

Alberta Environment- Hydrometric Monitoring Program

2008 Water Measurement Workshop



Where We Fit In AENV

Alberta Environment

Environmental Assurance Division

Monitoring, Reporting, and Innovation Branch


Monitoring Program Delivery

Water Monitoring Team

➤ Regional offices

- Lethbridge
- Calgary
- Edmonton
- Grande Prairie
- Fort Chipewyan

➤ Main areas of water monitoring

- Hydrometric
 - Meteorological
 - Water Quality
 - Groundwater
- 
- The bottom right corner of the slide features a decorative graphic of several concentric circles, resembling ripples on water, rendered in a lighter shade of blue against the main blue background.

Hydrometric Monitoring

- Surface Water
- Long-term networks
- Flow data
 - Rivers, creeks, canals
- Water level data
 - All of the above, plus lakes and reservoirs
- Real-time and non-Real-time stations




Monitoring Networks

- Provincial Hydrometric Network
- Lake Level Network
- Various projects and programs for partners and clients



Partnerships

- Various departments within AENV
 - WSC
 - Alberta Agriculture
 - Irrigation Districts
 - TransAlta
 - BC Hydro
 - Various levels of government, including cities and counties
 - Other
- 

Hydrometric Agreement

- Federal-Provincial Hydrometric Agreement between Water Survey of Canada and Alberta Environment
- Data published together
- Benefits of Agreement
 - Cost-sharing
 - Distribution of stations

Data Users- AENV

➤ Alberta Environment

- River Forecasting
- Water Management Operations
- River Engineering
- Evaluation and Reporting
- Approvals and Compliance

Data Users- outside AENV

- Water Survey of Canada
 - Irrigation Districts in Southern Alberta
 - Alberta Agriculture
 - Alberta Sustainable Resource Development
 - TransAlta
 - BC Hydro
 - Universities and Researchers
 - Watershed Organizations
 - Various Industries and Consultants
 - General Public
- 

Data Availability

➤ Archived data

- Water Survey of Canada- Hydat CD's

➤ Real-time data

- Available to Public
- Alberta Environment's Website
 - www.environment.alberta.ca/apps/basins/

Data Collection- Water Levels

- Water Levels
 - Manual Water Levels
 - Variety of Data Loggers and Telemetry



Data Collection- Discharges

➤ Discharges

- Standard Current-Price Meters
 - Wading/Bridge Frames
- Recently purchased ADCP equipment
 - Acoustic Flow Trackers for low flows
 - Workhorse ADCP's for higher flows



Where We're Going

- New Technology
- Expansion of Hydrometric Network
 - WSC stations
 - Possibly New Provincial Stations





Questions?