

STATE OF NEVADA HOUSING DIVISION 2011 STATE PLAN

U.S. DEPARTMENT OF ENERGY LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM (July 1, 2011 to June 30, 2012) Revised 3/30/2011 at 1:45 PM

440.14(a) NOTICE OF PUBLIC HEARING (See ATTACHMENT A)

440.14(b) DOE FUNDING FOR SERVICE PROVIDERS (SUBGRANTEES)

HELP of Southern Nevada(HELP)	\$290,615
Neighborhood Services (NS)	\$ 30,062
Community Services Agency (CSA)	\$ 81,259
Rural Nevada Development Corporation (RNDC)	\$ 30,471
Nevada Rural Housing Authority (NHRA)	\$ 33,602
Las Vegas Urban League (LVUL)	\$ 46,991

440.14 (c)(1) PRODUCTION AND EXPENDITURE SCHEDULE (See 440.14 (c)(5))

440.14(c)(2) CLIMATIC CONDITIONS

Nevada's climate varies dramatically from north to south. Perhaps the clearest indicator of the climatic conditions being addressed by the Weatherization Program are the number of heating and cooling degree days associated with each area scheduled to receive weatherization assistance. Typically the northeastern portion of the state has the highest number of heating degree days while Clark County has the highest number of cooling degree days. Listed below are the heating and cooling degree days associated with the various service areas of the state.

* Average Heating Degree Days (Base 65 F)

Clark County & Henderson	2,601
Western Service Area & Washoe County	6,022
Eastern Service Area	7,236

* Average Cooling Degree Days (Base 78 F)

Clark County & Henderson	3,201
Western Service Area & Washoe County	508
Eastern Service Area	320

*Source: Mechanical Engineering Department
University of Nevada - Reno

TYPE OF WEATHERIZATION WORK TO BE DONE

The program's Subgrantees will be responsible for the installation of the following measures providing they are cost effective, address client health and safety hazards and/or provide for minor home repairs. The measures may include but are not limited to the following:

1. Insulation: ceiling, floor and duct.
2. Duct leakage sealing (return, plenum and supply systems).
3. Shell infiltration sealing; i.e., replace broken glass, window and exterior door replacement, door weather-stripping, caulking, evaporative cooler covers, etc.
4. Insulation of water heater and water heater pipes.
5. Low-flow showerheads.
6. Mobile home roof insulation & solar screens (Southern Nevada only).
7. Minor home repairs.
8. Heating and cooling system repairs and/or replacements.
9. Compact fluorescent light bulbs.
10. Refrigerator replacement.

All weatherization Subgrantees funded by the Nevada State Housing Division (NHD) will be responsible for the installation of weatherization materials in accordance with 10 CFR Part 440.21, Appendix A, "Standards for Weatherization Materials", the state's "Weatherization Field Manual" and the program's Priority Lists.

Blower door diagnostics will be performed on each unit receiving weatherization assistance to ensure compliance with Indoor Air Quality Standards. A combustion appliance safety inspection will be performed on each single family dwelling unit containing a combustion appliance (furnaces, water heaters, ovens, cook tops and gas dryers). A final inspection will be performed by the program's Subgrantees on each home receiving weatherization assistance. The Housing Division will inspect a minimum of five percent of the homes weatherized by each Subgrantee on a statewide basis each year. A minimum of 10% of the units completed by a new Subgrantee will be inspected each year.

ESTIMATE OF AMOUNT OF ENERGY CONSERVATION

Currently, there is no definitive analysis regarding the amount of energy savings which can be attributed to the weatherization of residential dwelling units. Energy usage and subsequent savings can be attributed to the various retrofitted measures as well as changes in occupant behavior. NHD is working with an energy consultant in an attempt to more accurately determine the cost effectiveness of the weatherization measures currently being implemented.

Prior DOE studies indicate that a household's combined annual heating and cooling costs will be reduced by approximately 20-25% as a result of receiving weatherization assistance. Typically, the energy savings attributed to weatherizing electrically and propane heated households are nearly twice as great as those heated with natural gas.

The utility usage information listed below was provided by NV Energy Company and Southwest Gas. The usage is based on the annual average amount of Kilowatt hours (KWh) and Therms of gas utilized by both single family and multi-family households.

The estimated amount of energy savings for Nevada's 2011 DOE funded program was calculated by multiplying: the average annual energy usage (KWh or Therms) x .60 x .20 x the number of units weatherized for each area of the state.

The formula is based on the assumption 60% of a household's combined annual gas and electric bills can be attributed to space heating and/or cooling costs; and assumes these costs are reduced by 20% as a result of receiving weatherization assistance. Therefore, the energy savings that could be attributed to Nevada's 2011 Weatherization Program are estimated as follows:

Type of Fuel	Eastern Rural	Western Rural	Washoe County	City of Las Vegas	City of N. Las Vegas	Balance of Clark	City of Henderson	Total Statewide
Avg. Annual Usage (KWh)	7,331	7,331	7,331	11,821	11,821	11,821	11,821	
Avg. Annual Usage (Therms)	744	744	651	498	498	498	498	
Number of households	3	3	11	18	6	25	3	69
KWh hrs Saved	2,639	2,639	9,677	25,533	8,511	35,463	4,256	88,718
Therms Saved	268	268	859	1,076	359	1,494	179	4,503

440.14(c)(5) AREAS TO BE SERVED

The state's 2011 Weatherization Program will provide assistance to seven general areas of the state, four of which are located in Clark County. 1) the Western service area is comprised of the following counties: Carson City, Douglas, Lyon and Storey counties. 2) the Eastern service area is comprised of Churchill, Mineral, Humboldt, Pershing, Lander, Elko, White Pine, Esmeralda, Eureka, Lincoln, and Nye counties 3) Washoe County 4) City of Las Vegas 5) City of North Las Vegas 6) City of Henderson and 7) Balance of Clark County (Clark County less the cities of North Las Vegas, City of Henderson and City of Las Vegas.)

Listed below are the service areas, the number of households (units) scheduled to be Weatherized and the Subgrantees proposed for the 2011 program year:

Service Area	Eastern Rural	Western Rural	Washoe County	City of Las Vegas	City of North LV	Balance of Clark Co.	City of Henderson	Statewide
Total Units	3	3	11	18	6	25	3	69
Allocation	\$33,602	\$30,471	\$81,259	\$121,325	\$46,991	\$169,290	\$30,062	\$513,000
Labor Source	Contractor	Contractor	Contractor	Contractor	Contractor	Contractor	Contractor	
Subgrantee	RNDC	NRHA	CSA	HELP	LVUL	HELP	NS	

440.14(c)(6) THE MANNER IN WHICH THE STATE PLAN SHALL BE IMPLEMENTED

The State Plan has been drafted in accordance with the U.S. Department of Energy's Regulations stated in 10 CFR 440.14. NHD has issued a Request for Proposal to determine which agencies are most qualified to provide weatherization assistance within their respective service areas. NHD will issue grant awards to the most qualified agencies as determined through the RFP process. DOE funds are allocated to all of Nevada's counties.

Federal weatherization funds are received from the Department of Energy (DOE), Health and Human Services (HHS) and state weatherization funds are received through the Fund for Energy Assistance and Conservation (FEAC). When combined, these funds are allocated proportionate to the number of eligible households residing within their respective service areas.

Due to the relatively high costs in providing oversight of the Weatherization Program, all Subgrantees receiving less than \$350,000 will receive 10% for their administrative costs.

The Subgrantees primary responsibilities are to provide program outreach, determine client eligibility, conduct energy assessments, provide various weatherization measures, and to ensure the satisfaction, health and safety of the program's recipients. Outreach efforts will be coordinated with Nevada's Welfare Division, the utility companies and other interested private/public entities to ensure

program compatibility with other funding sources. NHD will also be working with other governmental and non-profit agencies responsible for administering low income housing and energy related programs and or projects. The Nevada Housing Division will be responsible for providing program oversight, ensuring compliance with state and federal laws/regulations as well as monitoring Subgrantee performance. For existing Subgrantees, a minimum of 5% of the households receiving weatherization assistance will be inspected by the Housing Division's weatherization staff. Subgrantee production and expenditure levels are monitored on a monthly basis. The Division will inspect a minimum of 10% of the total units weatherized by any new Subgrantees.

440.14(c)(6)(i)

ANALYSIS OF THE EXISTENCE AND EFFECTIVENESS OF SUBGRANTEE WEATHERIZATION PROJECTS

Listed below is the status of the Subgrantees currently administering weatherization programs using state and/or federal weatherization funds received from the Housing Division for the period July 1, 2010 through February 28, 2011. With the exception of the Las Vegas Urban League (LVUL), all of the agencies received federal weatherization funds through the American Recovery and Reinvestment Act of 2009 (ARRA), DOE formula grants (DOE base), Health and Human Services (LIHEA funds) and the state's Fund for Energy Assistance and Conservation (FEAC). FFY 2010 was the first year in which the Las Vegas Urban League was selected to participate in the state's Weatherization Program and was not awarded DOE base, LIHEA or FEAC funds for FFY 2010.

For reporting purposes, the DOE base, LIHEA and FEAC funds have been combined together under the heading of **Base funds**. The ARRA funds were awarded for the project period July 1, 2010 through March 31, 2012 and are reported separately.

AGENCY: **Nevada Rural Housing Authority (NRHA)**
Administered program since 2008

Service area: Douglas, Lyon, Storey Counties and Carson City

Base funds (DOE, LIHEA & FEAC) ó 67% of project period expired.
Budget for project period: \$223,579

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	48	\$223,579
Actual	35	\$144,323
% of Planned	73%	65%

ARRA funds (DOE) ó 38% of project period expired.
Budget for project period: \$1,296,961

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	217	\$1,296,961
Actual	97	\$490,592
% of Planned	45%	38%

LEVERAGED FUNDS: LIHEAP, FEAC

AGENCY: **HELP of Southern Nevada (HELP)**
Administered program since 1991

Service area: Clark County (excluding City of Henderson)

Base funds (DOE, LIHEA & FEAC) ó 67% of project period expired.
Budget for project period: \$2,217,505

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	573	\$2,217,505
Actual	491	\$1,355,326
% of Planned	86%	61%

ARRA funds (DOE) ó 38% of project period expired.
Budget for project period: \$11,759,113

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	1,996	\$11,759,113
Actual	1,540	\$ 7,882,140
% of Planned	77%	67%

LEVERAGED FUNDS: LIHEAP, FEAC

AGENCY: **Rural Nevada Development Corporation (RNDC)**
Administered program since 2003

Service area: White Pine, Elko, Humboldt, Eureka, Esmeralda, Lincoln,
Pershing, Lander, Mineral, Churchill and Nye Counties.

Base funds (DOE, LIHEA & FEAC) ó **67%** of project period expired.
Budget for project period: \$233,516

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	61	\$233,516
Actual	11	\$111,208
% of Planned	18%	48%

ARRA funds (DOE) ó **38%** of project period expired.
Budget for project period: \$1,296,961

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	212	\$1,296,961
Actual	332	\$835,963
% of Planned	157%	64%

LEVERAGED FUNDS: Wells Rural Electric, Mt. Wheeler Power, LIHEAP, FEAC

AGENCY: **Neighborhood Services (NS)**
Administered program since 2003

Service area: City of Henderson

Base funds (DOE, LIHEA & FEAC) ó **67%** of project period expired.
Budget for project period: \$450,983

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	87	\$450,983
Actual	48	\$281,478
% of Planned	55%	62%

ARRA funds (DOE) ó **38%** of project period expired.
Budget for project period: \$2,118,370

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	357	\$2,118,370
Actual	410	\$996,333
% of Planned	118%	47%

LEVERAGED FUNDS: Community Development Block Grant, LIHEAP, FEAC

AGENCY: Community Services Agency (CSA)

Administer program from 1979-2007 and July 2009-Present

Service area: Washoe County

Base funds (DOE, LIHEA & FEAC) ó **67%** of project period expired.

Budget for project period: \$537,631

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	134	\$537,631
Actual	106	\$453,607
% of Planned	79%	84%

ARRA funds (DOE) ó **38%** of project period expired.

Budget for project period: \$3,458,563

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	583	\$3,458,563
Actual	371	\$1,544,372
% of Planned	64%	45%

AGENCY: Las Vegas Urban League (LVUL)

Administered program from July 1, 2010 - Present

Service area: City of North Las Vegas

ARRA funds (DOE) ó **38%** of project period expired.

Budget for project period: \$1,686,049

	<u>Production units:</u>	<u>Expenditures:</u>
Planned	283	\$1,686,049
Actual	227	\$984,381
% of Planned	80%	58%

All of the agencies listed above have been successful in administering cost effective programs designed to assist the program's targeted population. Monitoring reports, financial audits, on-site inspections and client survey reports indicate all of the agencies administer cost effective programs and are in compliance with state and federal rules and regulations.

All of the agencies described above have received training in basic weatherization training, blower door diagnostics, combustion appliance testing, energy auditing, inspection protocol and Lead Based Paint Weatherization Practices. All agencies have at least one staff member certified through the Building Performance Institute's Building Analyst series.

440.14(c)(6)(ii) METHOD USED TO SELECT AREAS TO BE SERVED

In 2011, the Weatherization Program's service areas will ensure assistance will be made to all areas of the state. The service areas proposed for the 2011 program year were based on the following: the estimated number of eligible households located in each county, the availability of funds, the ability to integrate weatherization assistance with housing rehabilitation projects and the availability of qualified service providers.

The areas selected to receive assistance during the 2011 program year will also be based on public comment, recommendations received from the Housing Division's Policy Advisory Council and comments received through the public hearing process.

440.14(c)(6)(iii) EXTENT OF PRIORITY GIVEN TO SINGLE FAMILY OR OTHER HIGH ENERGY CONSUMING DWELLING UNITS

Priority assistance is determined by a point evaluation matrix which awards additional points for households which are single family units (including mobile homes) and/or households utilizing electricity or propane as their primary source of heating or electricity as their primary source of cooling. Priority assistance may also be provided to households having unusually high energy bills as identified by the state Division of Welfare and Supportive Services Energy Assistance Program or the utility companies.

440.14(c)(6)(iv) AMOUNT OF NON-FEDERAL RESOURCES APPLIED TO THE PROGRAM

NHD anticipates receiving approximately \$2,800,000 in state revenue from the Fund for Energy Assistance and Conservation (FEAC). NHD anticipates \$2,584,000 of the FEAC funds will be made available to the Weatherization Programs Subgrantees as follows:

Service Area	Eastern Rural	Western Rural	Washoe County	City of Las Vegas	City of North LV	Balance of Clark Co.	City of Henderson	Statewide
Total Units	28	26	72	108	41	151	26	452
Allocation	\$169,252	\$153,490	\$409,306	\$611,116	\$236,694	\$852,720	\$151,422	\$2,584,000
Labor Source	Contractor	Contractor	Contractor	Contractor	Contractor	Contractor	Contractor	
Subgrantee	RNDC	NRHA	CSA	HELP	LVUL	HELP	NS	

440.14(c)(6)(v) AMOUNT OF FEDERAL RESOURCES OTHER THAN DOE WEATHERIZATION FUNDS

NHD does not anticipate receiving any other federal funds in the 2011 program year.

440.14(c)(6)(vi) AMOUNT OF DOE GRANT FUNDS

The amount of DOE funds allocated to Nevada's 2011 Low Income Weatherization Program is \$662,859.

440.14(c)(6)(vii) AVERAGE COST PER DWELLING UNIT CONSIDERING ALL SOURCES OF WEATHERIZATION (FEDERAL AND NON FEDERAL) FUNDS

The average cost for each household weatherized using federal weatherization funds is approximately \$6,647. These costs include funds budgeted for NHD and its Subgrantees: administration, program operations, vehicles/equipment, liability insurance, training and technical assistance, health and safety, program outreach, program design and program evaluation.

440.14(c)(6)(viii) AVERAGE AMOUNT OF DOE FUNDS APPLIED TO EACH UNIT FOR PROGRAM OPERATIONS (labor, materials, insurance, vehicles, equipment, warehouse rent, transportation, etc.).

The average amount of DOE funds to be applied to each dwelling unit for program operations is approximately \$4,988. These costs do not include funds budgeted for administration, technical assistance, liability insurance, health and safety.

440.14(c)(6)(ix) RESERVED

440.14(c)(6)(x) PROCEDURES FOR PROVIDING ADDITIONAL ADMINISTRATIVE FUNDS TO SUBGRANTEES

The Housing Division intends to award an additional 5% of administrative funds to the program's Subgrantees, as allowed by the Department of Energy for grant recipients receiving less than \$350,000. This decision is based on the relatively high costs associated with the program's extensive administrative and financial management costs.

440.14(c)(6)(xi)

PROCEDURES FOR DETERMINING THE MOST COST-EFFECTIVE MEASURES IN A DWELLING UNIT

An energy audit software program (REM/Design) and blower door diagnostics were used to rank and identify the most cost-effective measures installed in each house receiving assistance. The measure list is based on a number of criteria such as: climatic zone, type and rate of utility, housing type, type of heating and cooling system, etc. NHD has developed a priority list for each area of the state based on the results of the energy audit recommendations.

The energy audit program selected for Nevada's program lends itself to site built single family units, mobile homes and multi-family units. The REM Design program is compatible with the Home Energy Rating software program adopted by the Nevada State Energy Office.

State program policy prohibits the installation of any conservation measures having an aggregate savings to investment ratio of less than one. The program's Weatherization Field Manual requires the measures to be installed in accordance with their relative savings to investment ratios. Exempt from the cost-effectiveness test are those measures related to reducing or eliminating any problems affecting a client's health or safety and related minor home repairs.

440.14(c)(6)(xii)

DEFINITION OF "LOW INCOME" HOUSEHOLD

NHD defines "low-income" as a household whose total annual gross income is at or below 200% of the national poverty income guidelines established by the Office of Management and Budget.

440.14(c)(6)(xiii)

DEFINITION OF "CHILDREN"

NHD defines "children" as individuals who are 6 years of age or less.

440.14(c)(6)(xiv)

AMOUNT OF FEDERAL FUNDS TO BE USED AND HOW THEY WILL BE USED TO LEVERAGE NON-FEDERAL STATE WEATHERIZATION FUNDS

No DOE or other federal funds will be used to increase the amount of weatherization assistance funds made available during the 2011 program year.