

AEMERA and the Future of Lake Monitoring in Alberta

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aemera.org

Outline

- Alberta Environmental Monitoring, Evaluation and Reporting Agency (AEMERA)
- Integrated Resource Management System (IRMS)
- Monitoring Management Team (MMT)

**In the context of
Lake Monitoring in Alberta**



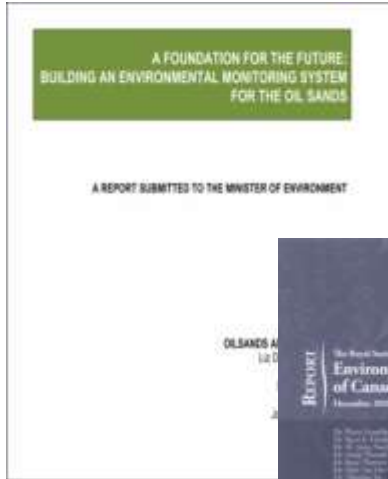
What is AEMERA?

The Alberta Environmental
Monitoring, Evaluation and
Reporting Agency is:

- newly established (arms-length) organization
- responsible for measuring, assessing and informing the public on ambient air, land, water and biodiversity



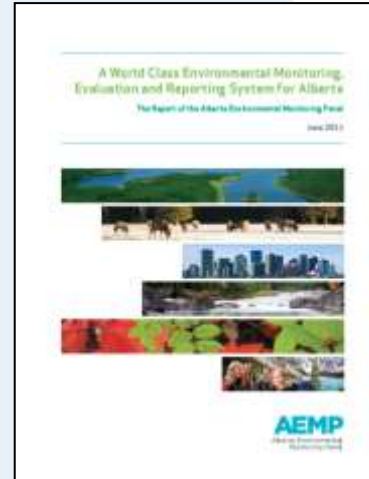
Journey to AEMERA



Oil Sands Advisory Panel Report (2010)



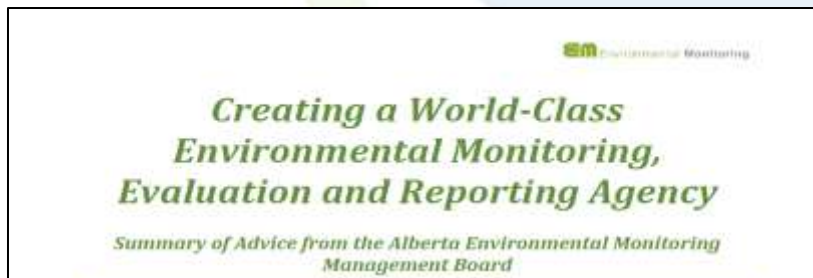
Royal Society of Canada Report (2010)



Alberta Environmental Monitoring Panel Report (2011)



Working Group Report (2012)



Management Board Advice to Minister (2013)

AEMERA Mandate

Proclamation of Bill 31: Protecting Alberta's Environment Act

High Level Principles and
Mandate:

Provide open and transparent access to scientific data and information on the condition of Alberta's environment, including specific indicators as well as cumulative effects, both provincially and in specific locations.

Specific roles/responsibilities not defined.



Province of Alberta

PROTECTING ALBERTA'S ENVIRONMENTACT

Statutes of Alberta, 2013
Chapter P-26.8

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AEMERA's Vision & Mission

VISION

To be recognized as the trusted source of comprehensive, credible environmental monitoring, evaluation and reporting that results in the better understanding and management of Alberta's environment.

MISSION

To provide **accurate data and relevant information** on the condition of Alberta's environment -- in an **impartial, open, accessible, understandable and timely manner** -- to **better inform decision-making** by policy makers, regulators, planners, researchers, communities, industries and the public.

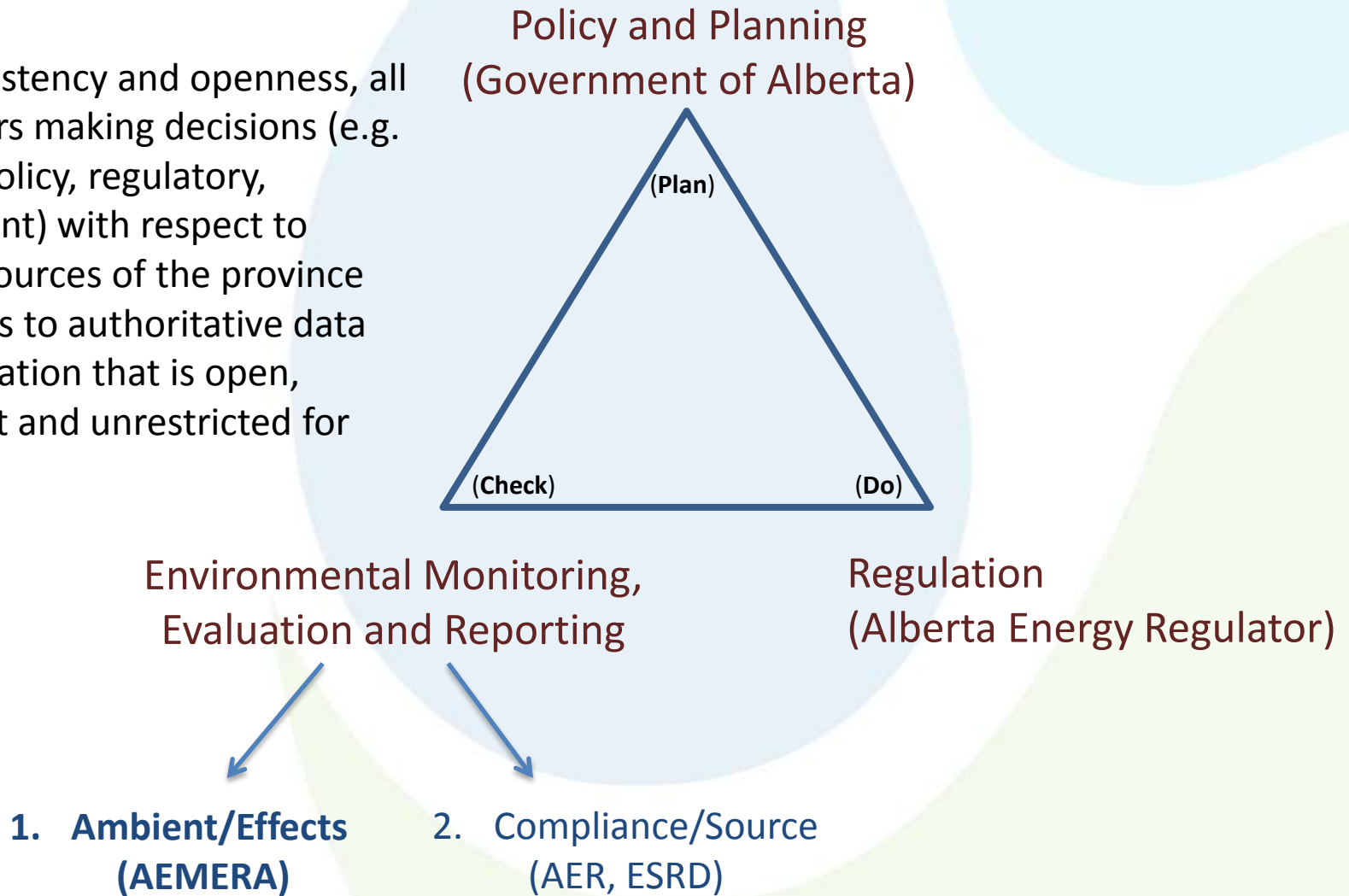
Integrated Resource Management System

GoA Policy Goal (2011): IRMS is the means by which Alberta will achieve *responsible resource stewardship*

- Coordinated approach includes:
 - Setting clear environmental, economic and social outcomes
 - Integrated and aligned natural resource and environmental policies
 - Strong relationships with partners/stakeholders
- System involves:
 - Land-use Secretariat
 - Supporting GoA and resource management ministries
 - Aboriginal Consultation Office, AER, **AEMERA**
- Founded upon principles of cumulative effects management:
 - Knowledge-based decision making
 - Effective and comprehensive monitoring system

Environmental Monitoring in the IRMS

“...for consistency and openness, all stakeholders making decisions (e.g. land use, policy, regulatory, management) with respect to natural resources of the province need access to authoritative data and information that is open, transparent and unrestricted for use.”



AEMERA's role in IRMS

AEMERA is accountable to the Minister of ESRD and responsible for the coordination of:

- ✓ Oil Sands Monitoring (JOSM)
 - Regional land-use plans' MER
 - Baseline & cumulative effects monitoring
 - On-going condition of environment and trends reporting in all regions of Alberta
 - Data management
 - Credible data collection, evaluation, knowledge and reporting to inform policy and regulatory decision-making



What Will AEMERA Do/Not Do?

AEMERA does provide authoritative knowledge and operates monitoring systems at this scale.

Provincial Scale

Land Use Region

What is AEMERA's role at sub-regional or basin scale where management involves regional or local partners?

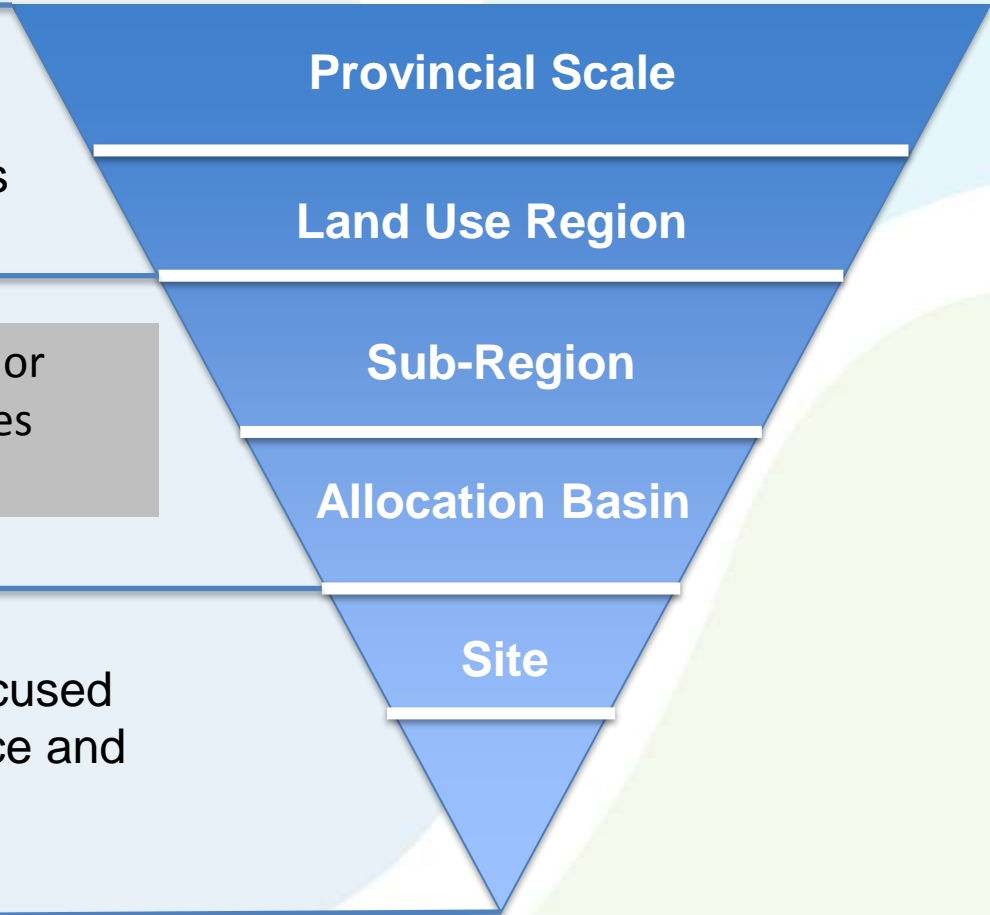
Sub-Region

Allocation Basin

AEMERA ***does not*** conduct site focused monitoring for compliance assurance and response.

Site

Point Source



ESRD/AEMERA Transition Project

Further define roles and responsibilities (gray areas) and provide support during transition:

1. Identify additional ESRD MER functions required:
 - For transition to AEMERA (short-term)
 - For transformation to AEMERA (long-term)
 - To remain with ESRD

2. Identify ESRD resources, support and services required:
 - For transfer to AEMERA
 - For sharing between AEMERA and ESRD

Lake Monitoring in Alberta

Current Situation

Comprised of:

1. ESRD centrally managed Long-term networks (LTLN & Provincial Parks Program)
2. ESRD Regionally managed programs (Southern Lakes/Reservoirs and Central AB Rec. Lake Programs)
3. ESRD funded provincial-scope partnerships (ALMS' Lakewatch)

Funding vetted through ESRD SWQ-Monitoring Management Team

Informal program coordination

No coordinated evaluation and reporting

Future

Comprised of:

1. AEMERA centrally managed Long-term networks (LTLN & Provincial Parks Program)
2. AEMERA coordinated regionally-focused programs (South, Central, UAR, Peace regions)
3. AEMERA coordinated/funded provincial-scope partnerships (ALMS' Lakewatch)

Funding vetted through AEMERA (MMT-based process)

Formal program coordination across all monitoring (incl. JOSM)

Resourced/coordinated routine evaluation and reporting

Limnology Support in Alberta

ESRD

Will maintain science capacity in Regions and Policy Div.

Responsible for:

1. Input to lake policy development
2. Input to regional lake programs
3. Lake specific studies (investigative work, issue evaluation and cause and effect studies)
4. Lake watershed studies to support lake management (watershed management plans, in-lake treatment etc.)
5. Emergency response (spills, floods and unforeseen events)

AEMERA

Will resource science and field capacity in Agency

Responsible for:

1. Coordinating QA/QC
2. Developing monitoring standards and field protocols
3. Providing field training and support to partners
4. Conducting field programs for both ESRD/AEMERA (Field Staff)
5. Province-wide (large scale) monitoring initiatives (AIS, Cyanotoxin Monitoring, emerging issues)



Contact Information

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