

Sutherland, centre, with Trowell, left, and Adams on a tour of the Netley-Libau Marsh this month.

## Red River Basin Commission project aims to improve health of Netley-Libau Marsh

A pilot project undertaken by the Red River Basin Commission is working to reduce the depth of parts of the Netley-Libau Marsh, and a shallower marsh means a healthier ecosystem and a healthier Lake Winnipeg

Chris Adams, project coordinator of the Netley-Libau Marsh Renewal Project with the RRBC, says it's the largest coastal freshwater marsh in North America and has been in a state of decline over the past hundred years and no longer functions the way it should.

"There's been a major loss in shoreline vegetation and all sorts of functions and benefits that the marsh provided historically," Adams said during a recent tour of the marsh.

"Historically we would see lots more fish, and mammals and water birds and it would also sequester nutrients, especially phosphorus in a way that it no longer does with a lack of vegetation it's lost over the last hundred years."

The Selkirk & District Community Foundation provided an initial grant of \$25,000 to the RRBC North back in 2018, and then Manitoba Director Steve Strang said at the time the funds were much appreciated and even prompted others to pay attention to the project and fund it as well.

"The money that came from the Selkirk & District Community Foundation has been the catalyst for all our funding to date. We are truly grateful for their leadership and feel that their gift has led to our success for this pilot project," Strang said.

The SDCF granted \$20,000 to the project in 2020 and again in spring of 2023, and RRBC North Manager Rebecca Trowell says dredging of the marsh and planting of vegetation is helping restore it, and evaluation of the effectiveness of reducing the marsh's depth is ongoing.

Adams says there have been positives, but more time is needed.

"Our bathymetric monitoring from 2022 indicated that the majority of sediment that was deposited was retained within our restoration area. However, because of the extremely high water in 2022, we were not able to get the vegetation growth that we were hoping to see last season. Even though we succeeded in elevating the marsh bottom, the water was still deeper in 2022 than in 2021. We are continuing to monitor our restoration area under moderate water levels this season, and this will be the real test of whether the reduction in water depth is working," Adams said.

"We have a longer record of the extent to which the natural reduction in water depth has been driving an increase in vegetation within the miniature delta that has been forming in Netley Lake. Beginning in 2018, 150 acres of vegetation has become established in these shallow areas."

There's plenty of reasons to return the marsh to a hemi-marsh - a type of marsh that's roughly equal parts open water and emergent vegetation or plant life. Adams says the deeper marsh and the reduced vegetation affect the lake in a negative way.

"There's no longer the same effect of sequestering nutrients which of course are really helpful with the algal blooms on Lake Winnipeg. This is really the last line of defense for water entering Lake Winnipeg," Adams said.

"The phosphorus and nitrogen that come down the Red River enter the marsh first before going into Lake Winnipeg and without the vegetation here it doesn't really sequester nutrients in the same way."

Brandon Sutherland, SDCF board member, like many folks in this area has a connection to the water that runs generations deep. The RRBC work in the marsh is almost personal to him and he's thrilled to see efforts to improve it.

His family has established the Parker Sutherland Memorial Fund in memory of his late father, who had a love for being on the water and taking care of the environment. The fund supports environmental causes and donations to it can also be directed to a scholarship.

"The environment is so important to my family and I, and its sustainability for future generations," Sutherland said.

"Specifically, Lake Winnipeg and all of its tributaries."

The SDCF will be producing its 'Great Grant Series' to focus on some of the 125 projects and scholarships supported in 2023, including the Netley-Libau Renewal Project. Watch SDCF social media for more details.