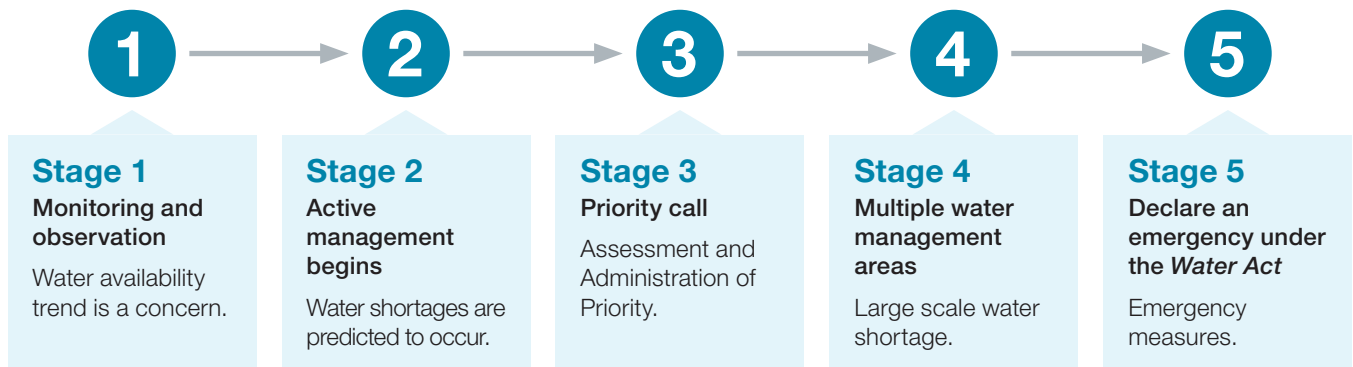


Water Shortage Management Stages

The Government of Alberta ensures the quality and quantity of Alberta’s water resources under the *Water Act*, which supports and promotes the conservation and management of water. During times of drought and water shortage, it may be necessary for the government to take management action to protect the aquatic environment and integrity of the water management system. Environment and Protected Areas (EPA) defines five stages for managing through water shortage:



Depending on the length and severity of a water shortage, the government may proceed through these 5 stages of water shortage management. Management stages will change based on conditions and can shift at any time.

Management Stage	Stage occurs when:	Management Action Options:
Stage 1: Monitoring and Observation	<ul style="list-style-type: none"> The Water Supply Outlook on Alberta River Basins indicates there may be potential water shortages in an applicable water management area. There is an elevated risk of a priority call or risk of failure to meet apportionment requirements. Risk of loss to riparian areas, or instream objectives or water conservation objectives not being met. 	<ul style="list-style-type: none"> An interdisciplinary Flood and Water Shortage Team forms to monitor the developing situation, identify resources, manage communications, and implement the water shortage procedures. Information such as reservoir storage, snowpack, predicted precipitation, current conditions and anticipated demand by all water users is taken into account to determine if the water shortage will impact household users, licensees, traditional agricultural users, or other provincial responsibilities such as apportionment.
Stage 2: Active Management	<ul style="list-style-type: none"> Stream flows are below instream objective or Water conservation objectives on licences and is forecast to not improve. Stressful conditions exist for fish populations from low flows and elevated water temperatures. 	<ul style="list-style-type: none"> Communicate the water shortage situation and measures to alleviate the potential water shortage, including implementing Water Shortage Response Plans and developing water sharing agreements. Consider suspending or cancelling all active temporary diversion licences in the water management area. Consider issuing a water shortage advisory on Alberta River Basins for the affected water management area.

Management Stage	Stage occurs when:	Management Action Options:
Stage 3: Priority Call Assessment and Administration	<p>Conditions degrade to a point where:</p> <ul style="list-style-type: none"> The department receives a priority call from a licensee, registrant and/or household user. The Transboundary Waters Team indicates concern the Master Agreement on Apportionment may not be met. 	<ul style="list-style-type: none"> Priority calls received will be validated and assessed to determine what flows are available and how much allocated flow must be released downstream. If it is determined that administering the priority call will satisfy the rights of the priority caller, a water management order may be issued directing upstream junior licence holders to reduce or cease diversion.
Stage 4: Multiple Water Management Areas	<p>Conditions degrade to a point where:</p> <ul style="list-style-type: none"> The water shortage impacts multiple water management areas. A significant number of licensees/traditional agricultural users/household users in the water management areas are impacted and are unable to divert water. The water shortage persists or is projected to persist. 	<ul style="list-style-type: none"> In addition to the actions taken in Stage 1, 2, and 3, communication to Watershed Advisory and Planning Councils and the Intrabasin Water Coordinating Committee of the South Saskatchewan River Basin increases. A water shortage strategy is developed with input from key stakeholders to mitigate the impacts of water shortage and manage water resources in a way that meets provincial apportionment obligations, as well as the needs of water users and the aquatic environment.
Stage 5: Declaring an Emergency	<p>There is significant risk to:</p> <ul style="list-style-type: none"> Human health and safety due to insufficient water supply. Human health and safety due to water quality degradation as a result of insufficient flow to dilute effluent releases to a water body. There is significant stress on the health of the aquatic environment to a point where fish mortality occurs. Municipalities, water users, and Alberta government departments have been unable to address the extent and magnitude of the water shortage. 	<ul style="list-style-type: none"> When other options have been exhausted, consider recommending that an emergency be declared under the <i>Water Act</i> to provide additional legislative tools to manage the emergency. Adjust the water shortage management system, as outlined in Stages 1, 2 and 3, in order to implement the declaration of the emergency.