



12TH
CANADIAN
POLLUTION
PREVENTION
ROUNDTABLE

June 10-12, 2008
Edmonton, Alberta

Crowne Plaza- Chateau Lacombe





8.3 Alberta's Waste Strategy - strengthening linkages between waste reduction and pollution prevention

Janet McLean, Alberta Environment

Pollution Prevention Approaches

Alberta's
Waste Strategy:
Reduction and Integration



Presentation Overview

- Waste – P2 Perspective
- New Alberta Approach
- Cumulative Effects Management
- P2 Into the Future



WASTE: P2 Perspective

- Waste is the failure to capture full value from a resource: P2 product design and waste minimization.
- Waste is everything that is discharged into air, water or land: P2 integration; ecological approach; lifecycle analysis.



Integration is Critical

- Air, land, water, waste management
- Social, economic and environmental
- All releases, all emitters



How?

Cumulative Effects Management:

Landscape Management



Cumulative Effects Management

- From facility to landscape focus – multiple facilities
- Economic, social and environmental outcomes
- Meaningful geographic scales and time spans
- Cumulative effects
- Results-based



APPROACH: Set Thresholds

Emitters sort-out details:

- Operating efficiencies
- Equipment modifications
- Process changes
- Industrial ecology
- On-site reuse and recycling
- Cost control

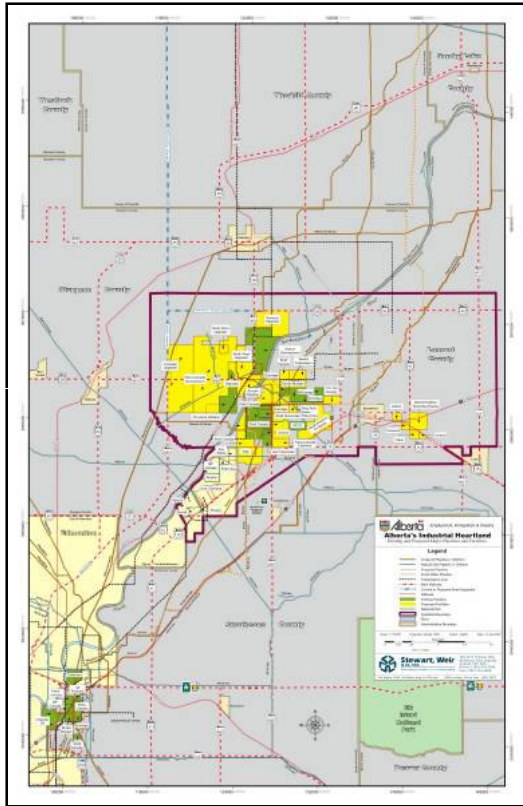


PROTOTYPE: Industrial Heartland

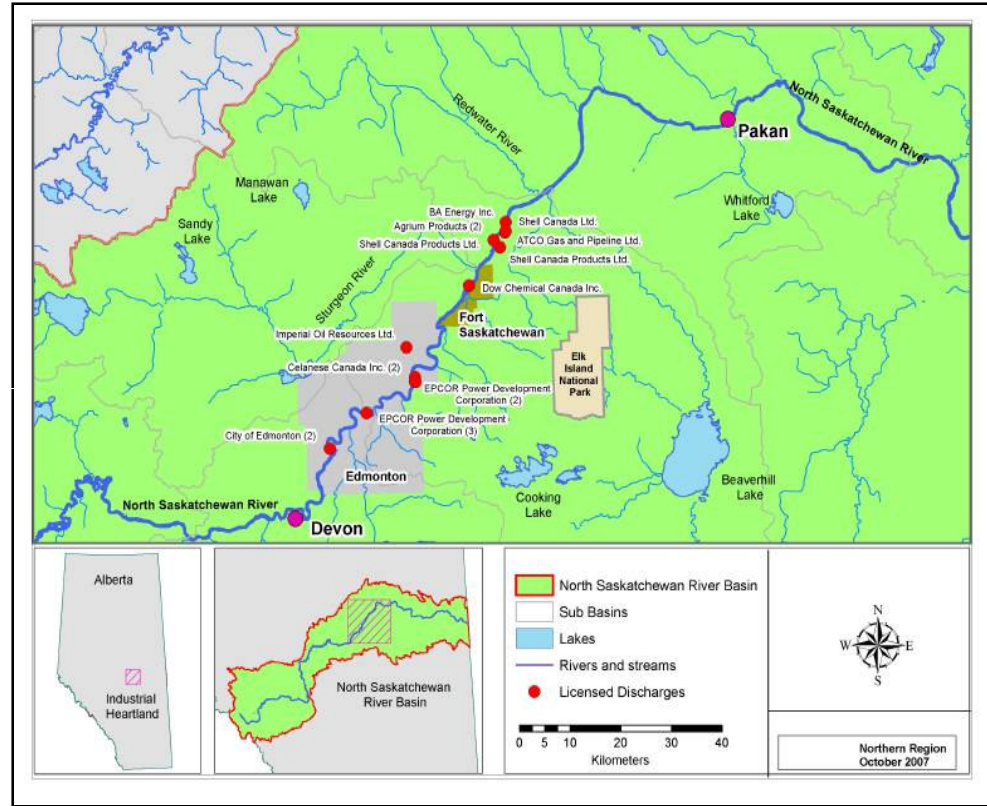
- First application of Cumulative Effects approach
- The pace of economic and population growth in the region requires immediate action
- Started April 2007 - Work in progress
- Action and learning important

Industrial Heartland - Project Boundaries

Airshed Map



Watershed Map



Agenda

- Air Thresholds (SO₂ & NO_x)
- Water Quantity and Quality Thresholds
- Waste – sulphur and others
- Land – river valley setbacks, wetland conservation, soil conservation and others

AIR Initiatives

- Air Management Framework pending
- Performance assessment – sulphur deposition monitoring

WATER Initiatives

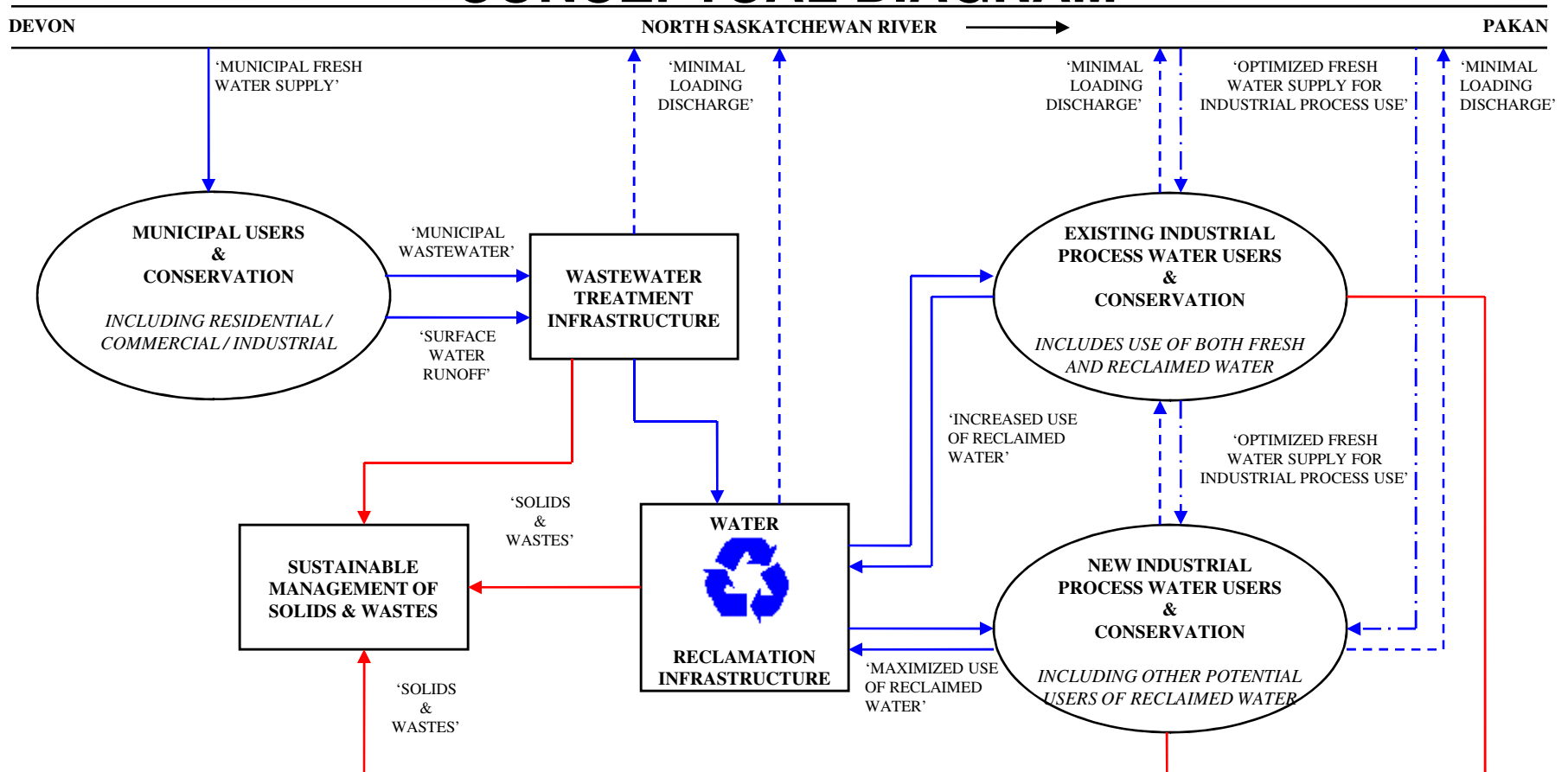
- Water Management Framework
- Use of reclaimed water from Edmonton
- Reduced diversion of raw water
- Minimized load discharge to the NSR

<http://www.environment.alberta.ca/2276.html>

The logo for the province of Alberta, featuring the word "Alberta" in a white, sans-serif font. The logo is positioned in the bottom right corner of the slide, which has a decorative background of blue water ripples and a yellow and blue wave pattern.

Sustainable Regional Water Management Network for the North Saskatchewan River to 2041 – The Model

CONCEPTUAL DIAGRAM



WASTE: Sulphur Management



Sulphur Products

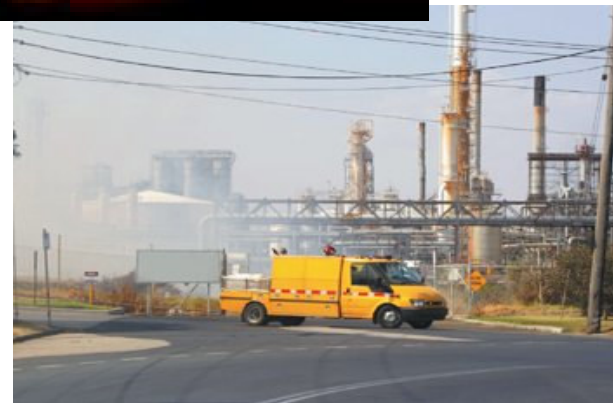
- Sulphur Fertilizer
- Phosphate Fertilizer Production
- Asphalt
- Concrete

Footprint

- Sight Pollution
- Noise Pollution
- Landscape disruption
- Habitat Disruption/Biodiversity
- Dust, Road Congestion



How can we improve the quality of life around industrial facilities?



Changing Minds



Land Matters



Place Matters



Alberta

Key Messages

- Alberta is pioneering a new approach to managing growth pressures on the environment
- Regional scale plans will be a first priority. These plans will define place-based social, economic and environmental objectives as well as providing land use direction
- Various sub regional partnerships and cumulative effects prototypes are underway

Questions?

