



Hatfield
CONSULTANTS

Environmental Specialists Since 1974

WATER RESOURCES

Hatfield provides a complete set of water management services to Canadian and international clients

WE PROVIDE A FULL SPECTRUM OF WATER MANAGEMENT SERVICES, INCLUDING:

Baseline, Due Diligence and Environmental Effects Monitoring

- Design, Installation and Operation of hydrometric, water quality and climate station networks
 - Telemetry
 - Data Management and Analyses
 - Web-based portals for data sharing
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Water Resource Assessment

Environmental Impact Assessment

- Surface and groundwater modelling
 - Impact Mitigation and Management Plans
 - Environmental Flow Requirements
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Special Studies

- Hydraulic modelling
 - Flood mapping
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Water Act Permitting

Hydrogeological Studies

Hatfield's Water Resources Group offers a full range of water resource services from the establishment of hydrometric networks to provision of effective tools for stakeholder-focused watershed management.

We provide water management services through an approach that combines field experience with quality data management and analysis.

FEATURED SERVICES



LARGE-SCALE AQUATICS MONITORING IN THE OIL SANDS REGION

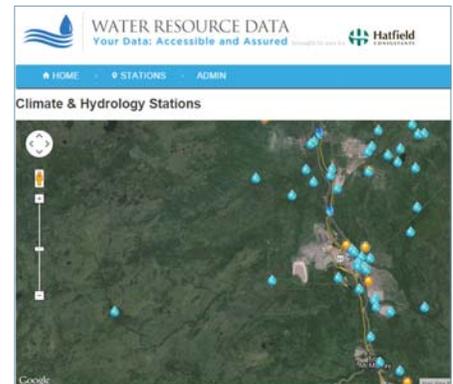
Since 2003 Hatfield has implemented the regional aquatics monitoring related to oil sands development under the Regional Aquatics Monitoring Program (RAMP) and more recently under the Joint Oil Sands Monitoring Program (JOSMP). Hatfield's responsibilities include:

- design, installation and operation of 50 hydrometric and 5 climate stations;
- oversight of telemetry based near real-time data acquisition;
- manual measurements and rating curve establishment;
- data collection, analysis and management to Water Survey of Canada standards;
- analysis, modelling and reporting.



COLONIAL COAL BASELINE SURVEYS

Hatfield undertakes snow course surveys for mining clients to contribute to run-off models and water balances. Depending on the location, surveys are generally performed in February, March, and April at selected sites to gauge snow pack extent, SWE, and freshet timing. These form part of the comprehensive baseline studies of local hydrology and aquatic resources (surface water quality, periphyton, benthos and fisheries) that were prepared for the purpose of submitting a formal application to develop a coal resource for Colonial Coal. A total of eight hydrometric stations are operated along with eight snow course sites to evaluate the local hydrologic conditions.



WATERRESOURCEDATA.COM

Hatfield's secure web-based portal allows clients easy access to their hydrometric, water quality, and climate datasets, which are managed by our professional hydrologists. Our portal:

- is used to manage over 150 stations and 600 data series;
- is aligned with Water Survey of Canada processes and systems;
- can be linked to telemetry systems;
- is user customizable with notifications;
- allows for client granted access to specified agencies; and
- includes a GIS web mapping system and online data analytics and visualization.

WWW.HATFIELDGROUP.COM



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WHY HATFIELD CONSULTANTS?

Established in 1974 and based in Vancouver, Canada, Hatfield Consultants has built a worldwide reputation in environmental services with over 3,500 projects in Canada, Asia, Africa, South America and Europe. With company offices in Canada, Indonesia, Laos, Cambodia and Botswana, as well as business partners in Chile and Thailand, we are well positioned to respond to your individual project needs and requirements – wherever you are.

We help you apply best environmental practices and contribute to a sustainable future.