

Third Party and Community SEP Completion Report

3rd Party SEP Recipient Contact	<p>Paul R. Reaser Senior Environmental Health Specialist Garfield County Public Health 195 West 14th St. Rifle, CO 81601 970-625-5200 x-8123 preaser@garfield-county.com</p>
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Geographical Area to Benefit Most Directly From Project	Garfield County (Colorado River Valley, Roaring Fork River Valley, and Crystal River Valley Air Sheds)
Project Title	Garfield County's Pilot Woodstove Exchange Program
Project Type	Third Party SEP Donation
SEP Category	Pollution Prevention
Project Summary	<p>This pilot woodstove exchange program successfully helped to start reducing fine particle pollution and promote energy efficiency, in Garfield County, by assisting 30 homeowners with funds to remove outdated, high emitting woodstoves and fireplaces. The SEP funds were used to pay for the entire purchase and installation of a modern EPA certified low emission woodstove, fireplace insert, pellet stove, or a natural gas space heating stove or fireplace insert for low income residents (including some elderly and disabled residents). This project also successfully tested the validity and feasibility for implementing a potentially larger project/program in the future. In addition, successful applicants were also eligible to receive full benefits (at no cost) through the NWCCOG Weatherization Assistance Program.</p> <p>The total cost of the project was \$120,857 with \$95,320 being allocated for the purchase of 30 modern EPA certified low emission woodstoves, fireplace inserts, pellet stoves, or a natural gas space heating stoves or fireplace inserts. Additionally, \$1788 was allocated for advertising and community outreach and \$23,749 was dedicated to the administration of the project. This project did not benefit from any matching funds, but local cities and towns within Garfield County did provide in-kind assistance by waiving permitting and inspection fees. Community support and publicity was very positive for the entire duration of this project.</p>

Project Description	<p>Criteria for Participation:</p> <ul style="list-style-type: none"> • The exchange program was only applicable to residences located in Garfield County. • The program did not apply to any new construction, only replacement of an existing woodstove or fireplace. • The existing woodstove had to be an older, non-certified wood burning stove. • Existing fireplaces were also included in the program, including replacement of a non-certified insert. • Grant recipients had to be the owner of the home that is used as a primary residence; no secondary/vacation cottages or shop/garages were included in this program. • Rental property owners were eligible to use the program for multiple locations, given that they meet the above criteria. • City Building Permits and Inspection requirements were followed as required for woodstove and insert installations. The cities and towns within Garfield County supported this program by waiving all permitting and inspection fees and providing this service in kind. <p>Project Tasks (for each applicant):</p> <ol style="list-style-type: none"> 1. A Qualifying Application form was completed and returned to Garfield County Public Health (GCPH). Supporting documentation such as income verification, cost estimates, pictures of the old wood burner, etc. were included. All information had to be provided in order to approve the application. 2. Once all application materials were received, GCPH scheduled a brief in person interview at the applicant's home. 3. GCPH issued a rebate letter stating the amount awarded to the applicant. The letter was used to demonstrate reimbursement resources to a contractor. 4. The old wood stoves were dismantled and discarded and a receipt from a metals recycler or landfill was provided. 5. The Installation Certification form was returned to GCPH when the installation was completed. All the required information accompanied the form. 6. NWCCOG is the local administering agency under the Weatherization Assistance Program and required a separate application process for qualified woodstove applicants. <p>Project Results: This pilot woodstove exchange program tested the validity and feasibility for implementing a potentially larger project/program in the future. We took some initial steps toward:</p> <ul style="list-style-type: none"> • Partnering with the NWCCOG to weatherize low income homes to reduce fuel consumption and heating costs. • Identifying other groups within our community (elderly, disabled, etc.) who may benefit from such a program • Seeking potential partners in our community • Envisioning the development of a more detailed project plan
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	<ul style="list-style-type: none"> • Envisioning the implementation of a full scale, countywide, wood stove change out campaign • Identifying potential variables to measure the success of such a program <p>This program was communicated to the public by running ads in our local news paper on 1/21, 1/23, 1/24, 1/27, 2/8, 2/9, 2/10, 2/13 and 2/15. An article entitled ‘County swaps old woodstoves for new, efficient models’ was written in the Glenwood Springs Post Independent on 12/8/11. In addition, an opinion piece entitled ‘Three reasons to applaud Garfield County’ was written by the Post Independent staff, putting this project in a positive light.</p> <p>Unanticipated Outcomes:</p> <ul style="list-style-type: none"> • In many cases the purchase and installation of a modern EPA certified low emission woodstove, fireplace insert, pellet stove, or a natural gas space heating stove or fireplace insert exceeded \$3200. However, many installations cost well under \$3200. On average (for 30 clients), each installation cost nearly \$3200. • Garfield County Public Health did their due diligence to work with County and City officials to permit and inspect the installations. Unfortunately, Garfield County has no permitting or inspecting requirements for these installations, so in the unincorporated areas of the County, no permitting or inspections were performed. Vendors installed units according to manufacturers’ recommendations. • Finding qualified applicants was a challenge because we only accepted clients at or above 200% federal poverty level (FPL). We had many people calling who were interested in taking advantage of the program who simply did not qualify based on their level of income.
<p>Environmental and/or Public Health Benefits</p>	<p>Environmental and public health benefits include reduction of PM10 and PM2.5 during the winter months when air quality concerns are at their greatest in Garfield County. Certified wood stoves emit from 70 to 90% less particulate emissions than uncertified wood stoves or fireplaces, and natural gas or propane heaters or fireplace inserts release up to 98% less particulate than wood heating. The EPA’s Wood Stove and Fireplace Emission Calculator was used to calculate the air quality benefits of our project. Based on the following assumptions we can estimate the total emissions avoided as a result of the project:</p> <ul style="list-style-type: none"> • Cords of Wood Burned per Woodstove = 3 • Wood density to convert cords to tons (tons oven dried wood/cord) = 1.03 • Number of conventional stoves changed out = 30 • Woodstove % efficiency for conventional WS = 54 • Woodstove % efficiency for certified WS = 80 • Fraction assumed changed out to new Cert WS, remainder to

non-wood burning heaters = 0.8

Emission Avoided (tons)	
Pollutant	Total Emissions Avoided
CO	8.02
Methane	2.26
VOC	2.08
PM2.5-PRI	1.12
PM10-PRI	1.12
NOX	0.08
Benzene	0.0761
Formaldehyde	0.0431
16-PAH	0.0222
Acetaldehyde	0.0152
1,3-butadiene	0.0140
SO2	0.01
Napthalene	0.0048
Acrolein	0.0036
7-PAH	0.0014
Dioxin teq	0.000000000193
total HAPS =	0.180

	Category	Description	Cost
Project Budget	Reimbursements (79%)	Purchase and installation of more efficient stoves, inserts, chimneys, and other equipment upgrades	\$95,320
	Advertising (1.5%)	Outreach to community about program	\$1788
	Project Administration (19.5%)	Project Manager (650hrs @ 30.00/hr) = \$19,500 Project Assistant (200hrs @20.00/hr) = \$4000 Fuel and Mileage = \$162.00 Postage (67 applicants * \$1.20) = \$80.00 Office Supplies (paper, envelopes, etc.)= 7.00	\$23,749
	Total:		\$120,859
Certification Statement	Garfield County Public Health has fully implemented this SEP pursuant to the provisions of the settlement agreement and SEP proposal.		
Other Relevant Information	Supporting Documents: <ul style="list-style-type: none"> • Equipment Specifications File (attached) • Financial Records File (attached) • 2 Post Independent Articles (attached) • 1 Post Independent Ad (attached) • 2 Letters of Appreciation (attached) • Photos (available upon request) 		