Engage MB

What We Heard

Project Overview

The Falcon Lake Dam consists of two water control structures through a causeway (Dam) on the southwest end of Falcon Lake. One of the two water control structures is in poor condition and is need of replacement to maintain access to the South Shore and control water levels on the Lake.

The original structures were not designed to act as flood control. However, preliminary design for a new structure does consider whether improvements to lake level controls could be achieved, and at what cost.

There is significant split among property owners on Falcon Lake with respect to what the ideal range of water regulation should be. These findings are supported by a previous engagement in the summer of 2018. Consequently, current public engagement on the preliminary design options provides additional information on the process, and provides an opportunity for public input on the proposed preliminary designs.

Feedback received at the public open house and the survey will feed into the evaluation of the design options. Topics covered include views on environmental issues, cost implications and overall design of the options. This information is used to evaluate the options and will be used by Water Management Engineering and Construction to determine the best option for the new structure.

Engagement Overview

Public engagement consisted of an open house using storyboards and subject matter experts to present information on January 22, 2020. This was accompanied by a paper survey, which was handed out to attendees of the event. Additionally, an open online survey and engagement website was run from January 22 to February 22, 2020. Invitations to participate were sent to the Whiteshell Cottagers Association (WCA), Manitoba Conservation and Climate and a public advertisement was issued in the Winnipeg Free Press. Social media posts were also shared by the Manitoba Government social feeds to encourage followers to contribute to the engagement.

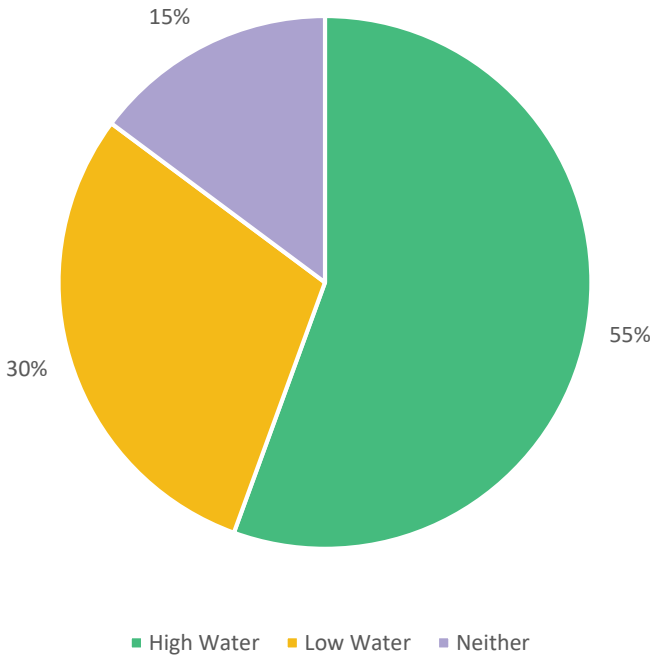
Demographics of Survey Responses

A total of 57 responses were received for the survey. The vast majority (95 per cent) of the survey respondents were property owners at Falcon Lake. Of these respondents, approximately 15 per cent indicated that they consider their cottage to be their primary residence. Additionally of the respondents who were property owners approximately 76 per cent of them were waterfront cottage owners.

New and generational cottage owners were represented in our survey sample, with those who have owned their cottages for only one year as well as those who have owned for nearly 70 years contributing. The average length of ownership was approximately 40 years.

Property owners had differing concerns regarding water levels as shown in Figure 1.

Figure 1 - Is your cottage at Falcon Lake primarily affected by high water or low water?



As can be seen in the above pie chart, the majority of respondents indicated that high water on the lake caused them more concern than low water, but low water is still a significant concern for many cottagers, the reasons for this will be discussed below in the What We Heard section.

What We Heard

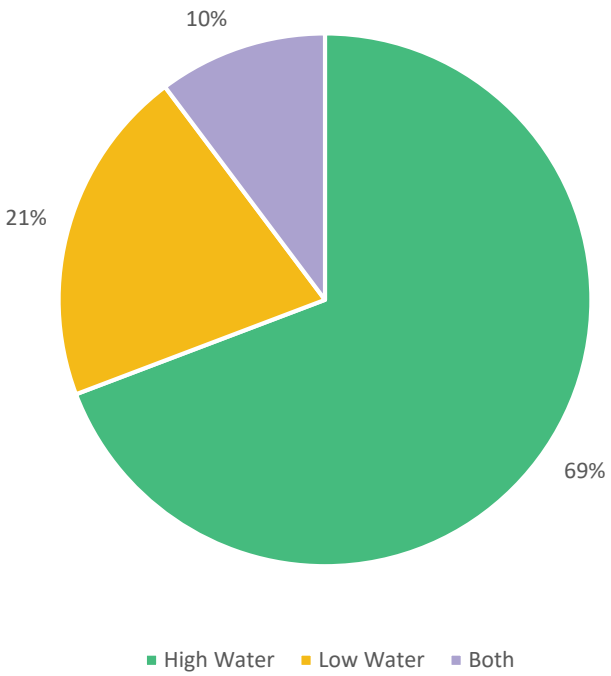
Several key themes were identified when analyzing the feedback. Responses were categorized into themes in order to break the information provided into useable data. The themes identified are Damage, Environmental Concerns, Cost Concerns and Operational Concerns. What we heard within these themes, and how they will be addressed in the project going forward follow in the sections below.

Damage

One of the main concerns regarding the replacement of the water control structure at Falcon Lake was the damage that has occurred in the past when water levels have been outside the normal range of operation for the lake. Damage from both high and low water levels were captured as part of the survey and among respondents who own property on the lake

approximately 72 per cent indicated that they had experienced damage as a result of water levels. The distribution of damages with relation to high vs. low water level is found in Figure 2.

Figure 2 - Damage reported based on high or low water



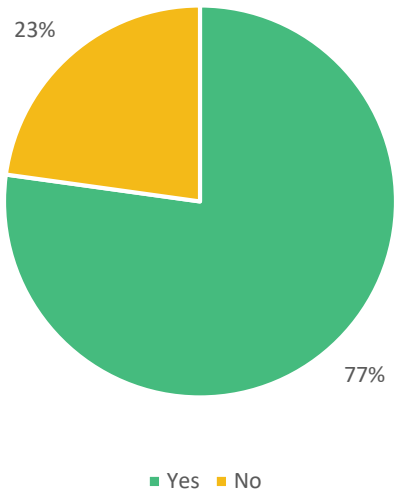
In general, the higher estimates for damage were from high water levels. Most damages from low water levels were from access concerns and boat damage due to underwater hazards. While damage from high water was noted to be primarily due to shoreline infrastructure (docks/boathouses) and loss of shoreline due to erosion. The average damages self-reported by respondents from high water levels during 2016 and other high water events was $14,000. The average damage reported by respondents from low water levels was around $2,000.

Lake regulation and the improvements that could be realized from a new structure was obviously a significant concern for the respondents of the survey and attendees at the open house. As such, the weighting for the improvements to water level control in the evaluation matrix that is proposed by Manitoba Infrastructure has been assigned the highest weight.

Environmental Concerns

Environmental concerns regarding the options were stressed in many of the comments provided by survey respondents. The question was asked directly and it appeared that the environmental concerns were an issue for a significant number of the respondents as can be seen in **Error! Reference source not found.** below.

Figure 3 - Are the potential impacts to the environment and fishery a significant concern for you?



The text responses to the environmental questions and the question regarding concerns about the various options provide some insight into the main concerns about the environmental issues surrounding the project. Many respondents were concerned about the health of the wetland downstream and the trees that border the existing causeway. Options #2 and #3 are identified to have more impact to the wetlands and fisheries on the Falcon River than Option #1, so these sentiments tended to follow with respondents who preferred Option #1. Respondents were concerned that artificial flooding of the downstream area may lead to changes in the vegetation and death of trees. Additionally respondents were commonly concerned about the fish spawning in the downstream reach of the Falcon River.

Several respondents indicated that wild rice harvesting and other traditional indigenous use occurs in the Mud Lake and Snake Lake areas by local indigenous communities; this is new information to Manitoba Infrastructure and provides additional avenues of investigation as the project moves forward.

There was a sentiment among some commenters that the “state of nature” or as close to it should be pursued. While this is not the case as it currently exists, nor is it in the mandate of this project, Option #1 as presented provides the least alteration to the “state of nature”, while Options #2 and #3 provide increasing levels of human intervention.

There were also commenters who felt that the environmental impacts associated with the pumping options was not significant, or that they were not concerned with this aspect of those options.

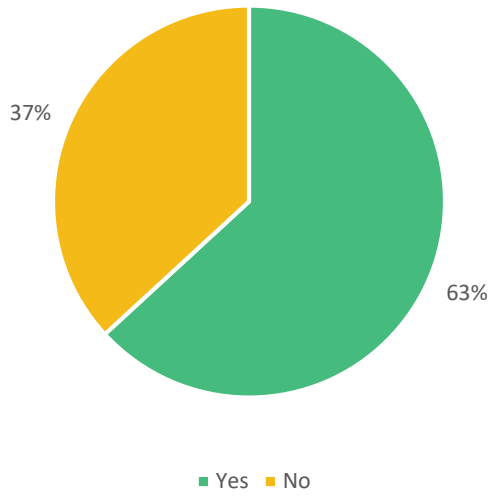
In addition to the responses that concerned specific environmental issues there were, also comments regarding the adequacy of the environmental information provided on the storyboards. This is a fair comment as the storyboards are meant to provide broad strokes of an issue. Some of these issues will be addressed during the preliminary design works; however, there will always be some uncertainty on the effects additional human intervention will have on the management of a wetland area.

As such, the environmental concerns of each option have been assigned a weighting of 3 out of 5 in the evaluation matrix that is being proposed by Manitoba Infrastructure. This takes into account the high percentage of respondents who were concerned about the potential environmental impacts of the pumping options, while understanding there are some unknowns regarding the impact of the two proposed pumping options.

Capital Costs

The majority of survey respondents were concerned about the costs of the proposed structures; however, it was more split than the question regarding environmental concerns. As can be seen in Figure 4 below about 63 per cent of the respondents were concerned about the costs of the new structure.

Figure 4 - Is the cost of each option a significant concern for you?



Among the text responses regarding the options, cost, who would be paying for the project, and value for money were concerns raised. Several commenters questioned what the long term operating costs would be for the pumping options, as this was not addressed in the storyboards. It is anticipated at this point that the project costs for this will come out of the Manitoba Infrastructure WMEC Capital budget and that operating expenses would continue to be born by Manitoba Climate Change and Conservation, however for the pumping options this is less obvious as the long-term operations costs could eventually dwarf the initial upfront capital costs. Cost was assigned a weighting of 3 out of 5 in the evaluation matrix so that Option #1 by virtue of being the cheapest option does not automatically become the recommended option.

Operational Concerns

The remaining concerns that were not captured above were themed as operational concerns. These include things such as suggestions for automating the control systems and concerns regarding noise of Options #2 and #3. Each of these will be addressed here briefly along with explanations on why they could or could not be incorporated into the project going forward.

Several respondents felt that Structure No. 1 (the steel plate bridge culvert installed in 2007) was inadequate to address issues at the lake, and requested gates be put onto this structure to control the lake on its lower end. While this is something that could be done, Structure No. 1 was initially built this way as compensation to the national Department of Fisheries and Oceans for destruction of fish habitat at other government owned facilities on Falcon Lake. The structure is designed to provide connectivity for fish passage over the widest possible range of flows. While gating this structure could achieve somewhat tighter control of the lake in periods of low water, the upstream weir has already been set to limit outflows during a low water year. It is recognized that there are varying opinions on the lake about whether this is adequate or not, but regardless, if the structure was gated it would no longer fulfill its intended purpose and it would require additional offsetting due to the loss of connectivity. As such, gating this structure more permanently is not currently part of the plans going forward.

Automation was mentioned as a concern from several residents, indicating that the lack of quick response times for operational changes at the structures has been or would be an issue in the future. The operation of this structure in an automated fashion would make sense for Option #3, and Option #1 has some potential for automated operation but Option #2 does not due to the requirement to bring in pumping capacity. Option #3 would likely include some amount of automation for operation; however, the complexity and potential issues associated with automating Option #1 vs. the ease of operation of the proposed structure make it unlikely that Option #1 would include any form of automation. MI understands the need for easily facilitated changes to the operation of the structure, so whichever option is selected, MI will include operation systems that facilitate quick changes.

Several respondents mentioned that pedestrian access over the dam was an issue to be addressed at the site. It is understood that the causeway forms part of the South Whiteshell Trail System, and it is felt that this can be addressed in the design of the new structure.

Numerous respondents to the survey as well as attendees at the Open House indicated that there were concerns regarding the condition of South Shore Road and other issues with park facilities in general. Numerous respondents indicated that money be “saved” from the more expensive options being proposed to pave the road or for other park facilities. Unfortunately, this is outside the scope of this project. South Shore Road is not an asset that is maintained by Manitoba Infrastructure, so “savings” realized from selecting a cheaper option could not be directly attributed to this or other projects in the park.

Next Steps

The next step in the project will be the completion of the preliminary design, the evaluation of the options and selection of a proposed Option. That Option will then be taken forward to detailed design, environmental approvals and construction. It is anticipated that once a final decision has been made on the Option to be moved forward notification will be given to

interested stakeholders. Upon completion of the detailed design, a final Public Information Session will be held to explain the final option chosen, timelines for construction and how construction may affect lake users.

Questions?

If you have any questions regarding this report, please contact Ben vanderHooft at ben.vanderhooft@gov.mb.ca.