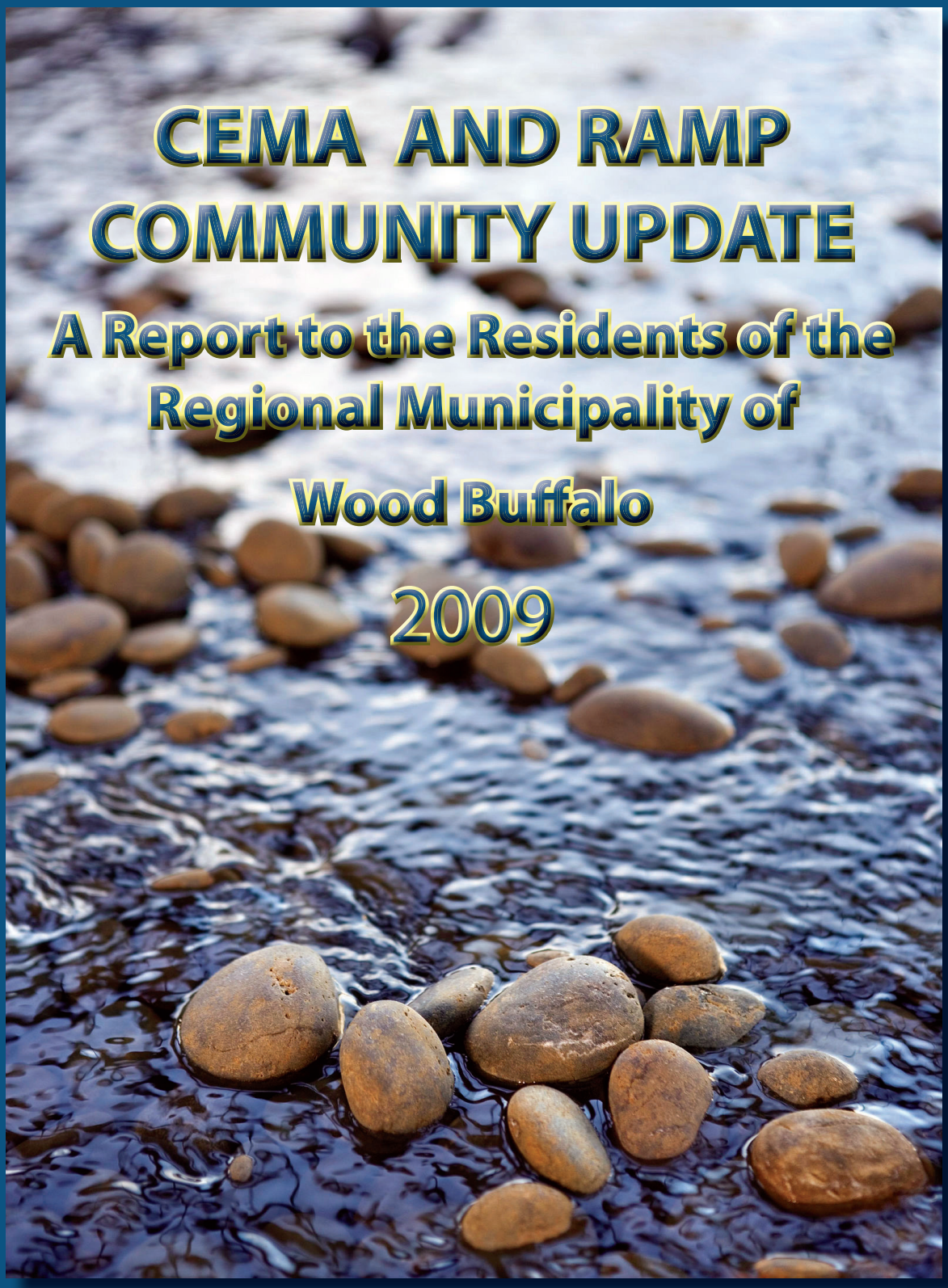

CEMA AND RAMP
COMMUNITY UPDATE
A Report to the Residents of the
Regional Municipality of
Wood Buffalo
2009

Table of Contents

RAMP
Regional Aquatics Monitoring Program

The Cumulative Environmental Management Association (CEMA) is a registered not-for-profit, non-governmental organization established in Fort McMurray, Alberta in June 2000.

CEMA's mandate is to study the cumulative environmental effects of industrial development in the region and produce guidelines and management frameworks. Since its inception CEMA has produced hundreds of reports and 8 Management Frameworks.

A multi-stakeholder organization, CEMA is governed by 45 members representing all levels of government, industry, regulatory bodies, environmental groups, Aboriginal groups, and the local health authority, which have an interest in protecting the environment in the Wood Buffalo region:

The Regional Aquatics Monitoring Program (RAMP) website provides access to a wide range of information related to the program. RAMP is an industry-funded, multi-stakeholder environmental monitoring program initiated in 1997. The intent of RAMP is to integrate aquatic monitoring activities across different components of the aquatic environment, different geographical locations, and Athabasca oils sands and other developments in the Athabasca oil sands region so that long-term trends, regional issues and potential cumulative effects related to oil sands and other development can be identified and addressed.

Overview

Established nine years ago

The Cumulative Environmental Management Association (CEMA) was established nine years ago to examine and address the environmental impact of the oil sands development in Alberta's Regional Municipality of Wood Buffalo (RMWB). Since then, CEMA has helped monitor and protect the health of the land, forest, air, water, wildlife and the biodiversity of this broad area.

Vision

Registered, not-for-profit, non-governmental multi-stakeholder organization

CEMA is a registered, not-for-profit, non-governmental multi-stakeholder organization founded in June, 2000, in Fort McMurray, Alberta. The 45 members who govern CEMA represent all levels of government, industry, regulatory bodies, environmental and aboriginal groups as well as the local health authority.

CEMA's members share a common interest and vision - to protect the Wood Buffalo area environment from the cumulative, long-term adverse impact of the oil sand industry.

Purpose

Ensure the impact of regional developments on the biophysical, health and resources of the Wood Buffalo area are not adversely affected

The purpose of CEMA is to ensure that the impact of regional developments on the biophysical, health and resources of the Wood Buffalo area are not adversely affected. To do so, CEMA provides a forum for its stakeholders to make consensus-based decisions on managing this environment.

Oil sand development has the potential to make significant changes to the landscape, water, wildlife populations, and habitats. CEMA determines and recommends the best management frameworks to protect and sustain and restore the health of the landscape, vegetation, soil and water sheds while balancing industrial development and environmental considerations

Mandate

Achieve vision, purpose and objectives

To achieve the vision, purpose and objectives of CEMA and ensure the principles of the Association are consistently applied in all aspects of its activities.

Structure

Five Working Groups, Advisory Committee and Task Groups

CEMA's goals are reached through the efforts of two Standing Committees, a special Task Group and five Working Groups. Members of the Working Groups use information culled from their technical and scientific work to develop management frameworks approved through the Members.

The Revitalization of CEMA

In the last few years, CEMA designed a Revitalization Strategy to improve the efficiency and effectiveness of the Association's preparation of plans to protect the environment while simultaneously allowing development and meeting the public social needs in the RMWB.

The revitalization was the organization's primary thrust aimed at ensuring CEMA stayed true to its mandate and its goals. Changes were widespread and progress has undoubtedly been highly acceptable. For example, the multi-stakeholder association has completed almost 90% of the 100 items the Radke report identified as CEMA's major challenges. The highlights include:

CEMA established an Aboriginal Roundtable to encourage more participation by First Nations and Métis Associations;

CEMA hired a full-time Communications Director and improved internal and external communication announcing CEMA's accomplishments.

CEMA issued more news releases and media information, coverage in newspapers increased exponentially.

Stories were carried in The National Post, The Globe and Mail, The Calgary Herald, The Edmonton Journal, and Sun outlets. Additionally, stories appeared on television and on radio, locally, nationally and internationally.

In response, CEMA decided there will be even more effort expended at getting CEMA's views across to the public and to stakeholders.

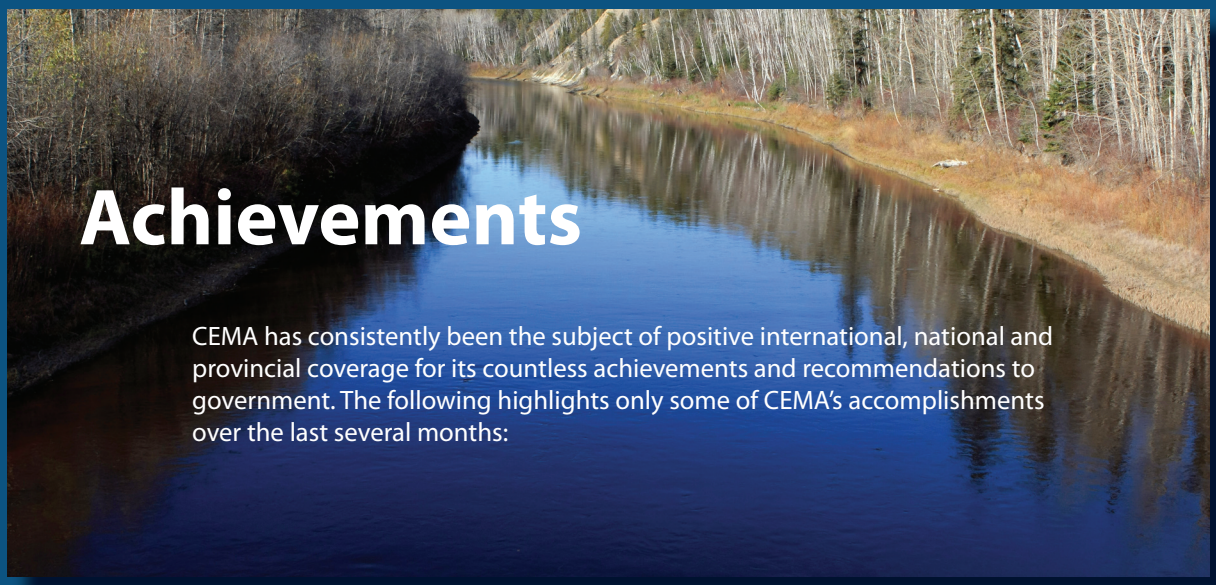
CEMA revamped the Terms of Reference and Work Plans for Working Groups and Committees;

CEMA's Management Committee met with industry heads and senior government officials to highlight the value of the Association at all levels of its mandate;

CEMA has re-established quarterly meetings at all levels;

CEMA hired more program managers and improved training for staff and leaders.

The Revitalization Strategy is a not a one-off, but will continue to remain a vital part of the future of CEMA.



Achievements

CEMA has consistently been the subject of positive international, national and provincial coverage for its countless achievements and recommendations to government. The following highlights only some of CEMA's accomplishments over the last several months:

- CEMA was invited to testify before the House of Commons Standing Committee on the Environment and Sustainable Development on the subject of the impact in the RMWB of oil sand development on water. This invitation was a strong indication that the federal government values the work, contributions, and history of CEMA in the Wood Buffalo Region.

- The Surface Water Working Group (SWWG) is developing a Phase 2 Water Management Framework to parallel management of industrial water withdrawals from the lower Athabasca River with protecting the aquatic ecosystem and maintaining social, economical, and traditional uses of the river over the long term. Phase 2 will concentrate on how changes in river flow impact issues such as recreation, navigation, fish habitat, and connectivity. CEMA and SWWG are committed to communicating information on surface water quantity to the public.

- The Reclamation Working Group (RWG) created the RWG Database, a vital resource tool to define the process and standards needed to return developed land to sustainable ecosystems with desired end land use values.

- CEMA's Annual Reports for 2008 and 2009, available on line, are detailed report cards showcasing the Association's significant achievements and include Revenue and Expenditures, details concerning the Revitalization Strategy, a list of complete recommendations and future work, and a full update from each working group. The Annual reports are a testimony to CEMA's mandate for transparency and openness.

- CEMA received $350,000 from the Department of Fisheries and Oceans (DFO) to support projects conducted by the SWWG. The money is earmarked for:
    - the rental of a helicopter for a Fish Telemetry Study on the migration of fish species in the lower Athabasca River; and for
    - the validation of River2D Models used to predict potential impacts of changes in river flow regime on fish habitat within the lower Athabasca River and the Peace- Athabasca Delta.

- The RWG Revegetation Manual Task Group (RMTG) (RMTG) was busy over the summer incorporating feedback from members following the review of the first draft of the *2nd Edition of the Guidelines for Reclamation to Forest Vegetation in the Athabasca Oils Sands Region* (The Revegetation Manual). This will be submitted to the membership of CEMA in December 2009 for final approval before being forwarded to Alberta Environment

- CEMA's budget in 2008 was $8.4 million. CEMA's bdget in 2009 was $8.8 million.

Achievements

- The NSMWG cosponsored a three-day Western Canada Sulphur and Nitrogen Deposition **Workshop.** The primary focus was to assess the state of the science on atmospheric deposition of sulphur and nitrogen and ecosystem impacts in Western Canada. This extraordinary workshop united over 100 participants including world leading academics and scientists from across Canada, the United States, the United Kingdom and Norway with oil sands industry representatives, regulators, non-government organizations and Aboriginal community representatives. The Workshop findings of the conference identified four themes:
    - Improvement in the projections of deposition spatial patterns and emissions' measurements.
    - Establishment of critical loads on nitrogen deposition inputs and ecosystem responses.

Synthesize information on the effects of acid deposition with other environmental issues and inputs. Improved coordination, standardization and centralization of data management collection and coordination, coupled with a strategy to communicate the scientific information to the public.

Two new important Members joined the CEMA Board - the Fort McMurray Métis Local 1935 and the Nistawayou Association Friendship Centre, bringing the Aboriginal Membership in the multi stakeholders association up to eight.

- CEMA formed the Terrestrial Ecosystem Management Framework in 2008 and its main element, the Land Management Approach. The corresponding Plan recommends the Triad approach that:

- 5% to 14% of the RMWB be identified as the most intensive zone of industrial development;
- 46% represents the extensive zone of the RMWB; and
- 20% to 40% is recognized as of the development free or protected zone of the region.

CEMA forwarded the Euthrophication Management Framework to the Alberta Government and proposed 15 major recommendations for enhanced regional monitoring. The report also focuses on the need for establishing regional criteria for nitrogen loading and calls for a five-year research program to develop the standards.

CEMA created an extensive Bibliography of Existing Traditional Environmental Knowledge Resources (TEK) for and about the Regional Municipality of Wood Buffalo. Categories include:

- Direct Aboriginal Support;
- Industry Initiatives and Reports;
- Historical Materials;
- Provincial and Federal Government Initiatives;
- Traditional Land Use Handbooks;
- Academic Reports and Approaches;
- General Material Related to Communities.

CEMA took a stand on resource tenures in 2008. The Association recommended the Alberta government suspend granting new resource tenures on an interim basis until January 1, 2011, to maintain the conservation authority in areas identified by CEMA as having high conservation value to Wood Buffalo and its people.

Completed Frameworks

Over the last several months CEMA completed and submitted myriad proposals to the appropriate regulatory agencies for approval and recommendation.

CEMA is proud of its track record and the efforts of its Working Groups as indicated by the positive responses received from the Alberta Environment (AENV), the Alberta Sustainable Resource Development (ASRD), and other agencies and departments of the federal government.

SEWG submitted the:

- Terrestrial Ecosystem management Framework (Under Review)
- Ecosystem Management Tools (Implemented / Used in Environmental Impact Assessments and as a Guidance Document)

NSMWG recommended the:

- Interim Nitrogen (Eutrophication) Management Framework (Under Review)
- Acid Deposition Management Framework (Implemented / Used in Environmental Impact Assessments and as a Guidance Document)
- Ozone Management Framework (Implemented / Effected changes to Environmental Monitoring & Research and used as a Guidance Document)

TMAC recommended the:

- Trace Metals Management Framework. (Implemented / Used in Environmental Impact Assessments, effected changes to Environmental Monitoring & Research and used as a Guidance Document)

RWG submitted the:

- Land Capability Classification for Forest Ecosystems in the Oil sands, 3rd edition (Implemented / Referenced in EPEA Approvals and used as a Guidance Document)
- Landscape Design Checklist (Implemented / Used as A guidance Document)

Additionally, CEMA's produced Guidelines for Reclamation to Forest Vegetation in the Athabasca Oil Sands Region (Revegetation Manual) which was referenced in EPEA Approvals and used as a Guidance Document.

CEMA also submitted the Guidelines for Wetland Establishment on Reclaimed Oil Sand Leases Revised 2007 Edition - Wetlands Reclamation Manual. The document has been referenced in EPEA Approvals and used as a Guidance Document)

The Government of Alberta has implemented CEMA's recommendations in the following manner:

- **Referenced** in Environmental Protection and Enhancement Act (EPEA) approvals for operators to use as **guidance documents** when developing plans;
- **Used** by operators in the development of environmental impact assessments;
- **Changes** to environmental monitoring and research;
- **Referred** to by Government as guidance documents and published on the Government of Albertan website.

The acceptance of its work so far by government regulatory authorities appears to be an overwhelming endorsement of the impact CEMA has on the environment of Wood Buffalo.

Members of the **Working Groups** use information culled from their technical and scientific work to develop management frameworks approved through the Members.

CEMA's Working Groups encompass all aspects of the Association's mandate and the media are now regularly informed of highlights and successes. The Working Groups feature:

Working Groups

NO_xSO_2 Management Working Group (NSMWG) **was** formed to design management frameworks that establish environmental capacity guidelines, management objectives and action plans to manage and control regional NO_x and SO_2 emissions, as well as receptor sensitivities to acidification, ground level ozone and eutrophication.

Task Groups of NSMWG include the

1. **Transition to Phase 2 Acid Deposition Management Framework (ADMF)**
2. **N Eutrophication Task Group**
3. **Ozone Task Group**

Reclamation Working Group (RWG) established to recommend to government that the regulatory requirements of reclaimed landscapes be met.

- Sub-groups of RWG include the **Terrestrial Sub-Group** (TSG) and the **Aquatics Subgroup** (ASG).
- Task-Groups of RWG include the
  1: Biodiversity & Wildlife Task Group (BWTG);
  2: Closure Coordination Task Group (CCTG), and
  3: Reclamation Certification Task Group (RCTG).

Surface Water (SWWG) is mandated to develop a management recommendation concerning the quantity of water in the lower Athabasca River.

SWWG Task Groups include the:
1: In-stream Flow Needs Technical Task Group (IFNTTG);
2: Phase 2 Framework Committee (P2FC);
3: Socio-Economic Task Group (ETG); and
4: Water Requirements and Engineering Mitigation Task Group (WREM)

Sustainable Ecosystems (SEWG) was founded to develop and recommend a management system, based on sustainable development principles, to tackle the cumulative effects on the ecosystems and landscapes of the RMWB.

Trace Metals & Air Contaminants Work Groub (TMACWG) **was formed to** develop recommendations for management frameworks that will establish objectives and action plans for the management and control regional trace metals and air contaminants and protect human and ecosystem health in the RMWB.

Traditional Environmental Knowledge (TEK) Advisory Committee

A major player in CEMA is known as TEK. It was established by CEMA to guide the working groups in the collection and use of traditional knowledge. The TEK committee ensures the land, forest, air, water, wildlife and biodiversity in CEMA's study areas are protected, sustained and restored over the long term.

The TEK is a body of local environmental knowledge and beliefs transmitted through oral tradition and first-hand observation based on living in close contact with nature. It includes a system of classification, a set of empirical observations about the local environment, a system of self management that governs sustainable resource base, and an understanding of the relationships of living beings (including humans) with one another and their environment.

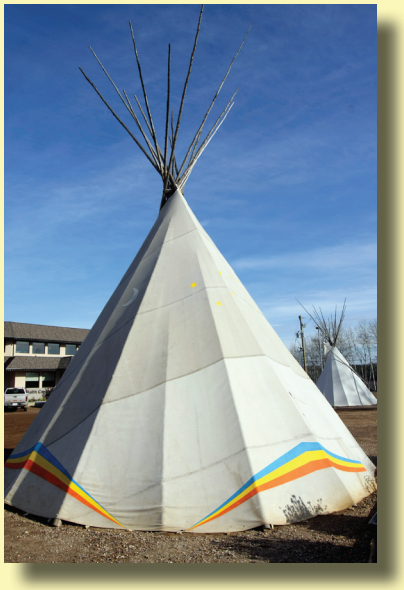
- **The quantity and quality of TEK varies among community members, depending on gender, age, social status, intellectual capability, and profession.**

Annually, Aboriginal Elders from Wood Buffalo congregate for the CEMA Elders Workshop to provide an update on CEMA's work and thank the Elders for their continued participation in the Association. Aboriginal youth from each community were invited to attend the 2009 workshop.

Aboriginal Roundtable

Involvement

This Aboriginal Roundtable Task Group (ART) was formed last year because First Nations and Métis wanted to get more involved in the development of the Wood Buffalo area beyond their contribution to the Traditional Environmental Knowledge Advisory Committee (TEK).



An Advisor, dedicated to the Aboriginal Roundtable, was hired in July, 2008. Meetings were arranged with area Aboriginals committed to getting something done about environmental issues. The Aboriginal people are now in the process of designing a framework which works for them and for CEMA.

This is the first initiative of its kind in the oil sands. There is no clear picture what their framework will look like, but basically, it is an initiative by Aboriginal people for the benefit of Aboriginal people and it has the support of CEMA.

The ART held a summer Youth and Elders' Camp which balanced cultural teachings through the oral tradition, training on environmental issues and strategic planning. The event allowed CEMA to showcase its concerted efforts to develop a strong relationship with the Aboriginal People of the region.

Community Outreach Projects

CEMA connected with all residents of the RMWB by either hosting or participating in myriad outreach projects. The activities, some of which are listed below, were considered effective team-building experiences that strengthened CEMA's profile in the community and involved thousands of residents of all ages.

Connected with all residents

- Environment Week Activities paired CEMA with the Royal Alberta Museum in Fort McMurray and included the Family Fun Day and BBQ featuring the Museum's collections and exhibits from the local ecosystems ;
- Fort McMurray Science Fair focused on children's exhibits;
- Smorgasbord 2008 profiled CEMA's trade booths in high-pedestrian urban shopping malls;
- Trade Show appearances enhanced CEMA's profile;
- Fort Chipewyan Open House reinforced CEMA's history and active role in the larger community of RMWB.
- An Aboriginal Youth and Elders Camp called "Pass it On" was sponsored by TEK's Aboriginal Round Table Advisory Committee. The camp reinforced CEMA's commitment to ensuring the knowledge, beliefs and traditions of regional and national Aboriginal Groups are passed on to the RMWB community and in particular to Aboriginal Youth.

While hosting a BBQ or showing children's exhibits are not major initiatives in themselves, they are early steps to demonstrate that CEMA is interested in building a strong community presence.

Sitting down and talking with CEMA members and staff is a major first step in being included and feeling welcome.

CEMA'S Future

CEMA is committed to the development of solutions that will help rebuild and strengthen its ability to continue to be a vital advisor to government on the management of cumulative environmental effects of development.

A critical proposal for the future direction of CEMA was designed by the Management Committee during a three-day February retreat. The proposal recommends that CEMA must be more proactive and embrace change.

If the new mandate is to be fulfilled, CEMA must perform in four key areas:

- **Deliver priority products that address cumulative effects issues;**
- **Review its organizational structure and improve alignment to the new mandate;**
- **Influence the Lower Athabasca Regional Plan under the province's new Land Use Framework.**
- **Improve Communication to Support Strategic Initiatives.**

CEMA took another major step towards revitalization and formed a Joint Review Committee with Northeast Alberta Regulators. Members of the CEMA Management Committee will work closely with these regulators to review the current governance structure and operations of CEMA and to clarify the future relationship of the organization with federal and provincial regulators.

As well as refining its relationship with regulators and members, the Joint Committee will define the limits of the difference between the power to recommend and the power to decide.

CEMA's full commitment to a more effective future is demonstrated by the foundation of this Joint Committee and its proposed charter endorsing change.

RAMP
Regional Aquatics Monitoring Program

The mandate of the Regional Aquatics Monitoring Program (RAMP) is to determine, evaluate and communicate the state of the aquatic environment and any changes that may result from cumulative resource development within the Regional Municipality of Wood Buffalo.

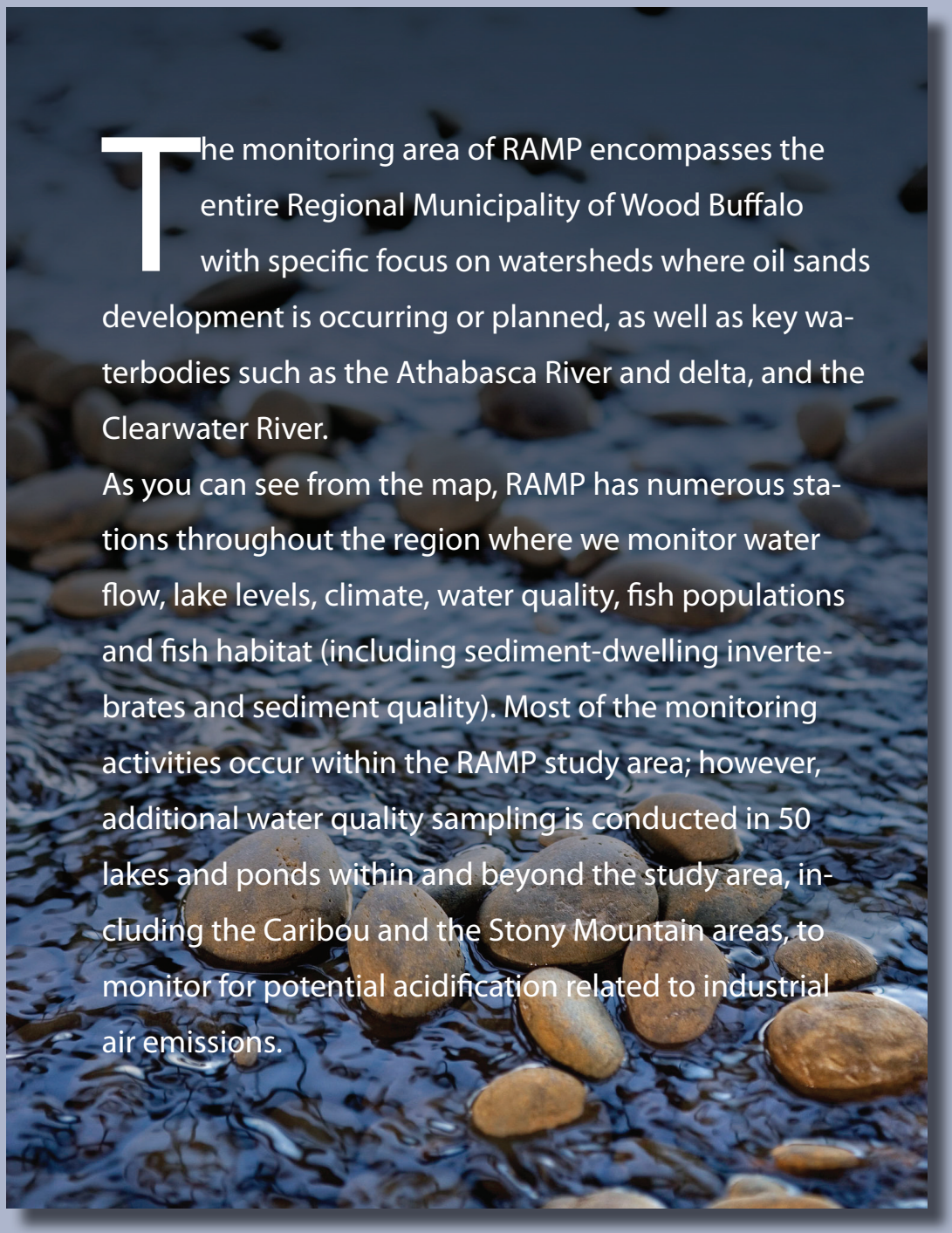
In general, RAMP is designed to:

- Monitor the health of lakes and rivers in the Athabasca oil sands region;
- Collect environmental data to better understand the RAMP study area;
- Compare monitoring data with Environmental Impact Assessment predictions;
- Conduct aquatic monitoring required by regulatory agencies; and
- Grow and adapt in light of past monitoring results, new oil sands development and community concerns.

- **Budget for 2008: $2.4 million**
- **Budget for 2009: $3.2 million**

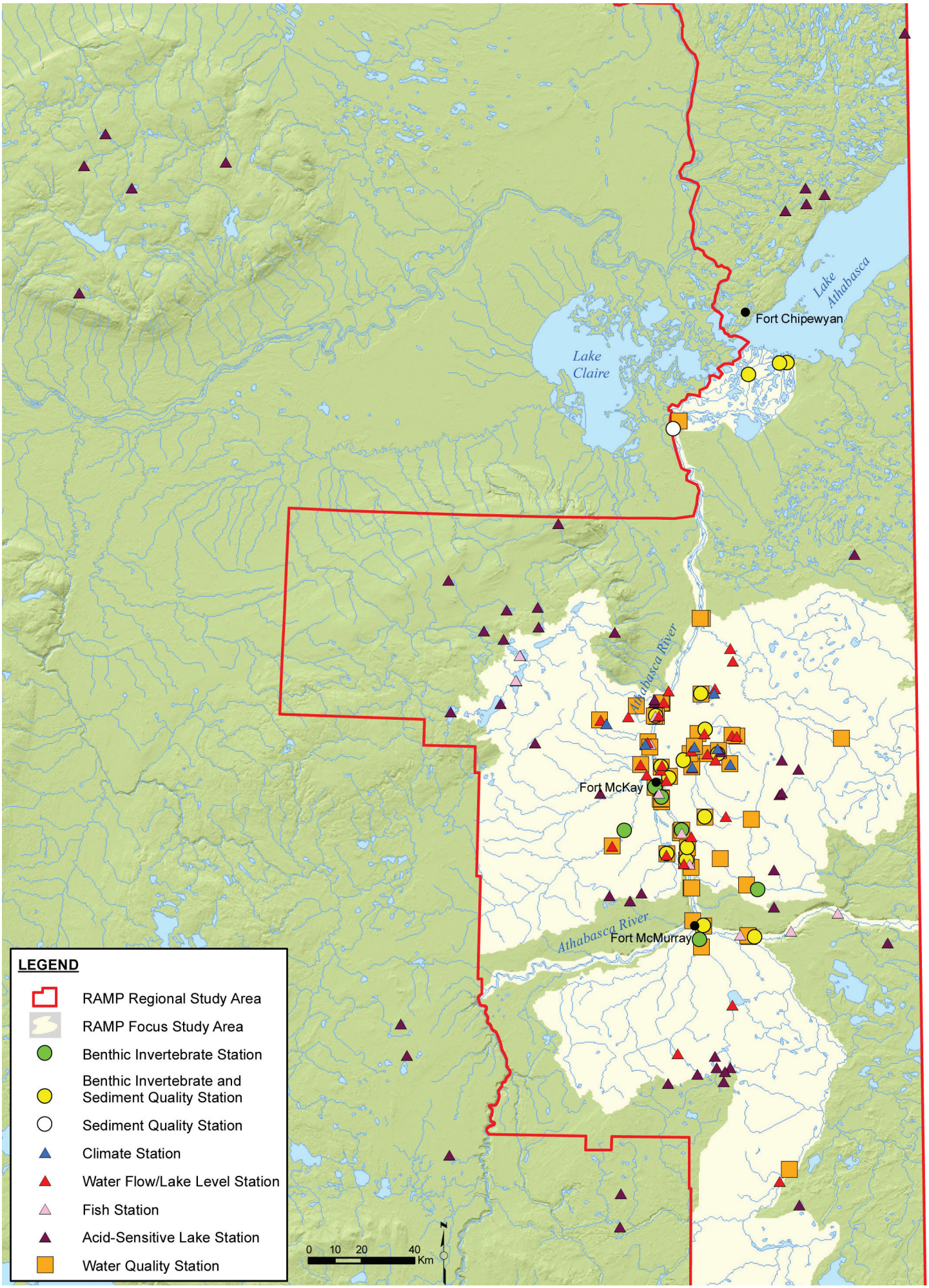
RAMP Regional Aquatics Monitoring Program

is a science-based program designed to monitor the health of Wood Buffalo's lakes and rivers. Now in its 12th year, RAMP continues to grow and adapt to increasing oil sands development, regulatory needs, community requests and past monitoring results. We do this while still maintaining the core elements of the program necessary to assess long-term trends.



The monitoring area of RAMP encompasses the entire Regional Municipality of Wood Buffalo with specific focus on watersheds where oil sands development is occurring or planned, as well as key waterbodies such as the Athabasca River and delta, and the Clearwater River.

As you can see from the map, RAMP has numerous stations throughout the region where we monitor water flow, lake levels, climate, water quality, fish populations and fish habitat (including sediment-dwelling invertebrates and sediment quality). Most of the monitoring activities occur within the RAMP study area; however, additional water quality sampling is conducted in 50 lakes and ponds within and beyond the study area, including the Caribou and the Stony Mountain areas, to monitor for potential acidification related to industrial air emissions.


Lake Athabasca
Fort Chipewyan
Lake Claire
Athabasca River
Fort McKay
Athabasca River
Fort McMurray
LEGEND
RAMP Regional Study Area
RAMP Focus Study Area
Benthic Invertebrate Station
Benthic Invertebrate and Sediment Quality Station
Sediment Quality Station
Climate Station
Water Flow/Lake Level Station
Fish Station
Acid-Sensitive Lake Station
Water Quality Station
0 10 20 40
Km

What does RAMP Monitor?

Climate and Hydrology monitoring includes climate data such as precipitation, amount of sunshine, temperature and snow-pack at 7 stations as well as the quantity of water at 34 stations in various lakes and rivers.

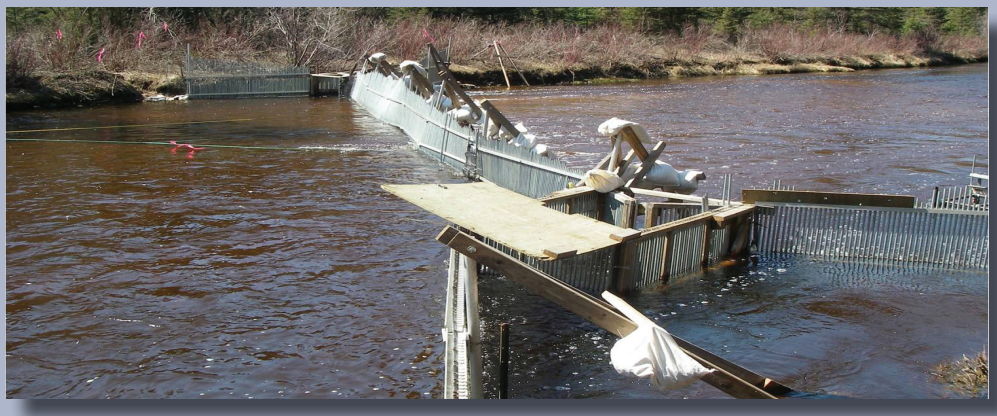
Water quality is monitored in rivers and lakes to better understand natural water quality conditions and determine potential exposure of aquatic organisms to various chemicals. RAMP samples over 45 stations seasonally or annually.

Sediment Quality is monitored with benthic invertebrates to assess the influence of chemicals in sediment on aquatic organisms. RAMP samples about 16 stations in the fall.

Benthic Invertebrates are organisms that live on and in sediments of lakes and rivers and serve as good indicators of the health of these aquatic environments. RAMP monitors benthic invertebrate communities at more than 32 stations in the fall of each year.

Fish Populations are important indicators of ecosystem health and a highly-valued resource in the region. RAMP conducts seasonal (spring, summer, and fall) inventories on the Athabasca and Clearwater rivers, annual tissue sampling in select regional lakes and the Athabasca and Clearwater rivers, fish fences and sentinel species programs.

Acid Sensitive Lakes are set of 50 lakes and ponds where RAMP monitors water quality as an early warning indicator of potential acidification related to industrial air emissions.



RAMP
Regional Aquatics Monitoring Program

Data collected by RAMP has shown that changes to the condition of lakes and rivers within the region up to and including 2008 have generally been small or related to natural changes in the environment (for example, 2008 was a dry year). There were local exceptions to this, but these were largely a result of industrial activities that had been approved by regulatory agencies. Below is a brief summary by monitoring component:

Hydrology: There was little change in water flow of many of the rivers of the region, including the Athabasca River, which could be attributed to oil sands development. Flows of the Athabasca River in 2008 measured at Fort McMurray continued an almost two decade-long period of below average annual flows. Changes were observed in the Muskeg and Tar Rivers, and Poplar, Mills, and Fort creeks due to increased water withdrawals or releases into the watercourses.

Water Quality: Generally, water quality was similar between stations located within and outside oil sands development and when compared to conditions prior to development. An approved wastewater treatment facility in the Tar River watershed has resulted in higher nutrients in the lower Tar River. As well, there were slight changes in water quality in the lower Beaver River, Isadore's Lake and Shipyard Lake in the vicinity of ongoing development.

Benthic Invertebrates and Sediment Quality: Organisms that live on and in sediments of lakes and rivers (benthic invertebrates) are good indicators of the health of these aquatic environments. Based on data collected to date, there have been no substantial changes in benthic invertebrate communities located near oil sands developments, although small changes were noted in the lower Steepbank River, lower Poplar Creek, lower Fort Creek, and Isadore's Lake. In addition, sediment quality has not changed substantially from previous years or compared to stations located beyond oil sands development.

Fish Populations: Since 1997, fish inventories on the Athabasca and Clearwater rivers have shown high year-to-year variability in the capture of sport fish. However, there has been no obvious increasing or decreasing trends in abundance, types of fish or condition of fish with the exception of an overall increase in relative abundance of walleye and a decrease in relative abundance of longnose sucker over time. Fish tissue was collected from Big Island Lake and Gardiner (Buffalo) Lake (whitefish, pike, walleye), and from the Athabasca River (whitefish, walleye) in 2008. Mercury levels were higher in larger fish and generally higher in walleye and pike relative to lake whitefish. These results are consistent with levels measured in the past and in other lakes and rivers in and outside the oil sands region. All fish tissue data are submitted to Health Canada for their ongoing evaluation of fish consumption guidelines.

Acid Sensitive Lakes: Generally there were no changes in overall water chemistry in sampled lakes in 2008 compared to previous sampling years.

RAMP will continue to monitor and report on any changes observed in local lakes and rivers and whether the changes are within the range of natural variability or exceed what was predicted in the various environmental impact assessments.

Scientific Peer Review

RAMP periodically undergoes a scientific review of its technical program to ensure that it continues to meet the scientific objectives of RAMP, and is capable of detecting changes in the health of regional lakes and rivers should they occur.

Commitment to Long Term Monitoring

The process involves asking independent scientists with expertise in aquatic monitoring to review the technical program and provide their objective opinion and comments. In this way, RAMP and its multi-stakeholder membership can have some assurance that the program is meeting the various monitoring requirements.

The last review was completed in 2004 with another review planned to start in fall 2009. The latest review will be completed in late 2010.

How You Can Help

RAMP relies on community participation to assist in monitoring fish populations of lakes and rivers in the region. There are two community programs currently in place:

Fish Tagging Program

To gain a better understanding of sport fish migration patterns, RAMP tags all northern pike and walleye that are captured. If you catch a fish that has been tagged, please report the tag number, tag colour, type of fish, location of capture and if possible, the length and weight of the fish to Alberta Sustainable Resource Development at 780-743-7200. If you intend to release the fish, please do not remove the tag.

Fish Health Program

In an attempt to document fish health in the region, RAMP has established a fish health program that provides analyses of unusual or unhealthy fish through an independent laboratory. The laboratory is part of the Canadian Cooperative Wildlife Health Centre based at the University of Saskatchewan. If you catch a fish that looks unusual or unhealthy (missing fins, curved spine, growths or sores) please contact Hatfield Consultants in Fort McMurray at 780-743-4290.

If you intend to release the fish, or if it is necessary to release the fish based on Alberta fishing regulations, please feel free to submit photos of unusual or unhealthy fish.

For more RAMP news and recent activities, please visit:

www.ramp-alberta.org

RAMP
Regional Aquatics Monitoring Program

CEMA
p. 780-799-3947
f. 780-714-3081
www.cemaonline.ca

#214, Morrison Centre
9914 Morrison Street
Fort McMurray, AB
T9H 4A4

RAMP
p. 780-743-4290
f. 780-715-1164
www.ramp-alberta.org

Hatfield Consultants
8542B Franklin Avenue
Fort McMurray, AB
T9H 2J4