



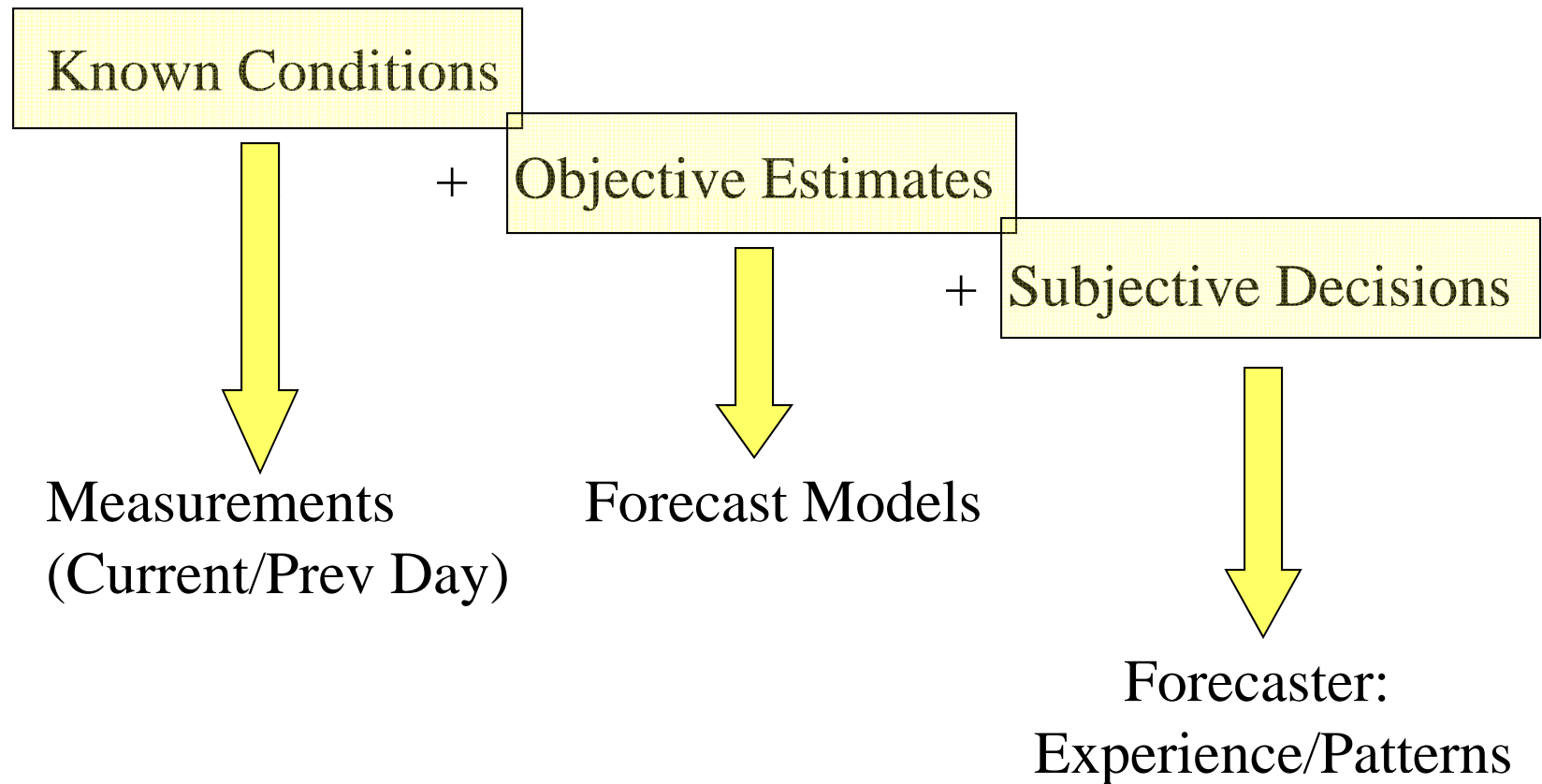
AIR QUALITY FORECASTING AND OUTREACH

ACPAC Meeting, April 18, 2011

Air Quality Forecasting

- Forecasts developed for ozone and particles
- Issued out to 3 days
- Consensus forecasts – MWCOG, MD Department of Environment, and VA Department of Environmental Quality

The Forecast Process



Air Quality Index and Action Guide

- Forecasts are based on the AQI
- National index to communicate air quality levels
- Informs the public on health issues and air quality forecasts
- Includes voluntary actions to reduce air pollution



Air Quality Rating	Steps to Protect Your Health and Our Environment
GOOD 0-50	Enjoy the great outdoors. <ul style="list-style-type: none">- Rather than drive - bike or walk when possible.- Conserve energy. Replace incandescent bulbs with CFLs.- Plant a tree to improve health and air quality.
MODERATE 51-100	Some pollution. Even moderate levels pose risks to highly sensitive groups. <ul style="list-style-type: none">- Bundle errands. Eliminate unnecessary trips.- Check AirAlerts to see if tomorrow's forecast is unhealthy.- Perform regular maintenance on your car.
UNHEALTHY For Sensitive Groups 101-150	Pollution levels are harmful to children, older adults and anyone with a respiratory or heart condition. Limit physical outdoor activity. <ul style="list-style-type: none">- Don't drive alone. Carpool, take public transit.- Refuel your car in the evening.- Put off lawn care until air quality improves.- Use a gas or electric grill instead of charcoal.
UNHEALTHY 151-200	Everyone should limit strenuous outdoor activity when the air is unhealthy to breathe. <ul style="list-style-type: none">- Telework and take public transit.- Turn off lights and electronics when not in use.- Avoid lawn mowing or use an electric mower.- Sign up for health alerts at cleanairpartners.net.- Don't use chemicals on your lawn and garden.
VERY UNHEALTHY 201-300	Pollution levels are very unhealthy for everyone. Avoid any physical outdoor activity. <ul style="list-style-type: none">- Follow all of the action steps above.

Do Your Share for Cleaner Air.

Visit Cleanairpartners.net to get your daily AirAlerts and discover additional steps you can take each day to improve our region's air quality, protect your health, and reduce the risks of climate change.



Ingredients for Unhealthy Air

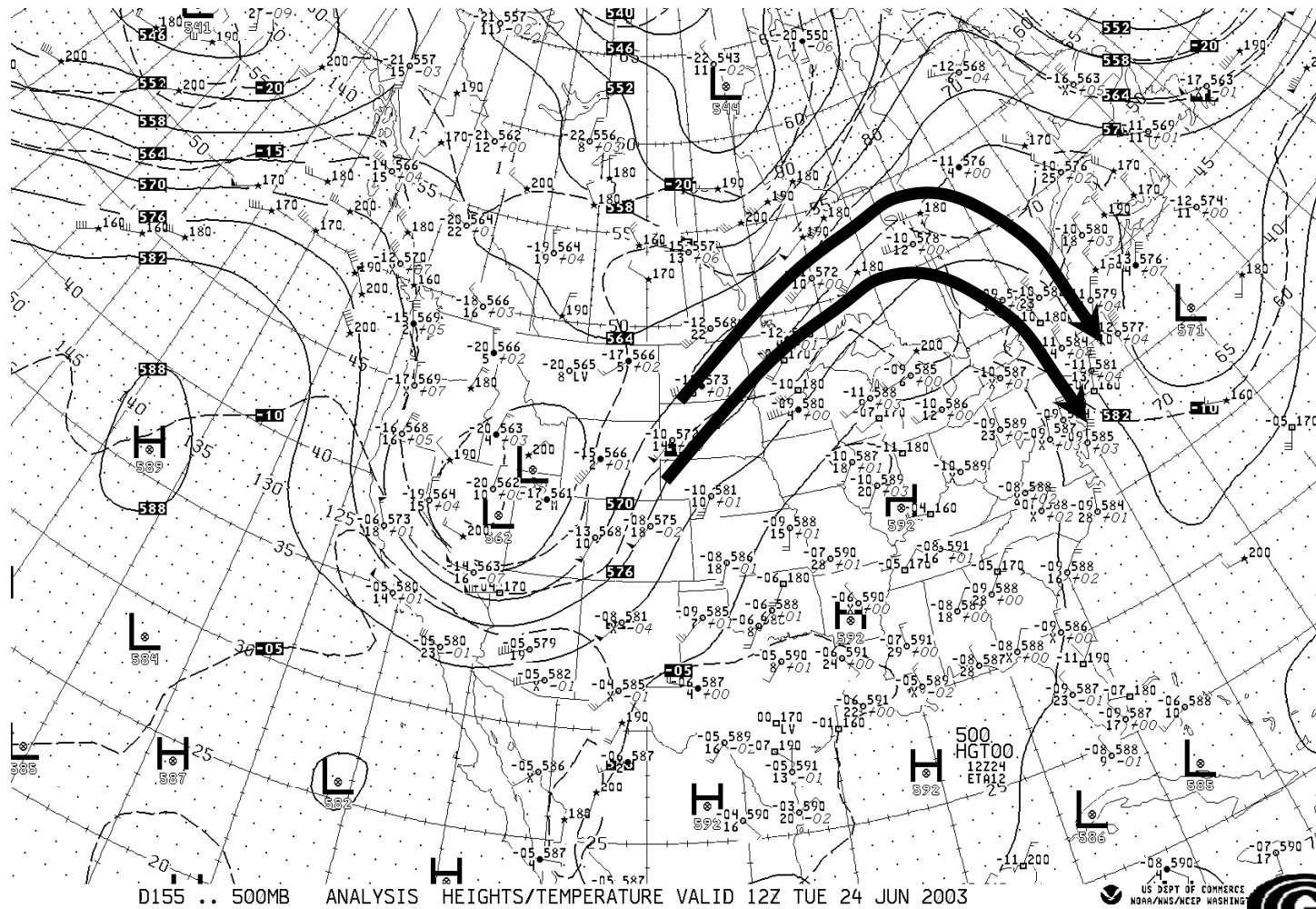
- Limited vertical mixing
 - Subsidence aloft
 - Strong inversion in the near-surface layer

- Sustained periods of sunshine
 - Solar zenith angle (seasonal effect)
 - Are all clouds created equal?

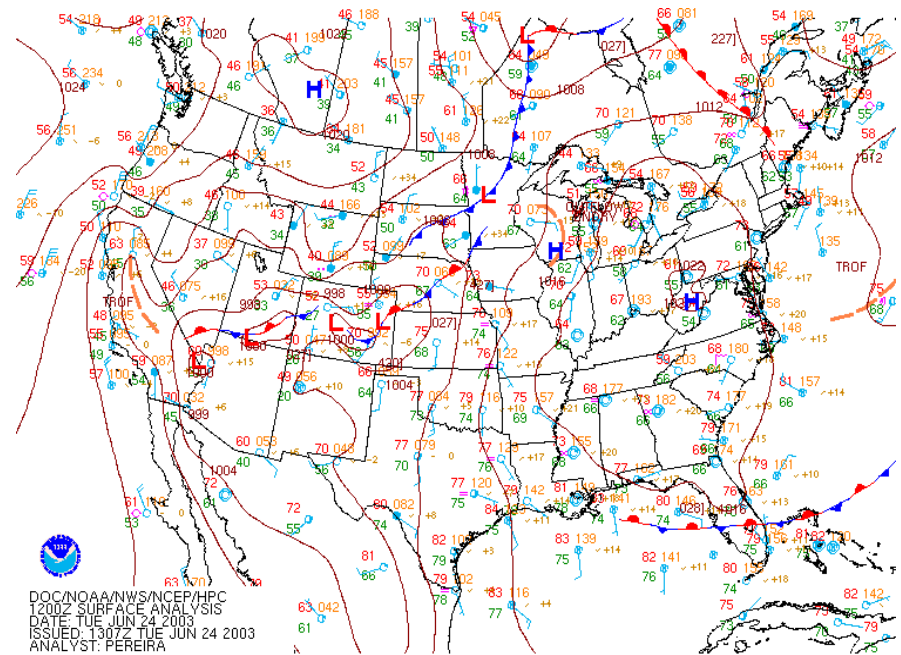
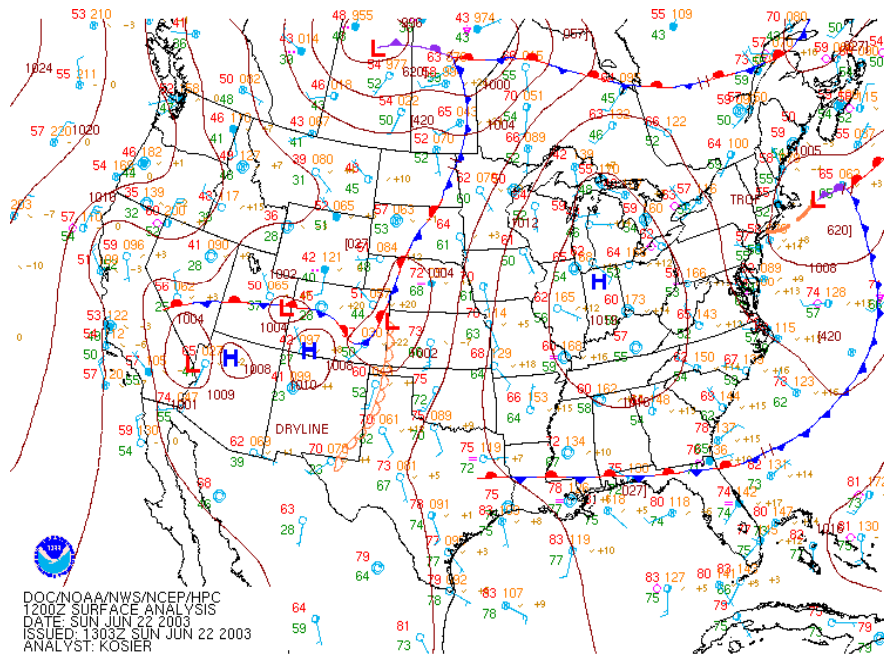
- Light winds

- Modified (polluted) air mass
 - Where is our air coming from?

Standard Weather Pattern



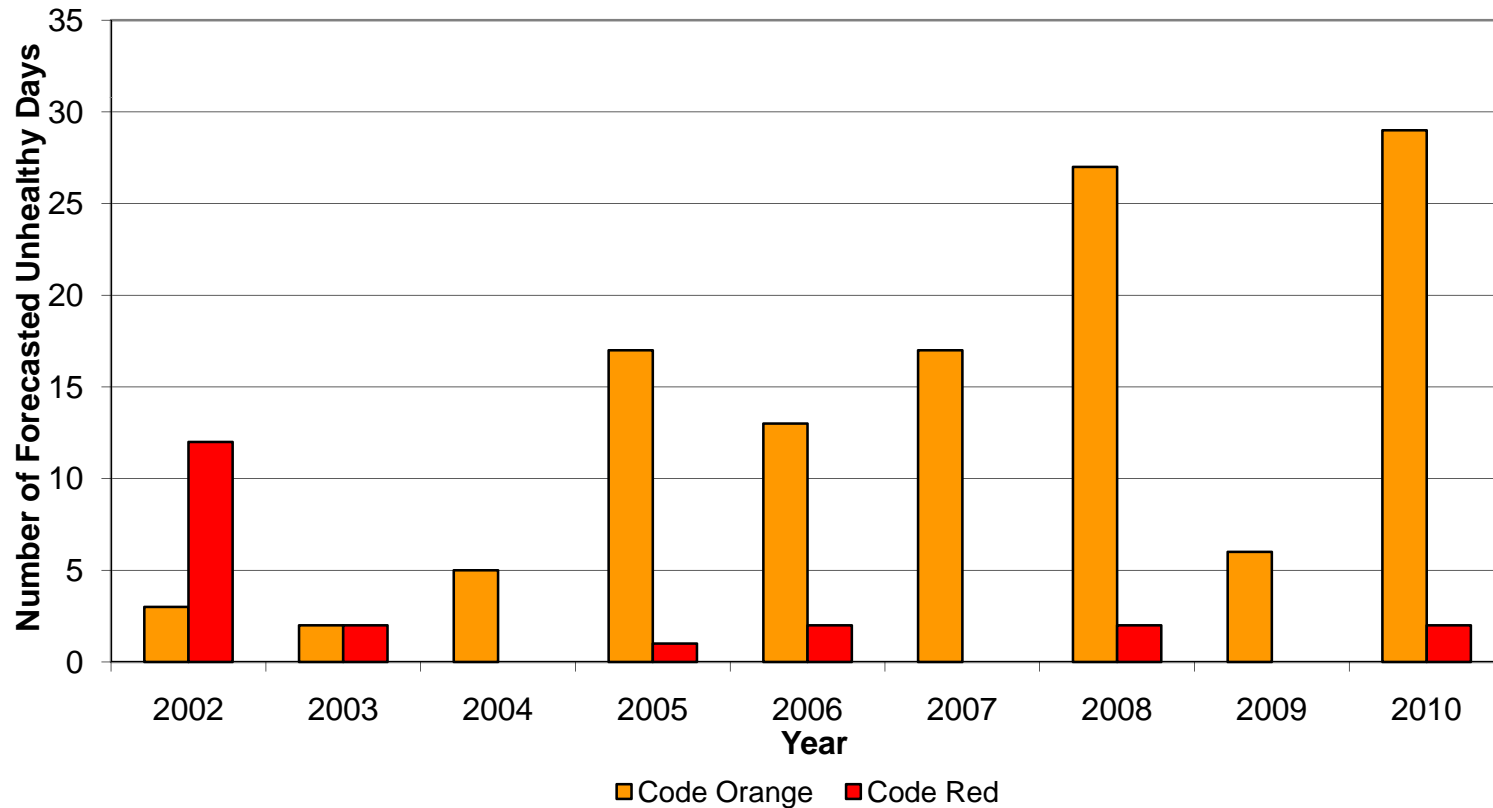
Slowly Migrating High Pressure



Slowly migrating high pressure means the air mass has a chance to modify (get dirtier) and, once overhead, winds are light.

Historical Forecasted Unhealthy Air Days

Forecasted Unhealthy Air Days
Washington, DC Metropolitan Region
2002 - 2010



Where to Find the Air Quality Forecast

- **MWCOG Website:**
www.mwcog.org/environment/air/forecast
- **MWCOG Hotline:**
202-962-3299
- **Clean Air Partners AirAlerts and Website:**
www.cleanairpartners.net
- **Clean Air Partners Twitter and Facebook Pages:**
www.twitter.com/cleanairpartner
www.facebook.com/cleanairpartners

AirAlerts

- Available for 4 regions
- Forecasts: daily and unhealthy
- Real-Time Health Notifications: code orange and red
- Includes health messages and tips

From: Clean Air Partners [mailto:airalerts@cleanairpartners.net]
Sent: Wednesday, September 01, 2010 3:23 PM
To: Jennifer Desimone
Subject: AirAlert: Unhealthy Air (Code Orange) Forecasted for Thursday, September 02, 2010



Contact Us: Metropolitan Washington Area (202) 962-3360 Metropolitan Baltimore Area (410) 732-9575

Your Daily Air Quality Forecast

Thursday, September 2

Metropolitan Washington	Unhealthy for Sensitive Groups	Code Orange:	Pollution levels harmful to children and anyone with breathing or heart conditions
Metropolitan Baltimore	Unhealthy for Sensitive Groups	Code Orange:	Pollution levels harmful to children and anyone with breathing or heart conditions
Western Maryland	Moderate	Code Yellow:	Some pollution - poses risks to highly sensitive
Eastern Shore	Moderate	Code Yellow:	Some pollution - poses risks to highly sensitive

Extended Three-Day Forecast

Air Quality Action Tips

Green	Good	If you are considering purchasing new appliances and products for the home, look for the ENERGY STAR which use less energy and can save you money.
Yellow	Moderate	Use a hybrid or fuel-efficient car.
Orange	Unhealthy For Sensitive Groups	Put off lawn care for a day or two until the air is healthier.
Red	Unhealthy	Check the AirAlert for your extended forecast to see if tomorrow's air quality is going to be unhealthy.
Purple	Very Unhealthy	Postpone outings on gasoline or diesel-powered recreational boats because they are high pollution sources.

Public Awareness and Outreach

- Outreach to local Television Meteorologists
- Annual Public Awareness Campaign
 - Radio Ads
 - Online Ads
 - Transit Ads
- Website and Social Media
- School Curriculum and Summer Camp Outreach
- Materials

Examples of Advertisements

Visit cleanairpartners.net to sign-up for your daily air quality forecast.

CLEAN AIR PARTNERS

I do it for them.

The advertisement shows a hand holding a smartphone displaying an air quality forecast. In the background, a family of three (a man, a woman, and a child) are looking at a smartphone together in a grassy field. The Clean Air Partners logo is visible in the bottom right corner of the image.

Breathe easy this summer

The Washington Times

President Obama labeled the recession a result of a decade of irresponsibility under Republicans.

Kara Rowland

NEWS OPINION SPORTS CULTURE BOOKS BLOGS COMMENTARIES MULTIMEDIA

EDITORIALS COMMENTARY LETTERS WATER COOLER DECKER KUMMER TUGENT MASTO BLUMLEY

HOME OPINION

RECENT EDITORIALS

EDITORIAL: The Philippine moment

EDITORIAL: Obama appointee's prescription for socialism

Kill misapplied, tax-raising energy bill

Health care gender gap

Obama's ignorant NASA homage

ADAMS: Harry Potter and Sharia law

By D.L. Adams

Sometimes, only a celebrity angle can get the public to pay attention to what's important. The Harry Potter address who suddenly became subject to Sharia law may be the source of such a moment when the public pays enough attention to create a sea change in national opinion. Published 7:10 p.m. July 9, 2010 - 51 Comments

NUGENT: To err on the side of freedom is no error

By Ted Nugent - The Washington Times

In a world increasingly hellbent on abandoning logic and the ensuing escalation of Obama madness, it is clearly time for the maximum celebration of the good old, always reliable Uncle Ted

creator of logic. Published 6:32 p.m. July 9, 2010 - 26 Comments

BOUSTANY & GINGREY & PRICE: Dr. No

By Reps. Phil Gingrey, Tom Price and Charles Boustany - The Washington Times

Throughout the yearlong debate over reforming our nation's health care system, Democratic leaders, including the president, continually reassured Americans that their brand of health care reform would not mean the rationing of care. Published 7:10 p.m. July

Sign-up for daily AirAlerts

CLEAN AIR PARTNERS

0% APR FOR 72 MONTHS

for qualified buyers!

OR

\$4,000 CASH BACK

on select models

SEE CURRENT OFFERS



Website

The screenshot shows the Clean Air Partners website in a Windows Internet Explorer browser window. The address bar displays <http://www.cleanairpartners.net/>. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The website's navigation menu includes: YOUR AIR QUALITY, GET INVOLVED, AIR QUALITY FACTS, EDUCATION, SUPPORTERS, RESOURCES, and ABOUT.

Sign Up for AirAlerts (Enter your email here) AIRALERT
Air quality information delivered straight to your inbox.

CLEAN AIR PARTNERS
Protect the Air We Breathe.
Do Your Share for Cleaner Air.

WHAT'S NEW?

- Be a Winner!** Help us reach our goal of 4,000 AirAlerts participants and win a clean burning, portable gas grill! All you have to do is sign up for [AirAlerts](#), our daily air quality forecast. The 4,000th person will be our winner!
- The Great Maryland Lawn Mower Event** Photos now posted from The Great Maryland Lawn Mower Event. [Visit the photo gallery](#) to check them out.

Clean Air Tip
Mowing for one hour with a gas-powered lawnmower causes as much pollution as driving round-trip from D.C. to New York City.

Clean Air Blog
[All About Mowers](#) by Maryland Department of the Environment

Air Quality Forecast
TODAY
Metropolitan Washington
Friday, September 17
Good

EXTENDED
[Save as Default](#) Sat 9/18 Sun 9/19 Mon 9/20
Forecast source: Metropolitan Washington Council of Governments

Current Air Quality **Haze Cams** [Save as Default](#)

Maximum AQI
Metro Washington: Good
Metro Baltimore: Good
Western Maryland: Good
Eastern Shore: Good

Upcoming Event
Oct 7, 2010 - Telework Exchange Town Hall

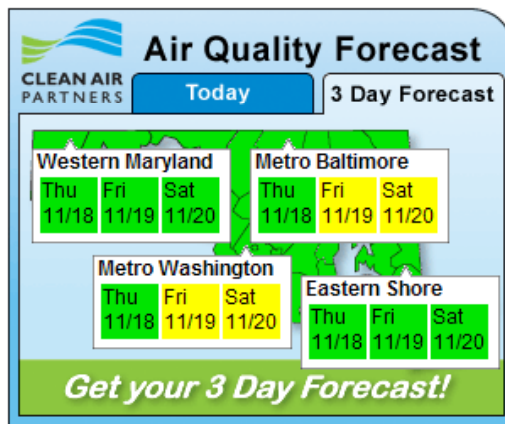
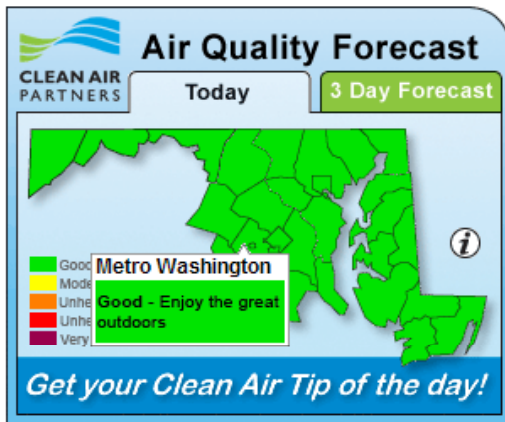
Media Center
Visit our [Media Center](#) for a photo gallery, videos, and audio recordings!

Facebook / Twitter / YouTube
Follow Clean Air Partners on [Facebook](#), [Twitter](#) and [YouTube](#).

Done Internet | Protected Mode: On

Free Web Tools

Forecast Widget:

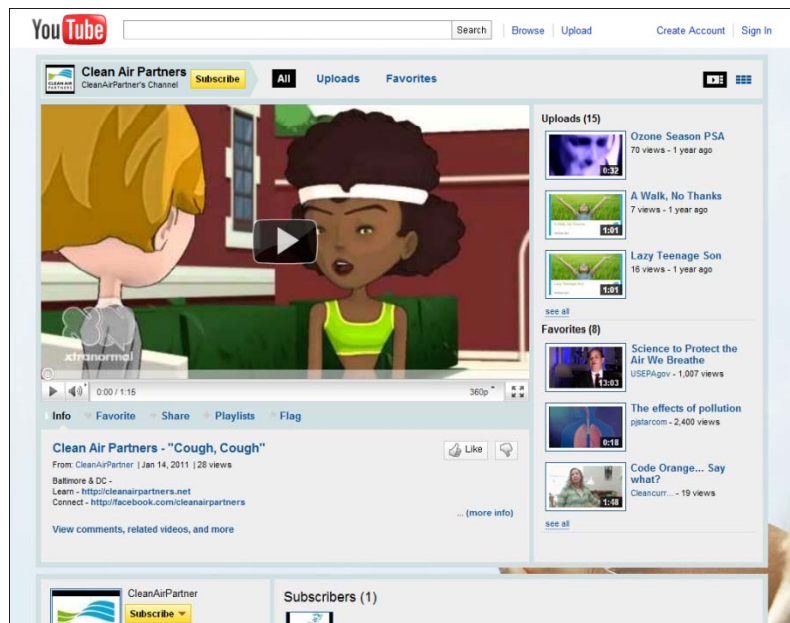


AirAlerts Button:



Social Media

- Engage 2-way dialogue with the public
- Contests to encourage clean air behavior



Materials

Thousands of pieces of materials are distributed each year throughout the Baltimore/Washington region.



CLEAN AIR PARTNERS

These easy steps can protect your health!

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UNHEALTHY For Sensitive Groups 101-150	Pollution levels are harmful to children, older adults and anyone with a respiratory or heart condition. Limit physical outdoor activity.
UNHEALTHY 151-200	Everyone should limit strenuous outdoor activity when the air is unhealthy to breathe.
VERY UNHEALTHY 201-300	Pollution levels are very unhealthy for everyone. Avoid any physical outdoor activity.

Get your daily forecast at cleanairpartners.net

or scan the code at right with your smartphone to sign-up for AirAlerts.



Schools and Summer Camps

- Air quality and climate information presented to thousands of students during the school year
- Reached approx. 3,000 young people through presentations at summer schools, camps, recreation centers, and summer youth job initiatives
- Annual poster contest
- Science fairs in 10 jurisdictions

