

Full Authority
21 November 2019
Agenda Item: 14

General Manager's Report

The General Manager's report provides a brief update for the Board Members prior to the Board meeting bringing forward additional information and/or progress on initiatives or current issues for the Board members consideration.

1. Watershed Management

Current Watershed Conditions

- Rainfall totals remained low in September with increasing amounts of precipitation throughout the watershed later in the fall. October rainfall average is approximately 3.4" and CVCA staff recorded approximately 7.5" during the month.
- Increased precipitation combined with the fall draw down period has created higher than normal seasonal water levels on some of the lakes in the watershed.
- As a result, public inquiries have been greater than normal. There is a concern that water levels will not be at winter water levels prior to the spring freshet.
- CVCA water management practices have been in place to ensure that flood storage capacity on controlled lakes is achieved before the spring freshet.

Anticipated Conditions

- The current seasonal levels are higher than normal, but with less precipitation received in the past few days and colder temperatures, the draw down to winter levels should progress in a more traditional manner.
- Seasonal variations are certainly to be expected. However, the seasonal water level cycle over the past 6 to 8 months has seen more extremes than normal. It certainly appears the cycles are deeper and more prolonged than in the past. It *may* become the new norm.
- CVCA staff will continue to monitor weather conditions and operate dams as required to ensure the drawdown is conducted as quickly as possible, taking into consideration the effect of the rainfall on the entire watershed and then performing the necessary stop log adjustments to return to seasonal norms as quickly as possible.

Marmora Dam Repairs

As per the submission of the project to obtain WECI funding, the repair work was originally to be completed to avoid excessive repairs in the future. However, the project did not rank high enough to secure the 50% Provincial funding.

The Board has remained committed to the project and in late September, WATECH SERVICES INC. was retained to carry out an inspection of the deck of the Marmora Dam. The inspection focused on the condition of the deck of the 5 bay control structure (west end). Deterioration of the lower portion of the deck in the area of the gains had become evident to CVCA staff.

The report has documented the general condition of the deck and has identified the following:

The reconstruction of the dam in the late 70's has created a problem now coming to light 40 years later. The deck of the dam is constructed of two layers of concrete, the original old deck and the 70's "new" deck. The new deck was poured on top of the old in all likelihood to save money for framing for a new pour.

WATECH documented the size and location of reinforcing steel in the two layers of concrete.

Documented the material concrete condition and the bond condition between the two layers of concrete by obtaining core samples of the concrete.

Reported the findings with cost estimates for repair/reconstruction

Observations included the following:

1. The new deck has a thickness of 12", the old deck 9 to 10".
2. There is no bond evident between the two layers. A layer of plastic was noted in all 5 core locations.
3. Re-enforcing steel was located in both layers. The new deck had steel in both directions and was a heavier gauge than the old. The steel in the lower deck was only in one direction.
4. Concrete in the old deck was deteriorating at every bay and is beginning to impact the new deck.
5. Concrete is spalling on the old deck and creating a hazard, especially as the size of the falling concrete pieces become larger and more frequent.
6. Aggregate in the old deck is larger than the new deck, therefore there is less concrete in the old deck.
7. The location of the dam is not secure. Fencing and barriers are inadequate to restrict public access.

Repair Options

Option 1 - Do no repairs to the concrete, but install necessary barriers, fences and signage to prevent public access below the dam where falling concrete will become an issue. Cost – approximately \$20,000.

Option 2 - Old deck removal (completely) and concrete restoration with steel jacking plates. Very labour intensive, not able to use heavy machinery. Approximately a \$325,000 repair

Option 3 - Concrete repair and steel angle plates at the gains and underside of the deck. Most practical and cost effective long term solution. Life of old deck can be extended for years. Cost – approximately \$96,400

Option 4 - Reduced barrier and fence area, signage – pending estimate from contractor. May be in the \$6,000 to \$8,000 range and weather dependent.

Discussions regarding the situation were held with the Executive Committee as to which option would be best for the public's safety and the CVCA. Issues considered were CVCA's liability, public safety, best use of scarce financial resources, public access (decades of use as a path, "observation" deck and attraction for local population and visitors to the area) and time horizons/longevity for each option.

In addition, Marmora and Lake Representative, Jan O'Neill has been notified of the situation. She has notified Marmora Council of the concerns with the dam and possible barricades to be placed by year end. Jan has been fully supportive and understands the implications of public safety and liability risks associated with the condition of the west sluiceway.

Recommendation

Staff recommend Option 1 or Option 4 be completed as soon as weather conditions permit and that the CVCA pursue funding options to complete the necessary physical repairs to the concrete with the steel plating – Option 3.

Board Decision

2. Administration

The Asset Management training has been completed and staff will be looking at next steps for the CVCA.

3. Conservation Areas

McGeachie Trails Improvement Update

Since the last Board meeting, the CVCA hosted a meeting with the Hastings Destination Trails Inc. (HDTI) Project Manager Carey McMaster and Zane Davies of Treadscape, (the contractor hired by HDTI) to discuss the steps to be taken for McGeachie Conservation Area during the fall of 2019 and winter 2020.

- The CVCA/North Hastings Economic Development Committee agreement has been signed.
- Work on the trails has been started with some of the equipment required moved on site early in November.
- As stated previously, the trail refurbishment will include funding for upgrades to the trails, signage, new washroom facility and project management expenses. Approximately \$40,000 has been allocated for MCA.
- Cathy Trimble, HDTI Chair and I will be meeting with Limerick Township to discuss possible maintenance support for the trail network in combination with establishing a volunteer base on the 18th of November.