



Working Together for Clean Air

www.pscleanair.org

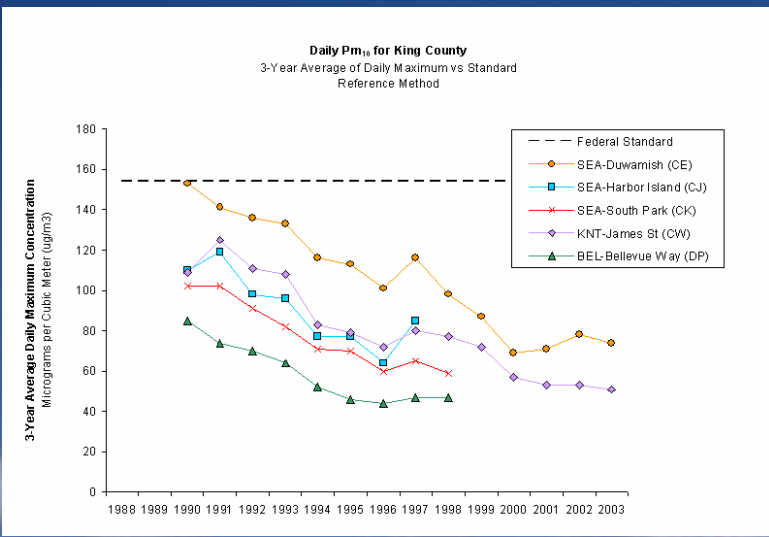


The Puget Sound Wood Smoke Control Program



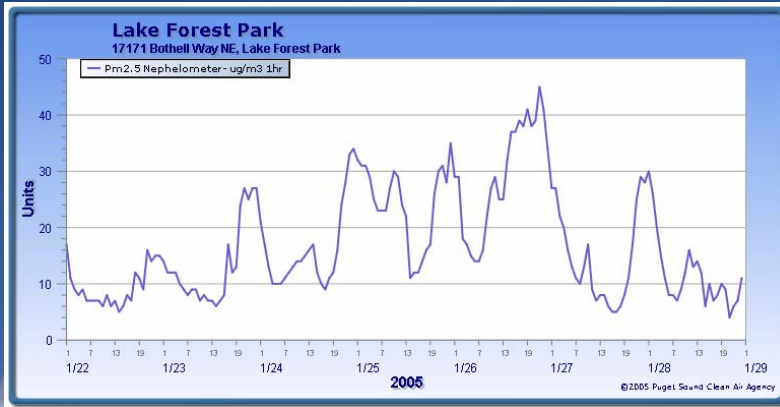
James Nolan
Director-Compliance

Why Do We Care About Wood Smoke?



Slide 2

How Do We Know It's Wood Smoke?



Slide 3

Our Universe of Wood Burning Devices



- **1.2 Million residences in our jurisdiction**
- **Over 600,000 fireplaces and woodstoves in use**
 - About 500,000 are fireplaces and 100,000 are wood stoves
- **Need to understand what devices are causing the problem**
- **Certified stoves are not the answer to problem of wood smoke**
 - Certified devices are thousands of times dirtier than gas or oil
 - Central heat is really the answer
 - Like the ambiance of a flame? Get a gas appliance!

Slide 4

What's Our Program



- **Change from wood to a cleaner form of heat**
 - Natural gas, propane, oil, pellet) or from uncertified to certified
- **Pollution prevention**
 - Proper burning practices, weatherization, manufactured logs etc.)
- **Burn Bans**
 - Stage 1 – 35 ug/m3 PM_{2.5} - No fireplaces or uncertified Stoves
 - Stage 2 – 60 ug/m3 PM_{2.5} - No wood burning
 - Designed to discourage the use of uncertified stoves
- **Complaint Response**
- **Public education about the health effects of wood smoke**
- **Discourage installation of wood burning appliances in new multiple unit buildings and single family housing developments**

Slide 5

Uncertified Wood Stove Change Out



- **Advertising**
 - Joint Promos with dealers and utilities
 - Direct promos by Gas Company and Oil Heat Institute
- **Funding – Where do we get the \$??**
 - State woodstove account
 - Direct agency subsidy
 - ▲ Paid for disposal
 - ▲ Pay a portion of the change out
 - SEP's
 - ▲ Boeing paid a portion of the cost of their employees changing to gas
 - Permit mitigation (e.g. Hampton)
- **Implementation**
 - Media campaigns
 - Events (fire depts, home shows, fairs)
 - Those annoying burn bans (if you really want to heat with wood you need to upgrade)

Slide 6

Wood Smoke Pollution Prevention



- **Proper Burning practices**

- Bad burner school - video
- Hearth Products web site (www.burnclean.org)

- **Weatherization**

- Connect people with existing energy conservation programs

- **Compressed Wood Logs**

- For open fireplaces this the most realistic option
- Potential wood smoke emission reduction is over 70%
- Switching to gas logs would be best, but is relatively expensive

- **EPA Web site has some good references**

- www.epa.gov/ttn/chief/ap42/ch01/related/woodstove.pdf

Slide 7

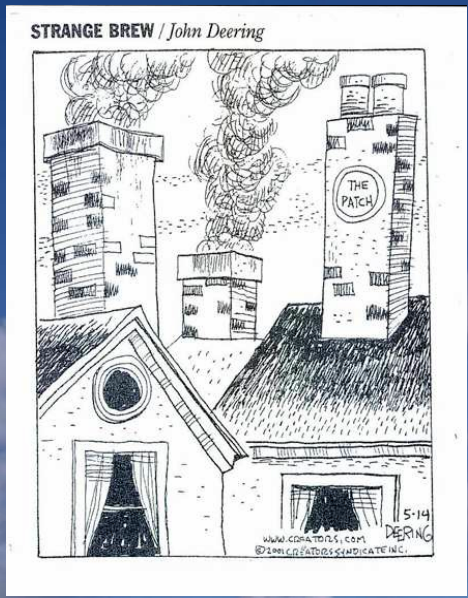
What Advice Do We Have



- **PATIENCE - This is going to take years**
- **People are in denial - Burning is in our genes**
- **Be ready for the bad press**
 - "A Yuppie Vendetta Against Wood-Stove Owners" – Seattle Times Oct 1991
- **Know what the mix of devices is in your region**
 - Wood stove change out isn't the answer if the wood smoke is coming from fireplaces
- **New wood stoves cost as much as a new forced air furnace**
 - It costs in the neighborhood of \$3,000 to install a new wood or gas stove
 - The change out program will probably not make it economically attractive for folks to change. They need to be ready to act anyway.
 - We use our burn bans on uncertified devices to encourage them to change
- **Manufactured logs are a cost-effective option for open fireplaces**
 - There is a huge emission reduction potential for no capital investment
- **Focus the message on the wood smoke not the wood burner**
 - There is strong political support for wood heating
 - There is no political support for wood smoke

Slide 8

The Ultimate Answer is the Patch



Slide 9