## Theme A: Monitoring and Data

Monitoring and collecting data can help reveal major trends, determine key triggers, and inform important management decisions regarding multi-year drought.

### Strategies

#### Know Your Water Supply

- ✓ Before Drought
- ✓ Warning Signs
- ✓ During Drought
- ✓ After Drought

#### Identify and Track Performance Measures

- **✓** Before Drought
- ☐ Warning Signs
- ✓ During Drought
- ✓ After Drought

## **Supporting Tools**

- Alberta River Basins
- Alberta Climate Information Service
- Alberta Agriculture and Forestry Moisture Situation Updates
- Alberta Rivers Mobile App
- Groundwater Observation Well Network
- Canadian Drought Monitor
- Environment and Climate Change Canada Temperature and Precipitation Forecast Map
- Alberta Environment and Parks Surface Water Quality Data
- Alberta Wildfire and Alberta Fire Bans Websites

#### Identify and Monitor Drought Indicators

- **✓** Before Drought
- **✓** Warning Signs
- **✓** During Drought
- ✓ After Drought

# Evaluate Drought Response and Lessons Learned

- ✓ Before Drought
- ☐ Warning Signs
- **✓** During Drought
- ✓ After Drought
- Water Survey of Canada
- Environment and Climate Change Canada Climate Data
- Alberta Agriculture and Forestry Wildfire Status Map
- Alberta Climate Records
- Prairie Adaptation Research Collaborative
- Prairie Climate Centre
- Agriculture and Agri-Food Canada's Drought Watch
- Alberta Biodiversity Monitoring Institute,
  Biodiversity Management and Climate Change
  Adaptation

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### Consider

- Where does your water come from?
- Who owns and operates your water supply?
- Who else has an impact on your water supply?
- How will a changing climate impact your water supply?

### Example

Several online resources provide data and information that can assist municipalities in assessing their local conditions. Relevant drought indicators and the associated triggers for implementing given strategies will vary from one municipality to another, depending on factors such as the source of water, key land uses, and monitoring capacity. An example indicator is Agriculture and Agri-Food Canada's drought intensity map, which provides a quick indicator of drought conditions in your area, according to five stages:

Stage	What does it mean?
D0 — Abnormally Dry	Represents an event that occurs once every 3 to 5 years
D1 — Moderate Drought	5- to 10-year event
D2 — Severe Drought	10- to 20-year event
D3 — Extreme Drought	20- to 25-year event
D4 — Exceptional Drought	50+ year event