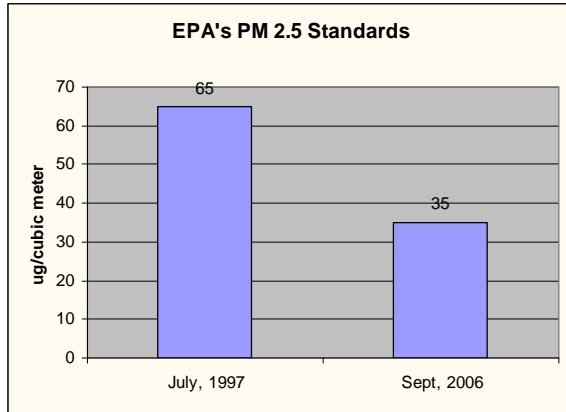
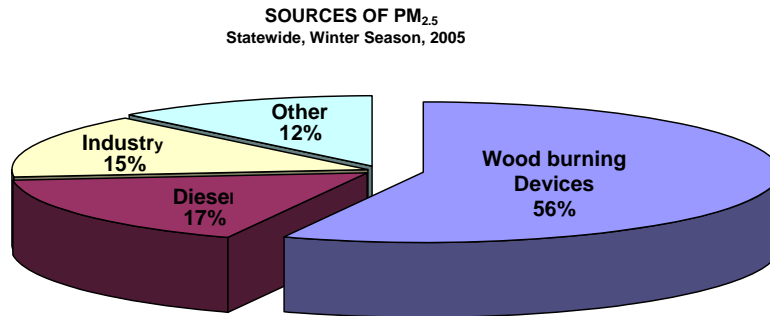


SUMMARY OF DATA ON WOOD SMOKE MARCH 2008

EPA STANDARDS:



PM2.5 SOURCES:



EMISSIONS FROM WOOD BURNING DEVICES:

| Type of Device | # of devices | tons/year | Emission % |
|---|------------------|--------------|------------|
| Uncertified Stoves, Inserts & furnaces: | 292,841 | 8435 | 58% |
| Certified Stoves, Inserts, pellets | 322,133 | 3600 | 25% |
| Fireplaces | 705,985 | 2509 | 17% |
| Total | 1,320,959 | 14544 | |

*Source: Dept. of Ecology 2005 Emission Inventory

- Note: These estimates are approximate. The hearth products industry believes there are more uncertified stoves and fewer certified stoves than this.

AREAS IDENTIFIED AS AT RISK OF VIOLATING THE STANDARDS:

Areas Expected to be Nonattainment in 2008 and 2009:

- Wapato Hills-Puyallup River Valley (Tacoma area)
- Yakima area

Areas with the Potential to be Nonattainment in 2009:

- Vancouver area
- Kent area
- Marysville area
- Everett area
- Darrington area

**SUMMARY OF DATA ON WOOD SMOKE
MARCH 2008**

Areas at Risk of Nonattainment after 2009:

- Olympia/ Lacey/Tumwater area
- Port Angeles area
- Spokane area
- Lynnwood area
- Mountlake Terrace area
- Lake Forest Park area
- South Seattle area

SUMMARY HEALTH EFFECTS OF PM2.5

- PM 2.5 exposure causes both long-term and immediate health problems.
 - Healthy populations become more susceptible
 - Sensitive Populations are seriously impacted
- In particular studies show ,
 - Decreased lung growth and function, and increased susceptibility to asthma in children
 - Increased symptoms and episodes from lung ailments such as asthma, chronic bronchitis, emphysema, in both children and adults
- Sensitive populations are particularly affected, in Washington that is:
 - 500,000 (8%) with asthma; 125,000 children
 - 400,000 (7%) with cardiovascular disease
 - 3,700 with lung cancer
- We all are affected by:
 - the increased cost of health care
 - increased health risks
 - costs associated with nonattainment status

OVERALL WOODSMOKE MANAGEMENT STRATEGY:

- Use curtailments (staged burn bans) to curb exceedances during stagnations
- Increase removal/change-out incentive programs
- Provide funding for a public education/information campaign
- Have additional authority for when curtailment & change-out aren't working:
 - Allow area-wide bans or phase-outs on use uncertified devices
 - Required removal in priority areas, if needed
 - Other approaches

CURTAILMENTS BY JURISDICTION AND YEAR:

| | 2007 | | 2006 | | 2005 | | 2004 | | | |
|--------------|--------------|------|--------------|------|--------------|------|--------------|------|------|------|
| Jurisdiction | curtailments | Days | curtailments | days | curtailments | days | curtailments | days | Avg | |
| PSCAA | 2 | 8 | 0 | 0 | 2 | 18 | 0 | 0 | 1 | |
| ORCAA | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0.25 | |
| SRCAA | 0 | 0 | [2] | 0 | [2] | 4 | 10 | 1 | 2 | 1.75 |

**SUMMARY OF DATA ON WOOD SMOKE
MARCH 2008**

| | | | | | | | | | |
|---------|-------|----|-------|----|-----|----|----|----|-----|
| YRCAA | (1) 4 | 61 | (1) 3 | 24 | 8 | 48 | 5 | 26 | 5 |
| Ecology | [1] 2 | 3 | [2] | 0 | [2] | 0 | na | na | 1.2 |

[] - # of advisories, i.e. not enforceable

() - # of Stage 2 curtailments

Note: NWCAA, SWCAA & BCAA did not call any curtailments in this period.

- Note, under new curtailment criteria, the number of curtailments in the future may be different than suggested by this history.

**POTENTIAL COSTS OF WOODSTOVE CHANGE OUT PROGRAMS
2007 ESTIMATES -- BEING UPDATED FOR 2008**

| Communities | Average PM2.5 | Number of Households | Uncertified Devices (10.8%) | 40% change \$500 subsidy | 70% change \$500 subsidy |
|--|---------------|----------------------|-----------------------------|--------------------------|--------------------------|
| <i>At Most Risk of Nonattainment</i> | | | | | |
| Yakima, woodsmoke control area | 40.1 | 45,713 | 4,937 | 987,401 | 1,727,951 |
| Tacoma, urban growth area | 42.3 | 242,235 | 26,161 | 5,232,276 | 9,156,484 |
| Marysville | 32.6 | 9,640 | 1,041 | 208,220 | 364,384 |
| Vancouver | 39.0 | 74,631 | 8,060 | 1,612,030 | 2,821,052 |
| Total | | 372,219 | 40,200 | 8,039,927 | 14,069,871 |
| Biennial -- tot cost averaged over 3 biennia | | | | \$2,679,976 | \$4,689,957 |

| <i>With adverse health effects, some risk of nonattainment</i> | 2006 Days Over 20 | Number of Households | Uncertified Devices (10.8%) | 40% change \$500 subsidy | 70% change \$500 subsidy |
|---|-------------------|----------------------|-----------------------------|--------------------------|--------------------------|
| Colville | 34 | 1,270 | 137 | 27,432 | 48,006 |
| Port Angeles | 33 | | | | 0 |
| Lynwood/Mountlake Terrace | 27 | 21,382 | 2,309 | 461,851 | 808,240 |
| South Park Community (Seattle) | 23 | 13,744 | 1,484 | 296,870 | 519,523 |
| Lake Forest Park | 22 | 4,769 | 515 | 103,010 | 180,268 |
| Lacey | 19 | 38,463 | 4,154 | 830,801 | 1,453,901 |
| Twisp | 18 | | | | 0 |
| South Seattle (E Marginal Way) | 17 | 382 | 41 | 8,251 | 14,440 |
| Spokane, urban growth area | 15 | 242,235 | 26,161 | 5,232,276 | 9,156,484 |
| Total | | | 34,802 | 6,960,492 | 12,180,862 |
| Biennial -- tot cost averaged over 3 biennia | | | | \$2,320,164 | \$4,060,287 |

| | | | | | |
|----------------------|--|--|--|---------------------|---------------------|
| Grand Total | | | | \$15,000,419 | \$26,250,733 |
| Biennial Grand Total | | | | \$5,000,140 | \$8,750,244 |

FEEES ON WOOD BURNING DEVICES:

| Fiscal yr | revenue | per unit | units |
|-----------|-----------|----------|--------|
| 90 | \$181,060 | \$5 | 36,212 |
| 91 | \$443,022 | \$15 | 29,535 |

**SUMMARY OF DATA ON WOOD SMOKE
MARCH 2008**

| | | \$15 first 6 months; \$30 last 6 months | |
|------|-----------|--|--------|
| 92 | \$501,466 | | 23,545 |
| 93 | \$666,660 | \$30 | 22,222 |
| 94 | \$664,865 | \$30 | 22,162 |
| 95 | \$508,000 | \$30 | 16,933 |
| 96 | \$490,270 | \$30 | 16,342 |
| 97 | \$238,286 | \$30 | 7,933 |
| 98 | \$268,094 | \$30 | 8,936 |
| 99 | \$284,460 | \$30 | 9,482 |
| 2000 | \$243,210 | \$30 | 8,107 |
| 2001 | \$233,130 | \$30 | 7,771 |
| 2002 | \$326,430 | \$30 | 10,881 |
| 2003 | \$233,820 | \$30 | 7,794 |
| 2004 | \$204,930 | \$30 | 6,831 |
| 2005 | \$225,090 | \$30 | 7,503 |
| 2006 | \$288,360 | \$30 | 9,612 |
| 2007 | \$293,160 | \$30 | 9,772 |