

2005 REPORT

**“Let’s Take Care of our Summer Air”
Ozone Education and Outreach Program**

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**LET’S TAKE CARE OF OUR SUMMER AIR.
OzoneAware.org**

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2005 OZONE REPORT

The 2005 Ozone Education and Outreach Program was made possible by funding from the following organizations.

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| Colorado Department of Public Health and Environment | Colorado Department of Transportation |
| Denver Regional Council of Governments | Envirotest Systems, Corp. (Air Care Colorado) |
| Federal Highway Administration | Strategic Environmental Project Pipeline |

See "Overview" section for more detailed funding information.

ACKNOWLEDGEMENTS

The Regional Air Quality Council would like to thank its partners for their participation in the 2005 "Let's Take Care of our Summer Air" ozone education and awareness campaign. Without the significant contribution of the below partners, this campaign would not have been as successful.

- American Lung Association of Colorado
- Black & Decker
- Colo. Dept. of Public Health and Environment, Air Pollution Control Division
- Colorado Department of Transportation
- Colorado Select NAPA AutoCare Group
- Denver Regional Council of Governments
- Envirotest Systems Corp. (Air Care Colorado)
- Federal Highway Administration
- The Home Depot
- JohnstonWells Public Relations
- Launch Advertising
- Local governments throughout the Denver region, in specific:

- City and County of Broomfield
- City and County of Denver
- City of Arvada
- City of Englewood
- City of Federal Heights
- City of Fort Collins
- City of Golden
- City of Lakewood
- City of Louisville
- City of Northglenn
- City of Thornton
- City of Westminster
- Media Visions
- National Jewish Medical and Research Center
- National Research Center, Inc.
- Regional Transportation District
- Strategic Environmental Project Pipeline (StEPP) Foundation
- Suncor Energy (U.S.A.) Inc.

The RAQC would also like to thank the following organizations for their involvement in the 2005 "Let's Take Care of our Summer Air" ozone education and awareness campaign.

- Action Promotions
- Base 2 Studios
- Branders.com
- Clear Channel
- Cleo Parker Robinson Dance (and members of the Clean Air Crew)
- Colorado Community Papers
- Comcast Cable
- Denver Newspaper Agency
- The FOX 103.5 FM
- Franciso Miraval, News and Services
- GSP Marketing

- KBCO 97.3 FM
- KCNC
- KDVR
- Kear/Stevens Creative
- Kinko's
- KMGH
- KOOL 105 FM
- KUSA
- KWGN
- Lamar Outdoor Advertising
- Nancy's Catering
- NAPA Auto Parts (Genuine Parts Company)
- NextMedia
- Nonformula Motion Design
- Obscura Music, Inc.
- PR Newswire
- Premiere Traffic Network
- Pull-N-Save Auto Parts & Recycling Center
- Rocky Mountain Recorders
- Safeway Stores
- Barnhisel Productions
- Unique Litho
- YouthBiz

OVERVIEW

The Regional Air Quality Council (RAQC) has concluded the seventh year of its Voluntary Ozone Reduction Program. The 2005 program built upon previous years with the implementation of a large-scale awareness, education, and outreach program entitled "Let's Take Care of Our Summer Air."

This comprehensive program was made possible with the help of numerous stakeholders from the Front Range region, including local, state, and federal governments, businesses, transportation organizations, non-profits, and citizens. Its goal was to increase awareness and understanding of ozone

pollution and voluntary activities to help reduce it throughout the region.

Ground-level ozone pollution is a summertime pollutant that occurs when volatile organic compounds (VOCs) and nitrogen oxides (NO_x) react in the presence of sunlight. These pollutants come from everyday items such as local industry, gasoline-powered vehicles and lawn equipment, and household paints, stains, and solvents.

Ozone pollution can cause breathing problems and respiratory infections in the elderly, young, and those with pre-existing ailments. Even healthy people who exercise or work outdoors can experience breathing problems when exposed to elevated ozone levels.

Fortunately, during the 2005 summer ozone season, the Front Range region maintained compliance with the new, stricter 8-hour standard set by the U.S. Environmental Protection Agency (EPA), despite record-breaking temperatures. Compliance this summer is a major achievement since the region violated the standard during the 2003 summer ozone season (see the "Standards and Status" section for more information).

It is imperative that the Denver-metropolitan area and Front Range region maintain its efforts to reduce ozone pollution to improve air quality and public health. In addition, it is important to ensure ozone levels are well below the standard for years to come to reduce the amount of mandatory control measures that may have to be introduced in order to meet federal requirements (see the "Regulatory Plan" section for more information).

The 2005 Voluntary Ozone Reduction Program, named “Let’s Take Care of our Summer Air,” expanded on previous efforts to include a large-scale public awareness campaign, aimed to reach as many people as possible to increase awareness and understanding about ground-level ozone pollution. The program consisted of the following activities:

- A continuation of the Ozone Advisory Program, designed to warn people in advance of potential high ozone days and to encourage changes in ozone-forming activities;
- Implementation of a large-scale information, outreach, and education campaign that focused on simple actions people can do to reduce ground-level ozone;
- Implementation of the Car Care Fairs for Cleaner Air – partnered with Colorado Select NAPA AutoCare Centers and metro-area local governments to host twenty-one clinics around the metro area;
- Utilization of television, radio, outdoor, and print advertising to educate citizens on simple tips to reduce ozone pollution;
- Continuation and expansion of the gas cap replacement program, focusing on local government fleet vehicles;
- Implementation of a local government sub-grant program to assist communications professionals with raising awareness of ozone pollution;
- Development of new ozone-dedicated web site, OzoneAware.org, with information for local governments, citizens, businesses, and media;
- Completion of pre- and post-campaign public awareness research to determine both level of knowledge about ozone pollution and to determine campaign effectiveness;
- Development of the Clean Air Crew, a multi-cultural, youth dance group that performed at various events throughout the region to raise awareness of ozone;
- In partnership with Envirotech Systems, Corp., the development of the AirWaves High School Radio Scholarship program to promote vehicle maintenance as a means to reduce ozone pollution;
- Continuation of outreach for the “Repair Your Air” campaign, which identified high-emitting vehicles using remote sensing technology and offered motorists up to \$500 in emissions-related repairs; and
- Participation in additional metro-area events such as Bike to Work Day and RideSmart *Thursdays*.

The 2005 program would not have been possible without the RAQC’s financial partners, all of which contributed greatly to the campaign’s efforts.

- Federal Highway Administration (FHWA), Colorado Department of Transportation, and Denver Regional Council of Governments (DRCOG) – Congestion Mitigation/Air Quality (CM/AQ) grant
- Strategic Environmental Project Pipeline Foundation (StEPP) – Supplemental Environmental Project grant
- Envirotech Systems, Corp. (Air Care Colorado) – private contribution to develop the AirWaves High School Radio Scholarship Program and to assist with components of the Car Care Fairs
- Colorado Department of Public Health and Environment – Community-Based Clean Air Grant

Additional support was provided by American Lung Association of Colorado, National Jewish Medical

and Research Center, NAPA Auto Parts, Safeway Stores, and local governments throughout the metropolitan area and Front Range region.

Summary of Major Funding Sources

| Source | Amount |
|---------------------------------|------------------|
| CM/AQ | \$785,000 |
| StEPP Foundation | \$110,000 |
| Envirotest | \$27,000 |
| Community-Based Clean Air Grant | \$25,000 |
| TOTAL | \$947,000 |

STANDARDS AND STATUS

8-Hour Ozone Standard

After a several-year court battle, EPA committed to promulgate nonattainment designations for the new, stricter 8-hour ozone standard by April 15, 2004. Governors were required to submit recommended designations by April 15, 2003.

The newer 8-hour ozone standard limits the allowable level of ozone to 0.08 parts per million (ppm) or 80 parts per billion (ppb) averaged over eight hours. A violation of the 8-hour standard occurs when the three-year average of the 4th maximum concentration at any given monitor reaches or exceeds 0.085 ppm or 85 ppb.

It is important the RAQC and its partners continue efforts to ensure the region meets the new standard by 2007, a date set by EPA.

1-Hour Ozone Standard

EPA approved the Denver Region's 1-Hour Ozone Redesignation Request and Maintenance plan in the

Federal Register on September 11, 2001 and the attainment redesignation became effective on October 11, 2001.

The maintenance plan details strategies to keep the region in attainment of National Ambient Air Quality Standards (NAAQS) for ozone and also requests that the EPA redesignate the Denver-metropolitan area to attainment status for ozone.

The federal 1-hour ozone standard is 0.12 ppm and a violation occurs when the three-year average of exceedances is greater than one per year. The region has not violated the 1-hour standard since 1988.

REGULATORY PLAN

State, regional, and local agencies in the Denver-metropolitan area entered into a voluntary agreement with EPA in December 2002 that outlines a process for achieving attainment with EPA's new, stricter 8-hour ozone standard in an expeditious manner.

Called an Early Action Compact for Ozone (EAC), the agreement sets forth a schedule for the development of technical information and the adoption and implementation of necessary control measures into the state implementation plan (SIP) in order to comply with the 8-hour standard by December 31, 2007 and maintain the standard beyond that date.

In exchange for implementing strategies earlier than required by the traditional nonattainment process, EPA agreed to defer a potential nonattainment designation. So, on April 15, 2004, EPA designated the seven-county, metro-Denver region, in addition

to portions of Larimer and Weld Counties, as a deferred nonattainment area for the new 8-hour standard.

The State submitted the plan to the federal government in December of 2004. In August of 2005, the EPA officially approved the EAC which was the result of a three-year collaborative effort by federal, state, regional, and local agencies to address the issue of ozone pollution in the Denver area. The region was to fully implement the strategies outlined in the EAC by the end of 2005. Failure to meet the obligations of the agreement will result in immediate reversion to the traditional nonattainment process. The Ozone Action Plan can be obtained through the RAQC's web site at www.raqc.org.

While the EAC outlines a variety of mandatory strategies, it does not include a voluntary outreach and education component. It is vital that the RAQC continues its outreach efforts in order to raise awareness and understanding about ozone pollution.

NUMBERS

Despite the fact that 2005 was one of the hottest summers in Colorado history, the Denver-metropolitan area and Front Range region maintained compliance with the ozone standard. The area did not violate the new, stricter 8-hour standard for ozone set by EPA due in large part to the efforts of industry, local governments, businesses, and an enhanced education and awareness effort aimed at curbing ground-level ozone pollution through the education of citizens.

While the region will maintain compliance for another year, the risk of violating the standard over

the next few years is still a possibility. Ongoing ozone mitigation efforts will continue to be critical.

The basis for the federal 8-hour ozone standard is the 4th maximum concentration at any given monitor averaged over an 8-hour time period at each monitor. The EPA calculates the standard by averaging the 4th maximum concentration over three years. The region did violate the standard in 2003 so values from that year were still calculated in the average in 2005, but will be eliminated from the average in 2006. In 2005, the monitor at Chatfield Reservoir recorded a 1st maximum value of 91 ppb, which was the highest reading for the 2005 season.

There were two exceedances of the 8-hour standard in 2005. The exceedances occurred on June 18 and July 12 at three area monitors: Highlands (86 ppb), Chatfield (91 ppb and 85 ppb), and NREL (85 ppb). No values at any other monitor exceeded the 8-hour standard. When averaged with the two previous years, the 4th maximum at Chatfield is 84 ppb, NREL 82 ppb, and Rocky Flats North and Highlands Reservoir 80 ppb. All other monitors maintained averages well below the 85 ppb limit.

Although the region remained within the federal guidelines for the 8-hour standard, it will remain imperative that the area maintain lowered ozone levels over the next several years to ensure attainment with the standard in future years.

Additional ozone monitoring data for the 2005 summer ozone season, as well as previous seasons, is contained in tables in the Appendices section of this report.

VOLUNTARY PLAN

During the RAQC's planning process to address ozone in the Denver region, it became clear that there was a need for the development of a large-scale, comprehensive ozone outreach and education effort that utilized a multi-media approach in order to reach out to a diverse audience. The RAQC's previous efforts were successful in organizing stakeholders and reaching out to small groups. Due to lack of funding, however, it was not able to expand significantly on previous efforts. However, thanks to numerous recent grant opportunities and other significant financial partners, the RAQC was able to greatly expand its plans for 2005 and beyond.

The RAQC, charged with developing a large-scale, comprehensive plan, made the decision to hire professional contractors to assist with this effort. With the assistance of a newly-formed Ozone Outreach, Information, and Education Advisory Committee (Advisory Committee), the RAQC developed two requests for proposals (RFP) – the first requested assistance with paid advertising, media outreach, and public relations activities and the second requested assistance with campaign research activities.

The Advisory Committee acted as the selection committee and ultimately chose the team of JohnstonWells Public Relations and Launch Advertising to assist with advertising and public relations activities and National Research Center, Inc. to assist with campaign research activities. All three contractors worked closely with each other, the RAQC Board and staff, and the Advisory Committee to develop the comprehensive campaign.

The result of this multi-partner effort was the development of a comprehensive, multi-media campaign that successfully educated and raised awareness of ground-level ozone pollution. The specific components of the campaign are discussed in more detail below.

Ozone Outreach, Information, and Education Advisory Committee

The Advisory Committee was formed in January to serve as an advisory team to guide the RAQC in its enhanced ozone outreach efforts. A number of public information, communication, marketing, and outreach specialists were invited to participate. Some of the Committee's members included representatives from the following organizations:

- American Lung Association of Colorado
- City and County of Denver
- City of Federal Heights
- City of Westminster
- Colorado Department of Public Health and Environment
- Denver Regional Council of Governments
- National Jewish Medical and Research Center
- RAQC Board Members

The Advisory Committee assisted with the selection of the professional contractors, reviewed all advertising materials, offered input on specific campaign components, assisted with distribution of materials and messages, and provided general professional oversight to the RAQC's campaign goals and objectives.

COMPONENTS

The 2005 "Let's Take Care of our Summer Air" education and awareness program included a

myriad of components designed to reach out to citizens, local governments, non-profits, businesses, and media. In addition, it included a multi-media paid advertising campaign covering television, outdoor, radio, print, and online components in order to maximize visibility. These various components, which are described in detail below, worked together to raise awareness throughout the Front Range region about this important issue. The major components of the campaign were simultaneously launched June 1 and continued through August 31 to coincide with the start and the end of the summer ozone season.

1. Ozone Action Alerts

One of the longest standing programs of the RAQC's summertime efforts include Ozone Action Alerts, designed to warn citizens of the potential of elevated ozone levels and to encourage behavior change. The Technical Services staff of the Air Pollution Control Division (APCD) at CDPHE developed a system over seven years ago to forecast imminent meteorological conditions that support the development of ozone concentrations above 75 ppb, which are reported on an as-needed basis.

APCD staff meteorologists used national and local weather data and an array of national predictive models to make the advisory calls, which take effect at 4:00 p.m. The advisories remain in effect for the following 24-hour period. This year, the RAQC worked with the APCD to develop a new advisory that reflected the campaign's creative and fresh look.

Using the APCD's advisory calls, the RAQC faxed and e-mailed ozone action alerts to the media, local governments, businesses, and citizens when the

conditions were expected to potentially increase ozone levels. The alerts were also displayed on Colorado Department of Transportation (CDOT) highway message boards throughout the metro area. All local television stations made an effort to broadcast alerts as well as mention the alerts during various morning and evening weather broadcasts.

In an attempt to make alerts visible for local government employees and businesses, two new alert posters were created and posted to OzoneAware.org to provide easy access to the new downloadable materials. One poster indicated an "ozone alert day," and the other indicated that there is "no alert in effect." In addition, the RAQC posted ozone alerts to the web site so people visiting the site could also access the current air quality information. As in the past, many local governments and non-profit organizations placed a link on their web sites to display current air quality conditions.

This year, the RAQC recreated the design and content of the advisories sent out in an effort to increase awareness and mimic the campaign's other materials. By utilizing the templates for the outdoor boards posted around the metro-area, five new alerts were created to raise awareness of the actions associated with an ozone alert. Each alert used one of the actions that citizens may take to help reduce ozone on potentially high ozone days. In addition to the new design, the alerts included information on how ozone is formed, the health affects, and important contact information.

Results

The RAQC faxed the new Ozone Action Alerts to nearly 400 local government representatives, media outlets, businesses, and citizens, including several Spanish television media outlets. The ozone alerts

allowed local governments to make changes in operational behavior to reduce VOC emissions. It was also an opportunity for them to inform their citizens of the high ozone day through e-mail, signs, and web site and cable updates. The alerts also provided media with information to broadcast the potential for elevated ozone levels and to encourage changes in ozone-causing behaviors.

During the 2005 ozone season, 23 alerts were issued including three in June, 19 in July, and one in August. The RAQC received informal feedback from e-mail subscribers who said the newly-formatted alerts were more helpful and visually appealing than the alerts from previous years.

2. Media Advertising

The RAQC hired Launch Advertising to develop a high-impact campaign to effectively raise awareness about ozone pollution. The creative team utilized feedback from the qualitative and quantitative research conducted prior to campaign development (see the “Research” section for more information) in order to design a campaign that would resonate with citizens. The concept of the campaign was constructed based on simple actions citizens can take to help reduce ground-level ozone pollution. The campaign’s look was fresh and colorful in an attempt to capture a more diverse audience (examples of campaign materials are displayed in the “Appendices” section of this report).

Professionals from Launch Advertising were able to work with an experienced media buyer, who successfully negotiated a healthy paid media schedule utilizing television, radio, print, and outdoor advertising methods in order to maximize awareness of the issue. In addition, the RAQC’s multiple media partners donated bonus television and radio airtime,

bus tails, and pump toppers, without which the campaign would not have been as far-reaching.

Results

The carefully planned and executed multi-media paid advertising campaign resulted in over 1,600 television and radio spots, in addition to five outdoor billboards rotating at the nine largest and most visible billboard locations in the metro area during a 13 week period. A partnership with the Regional Transportation District allowed for nearly a three-month campaign utilizing large bus tail billboards and a significant partnership with Suncor Energy (U.S.A.) Inc. resulted in over 250 bonus gasoline pump toppers. The total number of impressions across all paid media elements was over 71,000,000. All media aspects, including the creative work, were developed simultaneously with the other components of the program to ensure continuity throughout the entire campaign. Results of the paid media advertising campaign are detailed in the Appendices section.

3. Media Relations

The RAQC hired JohnstonWells Public Relations to develop a comprehensive media outreach plan to complement the paid media advertising plan by raising awareness of this issue among major media outlets throughout the region. By educating reporters, meteorologists, and editors of the importance of ozone pollution, the RAQC and its partners were able to secure a number of articles and on-air mentions about the essential components of the campaign.

Results

The program and its events generated at least 50 known news stories on television, in print (daily, weekly, and community newspapers and local government newsletters in both English and

Spanish), on radio, and online. See the Appendices Section for a document on “Known Media Coverage.”

4. Research

The RAQC hired National Research Center, Inc. (NRC) to develop a comprehensive, qualitative and quantitative pre- and post-campaign research survey to determine the effectiveness of its efforts. The research efforts included a pre-campaign random telephone survey of 400 respondents designed to gather quantitative data about other local issues that people think are important, current knowledge of air pollution and ozone pollution specifically, responsible social behavior for which people do or do not engage, and basic demographic information.

The second component of the research included two pre-campaign focus groups to gain a better understanding of what citizens know about ozone pollution and what types of actions people are willing to take to voluntarily change their behavior in favor of ozone reduction. The focus groups allowed for a more in-depth exploration of the issue.

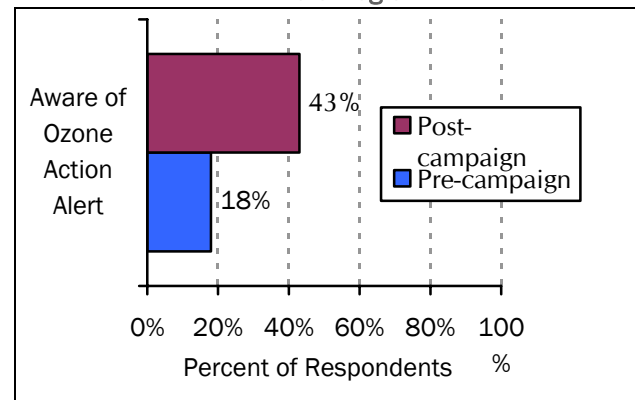
During the campaign’s last weeks, a post-campaign random telephone survey of 400 respondents was implemented. The survey instrument closely mirrored the pre-campaign instrument to allow for an analysis of attitudes, behaviors, and knowledge before and after the implementation of the major advertising and outreach components of the campaign.

Results

According to NRC, the analysis of the pre- and post-campaign research shows a meaningful increase in resident knowledge about the problem of ozone took place.

- More than 2 residents in 5 (44%) reported being somewhat or very familiar with the problem of ground-level ozone after the campaign compared to only 1 in 3 (32%) prior to the campaign.
- Of all the factors that may contribute to ground-level ozone, gasoline-powered lawn mowers were identified by a far larger percent of residents after the campaign than before – 86% after vs. 65% before. In addition, a significant number of residents were aware of and reported recognizing the campaign and its messages.
- Over 40% of residents reported being aware of the Ozone Action Alert program after the campaign compared to only 18% before (see Figure 12 below).

Figure 1: Respondent Awareness of Ozone Action Alert Program



- About 1 in 5 reported seeing a TV ad about ozone pollution during the campaign and close to that percent recognized the copy, “If you breathe the air, this message is for you,” at the same time over 10% recognized, “let’s take care of our summer air.”
- This compared favorably to recognition of the phrase “RideSmart Thursdays,” an RTD campaign that has been in place since 2004. The ground-level ozone public awareness campaign ran only during the summer, a time

when many residents are on vacation and whose regular schedules may be disrupted, and therefore may not be consuming as much local media as during the rest of the year.

Nevertheless, awareness of the campaign messages compares favorably with other similar types of public outreach efforts.

5. Public Outreach

One of the areas in which the RAQC and its partners were most interested in expanding was outreach to the general public. A series of events and programs were developed and implemented to maximize exposure of the campaign and its essential messages as well as educate the citizens on this issue using a more one-on-one approach. A number of informational items armed with important information about ozone pollution were handed out at a number of public events. These items are detailed below and examples can be found in the Appendices section of this report.

a. Web site

To complement the campaign's advertising and media relations efforts, a new ozone-dedicated web site was designed and developed to assist with all aspects of the outreach and education components of the program.

The web address at OzoneAware.org features nearly 20 pages of information about ground-level ozone pollution including a newsroom where local governments and businesses can download press releases and articles, information on how ozone is formed and how citizens can prevent it, and a new feature called a "blog" where RAQC staff or citizens can post information and others can respond with questions or concerns. The site also includes

information about the RAQC and a point of contact for further questions about ozone.

Throughout the summer, the homepage featured an ozone survey that citizens could take to gauge their level of understanding on the topic. Citizens who completed the survey were automatically entered to win a Black and Decker rechargeable trimmer and edger. The web site also provided an opportunity to cross-promote the Colorado Select NAPA AutoCare Group, who has been a consistent partner with the RAQC on all ozone efforts.

Results

Overall, the web site proved to be a powerful communications tool with nearly 6,500 new visitors logging on the site over the course of the outreach campaign which lasted from June 1 through August 31. One of the most interesting web statistics from the summer is that the top referring web site was OzoneAware.org. This means that most people who viewed the site went to their computers and typed in the URL directly instead of linking to it from another site or search engine. Other top referring sites included the Colorado Department of Public Health and Environment, the Denver Regional Council of Governments, 9News, and Air Care Colorado.

The final version of the web site features seven main pages that vary in information and targeted audience. The following explains each web page in further detail.

- Home Page – located at OzoneAware.org, the page features basic information about ozone pollution and provides several links to press releases and additional web pages. Previously included the survey to win the Black and Decker rechargeable trimmer and edger. Also offered

links to downloadable NAPA coupons for Colorado Select AutoCare Centers. The air quality box maintained and updated by the state health department is also located on this page.

- Ozone Information – provides a more in-depth look at ozone pollution and associated health concerns. Tips on how to reduce ozone pollution are also posted on this page along with the phone number to the state’s air quality hotline for more information on current conditions.
- Preventing Ozone – dedicated to providing further tips on reducing ozone with activities listed in three categories to help consumers differentiate between actions taken “in your yard,” “around the house,” or “on the road.” The page also offers a link for citizens to sign up to receive ozone action alerts by e-mail.
- Newsroom – links to all of the ozone press releases that are available and the design of the page makes it easy to download or e-mail to others.
- Summer Air Blog – a fairly new concept, the weblog, or “blog” offers citizens a forum to discuss ozone in depth. With nine different topics posted throughout the summer, any citizen with a computer could post a response to the information and ask questions to help them better understand the issue. This was a particularly popular section of the web site, fostering conversation among many interested citizens.
- About RAQC – provides more information about the RAQC as an organization and also serves a sponsor page for the summer campaign. In addition, the visitors to the site are provided more information about the large-scale summer outreach campaign to educate the public about ozone pollution.

- Contact – offers contact information for the RAQC as well as a map with directions to the RAQC offices.

The winner of the Black and Decker rechargeable trimmer and edger was chosen in September and John Pavlovic came to claim his prize in early October. As it turned out, Pavlovic had already been shopping for electric and rechargeable lawn equipment when he was contacted to receive his new trimmer. The fit was perfect and the RAQC was happy to award the prize to someone who plans to use it during the summer ozone season.

The cross-promotion program with Colorado Select NAPA AutoCare centers allowed the RAQC to work with a significant partner to further educate motorists on the importance of vehicle maintenance as well as direct more consumers to the campaign web site. John Rush, president of Colorado Select NAPA AutoCare group, made an appearance on Colorado and Company, a daily morning talk show hosted by 9News, to promote the new program. Coupons were posted to the web site and offered major discounts for service at any of the Colorado Select NAPA AutoCare Centers.

b. Informational Items

RAQC staff enlisted the help of the creative team to develop a series of fun, educational items to aid in the educational process. The items outlined below were designed specifically for special events and promotions and serve as a continued resource to citizens after attendance at an event. All materials and items were designed to match the theme of the overall campaign to ensure consistency with all messages.

Results

RAQC staff and the Clean Air Crew (see section “i” below for more detailed information) distributed nearly 20,000 educational pieces of literature or giveaways at events and meetings in which they participated, raising awareness and understanding about ozone pollution. These items included:

- Tip cards: contained general information about ozone pollution and simple, behavior-changing tips and were distributed at all public events for which RAQC had a presence
- Bike reflectors: contained the “Let’s Take Care of our Summer Air” tagline and the new ozone-dedicated web address – OzoneAware.org and were distributed at Bike to Work Day
- Tire pressure gauges: contained the “Let’s Take Care of our Summer Air” tagline and the new ozone-dedicated web address – OzoneAware.org and were distributed at the Car Care Fairs and Bike to Work Day
- Travel mugs: contained the “Let’s Take Care of our Summer Air” tagline and the new ozone-dedicated web address – OzoneAware.org and were distributed at the RideSmart *Thursdays* kick-off event
- T-shirts: contained the “Let’s Take Care of our Summer Air” tagline and the new ozone-dedicated web address – OzoneAware.org and were distributed at the RideSmart *Thursdays* kick-off event
- Stickers: contained “I breathe, therefore I care” and “Don’t just breathe, do something” as well as the “Let’s Take Care of our Summer Air” tagline and the new ozone-dedicated web address – OzoneAware.org and were distributed at all events by staff and the Clean Air Crew
- Banners: contained the “Let’s Take Care of our Summer Air” tagline and the new ozone-

dedicated web address – OzoneAware.org and were displayed at all events in which the RAQC participated

- Vehicle maintenance logs: designed to fit in a glove box, the vehicle maintenance log allows motorists to keep track of gasoline mileage and maintenance as well as provides simple tips to keep a vehicle in optimal performance and were distributed at the Car Care Fairs and other relevant events
- Ozone table top display: an interactive table top display designed to engage citizens in the issue of ozone pollution that included simple tips, general information, health information, and much more and was displayed at public events in which the RAQC participated

c. Gas Can Exchange

From May through September 2005, RAQC staff attended a number of household hazardous waste clean-up events to exchange old gasoline cans for new non-spill, non-permeable gas cans. The RAQC attended five events throughout the metro area to educate citizens about ground-level ozone pollution and to offer them an environmentally friendly gas can for their home or yard in an attempt to reduce emissions from evaporation or spills. The RAQC partnered with the Tri-County Health Department to attend events in Adams and Douglas counties. This program was made possible by funding provided by the StEPP Foundation.

Results

The RAQC attended five household hazardous waste clean-up events in Adams and Douglas counties. Approximately 250 old gas cans were permanently recycled and 470 new non-spill, non-permeable gas cans were distributed to event participants. The recycled gas cans resulted in a

savings of over 300 pounds of VOCs per year. In addition, nearly 1,000 participants were better educated about the contribution of gas can emissions to ozone formation.

d. Mow Down Pollution

The RAQC partnered with Black and Decker and The Home Depot to host “Mow Down Pollution” at seven retail stores throughout the metro-area. As part of the “Let’s Take Care of Our Summer Air” outreach campaign, the event gathered citizens together to permanently recycle old gasoline-powered lawn equipment in exchange for deep discounts on low- or zero-emissions alternatives. Citizens were able to choose from an electric lawnmower, a cordless rechargeable lawnmower, or a cordless rechargeable trimmer. All of the models were manufactured by Black and Decker and sold at participating Home Depot stores. At the event, citizens were also encouraged to recycle old gasoline cans in exchange for new non-spill, non-permeable cans that produce far fewer emissions. This program was made possible by funding provided by CDPHE and the StEPP Foundation.

Results

The RAQC and its partners permanently prevented 170 pounds of VOCs from entering the metro Denver region’s air by recycling 53 mowers and trimmers at the week-long event. In addition, the RAQC and its partners sold a total of 165 pieces of electric and battery-operated lawn equipment, which could lead to an additional savings of 360 pounds of VOCs should each consumer use only the newly-purchased equipment. Citizens were also encouraged to trade in old gasoline cans for non-permeable, non-spill cans. Participants recycled nearly 20 gas cans and program partners handed out 120 new earth friendly gas cans at the events. It

is estimated that over 160 pounds of VOCs will be eliminated this summer if every consumer uses their new can.

e. Car Care Fairs for Cleaner Air

The RAQC, in conjunction with the Colorado Select NAPA AutoCare Group and Safeway Stores, hosted 21 Car Care Fairs in Safeway Stores parking lots across the metro area and Fort Collins. These fairs helped educate motorists on maintaining optimum gas mileage and overall vehicle maintenance as well as provided information on reducing emissions and safety risks. Nearly 80 certified technicians volunteered their time and provided free, visual vehicle inspections for all participating motorists. The technicians inspected more than 85 components of the vehicles and provided specific information to motorists about their respective vehicles.

In addition, volunteers handed out non-spill, non-permeable gas cans, tire gauges, and vehicle maintenance logs to Car Care Fair participants. Additionally, Envirotec Systems, Corp. (Air Care Colorado) participated by bringing a RapidScreen roadside remote sensing device to one of the locations and the Spinal Injury Foundation also contributed to the event by adjusting head restraints at several of the event locations.

Due to the responses from participants, the media coverage this year was the driving force behind motorists’ participation. Representatives from both the RAQC and NAPA made appearances on all of the major networks on the morning of the event which appeared to raise awareness of the event. Moreover, AutoCare Radio on 630 KHOW sponsored by NAPA devoted the entire Saturday morning news radio program to the event, which

helped to increase participation and educate motorists on the importance of vehicle maintenance on ozone pollution and overall vehicle health.

Results

The RAQC and NAPA inspected over 500 vehicles at the 21 locations throughout the Denver-metro area in the 14 cities listed in the table on the next page.

- | | |
|--------------|-------------------|
| • Arvada | • Federal Heights |
| • Aurora | • Fort Collins |
| • Boulder | • Lakewood |
| • Broomfield | • Longmont |
| • Centennial | • Louisville |
| • Denver | • Northglenn |
| • Englewood | • Westminster |

In addition, the event provided an opportunity to distribute vehicle maintenance logs and other pertinent vehicle maintenance information to over 500 participants. Participants were also offered a new non-spill, non-permeable gas can at the event. Approximately 300 of the new earth-friendly gas cans were distributed to the event participants. If all 300 participants recycle an old gasoline can in its place, it would result in a savings over 400 pounds of VOCs per year.

f. AirWaves High School Radio Scholarship Program

The RAQC, Envirotec Systems, Corp. (Air Care Colorado), and 97.3 KBCO FM partnered to implement the first ever AirWaves contest to provide local high school students the opportunity to write and record their own air quality public service announcement (PSA) to be broadcast on a major radio station throughout the metro area.

Students from grades nine to 12 were asked to submit a 30-second PSA relating vehicle maintenance and air quality. The original idea for the project stemmed from Envirotec Systems, Corp. in British Columbia, Canada, who has conducted the program successfully for six years. The Ozone Advisory Committee reviewed the entries from the Denver-metro area and chose two PSAs that most closely fit the tone of this year's ozone outreach campaign. The winning students were afforded the opportunity to visit the KBCO studios to record their winning PSAs professionally in preparation for a six-week long run on the air.

Results

Nearly 2,000 posters were distributed to approximately 300 public and private high schools throughout the entire Denver-metropolitan region to announce and advertise the scholarship program. A total of 17 entries were submitted from 40 students and the two that most closely met the program's objectives were chosen. Each of the high school students who wrote and produced the PSAs were awarded a college scholarship in the amount of \$1,500 as well as the opportunity to be recognized by family and peers on local radio station 97.3 KBCO FM throughout the entire Denver-metropolitan region. In addition, the school in which the winning students attended received a \$500 environmental scholarship. The finished, produced spots played during morning and afternoon drive time for six weeks between June and mid-July. Information and photos about each of the students who produced the selected entries are posted on OzoneAware.org.

g. Bike to Work Day

In June, the RAQC participated in the Denver Regional Council of Governments' (DRCOG) Bike to Work Day, where the Clean Air Crew first performed.

In addition, RAQC staff hosted a booth in Civic Center Park to hand out fun, informational items, including bike reflectors, tire gauges, stickers, and tip cards. All items included the tagline, logo, and the new ozone web site – OzoneAware.org. Many local news channels attended the event and briefly taped the Clean Air Crew during one of their performances.

Results

The RAQC handed out more than 1,000 bike reflectors, tire gauges, stickers, and tip cards to Bike to Work Day participants. The Clean Air Crew made an appearance with spontaneous performances in and around Civic Center Park. A photograph of the Clean Air Crew appeared on the front of the Capitol Hill community paper the following week, with a brief description of the performance group. Several of the local television stations also aired clips from Bike to Work Day.

h. RideSmart Thursdays

RideSmart *Thursdays* is an annual program developed jointly by the Regional Transportation District (RTD), Denver Regional Council of Governments, and numerous partnering agencies to encourage metro-area citizens to commit to using public transportation or carpool at least one day per week. Intended to increase the use of public transportation in the area, the program starts out each year with a kick-off event. As part of the large-scale ozone outreach effort, the RAQC helped support RTD and DRCOG's effort this year by participating in the kick-off event held on August 18 in Skyline Park in downtown Denver. The RAQC attended the event and distributed informational and promotional materials to event participants to assist with raising program awareness.

Results

RAQC staff handed out nearly 350 travel coffee mugs and 200 t-shirts, both adorning the "Let's Take Care of Our Summer Air" tagline and web site address. The number of new visitors to OzoneAware.org increased in the days following the event.

i. Clean Air Crew

JohnstonWells Public Relations proposed investing in a method of public outreach that was more engaging and interesting than hosting an informational booth at public events. They contacted area dance organizations to gauge interest in putting together a performance group to spread clean air messages throughout the community using movement and chanting. Several dance organizations developed proposals and Cleo Parker Robinson Dance was selected as the best match for the project.

This team of professionals quickly formed the Clean Air Crew which performs a series of dance routines, "fraternity-style stepping," and call-and-response chanting to raise awareness about ozone pollution at Denver-area public events. The group is made up of multi-cultural youth ranging in age from 11 to 23 years, each bringing a profound amount of energy and enthusiasm to the performances. The overall appearance of the group is young, fresh, and vibrant with colorful costumes to match their liveliness as well as the overall campaign.

Results

The performance group was welcomed at eight different public events throughout the metro-area to perform their clean air routine. The performances varied in geographic areas but included locations such as The Capitol Hill People's Fair in Denver,

Western Welcome Week in Littleton, KidSpree in Aurora, and The Westminster Faire, among others. The wide range of geographic locations allowed the Clean Air Crew to hand out stickers and tip cards to many different people to raise the awareness of ground-level ozone pollution in the region. Citizens greatly enjoyed the unique performances and were willing to listen to the messages performed by the kids about ozone.

6. Local Government Outreach

The local governments throughout the Denver-metropolitan area have been one of the RAQC's most significant partners in its ozone reduction efforts. Over the past five years, local government staff has worked to make operational changes in public works and fleet maintenance divisions, as well as educate staff and communities about ground-level ozone pollution. This year, the RAQC offered local governments funding to assist with two programs involving fleet maintenance and education. In addition, the RAQC worked with the North Front Range to coordinate outreach and education efforts. More specific information about these programs is listed in more detail below.

a. Fleet Gas Cap Testing Program

From early summer through fall of 2005, the RAQC expanded the "Put a Cap on Ozone" gas cap testing and replacement program to focus on local government fleet vehicles. The program was made possible through partnerships with nine local government fleets from across the metro-area that agreed to incorporate the testing into their regular preventative maintenance schedule.

A faulty or missing gas cap can allow one gallon of gasoline to evaporate every two weeks. Pollutants

in evaporative emissions are a key ingredient in ground-level ozone formation.

The RAQC chose to work with local government fleets because earlier "Put a Cap on Ozone" program findings indicated that approximately 10 to 15 percent of the fleet vehicles had a faulty or missing gas cap. The fleet gas cap testing program provided a free gas cap testing kit as well as free replacement gas caps for all vehicles that either failed the pressure test or had a missing gas cap altogether.

In addition, public information officers from the participating local governments took the opportunity to educate thousands of metro-area residents about the health and regulatory benefits of properly-working gas caps as an ozone pollution control strategy through newsletter articles and employee informational materials.

Results

At the end of the ozone season, the fleet gas cap testing program tested a total of 860 gas caps at local government fleet maintenance divisions throughout the metro area. Of the 860 tested, 109 gas caps were replaced for a gas cap failure rate of nearly 13 percent. This is estimated to reduce VOC emissions by about 42 pounds per day during the critical summer months.

b. Local Government Sub-Grant Program

In order increase awareness in various areas throughout the metro area, the RAQC offered a unique opportunity for local governments around the region to apply for funding to increase outreach, information, and education efforts in their respective cities. The RAQC released a request for proposal asking municipalities to develop creative outreach

projects totaling up to \$5,000 each. The projects ranged in scope and cost, but each was fully carried out by the participants.

Results

Four local governments applied for the funding and each had creative ideas about how to increase awareness in their area. All four of the local governments that submitted proposals were selected to receive funding. The local governments that received the sub-grants are Boulder County, City of Federal Heights, City and County of Denver, and City of Thornton.

The City and County of Denver hosted an employee “Ozone Event” that featured Channel 7 Meteorologist Mike Nelson as the guest speaker. In addition, several vendors related to environmental issues or programs were invited to set up a booth at the event to distribute information about their individual organizations. The vendors included representatives from Denver Recycles, Colorado Select NAPA AutoCare Group – an alliance of auto repair shop owners who encourage proper vehicle maintenance, the Tri-County Health Department, and American Lung Association of Colorado.

The City of Federal Heights requested funding to help educate additional communities about ground-level ozone pollution that would otherwise not have access to the RAQC’s large-scale advertising and outreach campaign. Part of their proposal included funding to translate printed campaign materials into Spanish.

Boulder County requested funding to help launch a lawnmower exchange program similar to the RAQC’s “Mow Down Pollution” program. They worked with local businesses to arrange for

discounts on low-polluting lawn equipment while asking citizens to retire older gasoline-powered lawn equipment.

City of Thornton received funding to implement a miniature outdoor advertising campaign to further educate citizens on the importance of “Stop at the Click.” Unfortunately, there was not enough time to develop the ad, so the campaign will be posted in time for the 2006 summer ozone season.

c. Greater Front Range Outreach

Given the regional nature of air quality, ground-level ozone pollution has become a priority not just for the Denver-metro area, but to the entire Front Range region. The RAQC has been working with Front Range local governments and planning organizations for several years and recently increased in efforts to further coordinate ozone outreach and information campaigns. All of the materials from the “Let’s Take Care of Our Summer Air” program, including the logo, tagline, graphics, Ozone Action Alert templates, advertising materials, and other campaign materials, were made available to all Front Range cities for replication.

Results

The City of Fort Collins implemented a number of the components of the outreach campaign in the North Front Range by using several different means. The city offered rebates for earth-friendly lawn equipment in a similar fashion to the RAQC’s “Mow Down Pollution” event. It was structured so that citizens were offered a \$30 rebate for purchasing the zero- or low-emissions lawn equipment and received an additional \$30 if they recycled an older gasoline-powered piece of equipment. They also implemented the new Ozone Action Alert templates, which were published in the *Coloradoan* as well as

broadcast on Cable 14 public access channel in an attempt to reach a large audience.

In addition, the City of Fort Collins partnered with several local Climate Wise businesses to purchase a gas cap testing kit and test employee vehicles. The City visited eight local employers and tested 213 gas caps and replaced 17 failing or missing gas caps, resulting in a reduction of over six pounds of VOCs per day during the critical summer months. The City was also able to utilize the graphics from two of the outdoor boards created by Launch Advertising and adapt them to the North Front Range region. The two outdoor boards were posted from June 15 through August 15 in the Fort Collins area.

SUMMARY

The 2005 Voluntary Ozone Reduction Program complemented and expanded on the efforts of the previous six years. By securing additional funding, the RAQC was able to successfully develop and implement a large-scale advertising, outreach, and education campaign to complement the strategies outlined in the Early Action Compact designed to reduce ground-level ozone pollution.

The RAQC worked with local governments, businesses, non-profit organizations, transportation management organizations, employee transportation networks, citizens, and other concerned groups. The greater visibility allowed the RAQC to leverage a large amount of bonus media throughout the summer which also helped to increase awareness in the area. In addition, the program was measured through public opinion research which helped to determine overall program effectiveness and to outline future areas of interest. The RAQC was able to reach a larger audience than ever before through the use of a multi-media approach utilizing

television, radio, print, public events, media outreach, and a prominent online presence. This helped deliver a consistent message to audiences across the Front Range Region.

As a result, the region escaped violation of the federal ozone standard, despite record-breaking temperatures. The RAQC has hopes to expand on the current base of knowledge in the region, working with its partners to extend the program into the next few years.

FUTURE PLANS

Building on the efforts of the 2006 campaign, the RAQC and its partners plan to enhance education and outreach efforts to local governments, businesses, and citizens. While the 2005 campaign focused on simple action items to reduce ozone pollution, the 2006 campaign will attempt to educate people on why these simple actions are important. Specifically, the campaign will include the following components:

- Citizen Outreach
 - Ozone Action Alert program
 - Mow Down Pollution
 - Car Care Fairs
 - Ozone Education Video
 - AirWaves High School Radio Scholarship Program
 - Gas Can Exchange
 - Dedicated web site: OzoneAware.org
 - Community events, such as Bike to Work Day and Ridesmart *Thursdays*
- Local Government Outreach
 - Continuation of fleet gas cap testing
 - Continuation of sub-grant program
 - Outreach to staff and council
- Media Advertising and Outreach

- Continuation of paid advertising campaign
- Continuation of media outreach campaign

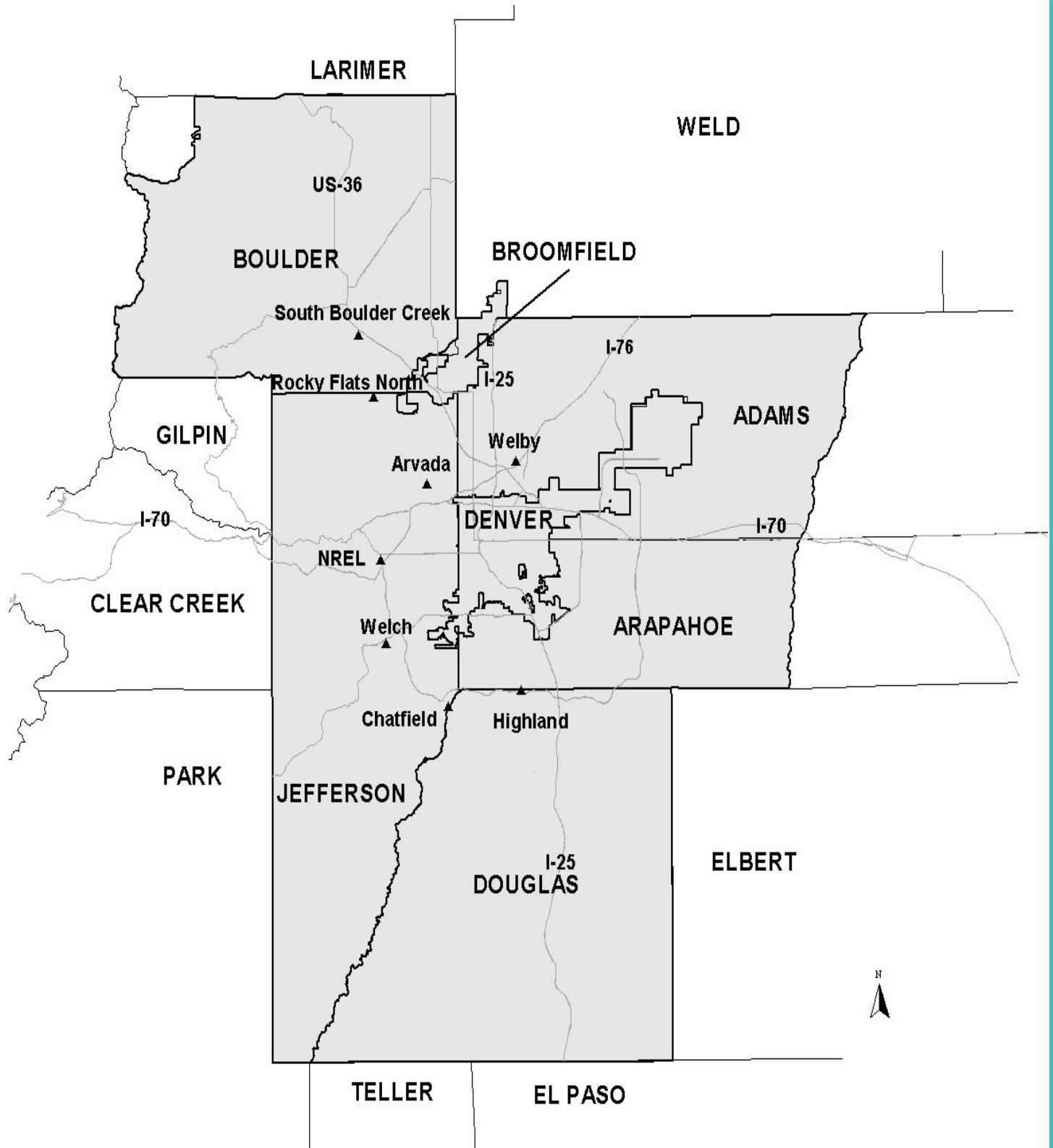
The RAQC looks forward to working with all of its partners in 2006 to develop and implement another successful ozone outreach and education campaign.

For more information, contact Sara O'Keefe at sokeefe@raqc.org or (303) 629-5450, ext. 220 or visit OzoneAware.org.

DATA APPENDICES

APPENDIX ONE:

MAP OF THE METROPOLITAN-DENVER
OZONE ATTAINMENT/MAINTENANCE AREA AND MONITORING SITES



APPENDIX TWO:**AQI/VSI SYSTEM REPORTING SITES FOR OZONE
DENVER-METROPOLITAN AND FRONT RANGE REGIONS**

| Site Name | Abbreviation | Location |
|--|--------------|---|
| Arvada | ARV | 9101 W. 57th (57 th & Garrison) |
| Carriage | CRG | 23 rd Avenue & Julian Street |
| Chatfield Reservoir | CHAT | 11500 N. Roxborough Park Rd. |
| Colorado Springs | ACAD | Road 640, USAF Academy |
| Ft. Collins | FTC | 708 S. Mason St. |
| Greeley Tower | GRET | 3101 35 th Ave. |
| Highlands | HLD | 8100 S. University Blvd. |
| Manitou Springs | MAN | 401 El Monte Place |
| National Renewable Energy Laboratories | NREL | 20 th Avenue & Quaker Street |
| Rocky Flats N | RFN | 16600 W. Highway 128 |
| South Boulder Creek | SBC | 1405 1/2 S. Foothills Highway |
| Welby | WBY | 3174 E. 78 th Ave (78 th Ave. & Steele St.) |
| Welch | WCH | 124000 W. Highway 285 |

APPENDIX THREE:
OZONE ACTION ALERTS
1999 – 2005

| | June | July | August | Total |
|-------------------|------|------|--------|-------|
| 1999 | 1 | 7 | 0 | 8 |
| 2000 | 3 | 15 | 9 | 27 |
| 2001 | 1 | 8 | 4 | 13 |
| 2002 | 10 | 10 | 0 | 20 |
| 2003 | 2 | 25 | 15 | 42 |
| 2004 | 3 | 8 | 3 | 14 |
| 2005 | 3 | 19 | 1 | 23 |
| Average per month | 3 | 13 | 4.5 | |

APPENDIX FOUR:**OZONE MONITORING DATA (PPB)
SELECT CDPHE MONITORING SITES**

| Monitor | 2005 | | | 2005 | 2004 | 2003 | 2003-05 | 2005 | 2002-04 | 2006 | 2006-07 Average |
|---------|------------|------------|------------|------------|------------|------------|-----------------|-------------------|-----------------|-------------------|--------------------|
| | 1st Max | 2nd Max | 3rd Max | 4th Max | 4th Max | 4th Max | Ave. 4th Max | Allow. 4th Max | Ave. 4th Max | Allow. 4th Max | Allow. 4th Max |
| WBY | 13-Jul | 12-Jul | 21-Jul | 24-Jul | 66 | 66 | 68 | 122 | 66 | 115 | 90.5 |
| | 76 | 75 | 75 | 73 | | | | | | | |
| HLD | 18-Jun | 12-Jul | 19-Jul | 8-Jul | 72 | 91 | 81 | 91 | 79 | 103 | 87.5 |
| | 86 | 83 | 81 | 79 | | | | | | | |
| SBC | 24-Jul | 11-Jul | 22-Jul | 28-Jul | 68 | 82 | 75 | 104 | 76 | 110 | 89 |
| | 83 | 79 | 76 | 76 | | | | | | | |
| CRG | 12-Jul | 28-Jul | 16-Jul | 21-Jul | 66 | 85 | 75 | 103 | 74 | 114 | 90 |
| | 80 | 75 | 74 | 74 | | | | | | | |
| CHAT | 12-Jul | 18-Jun | 21-Jul | 11-Jul | 75 | 95 | 84 | 84 | 84 | 96 | 85.5 |
| | 91 | 85 | 84 | 83 | | | | | | | |
| ARV | 12-Jul | 21-Jul | 24-Jul | 11-Jul | 65 | 83 | 75 | 106 | 73 | 111 | 88 |
| | 84 | 80 | 80 | 78 | | | | | | | |
| WCH | 12-Jul | 16-Jul | 21-Jul | 23-Jul | 62 | 77 | 68 | 115 | 69 | 128 | 95 |
| | 71 | 65 | 64 | 64 | | | | | | | |
| RFN | 24-Jul | 18-Jul | 11-Jul | 12-Jul | 73 | 91 | 80 | 90 | 84 | 104 | 88.5 |
| | 83 | 81 | 78 | 77 | | | | | | | |
| NREL | 12-Jul | 21-Jul | 16-Jul | 11-Jul | 74 | 95 | 83 | 85 | 83 | 101 | 87.5 |
| | 85 | 82 | 81 | 79 | | | | | | | |
| GRET | 24-Jul | 16-Jul | 8-Aug | 11-Jul | 69 | 83 | 77 | 102 | 77 | 107 | 88 |
| | 84 | 83 | 81 | 78 | | | | | | | |
| FTC | 16-Jul | 15-Jul | 24-Jul | 22-Jul | 64 | 75 | 71 | 115 | 70 | 117 | 90.5 |
| | 78 | 76 | 76 | 73 | | | | | | | |
| RMNP | 18-Jul | 22-Jul | 17-Jun | 24-Jul | 73 | 86 | 78 | 95 | 82 | 105 | 89 |
| | 84 | 79 | 77 | 76 | | | | | | | |

NOTES: Table includes data through August 31, 2005, which conforms to Colorado Air Pollution Control Division draft data. No data has been formally quality assured at this time. Values highlighted in yellow in left columns represent exceedances to the 8-hour standard.

APPENDIX FIVE:

**2005
1ST, 2ND, 3RD, AND 4TH MAXIMUM 8-HOUR OZONE VALUES (PPB)
SELECT CDPHE MONITORING SITES**

| Site | 1 st Max | 2 nd Max | 3 rd Max | 4 th Max |
|------|---------------------|---------------------|---------------------|---------------------|
| NREL | 12-July | 21-July | 16-July | 11-July |
| | 85 | 82 | 81 | 79 |
| ARV | 12-July | 21-July | 24-July | 11-July |
| | 84 | 80 | 80 | 78 |
| RFN | 24-July | 18-July | 11-July | 12-July |
| | 83 | 81 | 78 | 77 |
| CHAT | 12-July | 18-June | 21-July | 11-July |
| | 91 | 85 | 84 | 83 |
| HLD | 18-June | 12-July | 19-July | 8-July |
| | 86 | 83 | 81 | 79 |
| CRG | 12-July | 28-July | 16-July | 21-July |
| | 80 | 75 | 74 | 74 |
| SBC | 24-July | 11-July | 22-July | 28-July |
| | 83 | 79 | 76 | 76 |
| WCH | 12-July | 16-July | 21-July | 23-July |
| | 71 | 65 | 64 | 64 |
| WBY | 13-July | 12-July | 21-July | 24-July |
| | 76 | 75 | 75 | 73 |
| GRET | 24-July | 16-July | 8-August | 11-July |
| | 84 | 83 | 81 | 78 |
| FTC | 16-July | 15-July | 24-July | 22-July |
| | 78 | 76 | 76 | 73 |
| ACAD | 14-July | 19-July | 13-June | 12-July |
| | 86 | 81 | 78 | 77 |

APPENDIX SIX:

**2005
1ST, 2ND, 3RD, AND 4TH MAXIMUM 1-HOUR OZONE VALUES (PPB)
SELECT CDPHE MONITORING SITES**

| Site | 1 st Max | 2 nd Max | 3 rd Max | 4 th Max |
|------|---------------------|---------------------|---------------------|---------------------|
| NREL | 16-July | 21-July | 24-July | 11-July |
| | 99 | 95 | 94 | 93 |
| ARV | 16-July | 24-July | 21-June | 15-July |
| | 99 | 98 | 96 | 95 |
| RFN | 24-July | 18-July | 28-July | 21-June |
| | 99 | 94 | 90 | 88 |
| CHAT | 19-July | 12-July | 18-June | 22-July |
| | 108 | 103 | 98 | 98 |
| HLD | 19-July | 18-June | 12-July | 21-June |
| | 99 | 95 | 93 | 89 |
| CRG | 21-June | 16-July | 24-May | 22-June |
| | 95 | 95 | 88 | 87 |
| SBC | 24-July | 28-July | 11-July | 22-July |
| | 100 | 94 | 93 | 88 |
| WCH | 12-July | 13-July | 15-July | 24-July |
| | 81 | 78 | 77 | 77 |
| WBY | 20-July | 16-July | 13-July | 15-July |
| | 90 | 86 | 83 | 82 |
| GRET | 16-July | 24-July | 20-July | 9-July |
| | 116 | 98 | 95 | 94 |
| FTC | 16-July | 15-July | 17-June | 22-July |
| | 102 | 89 | 86 | 85 |
| ACAD | 14-July | 19-July | 12-July | 21-July |
| | 99 | 98 | 87 | 85 |

APPENDIX SEVEN:**HISTORICAL 8-HOUR OZONE LEVELS
4TH HIGHEST MAXIMUM LEVELS (PPB)
SELECT CDPHE MONITORING SITES**

| MONITOR | 1994* | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| | 4 th Max | 4 th Max | 4 th Max | 4 th Max | 4 th Max | 4 th Max | 4 th Max | 4 th Max | 4 th Max | 4 th Max | 4 th Max | 4 th Max |
| NREL | 83 | 79 | 82 | 75 | 95 | 80 | 83 | 81 | 81 | 95 | 74 | 79 |
| RFN | 79 | 80 | 83 | 76 | 92 | 81 | 81 | 82 | 88 | 91 | 72 | 77 |
| CHAT | --- | 73 | 79 | 75 | 81 | 76 | 80 | 77 | 83 | 95 | 74 | 83 |
| HLD | 75 | 68 | 73 | 65 | 84 | 75 | 76 | 77 | 76 | 91 | 72 | 79 |
| ARV | 72 | 71 | 73 | 70 | 89 | 72 | 76 | 74 | 73 | 83 | 65 | 78 |
| CRG | 64 | 68 | 68 | 66 | 85 | 68 | 71 | 72 | 73 | 85 | 66 | 74 |
| SBC | 72 | 74 | 75 | 72 | 89 | 75 | 72 | 71 | 78 | 82 | 68 | 76 |
| WCH | 72 | 70 | 69 | 68 | 80 | 66 | 68 | 64 | 69 | 77 | 62 | 64 |
| WBY | 69 | 71 | 74 | 71 | 83 | 71 | 62 | 64 | 68 | 66 | 66 | 73 |

NOTE: Values shown in bold reflect recordings at or above 85 ppb.

APPENDIX EIGHT:
PAID MEDIA ADVERTISING CAMPAIGN
JUNE – AUGUST 2005

Paid Media Advertising Campaign
June – August 2005

Television Spots

| | Paid Spots | Bonus Spots | Miscellaneous Bonus Spots | TOTAL |
|-----------------|------------|-------------|---------------------------|------------|
| KWGN (2) | 64 | --- | 26 (billboards) | 90 |
| KCNC (4) | 20 | 5 | --- | 25 |
| KMGH (7) | 95 | 8 | 27 (billboards) | 130 |
| KUSA (9) | 127 | 9 | 19 (billboards) | 155 |
| KDVR (31) | 32 | --- | 65 (:10 weather) | 97 |
| Comcast (Cable) | 205 | 149 | --- | 354 |
| TOTAL | 543 | 171 | 137 | 851 |

Radio Spots

| | Paid Spots | Bonus Spots | Promotional Spots | TOTAL |
|------------------|----------------|-------------|-------------------|------------|
| KOA (850 AM) | 3 (CCF) | --- | --- | 3 |
| KBCO (97.3 FM) | 168 (AirWaves) | --- | --- | 168 |
| KRFX (103.5 FM) | 15 (MDP) | --- | 14 (MDP) | 29 |
| KXKL (105 FM) | 23 (MDP) | --- | 16 (MDP) | 39 |
| Premiere Traffic | 467 | 85 | --- | 552 |
| TOTAL | 676 | 85 | 30 | 791 |

Outdoor

Billboards (paid): 5 each month (June – August) at nine rotating locations
 Bus tails (bonus): 50 bus tails (July 14 – September 30)

Gasoline Pump Toppers

Suncor (bonus): 257 signs at 43 Phillips 66 stations (July)
 NextMedia (paid): 104 signs at 26 various stations (July)
 144 signs at 36 various stations (August)

Print Ads

*DNA (paid): 1 ad in each newspaper (Car Care Fairs)
 1 ad in each newspaper (Mow Down Pollution)
 **MHSP (paid): 1 ad in each of the 19 community newspapers (Car Care Fairs)

*Denver Newspaper Agency includes The Denver Post and Rocky Mountain News

**Mile High Suburban Press includes 19 local, community newspapers covering the metro area

APPENDIX NINE:**KNOWN MEDIA COVERAGE
APRIL – SEPTEMBER 2005****Car Care Fairs:**

- KCEC-TV Univision: Friday 10:00 pm news 4/29
- KMGH-TV 7NEWS: Saturday morning show 4/30 – with vehicle inspection
- KUSA-TV 9NEWS: Saturday morning show 4/30
- KCNC-TV CBS4: Saturday morning show 4/30
- *Denver Business Journal*: article and event listing (circ 20,000)
- Event coverage included on websites of 9NEWS, 7NEWS and CBS4
- YourHub.com: article and event listing

AirWaves High School Radio Scholarship Program:

- *Farmer and Miner* (Frederick)
- *Longmont Daily Times-Call*

Meteorologist Briefings:

- Briefed KMGH-TV 7NEWS Chief Meteorologist Mike Nelson weather producer on ozone challenge and RAQC's education campaign.
 - Secured daily inclusion of alerts in on-air newscasts and web site.
 - Resulted in article on TheDenverChannel.com's weather section.

Mow Down Pollution:

- KUSA-TV: four airings including meteorologist Marty Coniglio discussing Ozone Action Alert and meteorologist Nick Carter's segment on Mow Down Pollution event
- KOA-AM
- *La Voz Nueva* (circ. 30,000)
- Event coverage on 9NEWS web site
- YourHub.com: seven mentions

Clean Air Crew:

- Inclusion in KMGH-TV's coverage of Bike to Work Day
- YourHub.com: article
- Featured by editors of YourHub.com with photos and highlight of upcoming appearance at KidSpree event
- Life on Capitol Hill: front page picture

Ozone Action Alerts:

- KMGH-TV: ongoing throughout summer
- *Denver Post*, Metro ozone breaks federal standards
- KWGN-TV: ongoing throughout summer
- *Denver Post*: Ozone advisory issued as levels sour
- *Daily Camera*: Ozone levels rise with temps
- *Denver Post*: Six consecutive days of ozone action alerts
- Denvergov.org: Help Prevent Summer Ozone Pollution with tips
- TheDenverChannel.com: High Ozone Levels Affect Many People
- MileHighNews.com: Causes of local ozone problem hazy
- *Wheat Ridge Transcript*: Causes of local ozone problem hazy
- KDVR-TV: ongoing throughout summer
- LovelandFYI.com: Silent threat

Spanish Web site:

- *Rocky Mountain News*: Spanish web site announcement
- *La Voz Nueva*: Spanish web site announcement

Local Government Communication:

- City and County of Denver: article in employee newsletter and online
- City of Englewood: interview with the mayor (cable channel 8)
- City of Federal Heights: article
- City of Golden: article
- City of Lakewood: interview with the mayor (cable channel 8)
- City of Northglenn: article and story on cable channel 8
- City of Thornton: article
- City of Westminster: article
- Denver Regional Council of Governments: article in regional newsletter
- University of Colorado at Boulder: article in employee newsletter

CREATIVE APPENDICES

APPENDIX ONE:
TAGLINE AND GOOD/BAD OZONE ICONS

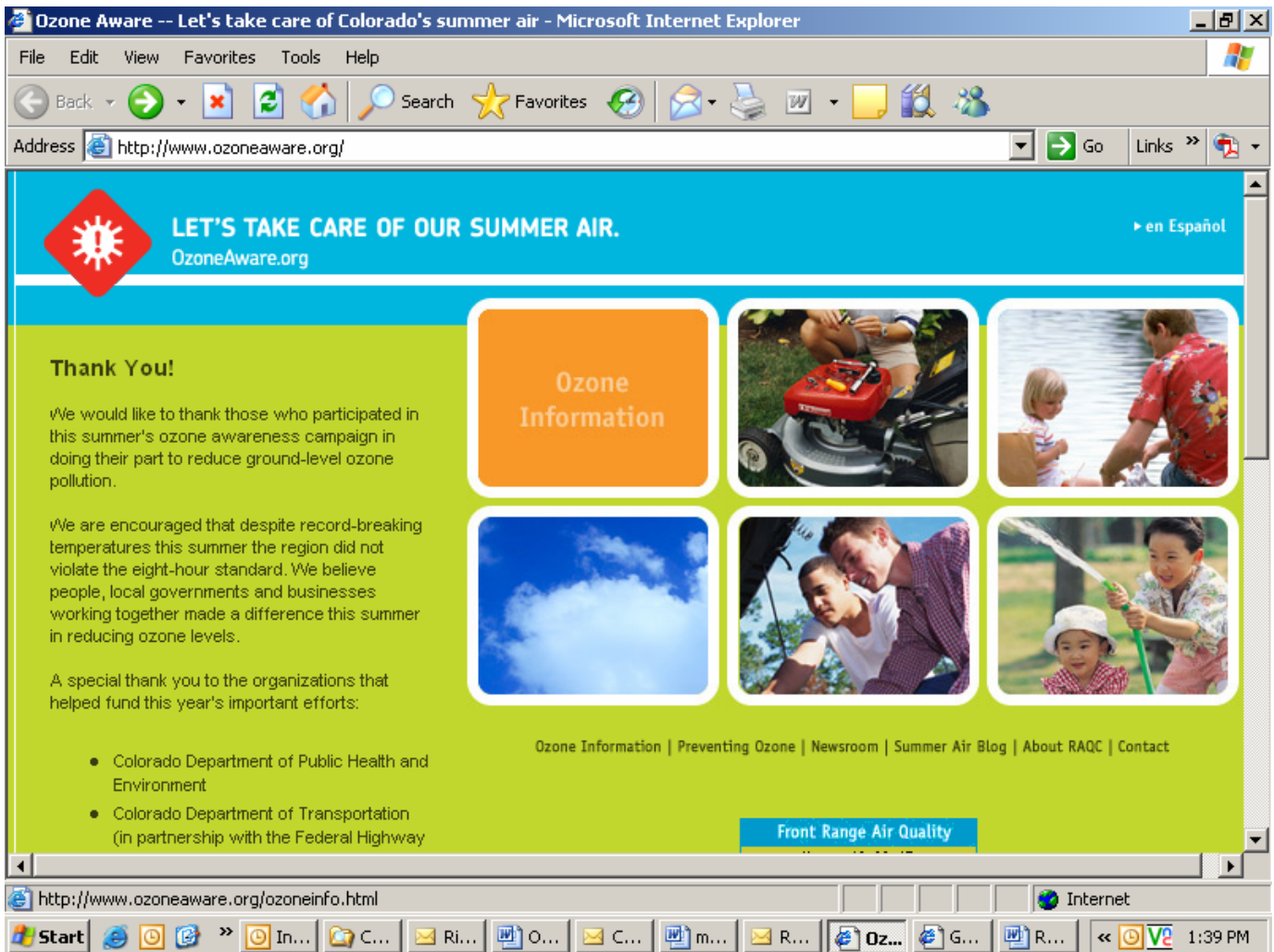


LET'S TAKE CARE OF OUR SUMMER AIR.

OzoneAware.org



APPENDIX TWO: WEB SITE: OZONEAWARE.ORG



**APPENDIX THREE:
OUTDOOR BILLBOARDS**

TIGHTEN YOUR GAS CAP.



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MOW IN THE EVENING.



LET'S TAKE CARE OF OUR SUMMER AIR.
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CHECK YOUR TIRE PRESSURE.



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TUNE UP YOUR CAR.



LET'S TAKE CARE OF OUR SUMMER AIR.
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REFUEL IN THE EVENING.



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APPENDIX FOUR:**OZONE ACTION ALERT TEMPLATE****OZONE ACTION ALERT:**

THE REGIONAL AIR QUALITY COUNCIL AND THE COLO. DEPT. OF PUBLIC HEALTH AND ENVIRONMENT HAVE ISSUED AN ALERT FOR THE METRO-DENVER AND FRONT RANGE REGION. HOT TEMPERATURES, CLEAR SUMMER SKIES, AND LIGHT-TO-MODERATE WINDS MAY LEAD TO INCREASED GROUND-LEVEL OZONE THROUGHOUT THE REGION. THIS OZONE ACTION ALERT IS IN EFFECT UNTIL 4:00 P.M. TOMORROW.

SO WHAT'S THE DIRT ON OZONE?

Ground level ozone pollution is created when emissions from everyday items – such as gasoline-powered vehicles and lawn equipment, and household paints, stains and solvents – combine with other pollutants in the atmosphere on hot, summer days.

IT CAN AFFECT YOU.

At ground level, ozone pollution is harmful to all of us, especially the young and elderly. Ozone can also trigger attacks and symptoms in individuals with pre-existing health conditions, such as asthma or other respiratory infections.

High levels of ozone pollution often affect healthy people who work or exercise outdoors and can cause breathing difficulties, eye irritation and reduced resistance to lung infections and colds with exposure for prolonged periods.

CHILL OUT AND BREATHE EASY.

The fewer ozone-causing emissions you produce on hot, still, summer days, the better. Reduce pollution by doing these simple things:

- > Keep your car well maintained
- > Refuel in the evening on hot sunny days
- > Stop at the click – don't overfill gas tank
- > Mow in the evening on hot sunny days
- > Tighten gas cap after refueling

**FOR MORE INFORMATION:**

24-Hour Air Quality Hotline: 303.758.4848
 Media Inquiries: 303.540.1887 (pager)
 Ozone Aware: www.OzoneAware.org
 RAQC: 303.629.5450 or www.raqc.org
 CDPHE: 303.692.3100

TIGHTEN YOUR GAS CAP.**LET'S TAKE CARE OF OUR SUMMER AIR.**OzoneAware.org

APPENDIX FIVE:**OUTREACH STICKERS AND TIP CARD****SO WHAT'S THE DIRT ON OZONE POLLUTION?**

Ground level ozone pollution is created when emissions from everyday items such as gasoline-powered vehicles and lawn equipment, and household paints, stains and solvents, combine with other pollutants in the atmosphere on hot, summer days. Ground level ozone is harmful to our health and environment. We can reduce our Ozone Alert days by working together. Check out the simple actions you can take on the back of this card.



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(front)**THINK BEFORE YOU START.**

Ground Level Ozone Pollution can be reduced when you do these simple things:

- > keep your car well maintained
- > refuel after 5 p.m. on hot sunny days
- > stop at the click – don't overfill gas tanks
- > walk to lunch and run errands after work
- > take the bus at least once a week
- > use gas-powered lawn equipment after 5 p.m. on hot, sunny days
- > avoid painting and staining projects in the heat of the day
- > tightly cap solvents; store in a cool place

(back)