



Freedom To Create. Spirit To Achieve.

Alberta's Cumulative Effects Management System

Air & Waste Management Association

Beverly Yee

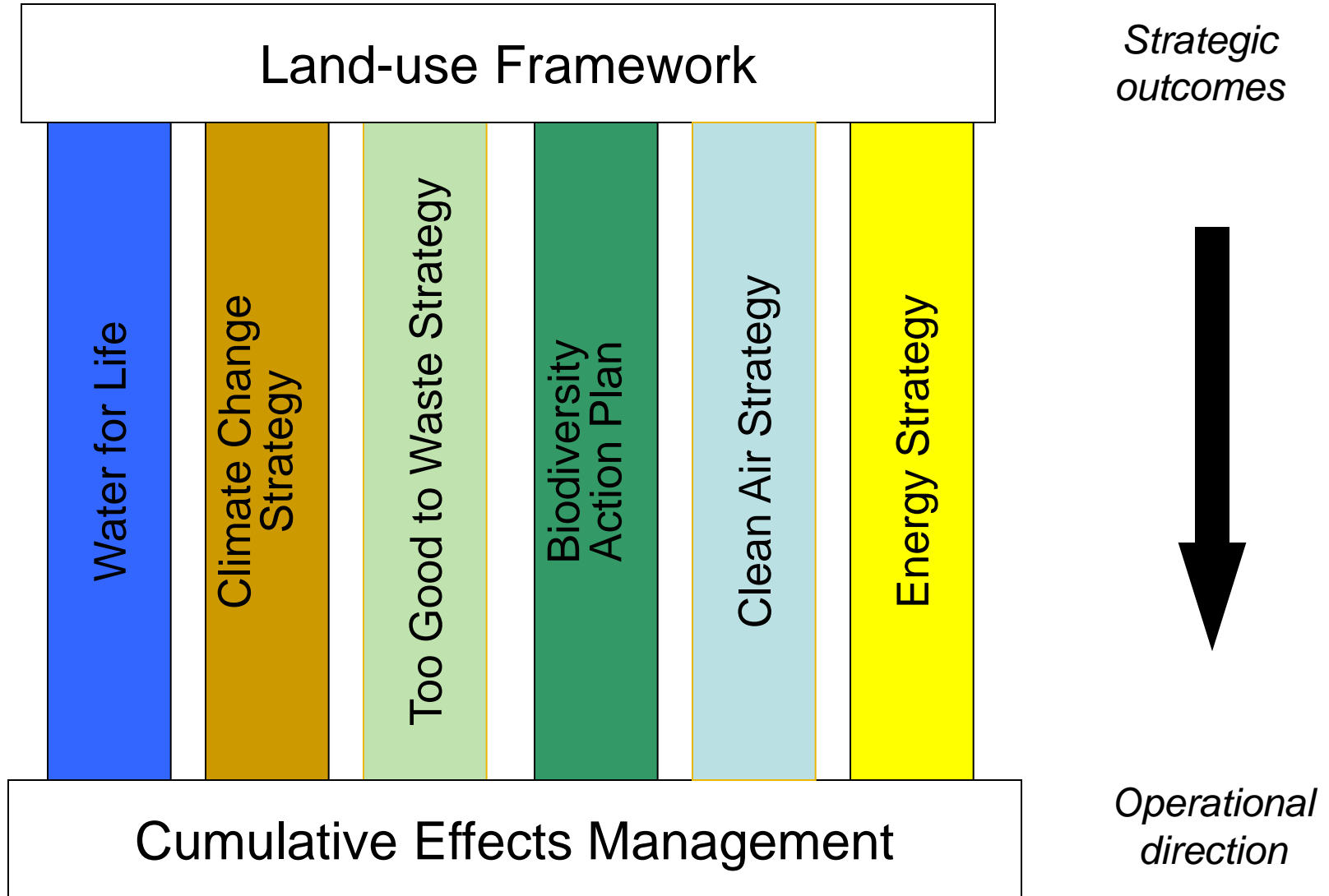
05 November 2010

**Government
of Alberta** ■

Context

- **Minister's mandate letter**
- **Land-use Framework establishes regional planning**
 - integration of environmental, economic and social objectives
 - cumulative effects management – approach to manage implications of development on land, air, water and biodiversity
- **Foundation established through *Water for Life* Strategy, new Clean Air Strategy builds on same concepts**
- **Continuous improvement, building on successes, addressing challenges for the future**

Linkages and Alignment



Approach

YESTERDAY:

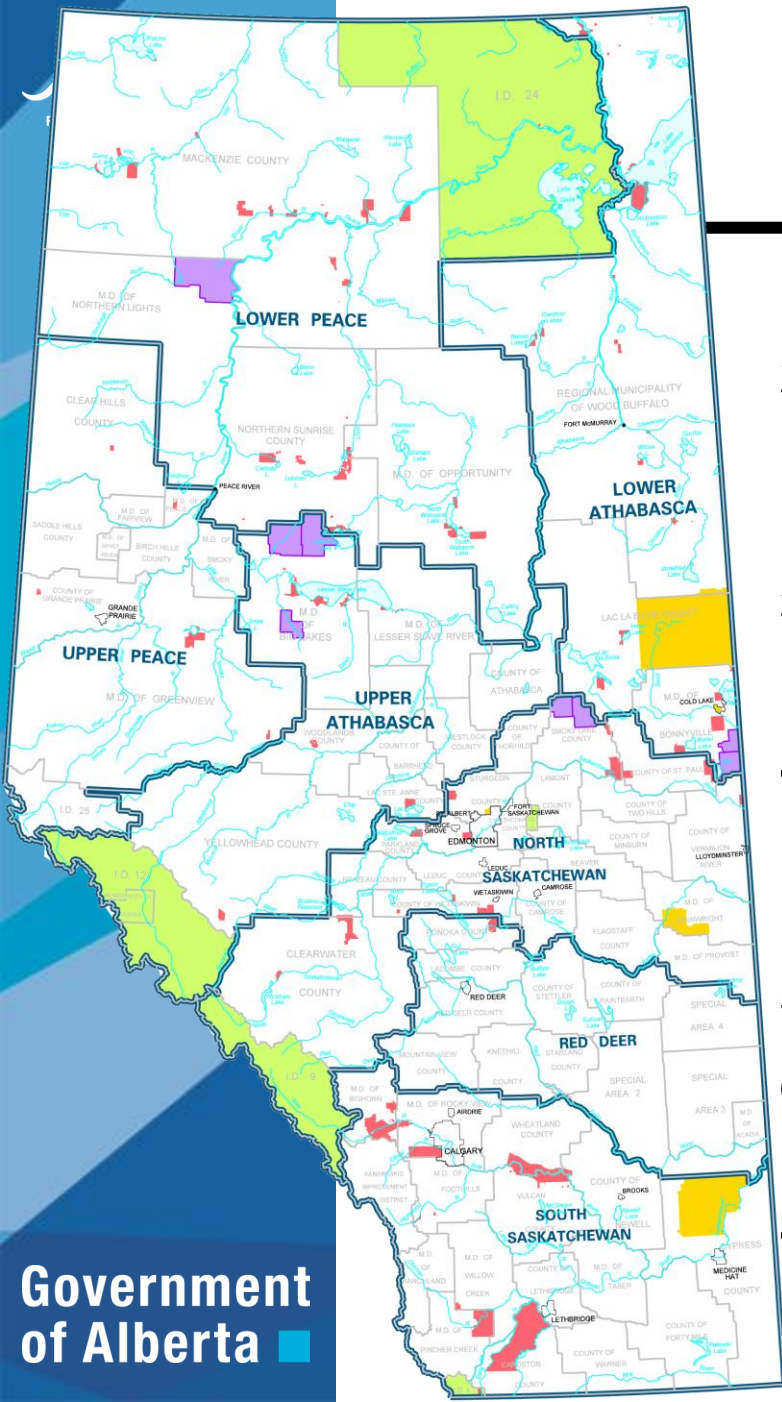
- Paradigm of abundance;
- Project-by-project regulation / allocation according to incremental effect;
- Focus on preventing adverse effects;
- Cumulative effects assessment of major projects an add-on;
- Cumulative effects of smaller projects and non-regulated activity largely unaddressed;
- Existing system cannot keep up

TODAY!

TOMORROW:

- Paradigm of scarcity;
- Regulation / allocation in context of overall capacity;
- Focus on achieving desired outcomes;
- Considers all contributors to achieving desired outcome;
- Management action in response to where we are relative to desired outcomes.

LUF Strategies



1. Seven new land-use regions
2. Land-use Secretariat and Regional Advisory councils for each region
3. Cumulative effects management at the regional level
4. Strategy for conservation and stewardship on private and public lands
5. Efficient use of land
6. An information, monitoring and knowledge system
7. Inclusion of Aboriginal peoples in land-use planning

Regional Planning

- **better balance between the economic, environmental and social values**
- **consider a planning horizon of at least 50 years**
- **articulate desired outcomes for the region**
- **set thresholds to manage cumulative effects, recognizing that airsheds, watersheds and landscapes are not limitless**
- **identify strategies and actions to achieve outcomes**
- **identify monitoring and reporting strategies**

A new cumulative effects management system

- outcomes/results-based;
- risk-based; focusing greater resources and efforts on higher-risk environmental impacts;
- considers health, economics and social values;
- implemented /delivered using a place-based approach and a broader set of tools;
- collaborative, involving many parties and sectors;
- adaptive, with mechanisms built in to allow flexibility and assure achievement of outcomes.

Cumulative Effects Management System



Management Actions

STRATEGIC DIRECTION

- Legislation
- GoA and Ministry Business Plans
- Provincial Level Strategic Policies



DEVELOP & REFINE OUTCOMES & STRATEGIES

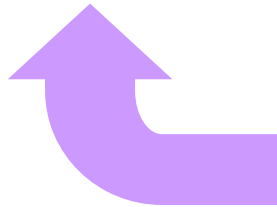
- Regional Strategic Assessment
- Place-Based Planning
- Indicator Selection
- Operational Policy/Strategy
- Management Frameworks

DELIVERY

- Tools: EIAs, Authorizations, Compliance Assurance, Non-Regulatory
- Monitoring, Data Management,
- Emergency Services

EVALUATE & REPORT PERFORMANCE

- Environmental indicators and their implications
- Effectiveness of strategies and their delivery



What will change?

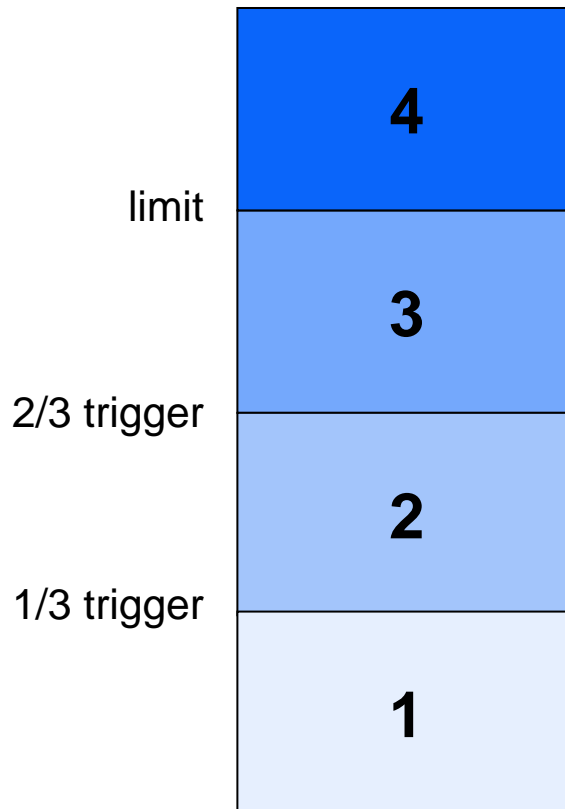
- **integration with regional planning (LUF)**
 - regional strategic assessment
 - management frameworks
- **enhanced and aligned regulatory system**
 - streamlined, integrated, efficient
 - more consistent decision-making
- **non-regulatory mechanisms**
 - market-based/economic instruments
 - incentives
 - collaborative management agreements
- **integrated monitoring, evaluation and reporting**

Management Frameworks

- **Collaborative approach to establish desired outcomes and objectives**
- **Progressive action based on conditions found in the environment; trigger points**
- **Identified integrated management actions at trigger points**
- **Full range of information, incentive, and regulatory tools for implementation**
- **Intensity of management actions increases to respond to the state of conditions and levels of risk**

Draft Lower Athabasca Region Air Quality Management Framework

- Based on ambient concentrations
- Initial focus on NO₂ and (SO₂)
- Limit and trigger levels are based on Alberta's Ambient Air Quality Objectives (annual and 1 hour metrics used)



- Exceeding AAAQO
 - Emission reductions
- Below but approaching AAAQO
 - Management / planning
- Ambient below AAAQO
 - Surveillance, assessment
- Ambient well below AAAQO
 - No further action

Environmental Legislation

1970 – 1990

Manage air & water releases:

- Manage pollutants

1990 – 2010

Manage facilities/operations:

- Manage impacts of single operations

Future

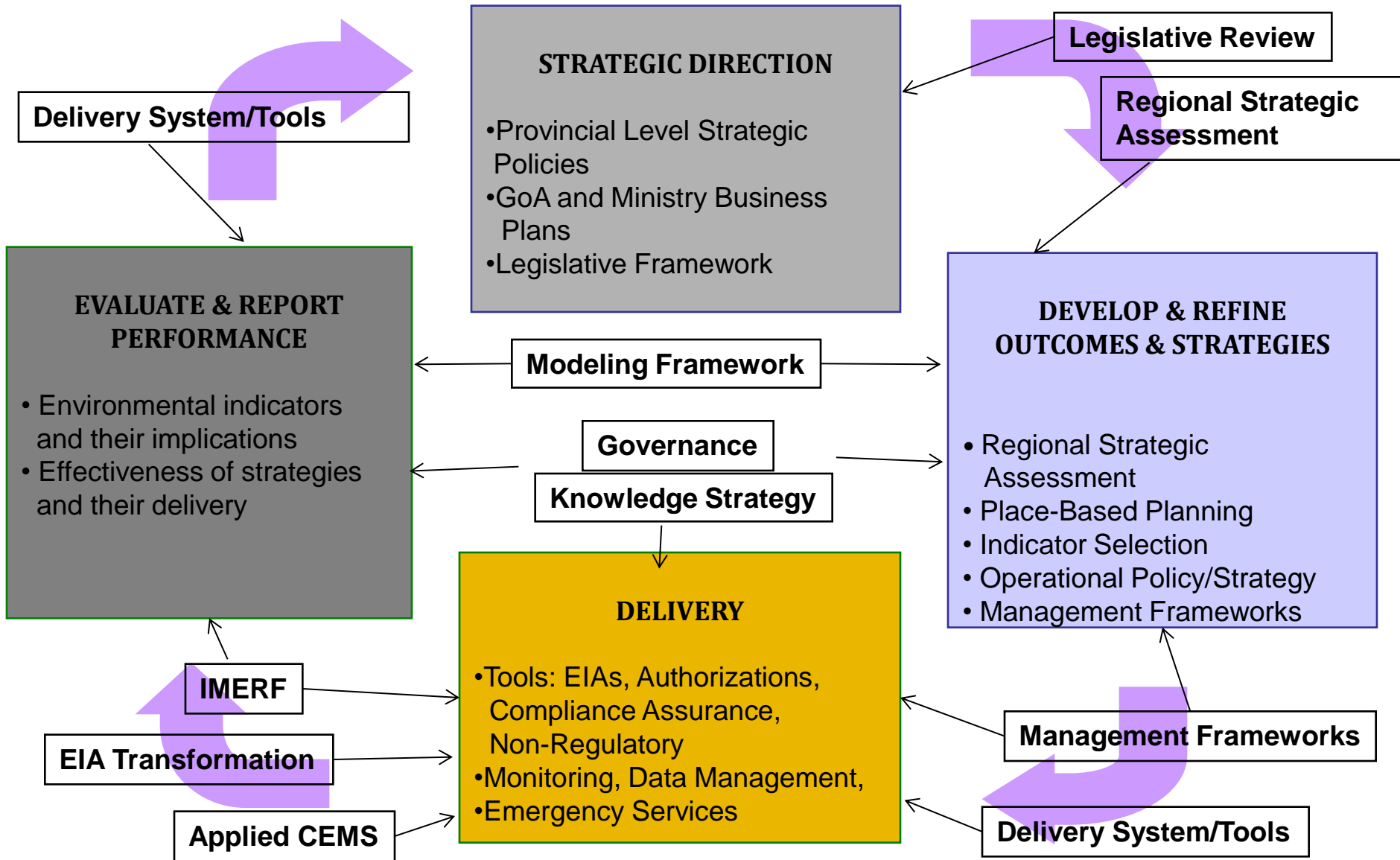
Outcomes focused:

- Manage cumulative effects of current, new and expanding operations
- Manage multiple parties, multiple activities

Alberta Environment's Focus

- **Regional Plans**
- **Strategy Alignment**
- **Knowledge and Performance Management Program**
- **Delivery Program**
 - **Regulatory & Non-Regulatory**
- **Organizational Design**

Cumulative Effects Management System



CEMS Fundamentals: Outcomes Based; Place Based; Performance Management Based; Collaborative; Comprehensive Implementation.



Freedom To Create. Spirit To Achieve.

Questions, Comments, Discussion

Government
of Alberta ■