



Central Okanagan Regional Air Quality Program

Actions for Clean Air

Central Okanagan Regional Air Quality Program

- Kelowna
- Peachland
- Oyama
- Lake Country
- Westbank
- Westside
- Ellison
- Joe Rich



LAYERS OF GOVERNMENT

Okanagan Airshed



The Problem

Particulates and Ozone that exceed National Standards

Sources of Particulates (PM₁₀ and PM_{2.5}):

- Open burning, wood stoves, vehicle exhaust, road dust, industrial emissions.

Sources that contribute to Ozone:

- Vehicle exhaust, soil, trees, smoke



Outdoor Burning Emission Control Strategies

- Backyard Burning Ban (Except Lake Country and Peachland)
- Land clearing for development open burning ban
- Agricultural wood waste chipping project
- No burning during poor venting conditions (VI must be ≥ 65)
- No burning during fair or poor air quality
- Outdoor burning hotline
- Coordinating forest industry slash burning
- Outdoor burning educational brochures to agriculture industry
- First Nations agreed to follow our bylaws
- All wood waste over 8 inches diameter must be dried for two years
- Strict proactive bylaw enforcement of outdoor burning regulations (all burn piles are inspected, permit holders are consulted and all infractions are ticketed).

Agricultural Wood Waste Chipping Project



- Up to 45% of outdoor burning emissions removed through this program.
- Program operating since 2004
- 179 acres of orchard trees chipped annually, producing 9000 m³ of chips and reducing particulates by 103 tonnes.



Wood Burning Appliance Emission Control Strategies



- Great Okanagan Wood Stove Change out Program
 - Over 900 old wood stove changed out
 - Wood Stove Workshops
 - New Insurance Industry policies are forcing people to change out their old wood burning appliances.
- Wood burning appliance bylaw
 - Allows ticketing for people burning unseasoned wood
 - Allows ticketing for those creating nuisance amounts of smoke
 - New wood burning appliances must be EPA emission approved
 - Non emission approved wood burning boilers and furnaces are banned

Vehicle Emissions Control Strategies

- Cash for Clunkers Clean Air Rewards Program
 - Over 700 Vehicles Sent to the Scrap Yard
- Annual Vehicle Emissions Clinics (formerly held)
- Corporate Idling Policy
- School Based Anti Idling Project
- Anti Idling Signage Policy



Transportation Demand Management Programs



- Commuter Challenge and Bike to Work Week
- Pedestrian and bike corridor planning
- Cycling - Bike rack program on busses and various locations. Bike lockers at town centers.
- Cycling network and pedestrian network planning
- Transit Service Improvements (Bus Rapid Transit Line)
- Walk and Roll Car Free Day
- Carpool Program
- Clean Air Day Celebration
- Walk to School Day

Smart Growth Principals

- Land Use Planning
 - Land use and transportation policies that will accommodate future growth in a manner which minimizes potential air quality impacts
- Transportation Planning
 - Trip Reduction Programs
 - Transportation Demand Management
- Development Policies
 - Ensure new commercial and industrial facilities have the most up-to-date pollution control technologies and operating practices

Education Programs & Events

- School presentations
- Mayor's Environmental Expo
- Living Greener Calendar
- Environmental Mind Grind



Research

- Research identifies priority pollutants, tracks emission reductions, identifies potential air pollution problems and validates the use of emission reduction strategies.

- Monitoring
- Emissions Inventory
- Emissions Forecasting
- Speciation Analysis
- Cost/Benefit Modeling
- Dispersion Modeling

Community Energy and Greenhouse Gas Reduction Initiatives

- Energy and Greenhouse Gas reduction initiatives reduce air pollution and saves money.
- Belong to the FCM's Partners for Climate Protection Program
 - Completing milestones of the program, which includes an emissions inventory, developing a plan of action and implementing that plan.
- City of Kelowna Energy Management Committee
 - Identifies opportunities to reduce costs and energy consumption within City operations.

Air Quality Management Planning

- Central Okanagan AQMP Updated in 2007
- Committed to keeping our air clean while the area grows (striving for continuous improvement)
- Set priorities for emission reductions
 - Outdoor burning (Agriculture, Development, Forest Industry, First Nations)
 - Wood Burning Appliances
 - Vehicle Emissions
- Okanagan Airshed Coalition is developing an Okanagan AQMP (Spring 2008)

Benefits of a Valley Wide AQMP (RDNO, RDCO, & RDOS)

- Supports common and consistent air quality programs, communications and messaging throughout Valley (i.e.: open burning regs.)
- Highlights the inter- and multi-jurisdictional nature of air pollution
- Improves coordination of stakeholder resources, expertise
- Increases opportunities for funding from senior levels of government

ECONOMIC BENEFITS

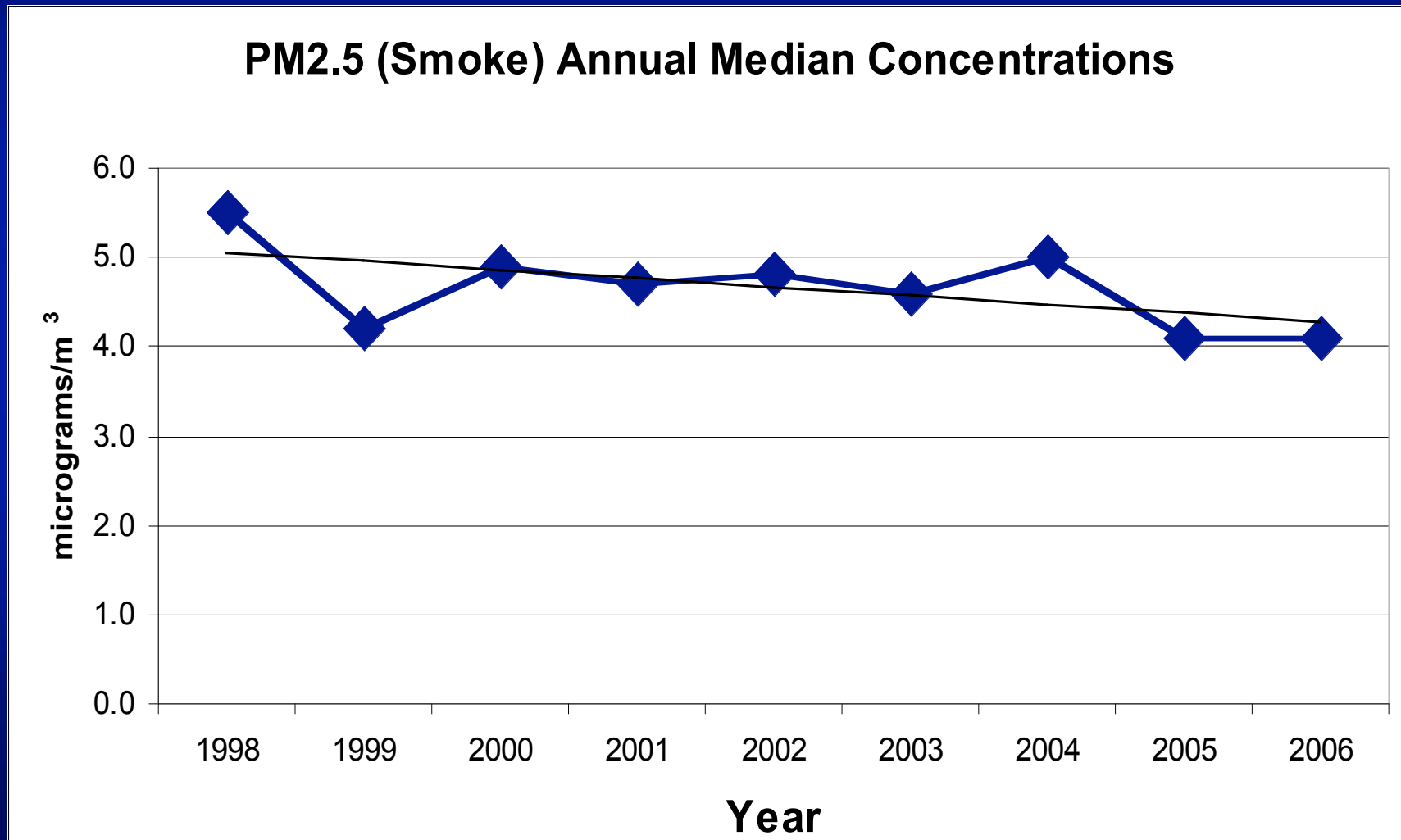
- A study of 'Health Effects and Benefits Estimates' completed by Environment Canada in 2006 demonstrates that even small improvements in air quality (PM2.5 and ozone) will yield substantial economic benefits.
- For the Regional District of Central Okanagan the quantifiable annual benefits estimates associated with a 10% improvement in PM2.5 is \$16,646,630 and ozone is \$1,833,540.
- For the Regional District of North Okanagan the quantifiable annual benefits estimates associated with a 10% improvement in PM2.5 is \$8,843,690 and ozone is \$675,309.

Shared Air Quality Initiatives between RDNO, RDCO, & RDOS

- Air Quality Management Planning
- Voluntary Vehicle Emissions Clinics
- Great Okanagan Wood Stove Exchange Program
- Agricultural Wood Chipping Program
- Environmental Mind Grind
- Emissions Inventory
- Indoor Wood Burning Appliance Inventory Survey
- Visual Opacity Assessment of Heavy Duty Vehicles
- Outdoor Burning Bylaw Templates
- Wood Stove Bylaw Templates
- Ozone Forecasting System
- Research (Dispersion Modeling, Emissions Forecasting and Speciation Analysis)



Success so far....



Conclusion

- The Central Okanagan is committed to keeping the air clean while the region grows.
- The Regional Air Quality Program will continue its efforts to assess and proactively manage air quality to protect the health of its citizens.