Full Authority 17 June 2021 Agenda Item: 15

Low Water Response

Background

As the Board Members know and understand, the CVCA is responsible for flood forecasting and warning as part of the Authority's water management program. The other end of the spectrum includes the CVCA's responsibility to implement a program to prepare and coordinate a response plan in the event of low water or drought conditions. This agenda item is to provide a brief background of the program and notification of the Board's responsibilities.

Purpose and Objectives

This program recognizes that water management needs to be approached in a coordinated manner at both the provincial and local level. The provincial role is to provide overall direction through policies and guidelines, central information storage and analysis and emergency support. At the local level, the conservation authority is responsible for monitoring levels, information collection and program delivery. As part of this program and in response to low water conditions, Water Response Teams have been established in the past to assist with implementing the response

Therefore, the purpose of the Crowe Valley Water Response Team (WRT) is to coordinate the activities of water management agencies with respect to dissemination of information, analysis and response to water events, especially in the event of a severe drought.

Specific objectives include:

- To characterize the Crowe Valley Watershed with respect to water resources and water demands.
- To identify water concerns including resource protection and adequate supply.
- To identify and categorize low water conditions through collection and monitoring of precipitation, surface water level/flow, and groundwater level data (if available) and comparison of this data to historical values.
- To recommend action for response to low water conditions and to implement water management strategies.
- To communicate with user groups to fully understand the water demands.
- To provide advice to local, provincial and federal decision makers.
- To evaluate the role of the Team and the effectiveness of the Water Response Program.

Membership

Certain organizations are required members of the WRT as a result of their organizational mandates, legislative tools, communication abilities and background data. The following membership of the Crowe Valley Water Response Team will include:

- Crowe Valley Conservation Authority representative (voting member)
- One representative from all Member Municipalities of the CVCA (voting members)
- Unimin Mines Representative (voting member)
- Federation of Ontario Cottagers representative (voting member)
- Ministry of Environment and Climate Change representative
- Ministry of Natural Resources and Forestry representative
- Ontario Ministry of Agriculture Food & Rural Affairs representative

The WRT Members' Commitments

- Partnering with the province to ensure coordination and local watershed support
- Considering and incorporating local knowledge and indicators of low water
- Ensuring that public concerns are heard and taken into consideration
- Attending meetings, communicating back to their sectors, sharing relevant data and implementing drought management tools
- Identify actions needed to manage the response to drought on a watershed basis
- In extreme drought, the WRT will provide advice to local and provincial decision makers.

Low Water Condition Level Indicators Explained

Level 1

The 3 different triggers that initiate a Low Water Condition Level 1 Status declaration are as follows:

- A watershed has its 18 month precipitation fall below 80% of average or
- A watershed has its 3 month precipitation fall below 80% of average or
- A watershed has a monthly average stream flow that falls below 100% in the spring or 70% of the minimum summer month flow

If a Level 1 Drought Status is declared, users will be asked to reduce usage by 10%

<u>Level 2</u>

The 4 different triggers that initiate a Low Water Condition Level 1 Status declaration are as follows:

- A watershed has its 18 month precipitation fall below 60% of average or
- A watershed has its 3 month precipitation fall below 60% of average or
- A watershed has its 1 month precipitation fall below 60% of average or
- A watershed has a monthly average stream flow that falls below 70% in the spring or 50% of the minimum summer month flow

If a Level 2 Drought Status is declared, users will be asked to reduce usage by 20%

Level 3

The 4 different triggers that initiate a Low Water Condition Level 1 Status declaration are as follows:

- A watershed has its 18 month precipitation fall below 40% of average or
- A watershed has its 3 month precipitation fall below 40% of average or
- A watershed has its 1 month precipitation fall below 40% of average or
- A watershed has a monthly average stream flow that falls below 50% in the spring or 30% of the minimum summer month flow

If a Level 3 Drought Status is declared, users will be *required* to reduce usage further than 20%. At this time, the Province will establish water usage criteria.

Further notes:

CVCA staff will be monitoring the primary indicators of low water conditions within the water bodies in the CVCA watershed. After discussion at the Board level with local knowledge input (ie, reports of well conditions throughout the watershed), a decision can be made to declare a Level 1 Status or not.

With changes to the CA Act and the recent Consultation Guide Regulation, the Province has determined that the Low Water Response Program is a mandatory conservation authority function.

At the same time this has been included in the mandatory "list", no additional funding is being provided for the program from the Province, which was previously funded based at \$5,000 and/or as additional expenses were incurred.

Staff Recommendation

That staff review the current water level and flow data with input from the Board and determine if the declaration of a Level 1 Drought Status is required.

That if a Level 1 is not immediately declared, that staff review the water level and flow data at the end of June (to include the June monthly data) to determine whether a Level 1 Drought Status is required.

Board Decision