

Topic: Whitewood Sands Bioengineering Project Update

**Introduction:**

This report provides an overview of the work Community Sustainability has been doing to restore the road allowance and informal access point in Whitewood Sands on Lake Wabamun since damage occurred as a result of the 2018 ice heaves

**Facts (Background Information):**

During the winter of 2018, an ice heave event caused areas of significant bank erosion along the shoreline at the end of Sunset Ave. The area is an informal access point used by local residents and was also damaged by private property owners using heavy equipment to repair their lakefronts. As construction sand was then dumped on the access as a temporary means of repair by private residents, there was a requirement from AEP to clean up the area and reduce erosion and sedimentation into the lake.

Community Sustainability has been working with the local community to develop a restoration plan for the area that is focused on using natural infrastructure to armour the shorelines, improve the riparian area, and slow the flow of run-off while capturing sediment (sand, gravel, and salt from road activities) along the drainage. These restoration methods that use nature in an engineered way are commonly called “bioengineering”. This was deemed the most cost-effective way of repairing the site and a grant of \$46,900 was received from the provincial government’s Watershed Resiliency and Restoration Program (WRRP) to complete the work. The bioengineering work will be in addition to the reconstruction of the reinforced grassed access way, which was constructed in 2020-2021.

The grant also provided funding for public engagement and communications. Over the Spring and Summer of 2022 three mail-outs, a hybrid in person/online info session and an online survey were completed to provide education on natural infrastructure and the importance of shoreline restoration, and to garner feedback and finalize the design. A workshop was held in early October to provide residents with an opportunity to help construct the erosion control mechanisms and learn how they can replicate the actions on their private properties. The Fall construction will mark the end of our formal efforts to reclaim the site and only monitoring and maintenance activities will continue into future years. Once complete, the project will also serve as a demonstration site for future tours, workshops or other learning opportunities and will include informative signage explaining the benefits of natural infrastructure.

## **Analysis:**

In 2022 Community Sustainability carried out a number of public engagement activities to inform the project design including:

- Two mail-outs reaching 56 local residents each
- An info session with 8 in-person and 16 online attendees (24 total)
- An online survey which garnered 18 responses.
- An in-person workshop where we expect to have around 20 attendees

Based on the feedback, we adjusted the design to remove the use of tall trees along the riparian area and reduce the use of shrubs along the shoreline to preserve as much of the view and grassed area for recreation as possible, while still adequately addressing the slumping and erosion issues. It was also emphasized to residents that the area is not a reserve or park but is a road allowance and so a compromise between use for recreation, access and drainage needs to be found. The engagements raised further issues such as the poor reconstruction of the area after the CN derailment as well as dissatisfaction with the lake level, but these were deemed out of scope for this project.

## **Conclusion/Summary:**

Administration recommends Council support the motion to accept the Whitewood Sands project update, as presented.

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