

# Keene Woodstove Changeout Campaign 2009-2010

Keene, New Hampshire

Final Report  
September 2010



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**Final Report  
September 2010**

*prepared by*

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## **Introduction**

Situated in a valley in southwestern New Hampshire surrounded by high hills and Mount Monadnock to the southeast, Keene is subject to temperature inversions on cold calm days during the winter. In the years leading up to 2009, air monitoring data collected at the air monitoring station in Keene showed levels of fine particulate matter reaching their highest levels under these wintertime conditions. Residential wood combustion was identified as a primary and significant contributor to the high particulate matter levels in Keene.

Particulate matter (PM), particulates, or particle pollution are general terms for a complex mixture of extremely small particles and liquid droplets. Particles less than 2.5 microns in diameter (PM<sub>2.5</sub>) pose a very serious threat to human health if they accumulate in the respiratory system. Exposure to these fine particles has been associated with hospital admissions and several serious health effects, including premature death. Because PM<sub>2.5</sub> can penetrate deeply into the lungs, it is generally considered more insidious than larger PM particles. People with asthma, cardiovascular or lung disease, as well as children and the elderly, are considered to be the most sensitive to PM<sub>2.5</sub>. Adverse health effects have been associated with exposure to PM<sub>2.5</sub> over both short periods (such as a day) and longer periods (a year or more).

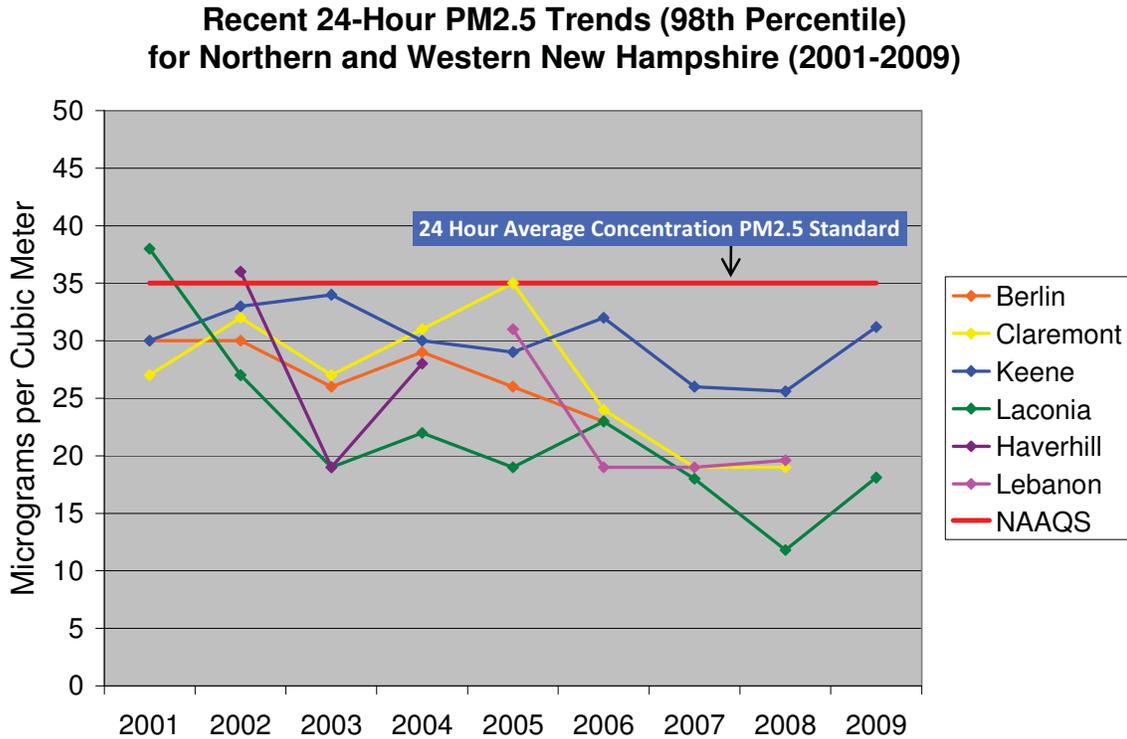
In recent years, individuals have been increasingly utilizing biomass as a home heating fuel in order to lower heating costs and lessen dependence on fossil fuels. Heating with a renewable resource such as wood has benefits. However, older woodstoves are a significant source of wood smoke and emissions of harmful fine particle pollution.

To address this air quality problem in Keene, the NH Department of Environmental Services (DES), in collaboration with the City of Keene, conducted a woodstove changeout campaign from October 2009 through June 2010, to reduce the number of old woodstoves in Keene by replacing them with newer, cleaner burning devices.

## **Wintertime Air Quality Monitoring Data**

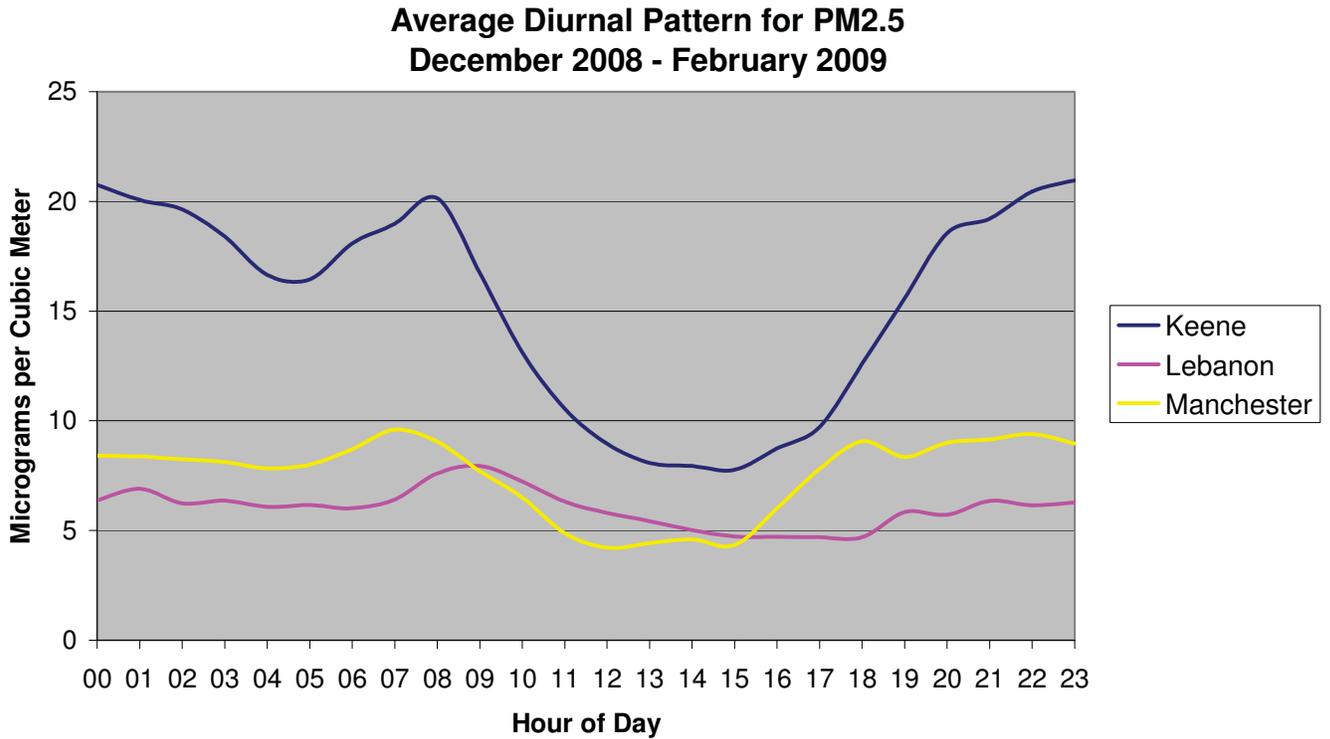
Air monitoring data over recent years shows that PM<sub>2.5</sub> levels in Keene have been approaching, and sometimes on cold winter days exceeding, the National Ambient Air Quality Standards (NAAQS) set by EPA (annual standard is 15 micrograms per cubic meter and the 24-hour average concentration standard is 35 micrograms per cubic meter). Data from DES's air monitoring station in Keene shows PM<sub>2.5</sub> levels frequently in the moderate to unhealthy range for sensitive groups (i.e., children, older adults, and anyone with heart or lung disease). The topography of the region, coupled with increased wood burning over recent years, creates a type of "perfect storm" that harbors the increased levels of PM<sub>2.5</sub> during cool, calm conditions. Figure 1 illustrates that PM<sub>2.5</sub> levels in Keene have been on average higher than other air monitoring sites in western and northern New Hampshire in recent years.

**Figure 1: Recent 24-Hour PM2.5 Trends**

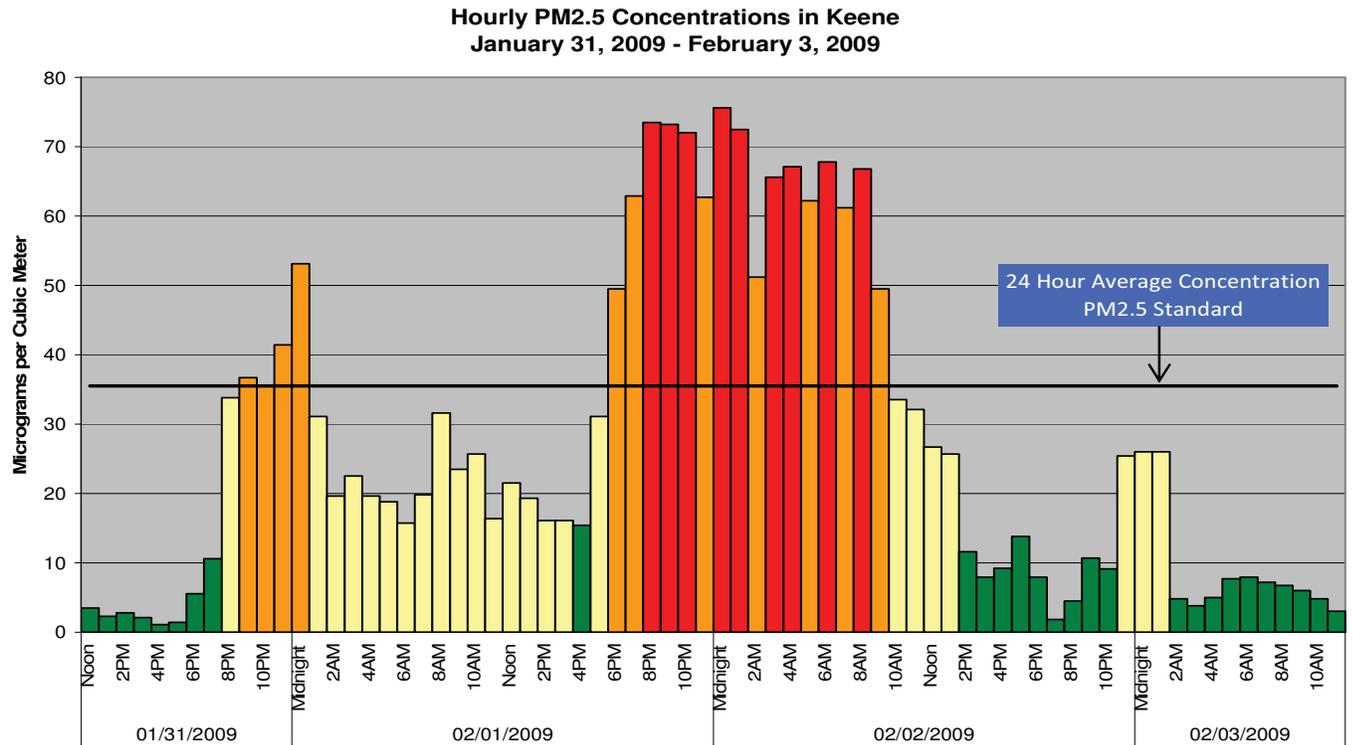


Figures 2 and 3 (on next page) show air monitoring data from Keene during a typical wintertime inversion event. The timing of the high PM2.5 levels correlates with the times of the day when residential wood burners would be using a maximum amount of fuel. Loading stoves during evening hours produces maximum amounts of particulate emissions during overnight hours, and pollution accumulates as the air remains stagnant in the valley. PM2.5 levels dip slightly during the early morning hours, rebuild during waking hours, then dip significantly during day time hours. These “diurnal” patterns indicate that the source of the particle pollution is primarily wood smoke, compared to other sources such as motor vehicles exhaust, which would produce higher emission levels at different times of the day.

**Figure 2: PM2.5 Daily Fluctuations (highest overnight, lowest during the day)**



**Figure 3: Graph of PM2.5 Hourly Averages in Keene During a Winter Event (exceedance occurred on February 2, 2009, with a 24-hour average of 35.8 ug/m<sup>3</sup>)**



## **Air Quality Solution: A Woodstove Changeout Campaign**

A woodstove changeout campaign is a voluntary, incentive based effort to encourage owners of old, inefficient woodstoves to replace or “change out” their stoves with cleaner burning hearth appliances. In recent years, woodstove changeout campaigns have been increasingly more and more utilized as a solution to particle pollution problems in specific geographic areas. Cooperating partners involved in organizing these campaigns have included U.S. Environmental Protection Agency (EPA), regional and national Hearth Patio and Barbeque Associations (HPBA), and state and local environmental agencies.

While nearly all new woodstoves and fireplace inserts sold in the United States are certified to be low particulate emitting according to standards set by the EPA, many Keene residents own and operate stoves that were installed long before the standards took effect in 1992. According to the EPA, these older uncertified stoves can release 40 to 60 grams of particulate matter per hour, while the newer certified stoves release 2 to 7 grams per hour.

### **Keene Woodstove Changeout Campaign** **Phase I**

A unique partnership was formed between DES and the City of Keene, with support from EPA, HPBA and other organizations, for the purpose of conducting the Keene Woodstove Changeout Campaign. A stakeholder meeting was held and a smaller steering committee was created during the summer of 2009 to help guide the program’s success. Members from the stakeholder meeting included representatives from EPA (Region 1), City of Keene, the Southwest Regional Planning Commission, Keene State College, Cheshire Medical Center, HPBA, DES, New England Wood Pellet, the UNH Cooperative Extension, and many local woodstove dealers.

Topics discussed in the steering committee included determining the goals of the program, eligibility requirements, identifying participating dealers, overcoming barriers for participation, and outreach methods. Ultimately, the campaign aimed to “changeout” 100 woodstoves by offering \$1,000 rebate vouchers toward replacement. Heidi Hales, the coordinator from Vermont’s woodstove changeout program, provided invaluable advice based on Vermont’s experience.

Funds for the woodstove changeout program came from two sources. DES submitted a proposal to EPA, and received approval, to use \$35,000 from (Section 105) Air Program funds. A temporary position was created for an intern. The intern would be the principal on-site project coordinator and serve as liaison between the state and local government agencies. In addition, settlement funds from a multi-state lawsuit against American Electric Power (AEP) in the amount of \$106,000 provided additional funds for the actual stove rebates and administrative costs of the project. The major portion of the settlement money, \$100,000, was applied toward the rebates and \$6,000 was granted to the City of Keene to cover miscellaneous associated administrative costs. The State of New Hampshire entered into a contract (see Appendix A) in October 2009 with the City of Keene, making available an amount of \$106,000 for a changeout program to improve air quality and reduce emissions of particle pollution from older non-certified woodstoves.

On Thursday, October 22, 2009, DES, the City of Keene, EPA, and HPBA held a media event (see Appendix B) to “kickoff” the campaign at a downtown square in Keene. About 100 stakeholders and interested individuals were present during the event. Some of the participating dealers brought burn trailers to showcase cutting edge models of efficient, cleaner burning stoves. Other displays were provided by Cheshire Medical Center, EPA, New England Wood Pellet, Woodpellet.com, and DES. Speeches were given by City of Keene Mayor Dale Pregent, DES Commissioner Thomas Burack, HPBA representative Kirk Meloney, and EPA’s Acting Region 1 Administrator Ira Leighton.

Applications for rebate vouchers (see Appendix C) were made available to all Keene citizens at the beginning of October. Initially, 40 applications were received, well under the goal of 100 woodstoves to be changed out. As a result, vouchers were issued on a first-come, first-serve basis and no ranking of applications was necessary. If more than 100 applications had been received, they would have been ranked by amount of wood burned and proximity to the Keene downtown area.

Due to a variety of factors, including the downturn of the economy and the program being conducted during peak heating season, only 65 rebate vouchers had been issued at the end of January, 2010. In an effort to attract more participants, the program was extended for an additional six weeks, with a new deadline set for March 12, 2010. By the end of this timeframe, 78 woodstoves had been changed out, or were in the process of being changed out, with 22 rebate vouchers still available for distribution.

### *Phase 2*

In an effort to fully utilize funds that were allocated for the Keene Woodstove Changeout Campaign, the program was modified and re-launched as Phase 2 in mid-March. Phase 2 kept most of the same parameters, but increased the value of the voucher and changed the eligibility requirements for voucher recipients.

The City of Keene, DES, participating dealers and Southwestern Community Services (SCS) teamed up to identify a population of Keene residents who burned wood as a primary source of heat and qualified for low income fuel assistance programs.

Phase 2 began without an official announcement. Since outreach and the level of public awareness about the changeouts was already high, the goals became to 1) reach out to a few additional low-income families who could not otherwise participate in the program due to financial constraints, 2) raise the amount of the rebates to accommodate the additional costs of installation, and 3) spend down the remaining funds. Phase 1 applications received during Phase 2 continued to be processed. Due to the departure of the program’s on-site project coordinator, the Phase 2 coordination was assumed by Keene’s Planning Department staff, who worked closely with staff from SCS and DES.

Phase 2 continued through the end of June, 2010. Phase 2 vouchers were worth a value of up to \$3,000. These vouchers were intended to cover any costs associated with a woodstove replacement. This could include costs that were not included in Phase 1, such as installation

costs, stove pipe repairs, hearth pad improvements, and chimney cleaning. In an attempt to control cost, each participating dealer provided a list of moderately priced stoves to be offered to Phase 2 participants, who were able to ‘purchase’ any stove they wanted from the predetermined list. This list included stoves that were of sufficient size to heat their home and included woodstoves, pellet stoves, and gas stoves.

By the end of the campaign, all funds allocated for rebates were disbursed. Under the terms of Phase 2, an additional eight woodstoves were changed out for a grand total of 86 new devices during the campaign, including 63 woodstoves, 15 pellet stoves, and eight gas appliances. A map of some of the participants’ locations can be found in Appendix D.

During the course of the campaign, a total of 97 vouchers were issued. However, 11 either expired or were cancelled, primarily because homeowners reconsidered once they became aware of the additional high, out-of-pocket expenses that would be required for installation or chimney improvements.

### **Other Incentives**

In addition to the rebate voucher that was offered to woodstove changeout participants, the program was also able to leverage additional incentives. Most notably, a federal tax credit equal to 30 percent of the costs was available to consumers who purchased and installed Energy Star products (>75 percent efficiency) in existing homes, up to a maximum of \$1,500 for improvements “placed in service” starting January 1, 2009, through December 31, 2010.

Another available incentive was a free ton of wood pellets to any woodstove changeout participant who chose to purchase a pellet stove. The market value for a ton of wood pellets during the campaign was approximately \$275. This additional incentive was the result of contributions from participating dealers.

### **Outreach Strategies and Methods**

The Keene Woodstove Changeout Campaign utilized a number of different outreach strategies and methods during the campaign to publicize the program and encourage participation. One of the most effective outreach methods was the use of local radio stations for announcements and interviews. The changeout program coordinator was a guest on these radio stations on several occasions, both before and during the campaign. During these interviews the coordinator explained the reasons for the campaign, eligibility requirements, application procedures, and answered live calls on related questions. Explaining why the program had been implemented and putting forth a representative of the program proved to be a helpful public relations strategy.

The use of posters was another valuable outreach method. A large poster was initially displayed in the front lobby of the Keene Public Library, and then later moved to Cheshire Medical Center. These places were determined to be locations that would attract large numbers of Keene residents on a fairly regular basis. Smaller posters were also placed in select restaurants in the downtown area. These restaurants were primarily popular for the “lunch crowd.”

Door knob hangtags were distributed in ‘target neighborhoods’ throughout the City during Phase 1 to notify and encourage people to participate. The hangtags were primarily distributed in the neighborhoods around Water Street, which is the location of the DES air monitoring station.

Letters were sent to the five largest employers and many local churches in Keene asking them to include an announcement on a bulletin board and/or in their newsletters about the changeout program. Three of the five companies did confirm that they announced the campaign to their employees. Flyers were also distributed at events sponsored by local conservation organizations such as UNH Cooperative Extension and the NH Timberland Owners Association.

At the end of January 2010, the City of Keene and the participating dealers shared the cost of an advertisement in the local Keene Sentinel newspaper to announce the extension of the campaign to mid-March. The advertisement was in the form of a newspaper insert and reached approximately 7,500 residents. Several people said the advertisement convinced them they should apply for a voucher while they were still available.

Overall, Keene’s woodstove changeout program received a great deal of positive publicity in the press. Numerous articles ran in the local Keene Sentinel announcing the campaign and its status. Abby Goodnough, New York Times correspondent, wrote a front page story that ran on Christmas Day, 2009, entitled “Where There’s Smoke...There’s a Trade In.”

### **Campaign Evaluation, Procedures and Results**

Baseline documentation and analysis of air quality trends over time will be helpful in evaluating the success of the program. Several community surveys have been or will be undertaken as a means to collect baseline data and to follow up on program implementation. The first survey (Home Heating Survey-see Appendix E) was conducted by students from Keene State College on a Saturday morning (December 5, 2009) at the Keene Recycling Center. Students “interviewed” residents as they arrived at the center, asking questions related to home heating practices, fuel usage, and recent changes in heating systems. The total number of surveys collected was 113. Analysis of these surveys is on-going and somewhat inconclusive.

A second survey was conducted in mid-June, 2010, to determine satisfaction level with the changeout program itself (Keene Changeouts-Customer Satisfaction-see Appendix E). At the time of this writing, 33 participants had completed the survey. Results were mainly positive, with one criticism being confusion over the City’s permitting procedures early in the campaign.

Another survey is underway to gather additional baseline information about homeowners’ home heating practices (Keene Wood Burning Survey 2 - see Appendix E). Students from Keene State College and an intern from DES will be conducting this telephone survey during the summer and fall of 2010.

To add another dimension to these Keene residents’ surveys, several “windshield surveys” were conducted in nearby towns in cooperation with Keene State College’s Environmental Health program. Students and instructor Dr. Nora Traviss took on a project to help monitor air quality in Keene and surrounding towns. Windshield surveys, so named because they involve collecting

data while driving around and looking through the vehicle windshield, were designed to observe and record evidence of residential wood burning, such as wood piles, smoking chimneys, outdoor wood boilers, or hazy conditions. Towns studied were selected because of topography similar to Keene (hills and valleys that could be subject to winter inversions), and they included Marlborough, Winchester, Swanzey, Peterborough, and Hillsborough. Results of these surveys provide data to support expansion of woodstove changeout programs beyond Keene to other nearby communities.

A woodstove changeout program of this magnitude has the potential to significantly reduce harmful emissions in a cost effective manner. EPA has estimated that by changing out 100 older woodstoves, the Keene Woodstove Changeout Campaign results in reduced emissions of between three and four tons of particulate matter during each heating season (EPA).

Measuring improvements in air quality in Keene that can be directly attributed to the reduced emissions achieved from the woodstove changeouts is challenging. Because air quality and inversions are very dependent on weather patterns, it will be several years before any trends can be identified. Although there were no unhealthy air quality days in Keene during the winter of 2009-2010, this does not mean it was a direct result of the woodstove changeout program. Year-to-year results may not be comparable for the reason stated above.

### **Overall Campaign Management and Implementation**

Overall project management for the Keene Woodstove Changeout Campaign was assigned to an on-site project coordinator. The importance of having an on-site project coordinator cannot be overstated. Local residents expect and need to be able to reach one central contact person. Skills and duties of the coordinator are broad and varied, but ultimately the coordinator should have excellent people skills and be a good communicator. Attention to detail and being able to follow through is very important. This project required initial research, project design, meeting facilitation, outreach, customer service, and working with a variety of audiences (e.g., stakeholders, media, homeowners, retailers). While it takes a wide array of stakeholders to make any sizable campaign a success, having one person who is available on a day-to-day basis increases the efficiency of the operation and minimizes confusion.

Relative to program criteria and procedures, picking the correct rebate amount is, perhaps, the most critical part of any campaign. Unfortunately, there is no secret formula for coming up with the perfect rebate amount. Factors to consider include: the program's budget, changeout goal (i.e., number of stoves to be replaced), target population, and the program's duration. The rebate amount, however, is a key factor to overcoming individuals' resistance to changing out their stoves.

Before any announcements are made to members of the media or to the public, procedures for the program should be fully discussed and finalized. It is important to "sell" the program and make the procedures as quick and easy as possible. The application process must be clear and concise. Program outreach materials must be varied and carefully developed with appropriate distribution points in mind. For example, if you want a local business to put an advertisement in their monthly newsletter to promote the campaign, then write the advertisement for them.

Design a poster or write a sample newsletter article and distribute copies to local businesses. The project coordinator should be responsible for evaluating initial program implementation, determining the effectiveness of the marketing materials, and making adjustments as necessary.

At the beginning of the Keene changeout campaign, 40 applications were received before the program started. It was decided to distribute vouchers on a first come, first served basis. There was some initial confusion over procedures relating to the City's permitting process for installation of new stoves, but that was clarified. The project coordinator was prepared to answer questions, take phone calls, and when necessary, visit with homeowners in order to help members of the community with questions.

The two most significant "rules" of participation included surrendering the old stove to be properly recycled and requiring the replacement stove to be professionally installed. The installation was to be arranged by the participating dealer (see Appendix F) where the stove was being purchased. In order to become a participating dealer, the dealer was required to employ a Chimney Safety Institute of America (CSIA) and/or National Fireplace Institute (NFI) certified installer. This requirement serves two purposes: (1) to ensure the replacement stove is in fact installed in the target area; and (2) to ensure a safe, up-to-code installation. The "old" stoves were required to be brought by the installer/dealer to a participating recycler; they were not to be released to the recycling center before the doors were removed.

An excel spreadsheet proved to be an effective way of keeping track of all program components, such as how many vouchers had been distributed, to whom, installation dates, and woodstove makes and models. This spreadsheet required vigilant updating, and served as the project coordinator's "bible" during the project. Vouchers were good for 21 days, so when a consumer selected the dealer they wanted to do the job, the dealer would then e-mail the coordinator to tell him (1) that a specific voucher had been received and (2) when the installation was scheduled to take place. All of this information was recorded on the tracking form. In the case that someone's voucher was about to expire, the coordinator would call and/or email them two days ahead of the expiration date to remind the participant it was about to expire and offer extensions on a case by case basis.

On the reverse side of the voucher was a tracking form for the participating dealer to fill out. This could be done during or after the installation and had to be received by the coordinator in order for the City to process the rebate reimbursement to the dealer. Information on the tracking form included signatures from (1) the recycler, certifying that the "old" stove was brought in, dismantled and permanently taken out of service; and (2) the certified installer, with the date, make and model of installation.

### **Lessons Learned**

Five major lessons were learned from the Keene Woodstove Changeout Campaign:

1. Partnerships between the local/state government (City of Keene and DES) and the private sector, especially the participating dealers, are critical. Remember, without the support of local dealers, a campaign is not possible.

2. Educational campaigns on the proper use of a woodstove before, during, and after the campaign are imperative. Just because someone has a new EPA certified woodstove does not mean they know how to use it. Dealers should be encouraged to show participants how to properly use their new stoves. “Burn Wise” material from EPA should be distributed to all participants and dealers.
3. Any woodstove changeout campaign must be flexible. The program coordinator must be good at identifying “barriers” and have the ability to overcome them quickly and effectively.
4. If funds remain after the deadline passes, have a backup plan. This could include extending the program deadline dates, or perhaps incorporating a phase 2 that targets a specific or different audience. If instituting a program for low income families, enlist the help of a community service organization.
5. There are many ways a woodstove changeout campaign can be implemented; no one campaign model is perfect. A good approach during the planning stage is to gather information and final reports from other campaigns to help determine what may be the best “plan of attack” for your community.

### **Program Websites**

DES

[www.des.nh.gov/organization/divisions/air/cb/ceps/npsap/keene\\_woodstove\\_changeout.htm](http://www.des.nh.gov/organization/divisions/air/cb/ceps/npsap/keene_woodstove_changeout.htm)

City of Keene

[www.ci.keene.nh.us/sustainability/woodstove-changeout](http://www.ci.keene.nh.us/sustainability/woodstove-changeout)

HPBA Woodstove Changeout

[www.woodstovechangeout.org](http://www.woodstovechangeout.org)

EPA Burnwise

[www.epa.gov/burnwise](http://www.epa.gov/burnwise)

# Appendix A

## **Contract Agreement between DES and the City of Keene**

### **Scope of Services**

This agreement between the City of Keene (herein referred to as Keene) and the New Hampshire Department of Environmental Services (DES) is to facilitate a voluntary woodstove change-out program in Keene, NH. Using funds from the American Electric Power (AEP) settlement DES is planning to provide financial support for a voluntary woodstove change-out program to be administered by Keene.

Keene shall provide the following services:

1. Collect, review and process applications from individuals that intend to purchase a qualifying replacement stove;
2. Certify that applications meet the following program eligibility criteria:
  - a. A qualifying woodstove (defined as an existing woodstove currently in use as a primary or secondary heating source that is Non-EPA Certified) will be surrendered, properly recycled and replaced with a Washington State certified wood, pellet or gas stove;
  - b. Replacement stove will be professionally installed by a NFI (National Fireplace Institute) certified installer;
  - c. Only households within the city limits of Keene qualify;
  - d. Individual applicant must be a homeowner;
  - e. Limit of one voucher per household;
  - f. No retroactive rebates are available.
3. Issue redeemable vouchers (valid for use within 3 weeks of issuance unless extended by the program administrator) and list of participating dealers to individuals that have submitted an application and are determined to be eligible;
4. Upon receipt of documentation from participating dealers verify that the following program requirements have been met;
  - a. A qualifying woodstove has been removed and replaced with a new wood, pellet or gas stove that is certified to meet Washington State emission standards within the Keene city limits.
  - b. The new replacement stove has been professionally installed.
  - c. The existing woodstove has been dismantled or rendered in-operable.
5. Reimburse participating dealers (within 30 days of receipt) for each voucher submitted and verified to meet program requirements;
6. Keene may also provide financial incentives of up to \$175 for the replacement of catalytic systems on existing woodstoves up to a maximum combined limit of \$2,000;
7. Provide a monthly report to DES by the 10<sup>th</sup> of each month reporting;
  - a. Number of vouchers redeemed for the reporting month.
  - b. Number of issued vouchers unclaimed and cancelled.
  - c. Location of replacement woodstove.
  - d. Number of catalytic systems replaced.

### **Contract Price and Method of Payment**

Within 15 days of receiving G&C approval, DES will issue a check to Keene in the amount of \$106,000. Of these funds Keene may use up to \$6,000 for administrative purposes associated with oversight of the program. The balance, or up to \$100,000 shall be used exclusively for the purpose of redeeming vouchers for woodstove change-outs or replacement of catalyst systems. Any funds not utilized by Keene shall be returned to DES prior to June 30, 2010.

## Appendix B

### Media Event Press Release

FOR IMMEDIATE RELEASE:

DATE: October 22, 2009

CONTACT: Barbara Fales, DES (603) 271-1390  
Corey Canning/Rhett Lamb, City of Keene (603) 352-5474

NHDES and City of Keene Launch Woodstove Changeout Program at Local Event

KEENE, NH – Tom Burack, DES Commissioner, and Keene Mayor Philip Dale Prgent today officially launched a citywide woodstove changeout program, an initiative aimed at improving air quality within the region by offering homeowners a \$1,000 rebate to replace older non-EPA certified woodstoves with much cleaner, certified woodstoves, pellet stoves or with vented gas- heating appliances. Officials from the City and the New Hampshire Department of Environmental Services, joined by others from the U.S. Environmental Protection Agency, the Hearth Patio Barbeque Association, local business owners, and various stakeholders, officially kicked-off the campaign at an event held at Railroad Square in downtown Keene to showcase cleaner burning stoves.

Keene is the first community in New Hampshire to have a woodstove changeout program. The City's goal is to replace 100 old woodstoves. Keene is a good location for a woodstove changeout program because local air monitoring data indicate levels of particle pollution that sometimes reach or exceed national air quality standards.

“Keene is a beautiful community,” noted Mayor Prgent in his welcoming remarks. “However, because of our geography, when wood smoke becomes trapped in the Keene valley during certain winter weather conditions, poor air quality can result. The woodstove changeout program will enable many of our residents to replace their old, inefficient wood stoves with new, cleaner burning devices.”

In addition to improving air quality in Keene, replacing older stoves will save homeowners money in fuel costs, since many new stoves use one-third less fuel than older stoves.

“This is a great opportunity for homeowners and residents of Keene,” noted Commissioner Tom Burack of DES. “This effort will help stimulate the local economy, and it complements our Department's work on climate change by increasing energy efficiency, reducing fuel usage, and improving overall air quality.”

Acting Regional EPA Administrator Ira Leighton was on hand to recognize this campaign as the first of its kind for New Hampshire. “Fine particle pollution from older woodstoves is a serious health concern,” Leighton said. “The amount of particle pollution reduced by changing out one old wood stove is equivalent to taking 5 old diesel buses off the road. EPA estimates that more than 13,000 old wood stoves and fireplaces have been changed out in 40 communities. The result is about 250 tons of fine-particle pollution reduced each year, with a savings of about \$100 million per year in health costs.”

The Keene Woodstove Changeout Campaign is a cooperative effort between DES and the City of Keene, with support from EPA, the Hearth Patio and Barbeque Association, and participating local woodstove dealers. No taxpayer dollars are being used for the rebates, which come instead from a large multi-state enforcement settlement with out-of-state power plants. For more information and program details, visit [www.des.nh.gov](http://www.des.nh.gov) and search the A-Z index for “woodstove changeout” or go to [www.ci.keene.nh.us](http://www.ci.keene.nh.us). If you are a Keene homeowner and would like to apply for a rebate voucher, contact Corey Canning at [corey.canning@des.nh.gov](mailto:corey.canning@des.nh.gov) or call 603-352-5474.

# Media Event Photos - October 22, 2009



## Appendix C

### Rebate Application Form & Instructions

#### **How the Rebate Program Works**

1. The City of Keene, in partnership with the N.H. Department of Environmental Services Air Resources Division, is offering rebate vouchers valued at \$1,000 to homeowners of Keene for replacement of currently operating non-EPA-certified woodstoves with new certified wood, pellet or gas stoves. New wood stoves must meet the State of Washington certification standards, which are stricter than EPA's certification requirements.

To qualify for a rebate voucher, the homeowner must first complete the application below. Applications for rebate vouchers will be accepted until January 29, 2010. The following items must accompany the application: (1) a photo of the currently installed non-certified woodstove; and (2) a request for a Permit from the City of Keene for installation of a woodstove. Completed applications must be signed by the homeowner and either mailed, faxed, or hand delivered with attachments to the program coordinator at the address below.

2. The Keene Woodstove Changeout Campaign coordinator will review the applications to determine if the preliminary qualification requirements have been met. Qualified applicants will receive a rebate voucher worth \$1,000 toward a new qualifying stove and a list of participating retailers. Rebate vouchers will be valid for three (3) weeks.

3. The homeowner may use the rebate voucher to purchase a new certified stove from a participating dealer, provided the voucher has not expired. Vouchers will be applied as an instant rebate off the total price of the stove. No retroactive rebates are allowed.

4. New stoves must be professionally installed and the installation must be coordinated and certified by the participating retailer. The City of Keene requires a permit for installation of new woodstoves.

5. Old stoves must be permanently removed from service and surrendered to the participating retailer, who will coordinate their disposal and recycling.

6. The participating retailer will take a photo of the existing non-certified woodstove prior to removing it and will also take a photo of the new stove after it is installed.

#### Project Coordinator:

Corey Canning – [corey.canning@des.nh.gov](mailto:corey.canning@des.nh.gov)

Woodstove Changeout Campaign

3 Washington Street – 4<sup>th</sup> Floor, Planning Department

Keene, NH 03431

(603) 352-5474; Fax: 866-690-8364

**REBATE APPLICATION FORM**

All sections of this application must be completed. A copy should be retained by the homeowner for their records. The rebate program is not responsible for materials lost by mail. Please review the program terms prior to signing below and submit your completed application with attachments by mail, fax, or hand delivery to:

Corey Canning, Project Coordinator – [corey.canning@des.nh.gov](mailto:corey.canning@des.nh.gov)  
Woodstove Changeout Campaign  
3 Washington Street – 4<sup>th</sup> Floor, Planning Department  
Keene, NH 03431  
(603) 352-5474; Fax: 866-690-8364

**PERSONAL INFORMATION:**

NAME: \_\_\_\_\_

PHYSICAL HOME ADDRESS: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_ EMAIL (IF AVAILABLE): \_\_\_\_\_

**CURRENT WOOD BURNING STOVE:**

MAKE/MODEL: \_\_\_\_\_ YEAR STOVE MANUFACTURED: \_\_\_\_\_

I HAVE INCLUDED A PICTURE OF MY CURRENT WOODSTOVE \_\_\_ YES

I HAVE INCLUDED A REQUEST FOR A PERMIT FROM THE CITY OF KEENE FOR INSTALLATION OF A NEW WOODSTOVE \_\_\_ YES

**ADDITIONAL INFORMATION:**

1. How did you hear about the changeout program? \_\_\_\_\_

2. Why are you applying? (Please check all that apply.)  
\_\_\_ Not satisfied with current device; \_\_\_ To reduce pollution; \_\_\_ To save money \_\_\_ Other

3. Was the rebate a significant factor in replacing your stove? \_\_\_ Yes \_\_\_ No

4. In a typical heating season, how many cords of wood do you typically burn? \_\_\_\_\_

5. Is your wood stove used as a primary source of heat? \_\_\_ Yes \_\_\_ No

**CERTIFICATION:**

I certify the following:

- a. I understand that only currently installed and operating non-EPA certified woodstoves are eligible to be replaced under this program.
- b. I understand that participants are limited to receiving one rebate voucher per address.
- c. I understand that applications are processed in the order they are received. Rebates will be distributed on a first-come, first-served basis. Funding is limited, therefore rebates are not guaranteed. The voucher will only be valid for three weeks from date of its issuance. No retroactive rebates are available.
- d. I understand that if I qualify, I will receive a voucher and a list of participating retailers who will honor the voucher if it is submitted by the expiration date written on the voucher.
- e. I will be replacing an operable non-EPA certified woodstove that is currently in use in my residence. The old woodstove will be removed and disposed of at a recycling facility approved by the program to ensure that it will be properly taken out of service and recycled. The participating retailer who installs the new stove is responsible for disposing of the woodstove at the approved recycling facility.
- f. If I choose to purchase a new stove with funds from this program, I will make a commitment to purchase an appliance from a participating retailer within the three week period and authorize the retailer to forward to the City of Keene a notification of the purchase agreement, with verification that my existing woodstove is not EPA-certified
- g. I understand that my new woodstove purchased with funds from this program will be professionally installed by a certified installer and that there will be additional costs for installation and a permit from the City of Keene for installation.
- h. I understand that I am responsible to pay the retailer for the purchase price and professional installation costs of my new stove, less the rebate amount. I am also responsible for obtaining a permit from the City for installation.
- i. I understand that I will forfeit my voucher if I provide the City of Keene with false information or fail to obtain the required permit, or if the required information is not submitted to the City of Keene prior to the expiration date listed on the voucher.
- j. I will provide City of Keene staff access to my residence to inspect the device for compliance with the permit and with these program requirements. I understand that the City of Keene will provide no less than two (2) calendar days notice prior to this inspection.
- k. The City of Keene does not warranty any devices purchased under this rebate program, including the quality, functionality or satisfaction of the device.

Applicant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**For Office Use Only**

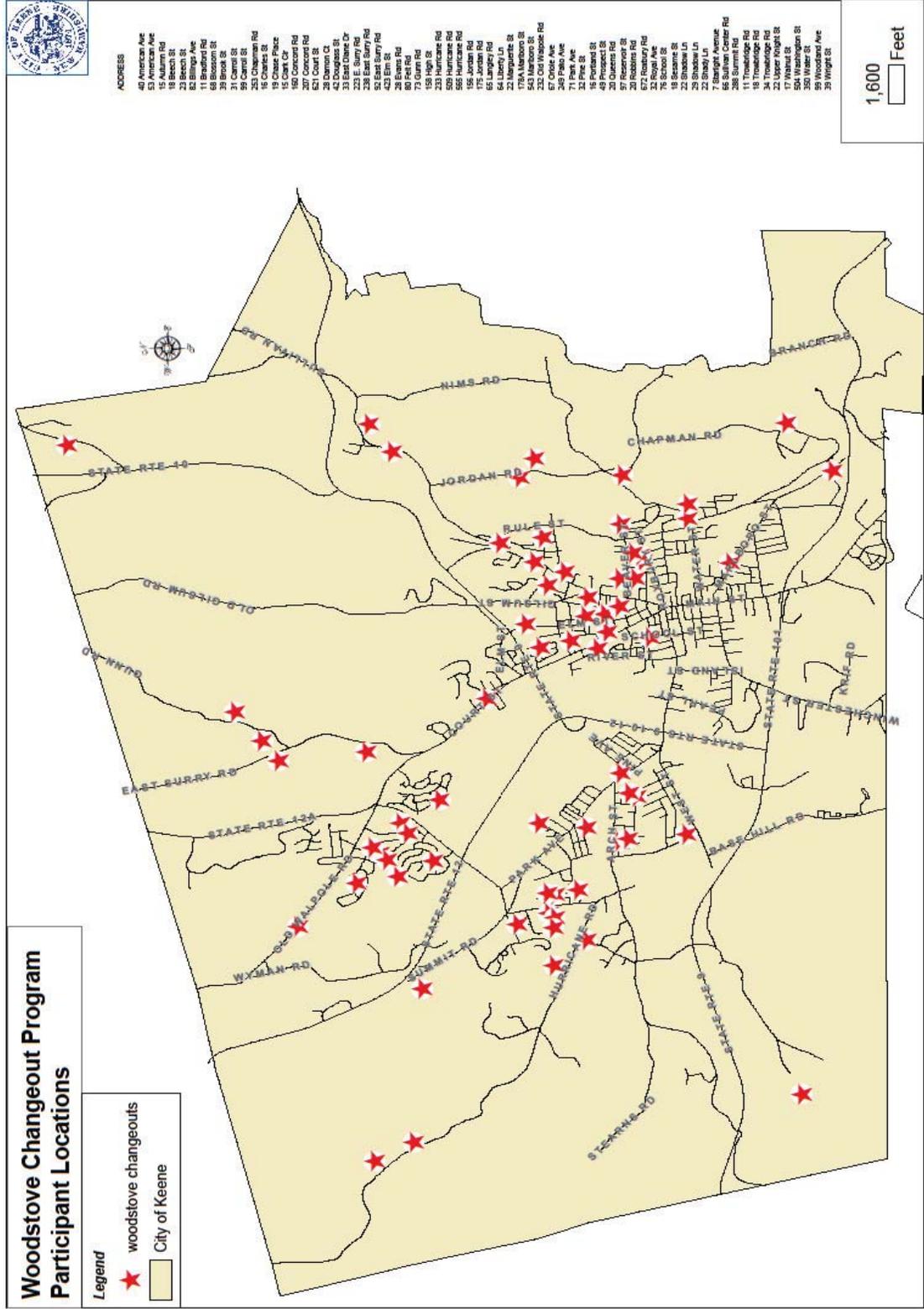
**Voucher #:** \_\_\_\_\_

**Date Issued:** \_\_\_\_\_

**Expiration Date:** \_\_\_\_\_

# Appendix D

## Map of Woodstove Changeouts



## **Appendix E** **Surveys**

Home Heating Survey (4 pages)

Keene Changeouts - Customer Satisfaction Survey (5 pages)

Keene Wood Burning Survey 2 (3 pages)

**Appendix F**  
List of Participating Dealers

<b>Company Name</b>	<b>Location</b>	<b>Phone Number</b>	<b>Website</b>
Fireplace Village	661 Marlboro St (Rt 101), Keene, NH 03431 & 36 Grove St., Peterborough, NH 03458	603-924-3831	<a href="http://www.fireplacevillage.net">www.fireplacevillage.net</a>
Friends of the Sun Ltd	532 Putney Rd., Brattleboro, VT 05301	802-254-4208	<a href="http://www.friendsofthesun.com">www.friendsofthesun.com</a>
Heartline Stove Shop	261 North St, Rte 137 North, Jaffrey, NH 03452	603-532-4513	<a href="http://www.heartlinestoves.com">www.heartlinestoves.com</a>
USA Solar Store / Green Energy Options	79 Emerald St., Keene, NH 03431	603-358-3444	<a href="http://www.usasolarstore.com">www.usasolarstore.com</a>