

## STAFF REPORT TO COUNCIL

**PRESENTED:** July 19, 2022 **REPORT:** 22-101  
**FROM:** Environmental Stewardship **FILE:** 8365  
**SUBJECT:** RIVER OF GOLDEN DREAMS ENHANCEMENT PROJECT REPORT

### RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

### RECOMMENDATION(S)

That Council receive Information Report 22-101 regarding the River of Golden Dreams Enhancement Project.

### PURPOSE OF REPORT

The purpose of this report is to inform Council of the planning being done to improve river user and fish passage on the River of Golden Dreams (ROGD), minimize impacts from increased users, and notify that future budget requests will be required for improvements to be undertaken in 2023.

Information Report  Administrative Report (Decision or Direction)

### DISCUSSION

#### Background

The ecological health of the ROGD watershed is important for the survivability of fish and wildlife, and is linked to the economic and social aspects of the Whistler community. As a result, efforts to manage recreation, and to protect and restore the health of the ROGD have been undertaken by the Resort Municipality of Whistler (RMOW) in consultation with the Ministry of Environment (MOE) and commercial canoe tour operators. To guide management of the ROGD over the years several initiatives have been undertaken including:

- a carrying capacity study conducted
- user numbers recorded
- fish habitat assessments and Canadian Aquatic Biomonitoring Network surveys performed
- stakeholder meetings held

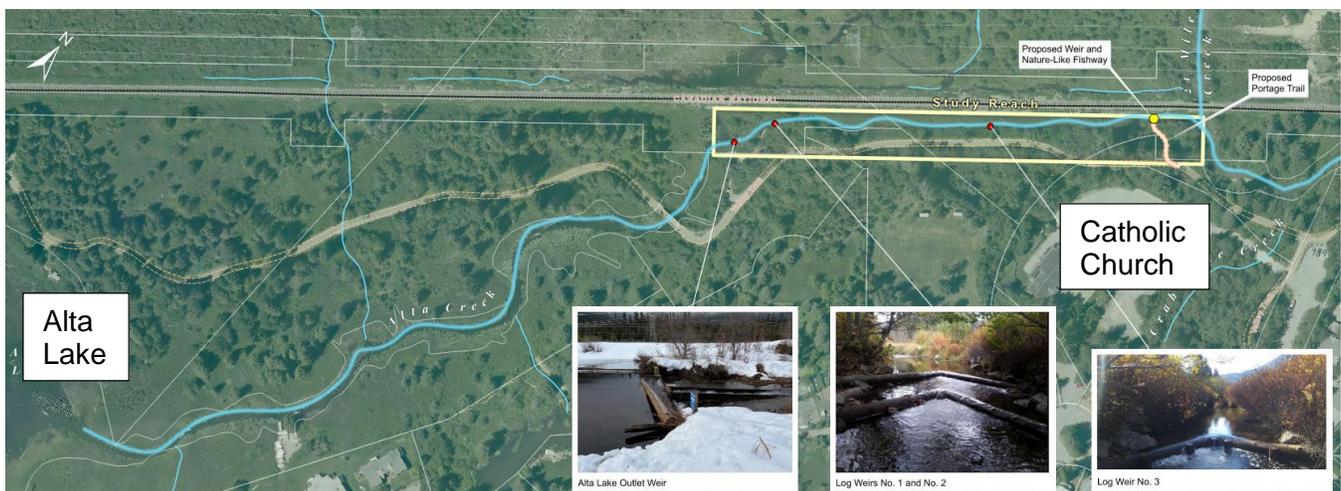
As a result of these initiatives, a ROGD Watershed Management Plan and ROGD Management Strategy were developed. In addition, varying restoration projects have taken place to mitigate impacts from CN Rail, development and users.

Over the past few years, user numbers have been increasing and awareness of the ROGD attraction is becoming more widespread. As a result of increased recreational use on the ROGD, the river has incurred increased social, economic, and environmental impacts. In the summer of 2020, user numbers per hour were more than double those of 2015. Increased promotion of floating the ROGD through social media, online regional outlets, and local promotions spread the word and increased river user numbers. With the growth in users, an increase in impacts have been observed, and these impacts are amplified during low water events which constrict the river channel and force users into a smaller usable space.

Impacts that occur when the river has large user numbers and low water levels include:

- Instream standing/walking and boat scour on streambeds:
  - Redistributes sediment causing sediment imbalance.
  - Causes sediment plumes increasing turbidity and limiting dissolved oxygen.
  - Damages diatoms and algae on river rocks which leads to a reduction in benthic invertebrates which are fish food sources.
  - Is detrimental to fish eggs, embryos and subsequent populations.
- Damage to fragile riparian vegetation
- Users entering and exiting the stream at uncontrolled locations cause bank erosion.
- Too many users can lead to visitor dissatisfaction
- Valley trail and parking congestion at the bottom of Lorimer Rd. when mandatory portage is in effect from the fish weir to downstream of the CN Rail bridge.

Staff are currently undertaking planning with Kerr Wood Leidal (KWL) to explore options to improve passage in a particularly congested, sensitive reach of the ROGD known as the canal. This work seeks to improve the user experience as well as environmental conditions. The canal, located from the fish weir, along the CN Rail line to the confluence with 21 Mile Creek (shown in the yellow rectangle in the map below), is a narrow, shallow, constrained reach of the ROGD. When water levels are low, the canal becomes impassable and results in the need to enact a substantive portage that extends from the fish weir to downstream of the CN Rail Bridge, a distance of approximately 400 metres.



## **Analysis**

To minimize negative impacts, the RMOW has provided public education, and installed log weirs to increase water levels in the canal. The RMOW also regularly enacts a mandatory portage from the weir

down to where the CN Rail Bridge crosses the ROGD, as this section of the river annually experiences low flows starting as early as July, and in some years through to October thereby increasing the degree of impact. The log weirs were installed in the 1990s without a full assessment; as a result, as time has passed they have become less effective at increasing the quantity of water to useable levels for canoe passage during drier seasons and are now also impeding juvenile fish passage. Additionally, lower water levels in the canal have been observed earlier the past few years, resulting in an extension of the mandatory portage season and resulting in user dissatisfaction with the length of the portage route. When users don't abide to the closure and attempt to use the canal at low water, they cause significant impacts to the streambed, fish habitat, and if done during spawning season, damage to fish eggs and populations as well.

To address the impacts from the increase in users and the longer low water season, the RMOW is consulting with KWL on ways to improve water levels, to enhance the stream health, and to minimize negative impacts.

KWL assessed the river from the weir to CN Rail Bridge as this area is most severely impacted. Due to flood risk, it was determined that the best course of action at this time would be to focus efforts on the canal section (weir to 21 Mile Confluence). An assessment of the canal's current state, as well a survey and hydraulic modelling were conducted. As a result, the following recommendations were made:

1. Remove current log weirs as they are believed to be impeding fish passage and the furthest downstream log weir is causing sedimentation build up and backwatering which may be inhibiting stream gradient, and therefore, reducing the potential for spawning habitat.
2. Install a weir upstream of 21 Mile Confluence to increase water levels throughout the canal.

Increasing water levels should reduce user impacts on the streambed, shorten the distance of the portage route, improve the user experience and enhance stream habitat, including juvenile fish passage.

KWL is currently developing a plan including design drawings for the new weir (see Appendix A). The current plan is to conduct the associated works during the 2023 instream work window next August.

## **POLICY CONSIDERATIONS**

### **Relevant Council Authority/Previous Decisions**

The RMOW and MOE developed and signed off the ROGD Management Strategy in 2004. This strategy provides the framework for monitoring the creek, managing commercial and public users, managing vegetation and beaver activity, and includes recommendations for enhancement projects. Authorization for the ROGD enhancement project will still be needed to secure the appropriate provincial permits to go ahead.

### **Corporate Plan**

The RMOW Corporate Plan is updated annually and articulates strategic direction for the organization. This section identifies how this report links to the plan.

### **Council Focus Areas**

Community Balance

*Effectively **balance resort and community needs** through deliberate planning, partnerships and investment*

Climate Action

*Provide leadership to **accelerate climate action and environmental performance** across the community*

Housing

*Advance strategic and innovative initiatives to enable and **deliver additional employee housing***

Pandemic Recovery

*Leadership and support for **community and tourism recovery and sustainability** – priority focuses are where recovery needs intersect with other Council focus areas*

Not Applicable

### **Corporate Goals**

Community character and mountain culture is reflected in municipal initiatives

Municipal decision-making supports the effective stewardship of natural assets and ecological function

Corporate policies and operations ensure continuous excellence in infrastructure, facility and program management

A high level of accountability, transparency and community engagement is maintained

Corporate financial health is optimized to ensure long-term community success

A vibrant local economy and safe, resilient resort community is effectively reinforced by organizational activities

### **Community Vision and Official Community Plan**

The Official Community Plan (OCP) is the RMOW's most important guiding document that sets the community vision and long-term community direction. This section identifies how this report applies to the OCP.

This report directs the RMOW toward the goals in Chapter 7 of the OCP: 7.1, 7.2, and 7.3. Removal of the current log weirs moves the RMOW towards ongoing protection and restoration of fish habitat and improved passage during low flow events in the ROGD. The installation of the weir will improve the water levels in the canal which will help protect stream habitat as impacts from climate change progress.

In addition, improvements to this section of the ROGD will enhance the user experience, for both visitors and residents alike.

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## **BUDGET CONSIDERATIONS**

In 2022, Environmental Stewardship budgeted \$40,000 in Project P102 for ROGD improvements. It is anticipated that the research, survey and design work undertaken by KWL will utilize the majority of this budget with potential for some remaining funds to be available for the removal of the existing log weirs in 2022, if time allows. If that is not possible, staff will request a carry forward of the remaining P102 budget into 2023.

Additional budget will be requested during the 2023-2027 Five Year Financial Plan development process to remove the remaining log weirs and to install a pre-fabricated cement weir and fish passageway above the 21 Mile Creek confluence. Early estimates indicate this work could be in the approximate range of \$150,000. This future project will be considered amongst other priorities within the 2023 budget process.

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## LIL'WAT NATION & SQUAMISH NATION CONSIDERATIONS

The RMOW is committed to working with the Lil'wat People, known in their language as *L'il'wat7úl* and the Squamish People, known in their language as the *Skwxwú7mesh Úxwumixw* to: create an enduring relationship; establish collaborative processes for Crown land planning; achieve mutual objectives; and enable participation in Whistler's resort economy.

There are no specific considerations to include in this report.

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## COMMUNITY ENGAGEMENT

Level of community engagement commitment for this project:

Inform     Consult     Involve     Collaborate     Empower

Comment(s):

Safety, environmental and social concerns about the ROGD were discussed in stakeholder meetings with the Association of Whistler Area Residents for the Environment, commercial canoe tour operators, RMOW Parks and Environmental Stewardship Departments and public participants. Feedback regarding the length of the portage route and impacts to the stream along the portage route, were received and potential solutions considered. As a result of the consultation, the plan to improve the weirs in the canal was put forward as the optimal solution.

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## REFERENCES

Appendix A – Proposed ROGD Weir

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## SUMMARY

The ROGD has experienced an increase in users over the past few years and low water conditions earlier in the season. As a result, the river has incurred increasing social, economic, and environmental impacts. To address these impacts, the RMOW has consulted with stakeholders, and instigated planning to improve the user experience and protect stream habitat. KWL was consulted on ways to

improve water levels to enhance the stream, and to minimize ongoing impacts. It is recommended by KWL that the RMOW:

1. Remove current log weirs as they are believed to be impeding fish passage and the furthest downstream log weir is causing sedimentation build up and backwatering which may be inhibiting stream gradient, and therefore, reducing the potential for spawning habitat.
2. Install a weir just upstream of 21 Mile Confluence to increase water levels throughout the canal.

Increasing water levels should reduce user impacts on the streambed, shorten the distance of the portage route, improve the user experience and enhance stream habitat.

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## **SIGN-OFFS**

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