Request for Decision

Agenda Item: Marina Lease Proposal – Buffalo View Estates

Issue

The County of Stettler has received a Lease Proposal from a group: Rochon Sands Heights Marina Association. The proposal requests the County of Stettler to lease to them, the Marina at Buffalo View Estates to provide a private community marina space including: placement, normal operation, use, maintenance, and use portions of the Municipal Reserve to access the Marina. This would provide boat slips in the Buffalo View Estates inlet. The Buffalo View Estates boat launch would remain 'public use', along with the County-provided dock located at the public boat launch.

Options for Consideration

1. That Council approves the lease agreement proposal in principle from Rochon Sands Heights Marina Association (as attached), pending the completion and review of two weeks of Public Notification/ Input;
2. That Council approves the lease agreement proposal from Rochon Sands Heights Marina Association (as attached);
3. That Council rejects the proposal.

General

At the June 11, 2022 Regular Council Meeting Council received a presentation/proposal from Rochon Sands Heights Marina Association to install a Community Marina in the inlet at Buffalo View Estates. The marina would not affect the public boat launch or access to the public boat launch. Council received the proposal and forwarded it to legal counsel for review and feedback.

Provided in this council package is the revised proposal for Council's consideration.

The Rochon Sands Heights Marina Association proposes:

- Parking – Terms/Rules Regulations of having a slip would include NOT absorbing parking spots in the County provided parking lot.
- Priority for Usage
    - 1. Residents bordering on the Marina
    - 2. Residents owning back lots
    - 3. Residents with lake front with limited access to lake (east side of Marina)
    - 4. Residents owning lakefront

Financial

The costs for consultation with the lawyers, estimated to cost $5,000.00. Should the lease agreement be approved in principle, there will also be the cost for fencing the area. Public Notification/Input/Feedback will be collected online.

Policy/Legislation

Municipal Government Act, RSA 2000, C M-26

Section 248 (1)

Where a municipality may only make expenditure that is: (1) included in an operating budget, interim operating budget or capital budget or authorized by the Council.

Public Participation is recommended in accordance with Policy AF 6.21, and two weeks of public notification is recommended, via Public Notice on our website at www.StettlerCounty.ca, and we have provided that information and posted it to the website inviting input and feedback, beginning Friday, July 8, 2022.

Strategic Plan Linkages

Council and Governance - 1.1 Establish level of service and funding.

Implementation/Communication

Upon approval by Council, Administration will execute and submit the attached consents.

Target Decision Date

Wednesday, July 13, 2022

Prepared By

Niki Thorsteinsson, Director of Communications

Reviewed By

Michelle Hoover, Legislative Services Assistant
Yvette Cassidy, CAO

Attachments

Environmental Impact Assessment

Environmental Impact Summary

Memo

TO: **Yvette Cassidy, CAO**

FROM: **Rick Green, Director of Operations**

DATE: **July 8th, 2022**

SUBJECT: **Buffalo View Estates Marina Association Lease Proposal**

The newly formed Marina Association has been working on a plan to lease a portion of the Public Service lands being Lot 30, Block 2, Plan 0720960 which lies between phases 1 and 2 of the Buffalo View Estates subdivision.

Since the subdivision was completed, we have been experiencing some issues with equipment, vehicle and off road vehicles accessing the sensitive area along the bottom of the wall that lines each side of the stormpond/marina area. The ground between the water and the walls is wet most of the time as there are drains that enter onto the surface from behind the walls. We have been working to get a good catch of grass on it but even mowers have difficulty at times due to the wet conditions.

The area was initially thought of as access for emergency vehicles to the beach areas, but it has become evident that unless very dry, that it is not likely that an ambulance would be expected to navigate to the beach area. We do need to maintain access of site maintenance which needs to be considered as part of the proposed lease agreement.

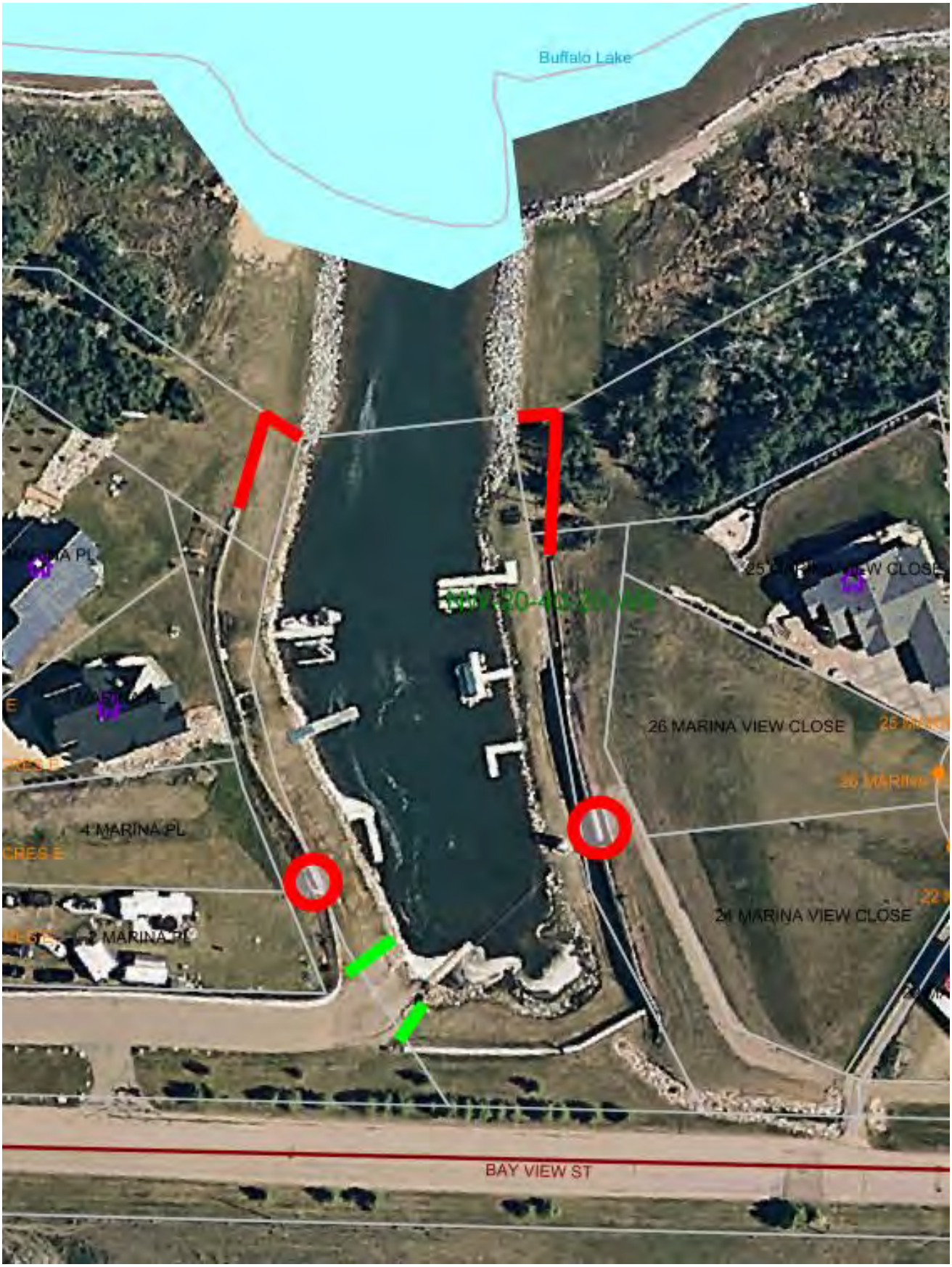
The County has secured access to the area at the boat launch end (south) by installing locked gates with foot traffic pass throughs as shown in green on the attached figure. There is still some issues with vehicle access from the pathways on the lake side as folks seem to want to drive right up to their boat when moored. We are proposing that regardless of approval of a lease for the association, that we install fence and gates similar to the south end on the lake end as shown in red which will protect the sensitive area at the base of the walls from damage by the variety of vehicles in use. The other thought regarding long term maintenance of this area would be to install a deck like boardwalk above the ground from the walls to the waters edge that would be a clean feature for foot traffic and other event opportunities while allowing the drainage below the boardwalk as it is now. This would be a nice “clean” addition to the useable area and prevent the damage to the soft, wet underlying surface. If of interest, this is something that could be installed and costed out in stages over multiple years or considered through the use of the on-hand reserve fund from ER encroachment land sales, done under one project.

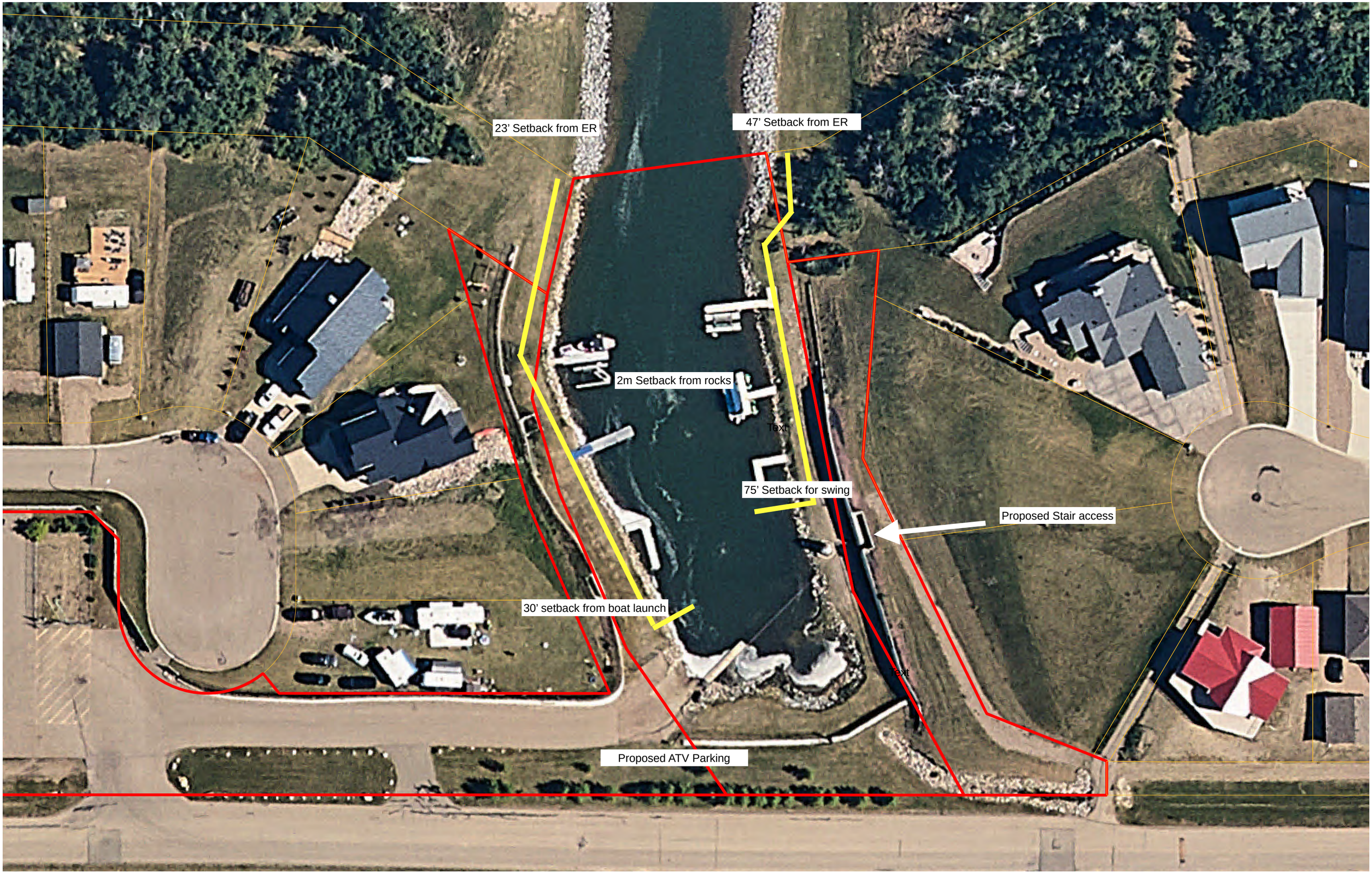
There are also stair wells placed in the walls (red circles on diagram) that have not had stairs installed as originally proposed by the original developer. The association is requesting that the County install stairs on the east wall as it is a good location to bring walking traffic down to the marina area. The stair well on the west wall is poorly placed as the wall has little topside access except for the immediately adjacent lots and would not likely serve the general public due to some encroaching landscaping from the adjacent lots where a path could be formed and a dead end near the boat launch that would be just as easily accessed from the access ramp from the parking area.

The boat launch has long been an issue. At the original time of construction, the developer had left it very steep. In addition, when proper regulatory approvals were obtained for the stormwater for the subdivision, a forebay had to be constructed adjacent to the launch pad. This provided for a challenge with launch geometry and as such, unless well experienced, boats over 22' are likely to have difficulty utilizing the launch. The County has improved and lengthened the ramp slope (above water) twice now when water levels allowed. Work in the water generally requires damming/dewatering or constant monitoring and special processes to work in the water so as not to contaminate the lake. There is a "break" in the launch ramp grade line just below normal water level where the original slope has been left as full upgrades were deemed cost prohibitive at the time.

Over time, the channel connecting the lake to the Public Service lot within the lake management right-of-way under control of the Province has sloughed and silted in – largely due to ice and wave action. The County does hold a license of occupation on this area and would be able to repair and maintain to original shape. That said, the requirements for working in the water will be significant and expensive as would require damming and de-watering. There was a dam constructed by the developer years back that reportedly failed, with remnants of it remaining on the lake bottom and a source of concern for boaters that have claimed propeller damage in past years.

The edges of the storm pond and channel have experienced some condition issues related to ice, wave action and installation and use of personal docks. The County should plan to perform some maintenance on the slopes and rip rap protection in the short term. It was intended to do some work on it this season, but wet conditions are not ideal due to risk of damage on the soft ground at the base of the walls. Likely better access late fall for the work to proceed.


Buffalo Lake
4 MARINA PL
26 MARINA VIEW CLOSE
24 MARINA VIEW CLOSE
BAY VIEW ST


23’ Setback from ER
47’ Setback from ER
2m Setback from rocks
Text
75’ Setback for swing
Proposed Stair access
30’ setback from boat launch
Text
Proposed ATV Parking

ROCHON SANDS HEIGHTS MARINA

ENVIRONMENTAL IMPACT ASSESSMENT

EIA

February 2022

Index

DEFINITION

Environmental Impact assessment is the process for anticipating the effects on the environment caused by a development

OBJECTIVE

Environmental Impact Assessment (EIA) will be our guide to assess the environmental impact potentially resulting from a proposed project. They are identified and assessed early in the planning process therefore represents a proactive approach to environmental management protection.

TYPES OF ENVIRONMENT

Physical Environment

Temperature, light and wind are three of the main factors that affect the physical characteristics of the lake. Temperature and light may vary from lake to lake. Depth, plant growth, dessoved materials, time of day and season, and latitude can all affect lights ability to pass through the lakes water

Biological Environment

Flora, Fauna, rare or endangered species sensitive habitats including parks or preserves, significant natural sites, etc.: species of commercial importance; and species with potential to become nuisances, vectors or dangerous

Location Details

Lot 30 Block 2 Plan 0720960

Current Use

This inland bay has an assortment existing metal/composite docks with multiple boats arranged in a manner that is “free for all”

- No known rules and regulations for use
- No known monitoring of the area for contaminants in the water and surrounding area
- No known defined process for ability to do repairs and maintenance on boats and docks
- No limitations for use of chemicals
- No waste management system
- No emergency contact information in the event of a spill
- There is no monitoring of potential risks

Proposed Change

RSHMA is proposing to establish a marina with a streamline docking system to facilitate approximately 30 slips. We will be registered, insured and responsible for all repairs and maintenance on the complete system. We will establish lease agreements with members in the community along with Rules and Regulations derived from in part this EIA to to protect the physical and biological enviornments.

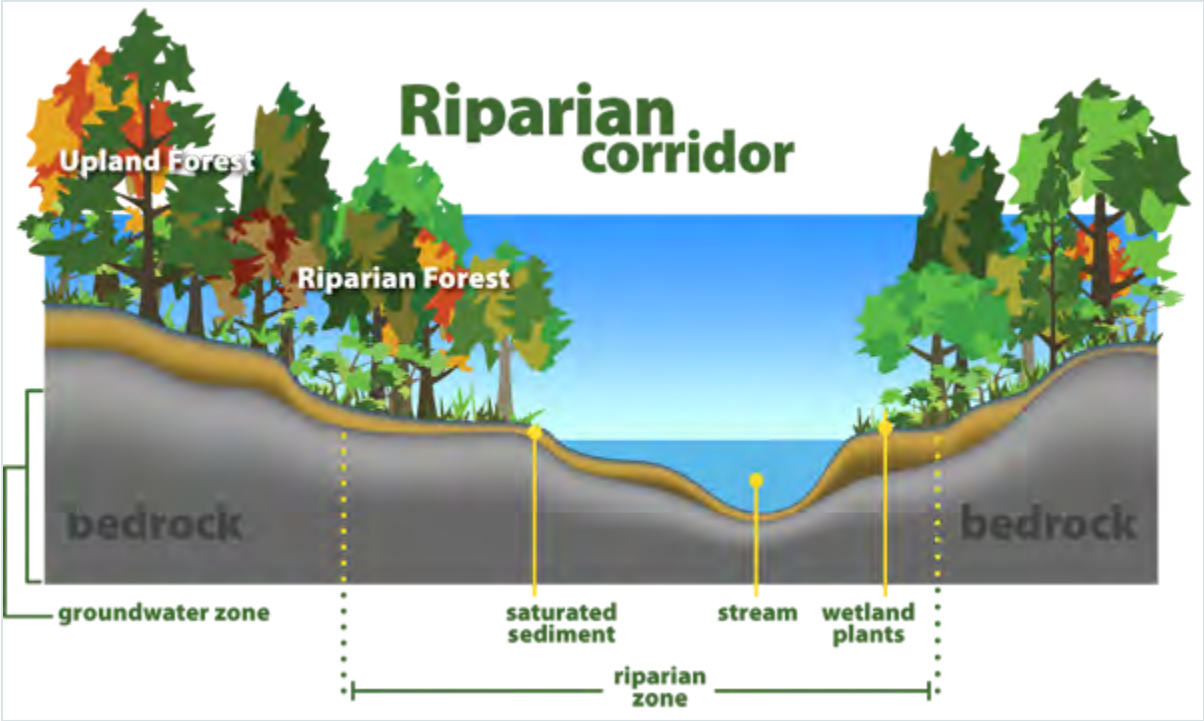
Key Differences

The RSHMA is committed to ensuring we do everything we can to conserve and protect the physical, biological and socio-economic environment. Our goal is to take every measure in the EIS recommendations into serious consideration

- We will have a streamline docking system with approx 30 slips
- Members will be required to adhere to all rules and regulations
- Restrict uses of harmful chemicals allowed on docks
- Guidelines on repairs and maintenance
- Fueling while in the marina will be allowed but will be addressed in the rules and regulations
- There a reporting system in place in the event fuel spill
- Display contact number in the event of a spill
- Establish a waste management system
- Through the rules and regulations describe limitations on no wake zone and towing in and out of the marina

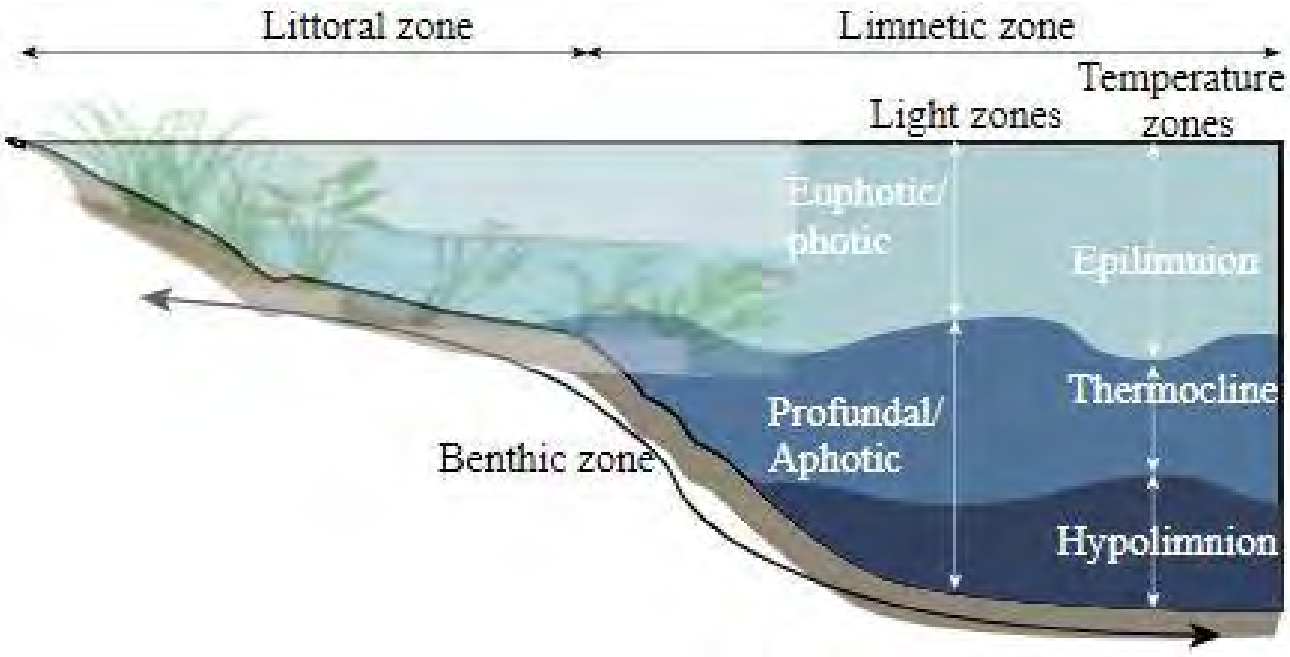
Impact Zones

Riparian Corridor



Riparian zones, or areas, are lands that occur along the edges of rivers, streams, lakes, and other water bodies. Examples include streambanks, riverbanks, and floodplains. They're different from the surrounding uplands because their soils and vegetation are shaped by the presence of water.

Water Impact Zone



Littoral zone

The topmost zone in a lake is the littoral zone, which is the area near the shore. This zone is the most productive since it gets abundant energy from sunlight and absorbs nutrients from land run-off. various species of algae, floating plants, submerged plants and phytoplankton. The littoral zone is the home of a number of animal species, including frogs, fish, insects, clams, grazing snails and crustaceans. The plants and animals serve as food for other animals, such as snakes, turtles and ducks.

Limnetic zone

The limnetic zone is the sunlit part of the lake surrounded by the littoral zone. This zone extends at a depth where sunlight penetrates. The vegetation of the littoral zone surrounds this span of open water which lies above the profundal zone. This zone is populated by phytoplankton (microscopic organisms at the upper sunlit layer of a body of water) and zooplankton. Small crustaceans and a variety of freshwater fish also live in this zone. Most photosynthesis occurs in this part of the lake.

Profundal zone

The profundal zone is much colder and denser than the previous zones. This zone is located beyond the range of sunlight penetration. This is typically down along the thermocline, the vertical zone through which temperature drops very rapidly. The process of photosynthesis is not possible in this zone. Low levels of photosynthesis leads to low levels of oxygen. The lack of sunlight determines the biodiversity living in this

Benthic zone

The final zone found in the classification in the benthic zone. It is located at the bottom of the lake consisting of various organic sediments of the soil. This is the zone where bacteria decompose the organic matter from aquatic plants, dead algae, fish and animal waste. This area will increase with age. Worms, bacteria, decomposers, and scavengers live here

Risks

Short Term-Assembly/Install

- Disturbance to the Riparian Corridor
- High foot traffic by the gate and on shorelines.
- Possible motorized equipment traffic
- Risks to natural habitat in the rocks
- The waste from packaging of equipment
- Possibility of lubricants

Long Term

- This will become a higher traffic area
- There will be approx 30 boats
- There will be fueling of boats present
- Repairs and Maintenance on Boats
- Cleaning of docks
-

Invasive Aquatic Plants

Invasive plants can have just as much of an impact as invasive animals! Aquatic invasive plants can reduce the habitat for our native plants, which threatens species of insects, fish, animals and other plants. As aquatic invasive plants begin rapidly reproducing, they reduce the overall biological diversity of ecosystems, can affect water quality and interfere with recreational opportunities.

Invasive Aquatic Plants of Note

Eurasian Watermilfoil

- Prefers shallow water, but can root up to 10 metres in depth.
- A single segment of stem and leaves can form a new colony. Plant does produce seeds but germination rates are usually poor. Stem fragmentation and underground runners allow this plant to reproduce rapidly.
- Forms large, floating mats that prevent light penetration into waterbodies, out-shading native plants and reducing oxygen levels when decomposing

Flowering Rush

- Can grow as an emergent plant along shorelines or partially submerged in lakes and rivers up to 4 metres in depth.
- Can reproduce by root system fragments or rhizome buds called bulbils. Seed production is yet to be observed in North American populations

Phragmites

- Perennial with large stems up to 4 metres tall.
- Grows in shallow water, up to one metre near the shore of still or slow moving water, such as that found in wetlands or ditches.
- Highly competitive and form dense stands, outcompeting native plants for water and nutrients.

Himalayan Balsam

- Grows in moist, nutrient rich soil and thrives in disturbed riparian habitats and wet woodlands.
- It is only able to reproduce by seed; however, a single plant can produce up to 4,000 seeds that launch up to ten metres in all directions
- Displaces native vegetation, reducing habitat for wildlife and native plants

Pale Yellow Iris

- Grows in wetlands or along water bodies – it can grow in water up to 25 centimetres deep.
- It is able to reproduce both by seed, easily dispersed by water, and through thick rhizome (root) fragments and bulb
- Infestations can displace native vegetation and alter water quality, reducing habitat for fish, wildlife, and native plants

Purple Loosestrife

- Prefer to grow in moist, highly organic soils and neutral to alkaline pH.
- It reproduces primarily by seed, producing more than two million seeds per plant annually but can also spread through stem cuttings and root fragmentation
- Purple loosestrife infestations can displace native vegetation and alter water quality, reducing habitat for fish, wildlife, and native plants

Buffalo Lake Fish

Buffalo Lake is home to one of Central Alberta's most important Northern Pike populations. Burbot, White Sucker and smaller fish such as Emerald Shiner, lowa Darler, Brook Stickleback and Fathead minnow are also found in Buffalo Lake It is important to identify what fish are found in Buffalo Lake.

Northern Pike

BurBot

White Sucker

Smaller Species

Emerald Shiner

Iowa Darter

Brook Stickleback

Fathead Minnow

Plankton and Crustaceans

The zooplankton and Crustaceans are important elements of the aquatic food chain. They are primarily found in the Littoral Aquatic Zone. These organisms serve as the beginning of the food chain and are fed upon by the smaller fish in the water.

Governing Bodies

Water Act

https://www.alberta.ca/water-act-forms.aspx

Fisheries and Oceans Act

https://www.qp.alberta.ca/documents/Acts/F16.pdf

Environment Protection and Enhancement Act.

https://www.qp.alberta.ca/documents/acts/e12.pdf

Disturbance standard for temporary seasonal docks and other mooring structures for personal recreational purposes

https://open.alberta.ca/dataset/2e15695b-51fb-4034-b581-92c4a9a1647c/resource/0ea88981-7343-474e-948c-994bfd6aef51/download/aep-disturbance-standard-temporary-seasonal-docks-mooring-structures-201-04.pdf

Publications of note

Conservation and Management Strategy

https://www.alberta.ca/fish-conservation-and-management-strategy.aspx

Buffalo Lake Integrated Shoreline Management Plan

https://open.alberta.ca/publications/9780778594055

Government of Canada Protect Fish and Fish Habitat

https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html

Buffalo Lake FIN Summary 2017

https://open.alberta.ca/dataset/5e67c1c2-bd2b-4f32-8657-450edc992c9c/resource/78dc49a2-0e7d-4186-ae60-043374c6ea6a/download/buffalolake-fallindexnettingreport-2017.pdf

Resources

BLISMP

https://open.alberta.ca/publications/buffalo-lake-integrated-shoreland-management-plan-blismp-synopsis#detailed

Alberta Environment and Parks-Respect or Lake

https://open.alberta.ca/dataset/c66f750c-b3cf-4248-91ff-9970d142605a/resource/57098f9e-ac92-47bf-bb9f-a58f8c07850f/download/rol-responsiblelakerecreation-jun2017.pdf

EPEA Reporting Spills and Releases

https://open.alberta.ca/dataset/f81f5fc8-a8bd-4c83-a29b-ae683617fa94/resource/94ab7c66-0fda-4c26-80a9-c4ce6733304b/download/reportingspillsreleases-feb04-2016.pdf

Protecting Lakeshores

https://www.alberta.ca/lakeshores.aspx

Lakeshore Use

https://open.alberta.ca/dataset/611cc561-f2fa-482c-9a97-3d014f02b7eb/resource/00b9c473-eaa4-4632-b1d1-f134dd18ef57/download/2001-guidelinesforlakeshoreuse.pdf

Invasive Aquatic Plants

https://www.alberta.ca/invasive-aquatic-plants.aspx

Respect our Lakes-Understanding Lake Science

https://open.alberta.ca/publications/respect-our-lakes-lake-legislation-in-alberta

Respect or lakes- Lake Legislation in Alberta
https://open.alberta.ca/publications/respect-our-lakes-lake-legislation-in-alberta

Fish Conservation and Management Strategy

https://www.alberta.ca/fish-conservation-and-management-strategy.aspx

Buffalo Lake FIN Summary 2017

https://open.alberta.ca/dataset/5e67c1c2-bd2b-4f32-8657-450edc992c9c/resource/78dc49a2-0e7d-4186-ae60-043374c6ea6a/download/buffalolake-fallindexnettingreport-2017.pdf

https://www.alberta.ca/northern-pike.aspx#jumplinks-4

ROCHON SANDS HEIGHTS MARINA

ENVIRONMENTAL IMPACT SUMMARY

EIS

February 2022

Introduction

The purpose of the Environment Impact Summary (EIS) is to provide a summary of the risks identified in the EIA and how we can manage the impact to the environment at the Rochon Sands Heights Marina. This process will ensure we do everything possible to protect this area to ensure the long-term successful operation of the marina.

The area we are addressing is Lot 30, Block 2, Plan 0720960 that is owned by the County of Stettler. We are proposing to commission a marina with approximately 30 slips for the use of our community.

Affected Environment

The identified land zone is the Riparian Corridor, although it is manmade, we felt equal consideration should be given. The water body zones that could be affected are the Littoral Limnetic, Profundal and Benthic Zone.

Identified Risks Short Term

- Disturbance to the Riparian Corridor while under Construction:
    - Possible equipment in this area and the contaminants associated with equipment.
    - Accelerated short term foot traffic.
    - Risks to the natural habitat in and around the rock shoreline.
    - Toxic fuel, chemicals or lubricants that will be present.

- Disturbance to the Water Zones while under construction:
    - Foot traffic over the rocks through the Littoral Zone.
    - Foot traffic disturbance to the Benthic Zone.
    - Possible disturbance from anchoring dock sections.

Identified Risks Long Term

- Riparian Corridor
    - Increased foot traffic from current use.
    - Increased motorized vehicle traffic.
    - Possible fuel hauling to docks.
    - Possible transport of chemical and lubricants.
    - Operating watercraft too fast for the area.
    - Risks to the vegetation and animal life on the shoreline.
- Water Zones
    - Fuels on Docks.
    - Cleaning of Docks while in water.
    - Chemicals on docks related to boats.
    - Operating a boat too fast for the area.
    - Foot traffic in the shoreline.

Proposed Actions Short Term

This will describe how we will manage the dock installation process to minimize the impact to the Riparian Corridor and the Water Zones.

- There will be 2 appointed representatives from the RSHMA to oversee the installation
- Representatives will review the EIA and EIS for guidelines and shared with the installation crews.
- Equipment will be inspected for leaks.
- Particular attention will be given to the Littoral Zone (water's edge) to minimize disturbance.
- Installation will be done after ground has dried.
- Discussion with the installation crew regarding harmful products and our expectations on managing them.
- Strategic planning to ensure minimum foot and equipment traffic.
- Representatives will ensure ground is left in the condition it was found.

Prevention of the harmful alteration, disruption, or destruction of fish habitat will be achieved by avoiding:

- Conducting work in the water.
- Placing fill or other temporary or permanent structures below the high-water mark.
- Disturbing or removing materials from the banks, shoreline or waterbody bed such as:

    - Sand
    - Rocks
    - Aquatic Vegetation

The Littoral Zone is one of the most important areas in the lake. It is the beginning of the food chain from the Zooplankton all the way to the large fish.

Proposed Actions Long Term

This section will describe how risks can be minimized long term in regards to the marina and how it is used.

- Establish a two-member subcommittee to monitor, inspect and maintain area regularly.
- Create a reporting system for this subcommittee.
- These members will familiarize themselves with the EIA and EIS.
- Rules and regulations will be posted and/or written as part of the lease agreements.
- Violations of the terms could result in expulsion from the marina.
- Clearly define process for fueling, work and maintenance on boats.
- Harmful substances not to be left unattended or stored on docks or near docks.
- Washing of docks process defined with environmentally friendly products.
- No wake sign posted upon entry.
- Emergency contact information posted in the event of a chemical release
- Planting of plants in the rock area and trees on the shoreline will enhance the natural filtration system.
- Initiate a waste management program.
- Post emergency contact information in the event of an incident.

Conclusion

With these proposed actions and structures, the protection of this environment can be achieved.

The processes and procedures will be monitored on an on-going basis. This will allow for continuous improvement as any challenges are identified.

The monitoring process will be a requirement through our Standard Operating Procedures and implement a reporting system.