

# **Environmental Trends in British Columbia: 2007**

## **Contents**

The following list includes all indicators and supplementary measures reported. Note that the web pages contain summary information for only the most important indicators. Follow the links to 'In-depth Reports' listed under each of the seven topics to see the supplementary measures and for other indicators not shown on the web pages.

## **POPULATION AND ECONOMIC ACTIVITY**

### **BACKGROUND**

The Growing Provincial Population

Impacts of a Growing Population on the Provincial Environment

### **INDICATORS**

Patterns of Use on Land and Sea

1. Key Indicator: Rate of change of selected land uses in Metro Vancouver, 1986 to 2002

2. Key Indicator: Changes in area of the Agricultural Land Reserve in B.C. since 1974  
Supplementary Information: Density of marine traffic on the B.C. coast

Liquid and Solid Waste Management

4. Key Indicator: Level of municipal wastewater treatment in B.C.  
Supplementary Information: Reducing the impact of sewage discharge in Metro Vancouver

5. Secondary Indicator: Trends in shellfish closures due to sewage contamination

6. Key Indicator: Municipal solid waste disposed and recycled per person in B.C.  
Supplementary Information: Municipal solid waste disposal per capita in regional districts in B.C.

7. Secondary Indicator: Trends in waste diversion through industry-led product stewardship programs

Economy and the Environment

8. Key Indicator: Intensity of conventional energy use in economic activity in B.C.

9. Secondary Indicator: Trends in greenhouse gas intensity in B.C.  
Supplementary Information: Economic value versus environmental value

**WHAT IS HAPPENING?**

**WHAT IS BEING DONE ABOUT IT?**

Environmental Farm Plans and Beneficial Management Practices  
Collaborative Management of Marine Fisheries  
Forestry Certification Initiatives  
WHAT YOU CAN DO

## **AIR QUALITY**

### **BACKGROUND**

#### **INDICATORS**

1. Key Indicator: Percentage of monitored communities achieving the Canada-wide standard for particulate matter (PM<sub>2.5</sub>) in B.C.  
Supplementary Information: Wood smoke in the air
2. Key Indicator: Percentage of monitored communities achieving the Canada-wide standard for ground-level ozone in B.C.  
Supplementary Information: Trends in concentrations of nitrogen dioxide (NO<sub>2</sub>) and sulphur dioxide (SO<sub>2</sub>) in B.C.

WHAT IS HAPPENING IN THE ENVIRONMENT?

WHAT IS BEING DONE ABOUT AIR QUALITY?

WHAT CAN YOU DO?

## **FRESH WATER**

### **BACKGROUND**

#### **INDICATORS**

1. Key Indicator: Water quality index for surface water bodies in B.C., 2002–2004
2. Secondary Indicator: Trends in surface water quality in B.C.  
Supplementary Information: Lower Columbia River Water Quality Integrated Environmental Monitoring Program
3. Key Indicator: Percentage of observation wells that show declining water levels due primarily to human activity
4. Secondary Indicator: Number of heavily developed aquifers in B.C.  
Supplementary Information: Aquifers at risk in B.C.
5. Secondary Indicator: Daily municipal water use per capita in B.C.

WHAT IS HAPPENING?

WHAT IS BEING DONE ABOUT IT?

WHAT YOU CAN DO

# CLIMATE CHANGE

## BACKGROUND

### INDICATORS

#### Impacts of Climate Change

1. Key Indicator: Long-term trends in air temperature in B.C.  
Supplementary Information: Temperature changes by mid-century in B.C.
2. Secondary Indicator: Coastal sea surface temperature  
Supplementary Information: Deep-water warming on the B.C. coast  
Supplementary Information: Trends in stream and river temperatures in B.C.
3. Key Indicator: Precipitation changes in B.C.
4. Secondary Indicator: Changes in the spring snowpack in B.C.  
Supplementary Information: Increasing glacial melt and earlier stream flow
5. Key Indicator: Mean sea level  
Supplementary Information: Sensitivity of the B.C. coast to rising sea levels
6. Key Indicator: Trends in greenhouse gas emissions in B.C.  
Supplementary Information: How does B.C. compare with other jurisdictions in North America?  
Supplementary Information: Conventional and alternative energy sources in Canada
7. Secondary Indicator: Trends in fossil fuel use in the transportation sector in B.C.

## WHAT IS HAPPENING IN THE ENVIRONMENT?

### REFERENCES

# CONTAMINANTS

## BACKGROUND

### INDICATORS

#### Persistent Organic Pollutants

#### How Contaminants Move in the Environment

1. Key Indicator: Total discharge of toxic substances in B.C., 2002–2005  
Supplementary Information: Recycling NPRI substances  
Supplementary Information: On-site toxic substance releases in Canada in 2005 by province and territory
2. Secondary Indicator: Trends in dioxin and furan levels in pulp and paper mill effluent, sediments, and Dungeness crab tissues

3. Secondary Indicator: Cleanup of contaminated sites in B.C.  
Supplementary Information: Federal contaminated sites
4. Key Indicator: Long-term trends in persistent organic pollutants in bird eggs in B.C.  
(Great Blue Heron, Cormorant, Osprey)
5. Secondary Indicator: Persistent organic pollutants in tissues of marine mammals on the B.C. coast
6. Key Indicator: Landscape pesticide use in the Lower Mainland of B.C.  
Supplementary Information: Trends in sales of pesticides of most concern in the Georgia Basin

WHAT IS HAPPENING IN THE ENVIRONMENT?

WHAT IS BEING DONE ABOUT ENVIRONMENTAL CONTAMINANTS?

WHAT YOU CAN DO

## **ECOSYSTEMS**

### BACKGROUND

#### INDICATORS

1. Key Indicator: Status of grassland habitats in southern interior B.C.  
Supplementary Information: Impact of climate change on grasslands
2. Secondary Indicator: Area of protected grasslands in B.C.
3. Secondary Indicator: Status of B.C. forests  
Supplementary Information: Impact of climate change on B.C.'s forests  
Supplementary Information: Garry oak ecosystems: past, present...future?
4. Secondary Indicator: Trend in the number of road crossings of streams in B.C., 2000 to 2005
5. Secondary Indicator: Economic and conservation tenures in the intertidal areas of B.C. estuaries
6. Key Indicator: Amount of protected area in B.C.  
Supplementary Information: Impact of climate change on B.C.'s protected areas  
Supplementary Information: Protected forests in B.C.
7. Secondary Indicator: Proportion of ecologically intact land within protected areas in B.C.
8. Secondary Indicator: Changes in road intensity and road length in B.C.

Supplementary Information: Road deactivation in B.C.

WHAT IS HAPPENING IN THE ENVIRONMENT?

WHAT IS BEING DONE ABOUT IT?

WHAT CAN YOU DO?

## **SPECIES CONSERVATION**

### **BACKGROUND**

How Conservation Status is Ranked in B.C.

### **INDICATORS**

1. Key Indicator: Changes in the conservation status of fauna and flora in B.C.  
Secondary Indicator: Percentage of known species and ecological communities on the B.C. Red list
2. Supplementary Information: How does the status of species at risk in B.C. compare with other provinces and territories?  
Supplementary Information: Status and population trends for selected wildlife in B.C.
3. Secondary Indicator: Threats to species at risk in B.C.  
Supplementary Information: Details of threats from habitat loss
4. Key Indicator: Progress toward completing recovery strategies for species at risk in B.C.  
Supplementary Information: Conservation areas for rockfish recovery
5. Secondary Indicator: Number of alien species, by species group, in B.C.  
Supplementary Information: Biological control of alien species in B.C.

WHAT IS HAPPENING IN THE ENVIRONMENT?

WHAT IS BEING DONE ABOUT SPECIES CONSERVATION?

WHAT CAN YOU DO?