



AGENDA

PARKS, RECREATION, AND WELLNESS COMMITTEE MEETING

April 26, 2017, 5:30 PM
Board Room, Service and Resource Centre,
411 Dunsmuir Street, Nanaimo, BC

Pages

1. **CALL THE MEETING OF THE PARKS, RECREATION, AND WELLNESS COMMITTEE TO ORDER:**
2. **INTRODUCTION OF LATE ITEMS:**
3. **ADOPTION OF AGENDA:**
4. **ADOPTION OF MINUTES:**

- a. **Minutes**

3 - 5

Minutes of the Meeting of the Parks, Recreation, and Wellness Committee held in the Board Room, Service and Resource Centre, 411 Dunsmuir Street, Nanaimo, BC, on Wednesday, 2017-MAR-22 at 5:30 p.m.

5. **PRESENTATIONS:**

- a. **Greater Nanaimo Water District Verbal Update**

Rob Lawrance, Parks and Open Space Planner, to provide a verbal update regarding public input on the future use of the old Greater Nanaimo Water District.

- b. **Lynn Lee Valley Environmental Audit**

Rob Lawrance, Parks and Open Space Planner, to provide a verbal update regarding the Lynn Lee Valley Environmental Audit.

- c. **User Fees and Charges Verbal Update**

6 - 8

Richard Harding, Director, Parks & Recreation, to provide a verbal update regarding User Fees and Charges.

6. REPORTS:

a. Nob Hill Dog Off-Leash Park Request and Park Improvement Plan

9 - 29

Purpose: To provide an update to the Parks, Recreation & Wellness Committee on the public feedback regarding the request for an off-leash area at Nob Hill Park and recommendations for moving forward with park improvements.

Recommendation: That the Parks, Recreation & Wellness Committee:

1. not support the dog off-leash option at Nob Hill Park;
2. continue to look for downtown dog off-leash sites through new park acquisition processes; and,
3. approve the updated Nob Hill Park Improvement Plan for implementation.

b. Buttertubs Marsh Conservation Area Management Plan Update

30 - 79

Purpose: To inform the committee on the update for the Buttertubs Marsh Conservation Area Management Plan.

Recommendation: That the Parks, Recreation and Wellness Committee receive and recommend that Council adopt the updated Buttertubs Marsh Conservation Area Management Plan and the conservation area as defined in the revised plan.

7. OTHER BUSINESS:

a. Delegation

80

Daniel Nugent, regarding paddleboard station at Westwood Lake.

8. QUESTION PERIOD:

9. ADJOURNMENT:

MINUTES
PARKS, RECREATION, AND WELLNESS COMMITTEE MEETING
BOARD ROOM, SERVICE AND RESOURCE CENTRE
411 DUNSMUIR STREET, NANAIMO, BC
WEDNESDAY, 2017-MAR-22, AT 5:30 P.M.

PRESENT: Councillor W. Bestwick, Chair

Members: Councillor I. Thorpe
Carrie Chassels (arrived 5:31 p.m.)
Marsha Down
Gabby Lent
Daniel McVicar
Ken Milne
Mark Swain
Calvin Tant
Tracy Vandermolen
Maureen Young

Absent: Councillor W. Pratt
Julia Buisman
Robert Fraser
Trevor Heshka
Howard Houle
Alec McPherson

Staff: R. Harding, Director, Parks, and Recreation
S. Snelgrove, Deputy Corporate Officer
J. Vanderhoef, Recording Secretary

1. CALL THE PARKS, RECREATION, AND WELLNESS COMMITTEE MEETING COMMITTEE MEETING TO ORDER

The Open Parks, Recreation, and Wellness Committee Meeting was called to order at 5:30 p.m.

C. Chassels entered the Boardroom at 5:31 p.m.

Councillor Bestwick initiated a round table introduction of the committee members and Staff.

2. INTRODUCTION OF LATE ITEMS

- (a) Move Agenda Item 5(b) - Overview of Parks and Recreation Department to follow Agenda Item 5 (c) - Key Date Calendar.
- (b) Add Agenda Item 5(e) - Update on Current Projects.

3. ADOPTION OF AGENDA:

It was moved and seconded that the Agenda, as amended, be adopted. The motion carried unanimously.

4. ADOPTION OF MINUTES:

It was moved and seconded that the Minutes of the Meeting of the Parks, Recreation, and Wellness Committee held in the Board Room, Service and Resource Centre, 411 Dunsmuir Street, Nanaimo, BC, on Wednesday, 2016-NOV-23 at 5:30 p.m. be adopted as circulated. The motion carried unanimously.

5. ADMINISTRATION:

(a) Introductions

Councillor Bestwick inquired if any members wished to add anything to the previous round table discussion. Nobody in attendance wished to add anything.

(b) Terms of Reference

Richard Harding, Director, Parks, and Recreation, reviewed the Terms of Reference for the Parks, Recreation and Wellness Committee.

Committee discussion took place regarding member terms, geographic regions, grants and the process for dealing with conflicts of interest.

It was noted that there will not be meetings of the Parks, Recreation and Wellness Committee in August or December.

(c) Key Date Calendar

Committee discussion took place regarding changing the scheduled meeting time of the Parks, Recreation, and Wellness Committee. The majority of committee members agreed to leave the meeting time at 5:30 p.m.

(d) Overview of Parks and Recreation Department

Richard Harding, Director, Parks, and Recreation, provided an overview of the Parks and Recreation Department and provided an update on ongoing projects.

(e) Update on Current Projects

Richard Harding, Director, Parks, and Recreation, provided an update on current projects including:

- the redevelopment plan for Harewood Centennial Park;
- the Nanaimo District Secondary School Lands and Joint Development of Artificial Turf Field; and,
- the Stevie Smith Bike Park.

6. OTHER BUSINESS:

Councillor Bestwick noted that the Parks, Recreation, and Wellness Committee Meetings will be a maximum of 90 minutes long.

A roundtable discussion took place regarding:

- covered tennis courts;
- more cycle paths;
- planting trees in older neighbourhoods;
- more electric car plug ins;
- encouraging artwork in the community;
- recognition of territory;
- delegation presentations; and,
- environmental issues.

7. ADJOURNMENT:

It was moved and seconded at 7:08 p.m. that the meeting terminate. The motion carried unanimously.

CHAIR

CERTIFIED CORRECT:

CORPORATE OFFICER

Task Plan

February 28, 2017

The following tasks are proposed to be performed for the City of Nanaimo as part of the Comprehensive User Fee Review.

Task 1: Preliminary Data Collection

In advance of the on-site meetings, we will collect documentation on existing fees, plus data on 2016 revenues and expenditures. We will research (by telephone) the organizational and fund structure of the City in order to develop the direct and indirect cost pools for the allocation of indirect costs. We will review the City's existing indirect cost allocation approach and prepare the framework for a revised indirect cost model that City staff would be able to use. This task also includes a limited number of hours for project administration, including monthly billing and reporting on project status.

Task 2: Initial On-Site Meetings

From March 27-30, we will conduct a project kickoff meeting in Nanaimo and then a series of interviews with department staff in order to gather data about how their time is spent on both revenue-generating and non-revenue-generating activities. We will also ask about other budgeted costs, in addition to labor time. We would also brief the City Council Committee of the Whole about the overall study.

In order to conserve project budget, our approach to the indirect cost allocation would be to set up the model, train City staff members, and then let them gather and enter the data on allocation factors and costs. Because indirect costs are a component of the various user fee models, we would need for the City staff to complete the indirect cost analysis by the end of April, about four weeks after the initial on-site meetings.

Task 3: Cost of Service Analysis

Following the meetings with department personnel and the collection of cost and revenue data, we would carry out a cost of service analysis for each General Fund department. In this analysis, we spread out the costs over the various fee-generating service areas. We will distinguish between different cost layers—beginning with direct program costs, adding a layer of allocated department overhead, then finally adding a layer of allocated citywide overhead costs. Our focus would be on the fees of General Fund-supported departments rather than utilities, although the indirect cost allocation plan might affect the utilities.

Parks and recreation is a special case when it comes to cost recovery, because of the large number of offerings in the recreation program and the fact that the Department's ability to recover the full cost is constrained by the competitive market. When we meet with Parks and Recreation staff, we will discuss the level of detail and most appropriate cost layers to examine, and we will work with the staff to analyze their costs in a way that would best help the City pursue its policy objectives. Our proposed project budget assumes a fairly high-level aggregation of recreation programs.

Task 4: Cost Recovery Analysis

The cost recovery analysis consists of comparing the allocated costs against the revenue generated by each type of fee. Typically, the result is that a given fee or group of fees is currently recovering X% of its full cost (or Y% of its direct program cost). Our understanding is that the City's primary need in this study is the basic analysis rather than a lot of policy discussion. However, we will present the findings in such a way as to allow the City to arrive at a cost recovery target for the various types of fees, and we will communicate any observations or questions or policy implications that may arise from our analysis. As part of this, we will rely on our experience and the cost of service analysis to identify any types of fees that the City might not now be collecting that we think should be considered for potential implementation.

Task 5: Staff Review of Results

Following the cost recovery analysis, we will prepare a set of discussion notes and review the results of our analysis with City staff via conference call. At this time, we will receive feedback about what areas should be emphasized in our documentation and presentation of the study.

Task 6: Documentation

After the review session with staff, we will prepare a draft report outlining our methodology and findings. After the City reviews the draft report, we will deliver a final report.

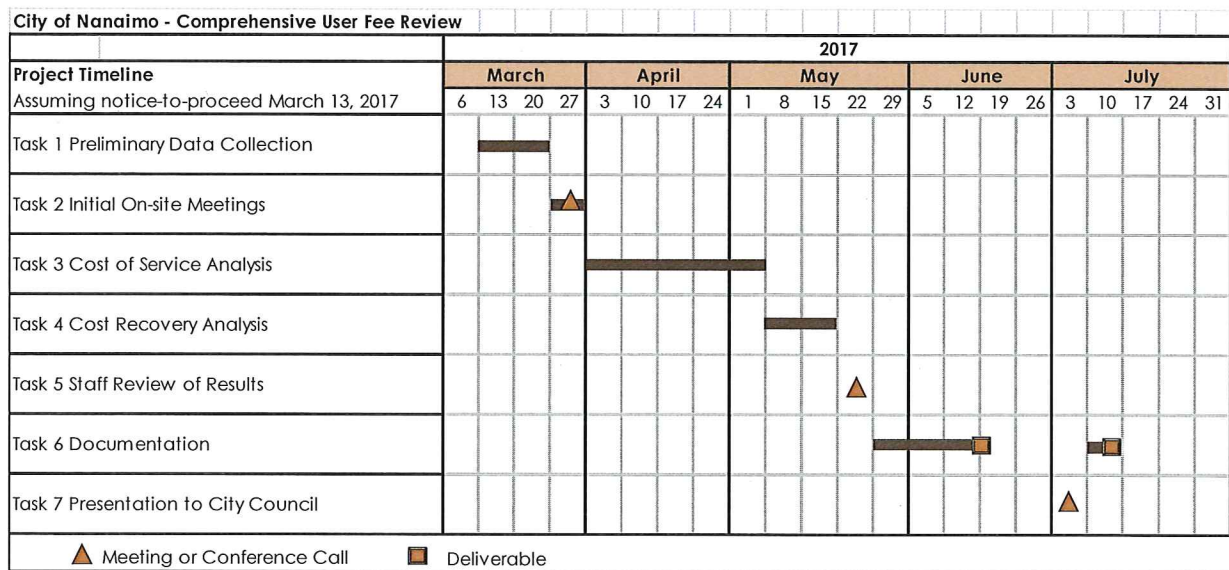
Task 7: Presentation to Council

We will prepare a presentation for the City Council on the results of the study and any recommendations that arise from our analysis. We will travel to Nanaimo to deliver that presentation.

Timeline

This is about a 4-month study, from start to finish. The attached timeline assumes that we have a notice-to-proceed by March 13. At that time, we would gather preliminary data from the City and accomplish the other steps in advance of our on-site meetings. From the afternoon of Monday, March 27 through the morning of Thursday, March 30, we would conduct a kickoff meeting and a series of interviews with department staff. During that trip, we would also brief the City Council Committee of the Whole on the afternoon of March 27. Over the following six weeks, we would build the cost of service model and perform the cost recovery analysis, and we would plan to report back to City staff via conference call during the week of May 22. After receiving feedback from the staff, we would prepare a draft report by the middle of June and be available to present it to the City Council during the month of July. We would finalize the report after receiving comments from the City.

This schedule depends on two assumptions not under our control: timely access to the relevant data, and the ability to meet with key department personnel during our trip at the end of March. If either of those assumptions turns out to be wrong, we will work with the City to develop a mutually agreeable revised schedule.



DATE OF MEETING April 26, 2017

AUTHORED BY ROB LAWRENCE, PARKS AND OPEN SPACE PLANNER
PARKS AND RECREATION

SUBJECT **NOB HILL DOG OFF-LEASH PARK REQUEST AND PARK
IMPROVEMENT PLAN**

OVERVIEW

Purpose of Report

To provide an update to the Parks, Recreation & Wellness Committee on the public feedback regarding the request for an off-leash area at Nob Hill Park and recommendations for moving forward with park improvements.

Recommendation

That the Parks, Recreation & Wellness Committee:

1. not support the dog off-leash option at Nob Hill Park;
2. continue to look for downtown dog off-leash sites through new park acquisition processes; and,
3. approve the updated Nob Hill Park Improvement Plan for implementation.

BACKGROUND

The City of Nanaimo received a petition and request from the residents of the Nob Hill neighborhood to create a dog off-leash park in Nob Hill Park.

There are currently twelve dog off-leash parks in Nanaimo. The current off-leash sites are geographically distributed throughout Nanaimo and are varying in character and amenities. The downtown core does not have any off leash facilities.

Most of the current off-leash sites were introduced as one-year pilot projects between 2008 and 2012. After the one year pilot period for each, a public re-assessment was completed before the current off-leash parks were made permanent by the Parks and Recreation Commission.

In November 2016, the Parks Planner and Manager of Parks attended a meeting of the neighbours of Nob Hill Society to review this report and its recommendations.

Public Input Session:

A public input session was held on Tuesday, 2016-JAN-19, from 4:00 p.m. to 7:00 p.m. in the Vancouver Island Conference Centre to discuss the off-leash proposal. About 60 people attended over the three hour session. A summary of the input received is presented in Attachment A.

Survey:

A survey regarding the issue was available for the public to fill out at the open house and online for over two months. The survey was filled out by 178 respondents and presented 3 locations in the Park for the potential off-leash area. Full survey results are presented in Attachment B.

Responses to the dog off-leash park proposal were overall very mixed with 58.6% of respondents supporting the idea of an off-leash site at Nob Hill Park and 41.4% of respondents not supporting the idea.

Common concerns at Nob Hill Park included fencing of the site and user conflicts, maintaining the open character of the site, the potential for environmental degradation of the Park, and parking.

Overall, there was a desire to have an off-leash location in the downtown core. However, the City has very few site alternative options. Staff did contact the South End Neighbourhood Association to discuss potential off-leash use at Deverill Square Park, but the board of the South end Neighbourhood association was not supportive of this idea.

Work to identify an alternate dog off leash site as part of a future park acquisition is continuing. The South Nanaimo Waterfront and other sites in the downtown area are possible.

Park Improvement Plans:

In 2008, the City of Nanaimo and the Nob Hill Neighbourhood Association conducted a park improvement process for Nob Hill Park. The improvements were intended to rejuvenate recreational use in this park. It was hoped that increased activity and improved physical structure would deter criminal activity from occurring and would contribute to a healthy and well-used green space. Some of the initial improvements were accomplished between 2008-2009, however some were not.

Desires for more park improvements have come to light through the recent open house discussions, input from staff and residents, and survey responses. Requests for additional lighting along Milford Crescent, additional summer programming and infrastructure, and Park gateways and fencing came to light through the public input.

An updated park improvement plan is attached to this report in Attachment C to reflect the desires of the community. The existing improvement plan and the suggested updates are being budgeted for and implemented to continue with efforts to build capacity and improve this neighborhood park.

OPTIONS

1. That the Parks, Recreation & Wellness Committee:
 1. not support the dog off-leash option at Nob Hill Park;
 2. continue to look for downtown dog off-leash sites through new park acquisition processes; and,
 3. approve the updated Nob Hill Park Improvement Plan for implementation.
 - **Budget Implication:** Future improvements will require budget allocation in the 10-year capital plan.
 - **Policy Implication:** An updated park vision and improvement plan will provide some direction and vision for future park development and future dog off-leash park programs.
 - **Engagement Implication:** Public engagement has already been completed and was very mixed.
 - **Strategic Plan Implication:** The park asset should meet changing community needs and demands.
2. That the Parks, Recreation & Wellness Committee deny all of the recommendations.
 - **Budget Implication:** No budget impact.
 - **Engagement Implication:** Public engagement did request additional off-leash options and improvements to Nob Hill Park.
 - **Strategic Priorities Implication:** If not improved, the park asset may not meet the changing needs of the community.
3. Approve some of the recommendations.
 - **Budget Implication:** Will vary depending on what is approved.
 - **Policy Implication:** Will vary depending on what is approved.
 - **Engagement Implication:** State implication here, otherwise delete.

SUMMARY POINTS

- Public feedback regarding the idea of an off-leash park at Nob Hill was very mixed.
- Public feedback generated many good ideas about ongoing/future park improvements at Nob Hill Park.
- Acquisition and development on an off-leash area in a suitable site in the downtown should be considered in the future to meet community needs.

ATTACHMENTS

- Attachment A: Nob Hill Public Input Session Feedback – 2016-JAN-19.

- Attachment B: Nob Hill Public Input Session Feedback – 2016-JAN-19.
- Attachment C - Nob Hill Park Improvement Plan.

Submitted by:



Rob Lawrance
Acting Parks and Open Space Planner
Parks and Recreation

Concurrence by:



Richard Harding
Director
Parks and Recreation

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ATTACHMENT A

Nob Hill Public Input Session Feedback – 2016-JAN-19.

Dog Park

- Water fountain with bottom part for dogs
- Dog Park is a huge improvement. Grass area is under used as is – more social space!
- I want a dog park and a bathroom
- Use aluminum fencing
- Concrete curb base with aluminum fencing. Make it classy
- Nob Hill is too small for off leash. Please leave it alone.
- I think fencing would be safer
- Fenced area for dogs
- An off leash dog park would need to be fenced, for the safety of the public and the dogs! (I was attacked by a dog near an off leash park)
- The park is so small – give any portion of it for the dogs and there is little left for CHILDREN
- I think a dog off leash area is a great idea for downtown
- A pilot project would be a great way to try it out without costing too much I think
- I want a dog park
- Downtown dog park please!
- Nob Hill is a small park with a variety of users – and should stay welcoming to variety of people - a dog park would change that
- 2 dog parks
- Nob Hill should have water, fencing and a dog park
- The plant life at Nob hill is beautiful and sensitive and even a trail dog park would damage and change that
- It would be nice if both dog owners and non dog owners/enthusiasts could enjoy the upgraded park, without any conflict between the 2 groups

Amenities

- Add porta-potty/washroom
- A regularly cleaned/replaced port-a –potty would allow people to “linger” at the park. If not, are other washrooms available to the public nearby?
- I think water fountains & bathrooms would encourage people to stay longer in the summer.
- Washrooms, water fountain, fence; other amenities are already available at much larger venue down the street Deverill Park.

Lighting/Safety

- More lighting & path on other side of rocky outcrops
- Increase lighting. Add street lights
- Improve park safety
- Improve park safety
- Enforce the laws – no Drug Dealers!
- Enforce the laws – No Hookers!
- Install needle drop box
- Slower traffic! 30 km/h below Milton →downtown
- Speed Bumps for slowing people down
- Needle boxes
- More lighting

Playground/Activities

- Make the playground area bigger on Field #2 (designated dog park area). Maybe add a skate board park
- Summer Day Camps/Programs for kids
- Skateboard park
- Free day camp in summer by Parks & Recreation
- Please prioritize the use of the park for children, elders and families, not dogs. I love dogs but not in our park please
- The amphitheatre is a cool idea

Park – General

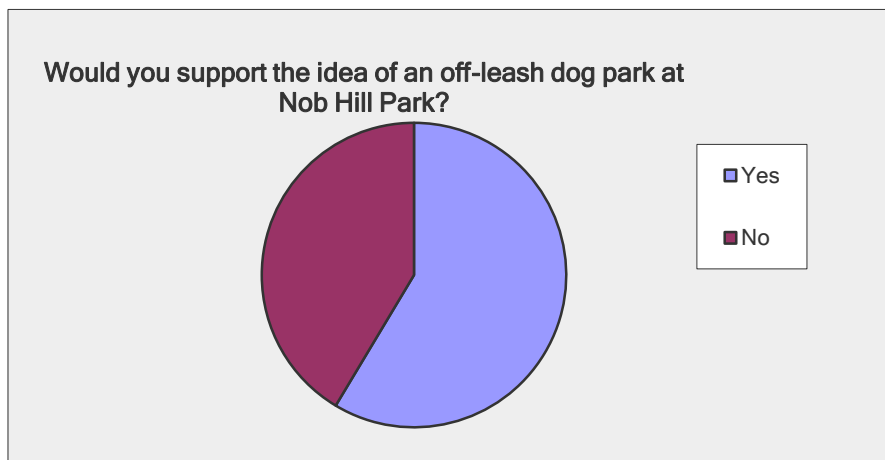
- “Density” increasing – Parks are not.
- Less conservatism – more parks/programs
- No change
- A very old park. Maintain its heritage for people
- The “rocky outcrop” area of Nob Hill is what sets it apart from other city parks. It is used & appreciated by children, and adults who don’t want to see it destroyed or fenced. We love Nob Hill the way it is.
- Kids and people first at Nob Hill Park
- I want to walk on all of the parts of the park and for Nob Hill to have the same things. (and no big dogs)
- Keep this park simple and natural
- Will committing to a “single” sue prejudice “future” or “other” options?
- Some property owners may want to “privatize” the park egg: use public waste containers for their private garbage
- Thin topsoil on rocks easy to wreck sensitive ecology (David Livingstone put in blue camus bulbs – native species)
- Put in more trees. Keep the natural setting for all.
- Thank you for the work you’ve already done. I’ve no need for the trail to extend up the knoll – I’d prefer not. Also, I like the big rocks at the edge of the park.
- Nob Hill is a gem. Please don’t destroy it

ATTACHMENT B

Nob Hill Public Input Session Feedback – 2016-JAN-19.

QUESTION 1:

Nob Hill Park Dog Off-Leash Survey - February 2016		
Would you support the idea of an off-leash dog park at Nob Hill Park?		
Answer Options	Response Percent	Response Count
Yes	58.6%	99
No	41.4%	70
<i>answered question</i>		169
<i>skipped question</i>		9



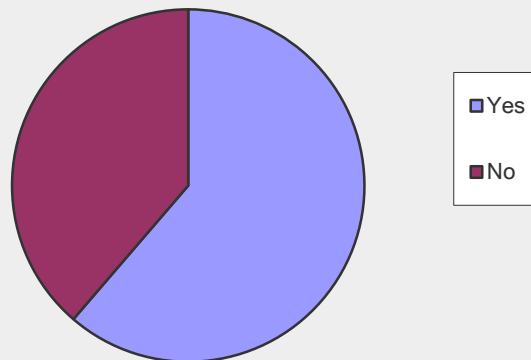
QUESTION 2:

Nob Hill Park Dog Off-Leash Survey - February 2016

Would you support the idea of a trial off-leash dog park at Nob Hill Park for one year, with community consultation following the one year trial?

Answer Options	Response Percent	Response Count
Yes	61.3%	103
No	38.7%	65
<i>answered question</i>		168
<i>skipped question</i>		10

Would you support the idea of a trial off-leash dog park at Nob Hill Park for one year, with community consultation following the one year trial?

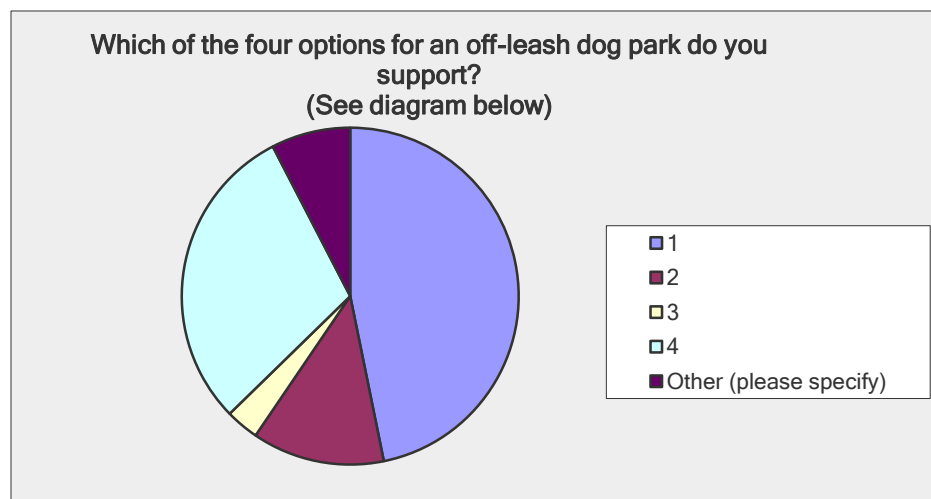


QUESTION 3:

Nob Hill Park Dog Off-Leash Survey - February 2016

Which of the four options for an off-leash dog park do you support? (See diagram below)

Answer Options	Response Percent	Response Count
1	46.8%	74
2	12.7%	20
3	3.2%	5
4	29.7%	47
Other (please specify)	7.6%	12
<i>answered question</i>		158
<i>skipped question</i>		20



Potential Dog Off Leash Options:



1 - as shown above 3 - other locations
2 - as shown above 4 - not at all

Other (please specify)
Option 1
I support 1, followed by 2.
Option 3 - Lights
Another light standard along Milford Crescent.
#3 Increase lights alongside Milford Crescent. Create water fountains.
Option #3. Spend more money. Make it classy.
Prefer option #3. Only fence the playground. Leave the rest of the area as is. Don't see why we need a fence, but if it gets it done, then ok.
Historical Park - Too small - People only
In my opinion this tiny park should contain historical aspects. An 'off leash' area makes this tiny outcrop more commercial ...fences attract signs and advertising etc. This little gem should be natural and special. Summer children programs should be encouraged.
Too small. This is an historical park and shouldn't be used for anything but people & a children's park & picnic area.
Please keep the park for people. A dog park will destroy our park. It's just too small.
We have enough off leash in the city. *Colliery Dam is no longer a park to be enjoyed by everyone due to off leash in the main area of walking paths! This community park used to be enjoyed by everyone. How much \$ did it cost tax payers for this meeting & notices!
No Fence
Keep the park simple. No fence.
No Washroom
May drug-box --> No washroom
None of the Above

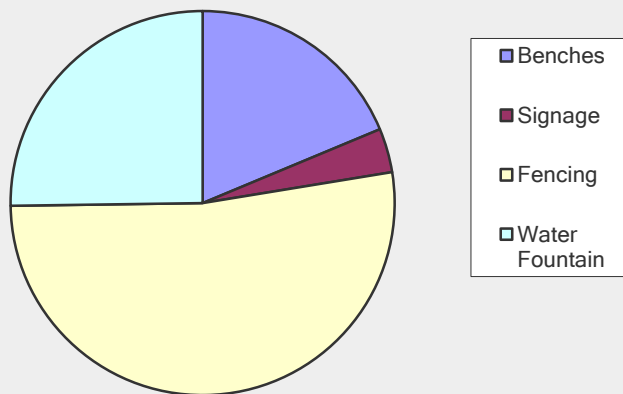
QUESTION 4:

Nob Hill Park Dog Off-Leash Survey - February 2016

What amenities would you like to see at the off-leash dog park?

Answer Options	Response Percent	Response Count
Benches	18.7%	20
Signage	3.7%	4
Fencing	52.3%	56
Water Fountain	25.2%	27
Other (please specify)		87
<i>answered question</i>		107
<i>skipped question</i>		71

What amenities would you like to see at the off-leash dog park?



QUESTION 5:

Nob Hill Park Dog Off-Leash Survey - February 2016

What other improvements would you like to see at Nob Hill Park?

Response Count	95
<i>answered question</i>	95
<i>skipped question</i>	83

Response Text
Green Space - Natural - Flowers
Fencing is not compatible with this park. Perhaps shrubbery for containment? Key to this park is preservation of all the trees and mosses. Do not 'manage' or 'improve' the green space.
Flowers and more lighting.
more flower beds as well
More native plants and bulbs that bloom
More naturalization
Kids love playing and exploring on the rocky outcrop area, please do not choose this area as an off leash dog park.
Leave it as natural as possible. Dogs love the hill and run.
Nob Hill Park needs to retain its uniqueness with the hilltops and views. I have often visited the park over the last 46 years and to me it is a place of peacefulness in our community.
<p>Please be advised of my opposition to any off-leash areas in Nob Hill Park.</p> <p>The large proposed area on the "Nob" of the park contains features enjoyed by all. The large Garry Oak hanging low to the ground has been played upon by children for decades, if not the past century, as well children running about with carefree abandonment on the rock outcroppings. The "Nob" provides a look-out to the Harbour and the mountains beyond, the warm rocks in the evening to sit, lounge, contemplate, provide solace, to visit, or watch the fireworks with friends and neighbours.</p> <p>The lower area proposal, however smaller, limits the enjoyment of all by limiting the open area in the park for those to enjoy robust activities (toss a frisbee - run into a fence), or relax beneath the large fir trees, and of course, the contamination, odors, and destroyed aesthetics.</p> <p>The park serves a large geographical area, as the nearest parks and playgrounds (to the best of my memory) being Milton and Haliburton Sts. (across Nichol St.), Bay View School, Gyro Comox park , and the Gyro park on Machleary St.</p> <p>In general, Nob Hill Park is too small, intimate, isolated, and diverse to accommodate any specific group, other than children.</p>

Shelters and more indigenous plant propagation.
Trimming of trees to open the park up more to visibility
No Changes
Continue as is as a place to meet my friend.
It is just fine the way it is. Why does the city want to ruin all the natural beauty of our parks? Please leave us in peace.
Keep it as is
NONE! LEAVE THIS PARK ALONE! I WANT IT TO REMAIN AS NATURAL AS POSSIBLE! POLICE THIS PARK BETTER IN ORDER TO DISCOURAGE THE USE OF FIREWORKS!
None, perfect as it is.
Nothing. It's unique and beautiful There should be a dog park at Deveril Park, which does not have much natural beauty to be disfigured. It's already chain linked. Just need to chain link off a section.
Other than some security issues I'd like to see the park left alone in a natural state as a lot of the park is natural. Many Citizens are afraid of dogs I may not be an actual resident but I do bring children to the park from time to time and I like it.
Park is great as-is. Rocky outcropping is a delicate natural feature. Don't destroy is with a dog park. Maintain play structures.
Please leave the park as it is. Our neighbours often congregate on the rocky point for special occasions, like an eclipse, fireworks, special occasions...and more and it is a good meeting place. It is a very small park and already has a children's playground - which is great. The rest of the green space should be left as it is, as it is really the only nice park area we have. The park is not big enough for an off-leash. It is impractical -- the dogs would not get much exercise and they would use up another section of the already small park. We owned dogs for many years. You have to take dogs to a big enough area for them to run around properly. A small piece of a small park would not work effectively.
The park is quite perfect as it is. We love it and use multiple days a week. You guys do a great job of keeping it up and we love the sound of children playing on the new equipment. Thank you!
This community park is used by local residents in an area that is under-served by parks. I am in favour of allowing leashed dogs in the park but off-leash areas put children at risk. The "underutilized" portion of the park is a quiet area needed by folks who just want a time away from the city pressures. Please allow a little wildness to stay in this area of town.
Dog Park
Drain able dog pool for summer. Dogs splash drink and keep cool
I am very happy to see this off leash park is in the works! We need many more of them in Nanaimo. I have enjoyed many of the wonderful off-leash parks in Calgary and have never seen any negative incidents there. Many dogs socialise with each other and have such a great time. My little dog was shy at first but soon warmed up and played with other dogs.
Please consider this as my vote of approval for this proposed dog park.
I drive to off leash parks from where I live, so the more areas the better. I wish there was one closer to where I live.
small dogs need to have separate time/or area from big dogs
Water for dogs
Water for the dogs like I said use the hill - makes this a unique dog park. Will bring in lots of other people.

No to Dog Park
I am a resident of the area and I am very much opposed to an off-lease dog area in the park. I walk through there often and do not want dogs running loose. It is just too dangerous.
<p>I am writing to let you know that I am NOT in favour of an off-leash dog park in Nob Hill Park for the following reasons:</p> <ol style="list-style-type: none"> 1. the park eco system of flora and fauna is fragile and unsuitable to off leash dog behaviour - e.g. the moss on the rocky knoll is easily disturbed and takes a great deal of time to re-grow; e.g. the ravens, hawks and owls that frequent the park. 2. I believe that humans deserve to get dibs on usage of the park over dogs - e.g. the neighbourhood children who play on the awesome equipment you guys installed; e.g. the boys and girls club kids who visit every week, the elders who live in the rest home below and above the park, and also the folks with developmental delays and disabilities who pick up garbage in the park. 3. the proposed locations are not effective - e.g. on top of the knoll would allow polluted run-off to flow down to the playground; e.g. - the other proposed site is on the only level ground in the park which is useful for a multitude of human activities which cannot be done on the rocky part 4. The fencing required to make the off leash section safe would ruin the natural beauty of this park. 5. Some disrespectful dog owners already use the park as an off leash site and do not follow your off leash rules, and do not clean up after nor supervise their pets, and an official off leash status designation would likely sanction and/or encourage this poor behaviour. 6. I have been fiercely growled at and/or been jumped up on by dogs enough times when visiting other Nanaimo parks such as Westwood Lake, Morell Bird Sanctuary and Buttertubs Marsh and I would like to have at least this little park to feel safe from dog interference while I walk, meditate, journal, draw or practice my martial art. 7. There are already 12 dog parks in Nanaimo for dogs and their owners to enjoy! 8. I have lived by, played in, loved and worked hard to improve our neighbourhood park for 18 years to remove the threats to safety in it such as drug dealers, johns, hookers, and drug and sex trade paraphernalia. I will be damned if all that work is going to result in it "going to the dogs."
I love our park. Thank you for all of the work that you have done so far. I noticed that you have plans to extend the pathway up the knoll which I'd prefer you'd not apply. Also, I like the big old rocks on the perimeter of the park. However, if you need to alter elements for safety reasons, I concede. I do not want a dog park in our park. Please prioritize its use for children, elders and families. Thank you!
I would hate to see the "rocky outcrops" (section 1) be turned into a dog park. This area is a perfect space for children in the neighborhood to experience nature play, climb, explore, and play. If it were turned into a dog park all of these opportunities would be lost. If there must be a dog park, I strongly feel that the best area would be the large grassy space. It is rarely used for any more than a shortcut to Robarts, and would cost significantly less as the need to clear space would be drastically reduced. Please reconsider removing one of the few "raw nature" spaces in the downtown area!
<p>More lighting for safety concerns.</p> <p>Beautify the lower open field that will bring out the residents of the senior residences across the street and to create something there that brings in families and their children. This park belongs to the people of Nanaimo and the residences of its surrounding neighbourhood, NOT just for dogs and their owners. It not a big park but we should respect the oldest park in BC and its history.</p>
It is small and should be a place for people.
No dog park. Too many anyways.
<p>NO Off-leash dog area at Nob Hill Park! Leave this park alone! I want it to remain as natural as possible!</p> <p>Police this park better in order to discourage the use of fireworks, illicit drugs, vagrancy, and sexual activity!</p>

No dogs off leash would be an improvement!!!
People only
Sheltered sitting area. As a resident of Nob Hill Park I DO NOT support a dog park. This park is too small to support this fixture.
Improved Lighting - Signage
Lighting improved. Garbage cans. Added equipment for CHILDREN. *Not a resident, but use this park on regular basis with children and dog.
Lighting and a bathroom.
Lighting for night time walking.
good lighting throughout the park
Improved lighting, improved by law/RCMP enforcement of smoking, littering, drug use, etc. more signage about the park. Enforcement of park closing hours, bring back Footprints security, increase the use of RCMP bicycle/patrol cars, establish a park warden/steward system with residents, new signage - like "no smoking", "no drug use" and enforce it. new signage encouraging Nob Hill and promoting it as a family and child friendly park, promote/encourage a vegetable garden in the lower area of the park on the Roberts side,
Improved signage...perhaps an historical marker.
More lighting, landscaping (flowers)
Would like to see improved facilities for families - washrooms, proper lighting, and more playground equipment. Summer programs for kids. Increased security/patrolling. Playground too close to have a safe off leash area.
Water access for the summer. Signage on Selby and Roberts to slow down cars gunning up and down the hills.
Playground
Maintain Park. Too small, intimate, isolated, and diverse to accommodate any specific group other than children.
Adult size swings. So many parks are having the adult size swings replaced with crappy little swings that are no fun.
I would like to see the playground moved to the area along Roberts and expanded on. Perhaps add a small skateboard park.
Skateboard park? Larger park.
Update park facilities for kids.
Improved Parking
Dually parking blocks the road. See back page. (Drawing depicts an area at Milford & Selby side of park where a resident parks a dually pickup truck. It notes that "Dually pickup truck parks here cheating danger. Blind hill and oncoming traffic. Thanks.")
Angle parking on Roberts Street
There is a parking problem around park.
Bylaw Enforcement - Surveillance
more monitoring of the park for used needles
I live very close to the park and I want to say that most of the time when I look there or walk by, dogs are NOT on leash owners get away with it obviously no enforcement. I prefer on leash especially big dogs since there is a play area and sometimes seniors sitting too. Please take this point into consideration and if they DO have to be leashed then have a sign there and send bylaw officer to check it out.

Thank you
Keep your dog on leach, pick up after it and all can enjoy this small park.
Proper lighting.
Security.
Improved playground equipment
. Proper parking time for visitors.
Surveillance cameras
Water Fountain
Water fountain
Water fountain. Art!
Water fountains and lights.
1 water fountain.
There is enough benches there is natural rocks maybe so more lighting and a small water fountain for humans
Stage/ Entertainment Area
3-stage park upgrade including ramp for scooters (Cavan steps), small performing arts stage with electricity and stone gateways built in collaboration with Ashlar Lodge (Masons).
Public, acoustic performance/rehearsal space in the lower area of the park
Fencing
Good fencing and latches at gates.
I would like to see arched entry ways at both ends of the path. I have drawings that I submitted to All North Engineering.
Keeping close to the beauty of the park and celebrating the heritage of the neighbourhood by using old-city style fencing. I'm really worried about the aesthetic effect the fencing will have on the park/neighbourhood
Water and fencing, a light would be nice.
Benches - Picnic Areas
Benches, more lighting
Benches, signage, water fountain, "band shell"
Better monitoring by Bylaws and the RCMP
more picnic tables
More picnic tables and a water park would be great. Many families are moving in to the area and nearest fresh water park is in Harewood.
More picnic tables, fountain, benches.
More picnic tables.
Sheltered Area
Small covered area near playground to increase all weather play at park for kids. Leave it unfenced. Plant more trees.

Community
More "healthy" community use.
I think it would be a great place to host a yearly lantern festival. A note about question 6: I'm not a resident of Nob hill but I am a landlord of 2 properties
If you turn the open field into something for soccer or football with nets etc, I think that could really help add some more fun to the park for the adults etc. You could even create a free league for troubled youth in the downtown core.
Sidewalks
Side walks around the park. We all ready have a parking issue around park if park was totally fenced in we would have to walk our grandkids though the parked cars or walk on Robarts street to get them to the park. Our family has owned this property for over fifty years; we brought the home off our parents in 1998 and have been doing improvement ever since .We went through the worst years, now it nice to see the park being used by the kids again. Daycare and the boys and girls club, people exercising, enjoying the views, painting and photography clubs, Our grandchildren love to play on the rocks as our kids did when they were visiting their grandparents. The hill down to Milford Cres has been a favourite hill for neighbourhood kids to sled on for years. Our grandchildren are ages 2, 3 and 4, and the 2 and 4 year old live right next door in another home that has been in our family for years. People have been bringing their dogs on leash to the park now for as long as I can remember and we have no problem with that as they are in care of their owners and sharing the amenities with all.
Sidewalks, parking.
Sidewalks: prevent soil compaction/mud in wet seasons. Reduces area degradation: ground water pathways.
Nothing To Add
None - this is a good start.
Other Comments
Look at the fancy parks in Vancouver and then "one up" that standard.
I don't live in Nob Hill but I do go to this park.
reserve future input
Area one is an example of a very precious ecosystem that is not intended to have the traffic associated with a dog off leash park. I am quite shocked that the city parks Recreation and ENVIRONMENT would even consider this space for a dog off leash park! The significant Garry oaks in this park need protection not dogs
There is one family whose home borders the park that accesses the doggie bags the city leaves in the park to clean up after her dog, in her front yard! Today (Dec.13,) at roughly 2pm she sent her kids into the park to retrieve bags she subsequently used in her own yard... 3 times! And she instructed them to bring back 6 each (two kids) and then she sent one back a second time for 10 more! Then to make matters worse, all that crap was then put in the parks garbage container! I clean up after my dog with my own bags and dispose of it at home.

I have lived in this part of Nanaimo in our home for the last 18 years.

My partner and I are both adamantly opposed to having this highly sensitive and beautiful green space turned into a pocket mud pit for dogs. The "mud pit" part is a foregone conclusion once the activity of the dogs strips the fragile covering moss and shallow rooted grasses off of the knoll. As the proposed spot on the upper portion of the park comprises almost 1/3rd of the park area there are a number of community and environmental concerns that prevent this plan from any degree of practical or community oriented viability. As there was an earlier plan to build an outdoor performance space below the rocks the lower area is equally impractical. The upper area of the park, bounded on one side by the play area and by Selby St. and Milford Crescent on the other two sides includes the rocky areas of the park and many of the trees that make the park such a lovely addition to our neighborhood. The trees and rocky areas are a primary play area that is regularly used by a number of local children and by children from the Boys and Girls Club at the south end of Hecate St. As safe play areas are rare in the south end of Nanaimo, turning this one into a dog park is highly questionable from a community stand point.

In addition to my initial concerns regarding this decision I have some equally important concerns about the changes in access to the park that would be required if it were turned into an off leash park.

Currently the park can, with relative safety, be accessed from all sides. Fencing the proposed upper area will result in limited access to the play area by compelling people to walk around the perimeter of the area along Milford Crescent and then up and across the park and around the rocks. This route would be challenging for strollers, toddlers and moms due to the difficulty of the ground and the absence of any kind of a path.

The other option for access along Milford Crescent is to follow it north to Robarts St., where there is no side walk on the park side of the street, and come in the bottom or north side entrance, and then up the entire length of the park to reach the play area. This is an equally challenging route for strollers, toddlers and moms. Once the suggested upper area is fenced the only other option to access the park is to come along Selby St. past the rocks to the north entrance or along the side walk on the south side of Selby. There is currently no crosswalk at the crest of Selby St.

As the local residents know, Selby is a major, high speed "short cut" between Albert St. on the west and Old Victoria Rd. on the east. Further complicating things is the "blind" crest of Selby St. and the recent increase in spill over parking from downtown. Cars parking on Selby and Hecate Streets limit visibility at the intersection and make crossing the street to reach the park problematic for grownups sometimes. When irresponsible drivers speed in either direction anyone entering or leaving the park would be at risk as a result of the fencing. And as an off leash park needs to be effectively and responsibly contained a gate in that corner is equally questionable as we can't count on everyone to be responsible.

This area of the park is also used by local residents for drum circles, yoga classes, martial arts practice & instruction, family and community gatherings, weddings and a host of equally important community, resident driven activities.

Once turned into an off leash dog park these areas of the park will no longer be available to the general public for current or future use. An obvious and existing lack of responsibility on the part of some dog owners will lead to clean up issues that will be further complicated by the proposed location being up slope from the play area. As we receive a great deal of winter rain here on Vancouver Island and there is very little soil at the top of the park dog feces and urine will inevitably accumulate and flow towards the play area.

Undeniably this accumulation would take time, but, in all honesty, what right do we have to hand our problem to the future. On a more personal level, for a number of years I have studied and taught the martial art of aikido. I have used the rocky outcrop near the pine trees as a meditation and practice area for my continuing study since moving to this neighbourhood. I currently use the large open area to the east of the play area for group practice. For a number of reasons, many of them connected to irresponsible ownership of animals, I will no longer be able to pursue these activities with my friends in those areas of the park. I would imagine that there are a number of community members that share my position and perspective on this situation.

As a long time resident of the area, I am well aware of the necessities and challenges of our little community.

Across time the association has worked diligently to make the area more livable for the residents of Nob or Nobility Hill. Community driven and supported actions such as the “John Watch” walks of several years ago, the establishment of a “Neighborhood Watch”, the eventual declaration of 522 Hecate as a “nuisance property”, an expanded presence of Law Enforcement and a number of other resident driven initiatives have changed the face and quality of our community.

At the core of things, it was our intention to create a safe and open park that offered children, individuals and families a place to gather, relax and play that was free of needles, condoms and other refuse. Through the ongoing efforts of myself, my partner and our neighbours’ we have an absolute gem where children actually come to play. It is an absolute pleasure to hear the sounds of active kids playing in our park. Less than a dozen years ago that was not possible. I am looking forward to the public consultation aspect of this process as there are a number of factors to be discussed. On the part of the city, it is vital that the wants of the entire community be considered before a decision is made. It is the responsibility of the municipal government to remove personal opinion or agenda from this discussion so that volume is not allowed to overpower good sense. A vocal minority of local dog owners unwilling to access the numerous existing dog parks in Nanaimo is not adequate justification to sacrifice, yet again, such a beautiful green space.

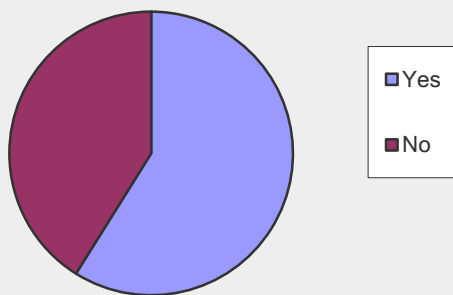
QUESTION 6:

Nob Hill Park Dog Off-Leash Survey - February 2016

Are you a resident of the Nob Hill area?

Answer Options	Response Percent	Response Count
Yes	58.9%	99
No	41.1%	69
<i>answered question</i>		168
<i>skipped question</i>		10

Are you a resident of the Nob Hill area?



ATTACHMENT C

Nob Hill Park Improvement Plan.

Nob Hill Park Improvements ... (2008 & 2016 update)

► Park Improvement Plan

In 2008, the City of Nanaimo and the Nob Hill Neighbourhood Association conducted a park improvement process for Nob Hill Park. The improvements were intended to rejuvenate recreational use in this park.

In 2016 further discussions with the Nob Hill Neighbourhood have generated some new ideas & interests in improving the park. This map depicts the long term vision for the park.



Park Amenities

1. Remove outdated playground equipment and surfacing. Install new equipment in an effort to attract family use to the park. New equipment will be located in our consolidated location with good site surveillance. (Completed)
 2. Provide one consolidated picnic area with good natural surveillance. Modern picnic tables with proper shade trees will be used. (Completed)
 3. Provide an open grass area for free play. (Completed)
 4. Plant tall light structures (like to help illuminate the park). Increase lighting levels to better illuminate the park. (Phase 1) Upgrade to LED (Phase 2)
- #### Park Entrances, Perimeter, and Trails
5. Provide gateway structures at both ends of the main trail to provide a sense of arrival to park users as they enter the park. (Phase 2)
 6. Remove perimeter walls and replace with well-lit fence or post & chain to increase park amenities and provide a sense of park boundary. (Phase 2)
 7. Provide a secondary trail up to the hill that loops into the main trail. (Completed)
 8. Continue to work with local services on parking issues. (Ongoing)

Park Signage

9. Working with the neighborhood, develop an historical interpretive trail to be installed in the park. The trail will replace the history of the Nob Hill around points of the interest in the park and will help provide a sense of place. (Completed)
 10. Install park entry signage with park regulations and emergency contact points. (Completed)
- #### Special Events
11. Portion of the rock walling fence created amphitheater with seating on the rock. Construct a concrete platform at the base of this amphitheater to act as a stage for special events. (Phase 2)
 12. Explore the installation of a gazebo to be used for special events. (Phase 2)
 13. Support the Nob Hill Neighbourhood Association in programming events in the park. (Ongoing)
 14. Addition of horse bins for path users.

Park Beautification

15. Under Parkmen in Parks, plant spring bulbs to enhance throughout the park. (Completed)
16. Under Parkmen in Parks, explore the installation of public art on the trail and at key locations in the park. (Phase 2)

Park Maintenance and Security

- Replace very old trees throughout the park by maintaining tree canopy and ground level vegetation. (Ongoing)
- Under Parkmen in Parks, explore opportunities for park ambassadors with the neighborhood. (Phase 2)
- Work with local services and park operations on park security & needle clean-up.

2008 - 2009 (ACCOMPLISHED)

- Installation of new path lights
- Installation of new playground equipment
- Bulb planting
- Signage upgrades
- Trail Development
- Installation of community book nook

Phase 2 (ACTIONS TO STILL COMPLETE)

- Conversion of lighting to LED
- Special event upgrades to the park
- Park fencing & gateways
- Lighting of Milford Crescent lane way
- Installation of water hose bib
- Consideration of summer playground programming & PIP park ambassador program
- Consider of needle drop box

DATE OF MEETING April 26, 2017

AUTHORED BY ROB LAWRENCE
 ACTING PARKS AND OPEN SPACE PLANNER

SUBJECT BUTTERTUBS MARSH CONSERVATION AREA MANAGEMENT
 PLAN UPDATE

OVERVIEW

Purpose of Report

To inform the Parks, Recreation and Wellness Committee on the update for the Buttertubs Marsh Conservation Area Management Plan.

Recommendation

That the Parks, Recreation and Wellness Committee receive and recommend that Council adopt the updated Buttertubs Marsh Conservation Area Management Plan and the conservation area as defined in the revised plan.

BACKGROUND

The Buttertubs Marsh Conservation Area (BMCA) is a 55ha reclaimed wetland and floodplain habitat adjacent to the Millstone River within the City of Nanaimo. In the 1800's, this shallow flood plain, known then as Pearce's Plain, was originally drained to become seasonal farmland and pasture. Over time, a berm was created overtop a City of Nanaimo Waterline that bisected the Marsh (Attachment A – Infrastructure Map). This created two separated wetlands, referred as the East Marsh and West Marsh.

Since the 1980's, the East Marsh has been set aside as a conservation area. Originally purchased by the province and eventually transferred to the Nature Trust of British Columbia.

Since 2004, a management plan has been in place for the East Marsh, with a Committee made up of representatives from The Nature Trust of British Columbia, Ducks Unlimited Canada (DUC), and the City of Nanaimo. These organizations, plus a volunteer "Friends of Buttertubs Marsh" group, have worked together to implement the plan and manage the East Marsh. The City has primarily focused on trail maintenance but has collaborated on various restoration projects initiated by the other partners.

In 2011, the City of Nanaimo acquired the West Marsh property with Ducks Unlimited as Tenants in Common (Attachment A - Properties and Land Ownership). Since the purchase, the area has been used by faculty from Vancouver Island University to conduct wildlife research.

Updating the Existing Plan

Beginning in 2015, City staff has worked on a process to update the 2004 management plan to include the West Marsh and other adjoining park properties. The process included a review of the existing plan by an external consultant (Madrone Environmental), as well as several input and review sessions with the Nature Trust of British Columbia, Ducks Unlimited Canada, Vancouver Island University Faculty, and members of the Friends of Buttertubs Marsh. A 'Marsh Day' event was also held in October 2016 to present the draft updated plan for additional public input. Invites were sent to neighboring property owners and posters were placed at entry points into the Marsh (Attachment C – Event Poster).

While respecting the underlying guiding documents and legal framework of the properties that make up the Buttertubs Marsh Conservation Area, the updated plan (Appendix 3 – Management Plan) has been changed to apply equally over all the properties currently owned by the management partners (Attachment A - Properties and Land Ownership). The updated plan lists the land use activities that complement the overarching goals of the management plan, which are to:

- monitor, maintain and, where possible, enhance the Natural Ecosystems of the Marsh Complex;
- provide for compatible public recreational and educational use of the area; and,
- build and maintain a cooperative management approach of the conservation area.

To assist with land management decisions five (5) year management targets have been created to meet the overall management goals. The goals and targets will guide annual work plans moving forward (Attachment B - Management Targets).

The updated plan (Attachment D – Buttertubs Marsh Conservation Area Management Plan) is not meant to totally replace the original plans; it is a supplementary document that incorporates Madrone's 2015 strategic review of the 2004 management plan and includes the input of the current conservation partners and stakeholders. The goal of this document is to update information, highlight achievements and prioritize the next steps through the establishment of management targets.

OPTIONS

1. That the Parks, Recreation and Wellness Committee receive and recommend that Council adopt the updated Buttertubs Marsh Conservation Area Management Plan and the conservation area as defined in the revised plan.
 - **Budget Implication:** Future cost and staff time implications as partners in implementing the management plan.
 - **Engagement Implication:** Strong existing partnership with Nature Trust and Ducks Unlimited. Great opportunity to build on partnerships with Vancouver Island University and community stewardship groups in future.

- **Strategic Priorities Implication:** Helps the City of Nanaimo meet its strategic priority of Community Building Partnerships, and the Sustainability Pillar of Environmental Responsibility and Economic Health.
2. Do not adopt the updated Buttertubs Marsh Conservation Area Management Plan.
- **Budget Implication:** Ongoing responsibility for trail maintenance for East marsh. No additional budget implications. No additional financial or staff time commitments for implementing the updated plan.
 - **Engagement Implication:** Existing partnership with Nature Trust and Ducks Unlimited could be impacted. Opportunity to improve engagement ties with other stakeholders and surrounding residents could be missed.

SUMMARY POINTS

- Buttertubs Marsh Conservation Area (BMCA) is a 55ha reclaimed wetland and floodplain habitat adjacent to the Millstone River within the City of Nanaimo.
- In late 2015, City staff began a process to update the 2004 management plan goals and actions and include the West Marsh and other adjoining park properties.
- The process included a review of the existing plan by an external consultant (Madrone Environmental), as well as input from the Nature Trust of British Columbia, Ducks Unlimited Canada, Vancouver Island University Faculty, and members of the Friends of Buttertubs Marsh.
- The updated plan allows for more integrated management of the entire Marsh complex and sets 5 year targets for Restoration, Ecological Enhancement, Research, Public Education and Public Access / Recreation.
- A management committee, made up of representatives from the City of Nanaimo, Nature Trust of British Columbia, Ducks Unlimited Canada, Vancouver Island University Faculty, and members of the Friends of Buttertubs Marsh would be responsible for implementing the plan and finding resources to accomplish actions.

ATTACHMENTS

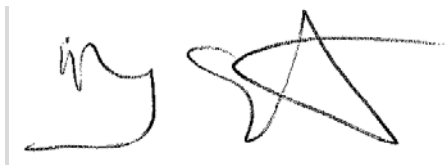
Attachment A: Properties and Land Ownership
Attachment B: Management Targets
Attachment C: Event Poster
Attachment D: Buttertubs Marsh Conservation Area Management Plan

Submitted by:



Rob Lawrance
Acting Parks and Open Space Planner
Parks and Recreation Department

Concurrence by:



Mary Smith
Acting Director
Parks and Recreation Department

ATTACHMENT A:

Maps

- Properties and Land Ownership:
<http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/ButtertubsPropertyOwnershipWithinConservationArea.pdf>
- Infrastructure:
<http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/ButtertubsInfrastructureMap.pdf>
- Terrestrial Ecosystems:
<http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/ButtertubsTerrestrialEcosystems.pdf>
- Ecological Management Zones:
http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/MadroneReport_Figure6_%20Management_Zones_Overview.pdf

ATTACHMENT B:

Management Targets

West Marsh

This management zone is managed between DUC and the City of Nanaimo as Tenants in Common, under the Ecological Gifts Program, which is administered by Environment Canada. While the land is owned by the City of Nanaimo, both DUC and the City of Nanaimo are joint recipients of the donation and are responsible for maintaining the conservation values of the land. Areas within this zone include Millstone River Riparian, Vegetated Upland, Marsh Shallow Water, Lower and Upper Shoreline (refer to Appendix 4 – Buttertubs Marsh Conservation Area Map).

Land Use Activity	Priority Management Actions for West Marsh	5 Year Management Target
Restoration	<ul style="list-style-type: none"> - Map invasive species - Invasive species removal - Native species planting - Boundary management along south boundary 	<ul style="list-style-type: none"> - Year 2 – invasive species mapped - Year 5 – 50% reduction in invasive species cover - All boundary issues resolved
Enhancement	<ul style="list-style-type: none"> - Undertake hydrological study of West Marsh to identify opportunities for increased open water habitat and to determine appropriate baseline water levels - Improve habitat for Western Painted Turtle and American Bittern - Enhance 30 m riparian zone along Millstone. Seek letter of agreement with property owner of Pryde Vista Golf Course to allow for enhancement work within the Millstone River Riparian Area and north of the West Marsh 	<ul style="list-style-type: none"> - Hydrological study completed with multiple stakeholder engagement - Installation of basking logs for Western Painted Turtle - Undertake study to determine American Bittern habitat requirements
Scientific/Research	<ul style="list-style-type: none"> - Expand involvement of VIU at Buttertubs - Conduct baseline inventory of West Marsh and establish permanent baseline monitoring plots/transects 	<ul style="list-style-type: none"> - Baseline inventory completed in accordance to standardized protocols; 5-year monitoring plan developed - Annual engagement with VIU
Education	<ul style="list-style-type: none"> - Support the involvement of VIU or other school groups in conducting research and educational opportunities in the area 	<ul style="list-style-type: none"> - Develop a permit system and protocols for educational and research work in the Marsh Complex with VIU
Public Access/Recreation	<ul style="list-style-type: none"> - Complete a trail and access plan that respects the requirements of the eco-gift 	<ul style="list-style-type: none"> - Approved trail plan developed

Water Control Structures	- As part of hydrological study assess whether or not a water control structure would benefit the marsh	- Completion of hydrological study - Implementation of restoration work identified by hydrological study
Fixed Infrastructure - conservation	- Support the establishment of a field research shelter - Install boundary fencing and signage	
Linear Infrastructure	- Formalize access point to the West Marsh - Construct environmental fencing along boundaries currently unfenced. - Identify appropriate corridors for public use trails - Maintain service road/trail to banding station	- Fencing completed in areas of potential threat of trespass/ incursion
*A	Acceptable use/activity	
*C	Conditional – subject to provisions identified	
*N	Not acceptable	
*N/A	Not applicable	

Zone Comments

- Management must adhere to conditions of Ecological Gift Program
- Currently public access is limited to permission only

East Marsh

This management zone is the eastern portion of the Buttertubs Marsh Conservation Area that has dual land management obligations with the Province of British Columbia (as the land holder) and TNT of British Columbia (as the lease holder). The City of Nanaimo helps to maintain the trail system and infrastructure features found on the property. The Friends of Buttertubs Marsh coordinate volunteer stewardship activities. Areas within this zone include Millstone River Riparian, Vegetated Upland, Marsh Shallow Water, Lower and Upper Shoreline (refer to Appendix 4 – Buttertubs Marsh Property Title Map).

Land Use Activity	Priority Management Actions for East Marsh	5 Year Management Target
Restoration	- Map invasive species - Invasive species removal - Native species planting	- Year 2 – invasive species mapped - Year 5 – 50% reduction in invasive species cover

	- Boundary management	- All boundary issues resolved
Enhancement	- Improve habitat diversity	- Installation of basking logs for Western Painted Turtle and other wildlife
Scientific/Research	- Expand involvement of VIU at Buttertubs - Revisit Materi (2004) vegetation report to assess changes	- Annual engagement by VIU Resource Management Officer Training (RMOT) student in conducting field studies
Education	- Support the involvement of VIU or other school groups in providing educational opportunities in the area - Upgrade West Marsh sign along public trail	- Increase the number of faculty led projects occurring within Buttertubs focused on fish, wildlife and ecosystem inventory/ research. - Develop an educational brochure/trail guide for Buttertubs Marsh. - The brochure will be printed and regularly updated and easily available to visitors to Buttertubs Marsh. - Annual faculty inspections completed and necessary repairs undertaken.
Public Access/Recreation	- Maintain trails cut back tall grass and blackberry - Repair minor surface erosion and maintain drainage culverts on east and south trails	- All trails are maintained to City of Nanaimo standards
Water Control Structures	- DUC maintains the water control structure.	- Water control structure maintained annually - Water level managed according to Conservation Agreement with an FSL of 57.16m geodetic
Fixed Infrastructure - conservation	- Conduct a sign review and remove old/outdated signs - Install boundary signage as required	- All regulatory signs in the East Marsh will follow provincial template - Interpretive signs are updated as necessary
Linear Infrastructure	- Maintain fences along boundaries - Maintain interpretive kiosk signs and replace interpretive kiosk signs adjacent to miner's cottage	
*A	Acceptable use/activity	
*C	Conditional – subject to provisions identified	
*N	Not acceptable	
*N/A	Not applicable	

ATTACHMENT C:

Buttertubs Marsh Day Poster – 2016-OCT-02

BUTTERTUBS MARSH DAY

Join one of our expert naturalists for
a morning and afternoon guided walk
around Buttertubs Marsh!

Sunday, October 2
10 am-2 pm
South Entrance to Buttertubs Marsh
(next to Miner's Cottage - 1904 Jingle Pot Rd)

DISCOVER MORE ABOUT:

- History & Ecology of Buttertubs Marsh
- Secret Life of the Virginia Rail and Painted Turtle
- The Conservation Partnership for Buttertubs Marsh
- Restoration and Management Plans

*Join us for coffee and meet your friends and
natural neighbours!*



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CITY OF NANAIMO
THE HARBOUR CITY

The Nature Trust
of British Columbia

Ducks Unlimited Canada
Conserves Canadian Wetlands

ATTACHMENT D:

BUTTERTUBS MARSH CONSERVATION AREA MANAGEMENT PLAN:

A consolidated review (2004-2015) & Future Directions (2016-2021)

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BUTTERTUBS MARSH CONSERVATION AREA MANAGEMENT PLAN
A consolidated review (2004-2015) & Future Directions (2016-2021)



Cover Photos:

Top:	Buttertubs East Marsh
Bottom Left:	Virginia Rail
Bottom Right	Millstone River

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 - Management Plan for Buttertubs West Marsh (July 2012)
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Introduction

The Buttertubs Marsh Conservation Area (BMCA) is a 55ha reclaimed wetland and floodplain habitat adjacent to the Millstone River within the City of Nanaimo (Figure 1). In the 1800's, this shallow flood plain, known then as Pearce's Plain, was originally drained to become seasonal farmland and pasture. Over time, a North-South elevated walkway was created overtop a City of Nanaimo Waterline. This has created two separated wetlands, referred to in this document as the East and West Marsh.

The Buttertubs Marsh Conservation Area is comprised of several parcels of land and includes lands secured by The Nature Trust of British Columbia, Ducks Unlimited Canada (DUC) and the City of Nanaimo; with substantial support received from the local community and funding organizations. Map 1 in Appendix 4 identifies the land ownership makeup within the Conservation Area.

Background to Plan Update

The Buttertubs Marsh Co-Management Steering Committee (the Committee) is made up of representatives of the property owners and volunteer organizations involved in managing the Marsh. In 2004 the Committee adopted a Management Plan for the East Marsh that provided recommendations for protecting, enhancing and restoring fish and wildlife habitat while continuing to allow for passive recreation.

Since 2004 the Committee has undertaken several projects and initiatives in partnership with community volunteers and more recently Vancouver Island University (VIU), to achieve the goals and objectives of the Management Plan. As a result of these efforts, the conservation area has been expanded; several restoration projects have been completed; more information about the biophysical features and human use of the area has been collected; and several land management issues have been addressed.

In recognition of these successes, the committee hired Madrone Environmental Services to undertake a strategic review of the 2004 management plan (See Appendix 2). This review, coupled with the committee's desire to create a plan that reflects the expanded conservation

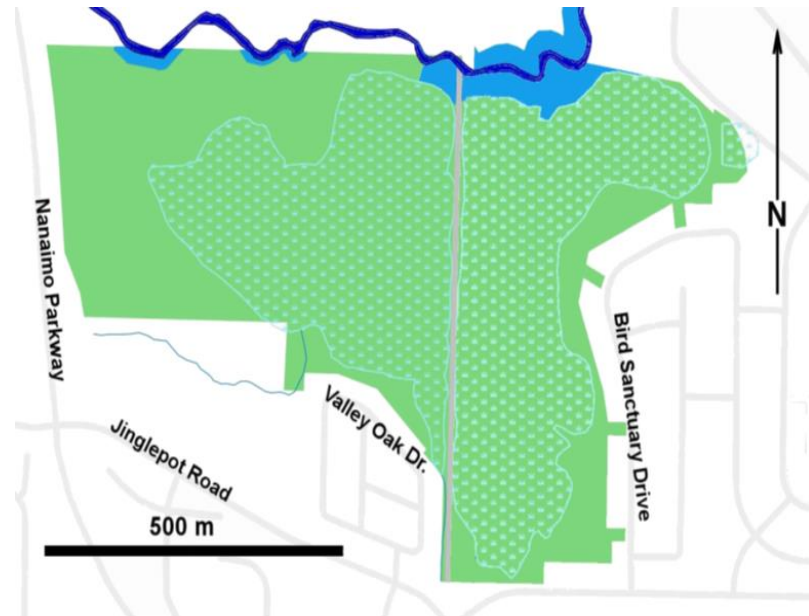


Figure 1: General characteristics of the Buttertubs Marsh Complex (BMC). Areas in Green are parks or conservation area within the complex. Dark blue indicates the Millstone River and light blue denotes riparian areas in the BMC complex. The water pipe which bifurcates the two marsh properties is shown as the vertical light grey line just to the right of center of the figure. Areas subject to regular inundation are shown as light blue stippling. This figure was adapted from the City of Nanaimo map server found online at maps.nanaimo.ca/nanaimomap/

area, resulted in this updated 5-year strategic plan. While respecting the underlying guiding documents and legal framework of the properties that make up the Buttertubs Marsh Conservation Area, this plan allows for the management of the entire Marsh complex under one management plan. This plan describes acceptable land use activities to assist with land management decisions and establishes a number of five (5) year targets to meet the overall management goals. The goals and targets will guide our annual work plans moving forward.

This document is not meant to totally replace the original plans; it is a supplementary document that consolidates the East and West Marsh Plan and Madrone's 2015 strategic review of the 2004 management plan. The goal of this document is to update information, highlight achievements and prioritize the next steps through the establishment of management targets.

Guiding Documents

The following background documents provide the guiding direction for the management of Buttertubs Marsh and the development of this strategic plan:

Document	Key Highlights
Agreement between City of Nanaimo & Ducks Unlimited Canada (2012)	Lease agreement between DUC and the City of Nanaimo to manage the West Marsh as Public Park and to provide recreational amenities to the public consistent with the conservation purposes for which the land was acquired.
City of Nanaimo Parks Master Plan	The Master Plan guides City Council with a long range vision and guidance on the development of facilities, parks, open spaces and the delivery of services that best meet the needs of the community. The Master Plan was last updated in 2005.
City of Nanaimo Official Community Plan (2008)	The Official Community Plan provides land use direction for the City. Within the OCP, the Watercourse and Environmentally Sensitive Development Permit Areas restrict development of environmentally sensitive lands and includes guidelines and requirements to protect and enhance environmentally significant lands within the City of Nanaimo.

Ducks Unlimited Canada Conservation Agreement with Province of BC/TNTBC	Renewed in 2007 this conservation agreement allows DUC to construct and maintain a water control structure on Buttertubs Marsh to an FSL of 57.16m geodetic; conduct engineering inspections annually and implement bio-inventory monitoring every 5 years.
“Hyde” Property (1946 Jingle Pot Rd.) Lease Agreement between City of Nanaimo and TNTBC (2011)	The lease compels the City to maintain the property in accordance with the Buttertubs Marsh Conservation Area Management Plan. The Parks and Recreation Department have indicated their intent to maintain the land in its natural state, with little or no public access or improvements for the foreseeable future.
TNTBC and Province of BC Lease Agreement	Assigns management authority for lands owned by The Nature Trust of BC to the Province of British Columbia; these leased lands are managed via the Vancouver Island Conservation Land Management Program.
Utility Right of Way Agreement between City of Nanaimo and Nature Trust of British Columbia (2001)	Right of Way Agreements for Water and Sewer lines within the Buttertubs Marsh Conservation Management Area.
Wildlife Act – Conservation Lands Regulations	Enacted in 2014 these regulations prohibit camping, motorized vehicles, fires and dogs on the provincially managed land at Buttertubs Marsh.

Achievements in the Management of Buttertubs Marsh

The original 2004 Buttertubs Marsh Management Plan contained two (2) goals:

GOAL 1: Maintain and, where possible, enhance plant and animal resources of the Conservation Area

Objective 1: Provide wildlife habitat

Objective 2: Control exotic, invasive plant and animal species

Objective 3: Gradually increase wildlife habitat and biological diversity

GOAL 2: Provide for compatible public recreational and educational use of the area

Objective 4: Provide controlled public access

Objective 5: Provide wildlife and nature viewing opportunities

Objective 6: Provide public education opportunities

In 2015, Madrone Environmental reviewed the management goals and activities of the original 2004 management plan. This review identified that of the 136 individual tasks listed in the 10 broad categories of the 2004 management plan, the partners have completed 58% of the tasks with another 18% underway; leaving 24% of the tasks not completed to date (Madrone 2015, Appendix 2).

Of the tasks and goals successfully achieved the partners of the Buttertubs Marsh Conservation Area have:

- Resolved several long standing trespass issues;
- Installed new interpretive and regulatory signage;
- Conducted inventories and removals of invasive species;
- Built new viewing platforms;
- Replaced and upgraded the Buttertubs Marsh water control structure;
- Implemented Wildlife Act Regulations to address concerns of motorized vehicles, camping, fires and dogs;
- Secured an additional 0.342Ha of habitat from the Hyde property (1946 Jingle Pot) and 26.13 Ha in the West Marsh;
- Implemented a restoration plan for Western Painted Turtles; and
- Partnered with VIU to undertake public use studies and to create the VIU bird banding station at the West Marsh.

Purpose and Management Goals

The Buttertubs Marsh Conservation Area Management Plan (the "Plan") has been developed for the purpose of consolidating the planning and management of the properties making up the BMCA. The Plan, while respecting the underlying legal jurisdiction of the property owners and lease holders (City of Nanaimo, the Province, The Nature Trust of BC, and DUC), will provide general direction for the management of all the properties within the BCMA.

Guided by the importance to conserve, maintain and enhance the natural state of the BMCA, the overall management goal for the Plan is to direct the maintenance and enhancement of water, plant and animal resources within the BMCA and provide compatible public recreational and educational use. The management goals for the Plan are:

GOAL 1: Monitor, maintain and, where possible, enhance the Natural Ecosystems of the Marsh Complex

Objective 1: Provide wildlife habitat

Objective 2: Control priority exotic, invasive plant and animal species

Objective 3: Gradually increase and improve fish and wildlife habitat and native species diversity

Objective 4: Conserve ecological values in the West Marsh to maintain the integrity of its Eco-gift designation

Objective 5: Over the long-term, work to acquire the remaining lands that make up the natural boundaries of the marsh

GOAL 2: Provide for compatible public recreational and educational use of the area

Objective 6: Provide controlled public access

Objective 7: Provide wildlife and nature viewing opportunities

Objective 8: Provide public interpretive and educational opportunities to foster public appreciation for the values and benefits of nature, and an understanding of the need to protect sensitive ecosystems. Physical structures required to support education and passive recreation (e.g. trails, structures, and signage) will be designed and located in a manner that minimizes habitat impacts.

GOAL 3: Cooperative Management

Objective 9: DUC and the City of Nanaimo will hold title on the West Marsh property as "tenants in common" and will manage the West Marsh through a management agreement and in the same spirit of collaboration as seen in the East Marsh under the Buttertubs Marsh Management Plan.

Objective 10: The principle of co-operative management will include consulting with stakeholders on the Buttertubs Marsh management committee to plan monitoring work, enhancement activities, and control of invasive species between Buttertubs Marsh and West Marsh.

Objective 11: The committee will work to encourage key partners, such as VIU, to join the management committee.

Partners in Managing the Buttertubs Marsh Complex

The Nature Trust of British Columbia (TNT)

The Nature Trust of British Columbia is a leading land conservation organization based in BC with a mandate to:

1. Acquire habitats of high biodiversity values and at greatest risk of being lost; and
2. Manage conservation lands as part of landscapes to ensure ecosystem resilience and connectivity.

Since 1971, TNT along with its partners has invested more than \$80 million to secure over 70,000 hectares (170,000 acres) of land. This includes over 23,000 hectares (56,000 acres) that is owned, leased or covenanted.

TNT as the property owner is responsible for ensuring that the conditions of the 99 year lease agreement with the Province of British Columbia for the East Marsh are being met. TNT as a landowner within the City of Nanaimo is responsible for paying property taxes, including making an annual application to the City to have the taxes reduced. TNT also responds to requests to upgrade present and future utilities which pass through the East Marsh and provides input towards annual work plans by participating on the management committee.

City of Nanaimo

The West Marsh is co-managed by the City of Nanaimo as a nature park that provides passive recreation and education opportunities that are consistent and compatible with the conservation purposes for which the Land was purchased. As the property is the subject of an Ecological Gift, any dispositions or changes in use of the property require an authorization from the Federal Minister of the Environment.

For the East Marsh, the City is responsible in part for trail and facility maintenance and contributes toward interpretive program development. Under the 1997 co-management agreement between the Province, local conservation groups and the City:

- Maintains trails, public facilities (benches, viewing platforms, etc.);
- Continues maintenance responsibilities over the City dyke which delineates the western boundary of the Conservation Area; and
- Manages land use through its Official Community Plan and zoning processes and works with other government agencies to address storm water management within the municipality.

The City of Nanaimo Parks Master Plan guides park development and acquisition priorities. The Master Plan was last updated in 2005 and involved significant public input. The public suggested that additional waterfront parks and continued trail development are most needed in terms of new and improved facilities, followed by environmentally sensitive areas (ESAs) and natural /passive parks.

Ducks Unlimited Canada

A non profit organization dedicated to the conservation, restoration and management of wetlands and associated habitats for North America's waterfowl. DUC partners with government, industry, non-profit organizations and landowners to accomplish its goals. For the East Marsh, DUC is responsible for the construction, maintenance and repair of the north dyke and associated water control structures as part of a long standing

agreement signed between DUC and the Province of British Columbia. This includes clearing of mud and debris piled around the outlet level control structure each fall, as well as annual inspections of the north dyke and associated structures and repairs or maintenance, as required. For the West Marsh, DUC and the City hold the property as Tenants in Common. As part of the purchase, the former owners agreed to a donation that qualified under the Ecological Gifts Program administered by Environment Canada.

Vancouver Island Conservation Land Management Program

The Vancouver Island Conservation Land Management Program (VICLMP) is an innovative partnership program which involves the management of over 100 conservation areas mostly coastal wetlands and estuaries owned by TNT of British Columbia (TNTBC), DUC and managed by the Ministry of Forests, Lands, and Natural Resource Operations (FLNRO). Projects are coordinated by the Conservation Lands Manager who assists FLNRO, TNTBC and the other program partners (Habitat Conservation Trust Fund, DUC, and the Canadian Wildlife Service) with land management, restoration/enhancement projects, and inventory and habitat securement activities.

Friends of Buttertubs Marsh

A volunteer organization dedicated to providing support to the management of Buttertubs Marsh. The group is a direct "descendant" of the Nanaimo Field Naturalists Club which was a prime stakeholder in the formulation of, and signatory to the original 2004 Buttertubs Marsh Management Plan. Since 2005, Friends of Buttertubs has carried out maintenance, enhancement, inventory and public engagement projects and activities throughout the East Marsh. The group's eclectic membership consists of an array of disciplines and backgrounds, all with the single aim of working to ensure the preservation of the values of the expanded Buttertubs Marsh Conservation Area.

Ecological and Wildlife / Habitat Values

Ecological Context

In 2008, a BC provincial status report on biodiversity titles, *Taking Nature's Pulse - the Status of Biodiversity in British Columbia* (Austin et al., 2008) listed 23 major findings on the most significant components of biodiversity in the Province and where impacts have occurred and where vulnerabilities will likely be in the future. Below are the relevant findings that are applicable to the Buttertubs Marsh Complex that have a bearing on management activities:

- Of the species assessed to date in British Columbia, 43% are of provincial conservation concern and are concentrated in four biogeoclimatic zones of conservation concern (Coastal Douglas-fir, Interior Douglas-fir, Coastal Western Hemlock, and Ponderosa Pine).
- Significant areas of wetlands in British Columbia have been lost or degraded.
- The flow of water in lakes, streams, wetlands and groundwater systems is being seriously impacted in British Columbia by dams, water diversions, logging, stream crossings and climate change.
- British Columbia has many significant seasonal concentrations of species [e.g., migratory birds, spawning salmon] that are vulnerable to human impacts.
- Alien species are seriously impacting British Columbia's biodiversity, especially on islands and in lakes. Climate change is already seriously impacting British Columbia and is the foremost threat to biodiversity.
- The cumulative impacts of human activities in British Columbia are increasing and are resulting in the loss of ecosystem resilience.
- Gaps in our knowledge of biodiversity in British Columbia create major challenges for effective conservation action.

The protection of Buttertubs Marsh contributes toward fulfilling a key goal in the *Wetland Action Plan for British Columbia* (Wetland Stewardship Partnership 2010): Goal 5. Secure the protection of priority wetlands and the conservation and restoration of natural wetlands throughout the province.

The Buttertubs Marsh Complex conserves wetland, riparian and upland forest ecosystems. The area is within the Moist Maritime Coastal Douglas Fir (CDFmm) Biogeoclimatic Zone and the Georgia Depression (Nanaimo Lowland Ecosection). Currently, only 8% of the CDFmm is protected in either parks or protected areas (Province of British Columbia 2011).

The wetland is clay bottomed and located on the floodplain of the Millstone River. The wetland component comprises 57% of the property with the remaining area function as riparian habitat and upland wooded habitat sections. The entire marsh complex provides an important flood protection zone as it can absorb overflow from the Millstone River during high water events.

Description of Ecosystems

For the purpose of this plan, the Buttertubs Marsh Complex is made up of 5 distinct ecosystems (Table 1). These zones have been identified based on legal designations (e.g. Eco-Gifts) as well as ecological features and unique physical attributes. See map in Appendix 4.

Table 1: Buttertubs Marsh – Ecosystem Descriptions

Management Zone	Ha*	%	Ecological Features	Anthropogenic Features
West Marsh	30.6	56%	This zone contains a range of habitat types including forested upland, marsh shallow water, riparian and shoreline habitat.	Small access road from south into old field; some limited trails for bird banding station; limited private fencing along south boundary
Millstone River Riparian	0.8	1.0%	30m city designation strip on the riparian bank of identified streams.	Drainage ditches (West Marsh)
Marsh Shallow Water	8.4	15%	Wetland habitats; swamps, ferns, cattail marshes, minimal open water.	Drainage ditch by previous owner
Lower Shoreline	2.6	5.0%	Open areas for passerine species.	Scarified by previous owner – Alder forest
Upper Shoreline	3.1	6.0%	Seasonally flooded agricultural fields; open field habitat for wildlife.	Previously cultivated fields filling in with Hawthorn
Vegetated Upland	15.7	29%	Mix of older second growth conifer forest; deciduous shrub woodlands. Selectively logged.	Trails and Road access. Squatter shack ruins
East Marsh	24.1	44%	This zone contains a range of habitat types including vegetated upland, marsh shallow water, riparian and shoreline habitat.	Open water habitat with significant cattail marsh. English Oak dominates riparian area. Public trail around marsh
Millstone River Riparian	2.1	4.7%	30m riparian setback on the riparian bank of identified streams.	Water control structure
Marsh Shallow Water	15.5	28%	Wetland habitats; cattail, open water.	Osprey nesting platform
Lower Shoreline	1.4	2.0%	Open areas for passerine species.	Benches; viewing platform
Upper Shoreline	0.2	0.3%	Seasonally flooded agricultural fields; open field habitat for wildlife.	Previously cultivated fields filling with non native Hawthorn. City sewer line.
Vegetated Upland	4.9	9.0%	Mix of older forest with deciduous shrub woodlands. Largely non-native.	Trails, benches, viewing platforms, interpretative signs; other historic features; fences. Sewer and water line, Old Dairy Barn Foundation
TOTAL	54.7	100%		

*Areas based on GIS assessment of zone designations.

Millstone River and Riparian Ecosystem

A narrow strip of riparian woodland bordering the Millstone River, dominated by alder and large English oaks with a shrub understory. The well vegetated riparian strip is the least disturbed area and contains mainly native plant species and represents 5.7% of the Marsh Complex. Note: Considered to be 30 meters in width but only extends to northern walkway. In West Marsh, the situation is very different with the existing riparian not 30 meters from top of bank due to past farming activity.

Vegetation	Wildlife Habitat Values
<ul style="list-style-type: none">English oaks planted along the river bank in the early 1900's. In the West Marsh, red alder and other native deciduous trees occur with a dense native shrub understorey of ninebark, red osier dogwood, snowberry and willow. The under storey vegetation resembles a mid-late seral native plant association indicative of floodplain sites (CDFmm Site Series 08). The West Marsh has a narrower riparian area dominated by similar native shrubs.	<ul style="list-style-type: none">Habitat provides feeding by Wood Ducks, Band-Tailed Pigeons, hunting and roosting by Barred Owls and several hawk species and feeding and nesting by woodpeckers and numerous songbirds.Mammals, including deer, raccoons, beaver, muskrat, mink, and river otter feed and/or rest in this area.This also provides a wildlife corridor linking the Buttertubs area with adjacent upstream and downstream habitats.

Invasive Plants

- Broom and blackberry are invasive species that are no longer the dominant cover in this habitat as there is a sufficient tree-shrub canopy to shade out these invasive shade-intolerant species.
- Reed canary grass is highly invasive along wetland margins where soils are saturated for part of the growing season.

Marsh - Shallow Water Ecosystem

Cattail vegetation and shallow water wetlands occupy about 43% of the surface area of the Marsh Complex.

Vegetation	Wildlife / Habitat Values
<ul style="list-style-type: none"> The Marsh consists of open water areas up to 1-2m deep interspersed with emergent cattail marsh, floating cattail islands, hummocks and four small constructed islands with herbaceous vegetation. Shallow open water areas support emergent and floating aquatic vegetation, including common mares tail, water smartweed, bladderwort, duckweed, pondweed and yellow pond lily. Shallow wetland areas, to some extent isolated from the main marsh, partially dry out during the summer drawdown and have different more diverse vegetation. The dominant vegetation is hardhack, young willows and some red-osier dogwood characteristic of a shrub swamp habitat. 	<ul style="list-style-type: none"> The marsh area is used for roosting, feeding and nesting by red-winged blackbirds, common yellowthroats, marsh wrens, mallard ducks, pied-billed grebes, Canada geese, Virginia and Sora rails and formally American bittern (blue-listed). Mallards, wood ducks, hooded mergansers and other waterfowl use these areas for cover while flightless. These areas are also used for feeding and resting by beaver, mink, raccoon and river otter. Open water areas are used for feeding and resting by many waterfowl species, including ducks, diving ducks, grebes, American coots, geese and an occasional trumpeter swan (blue-listed). These habitats are heavily used during fall and spring migration and for waterfowl over wintering in the Nanaimo area. Red-listed - one bird and one reptile species: <ul style="list-style-type: none"> Purple martin (<i>Progne subis</i>) Painted turtle (<i>Chrysemys picta</i>) Blue-listed birds: <ul style="list-style-type: none"> Trumpeter swan (<i>Cygnus buccinators</i>) American bittern (<i>Botaurus lentiginosus</i>) Great blue heron (<i>Ardea Herodias</i>)



Pacific Bleeding Heart
Dicentra formosa



West Marsh – Former hay field with alder forest



Indian Hellibore
Veratrum viride

Upper and Lower Shoreline Ecosystem

Combined, the upper and lower shoreline make up to 13.3% of the Marsh Complex.

Vegetation	Wildlife / Habitat Values
<ul style="list-style-type: none"><u>Lower shoreline = Cattail-yellow iris plant association</u> Dominated by cattail and yellow flag iris, growing on saturated soils.<u>Upper shoreline = Reed canary grass-hardhack shoreline plant association</u> The area above the full standing water level is dominated in most areas by a dense growth of reed canary grass with scattered clumps of hardhack. Red-osier dogwood, Douglas water hemlock, common rush occur in some areas. This may be the lower extent to the riparian area distinguished by the absence of a tree or shrub canopy.	<ul style="list-style-type: none">Marsh riparian areas are utilized by various bird species, depending on the vegetation type, for cover, foraging and/or nesting, (e.g. red-wing blackbird, marsh wren, Virginia rail, mallard, wood duck, Canada goose, common yellowthroat, song sparrow, willow flycatcher). These areas are also used by a number of mammal species including beaver, raccoon, mink, river otter, voles and shrews. The habitat is important for some life stages of frogs and salamanders (with aquatic larval and terrestrial adult stages) painted turtles (blue-listed) and garter snakes. In general, areas with greater vegetation species diversity and structural complexity tend to be utilized by a wider range of species.

Invasive Plants

- The cattail areas are heavily intermixed with yellow flag iris, an invasive non-native species originally planted in the 1970's.
- Purple loosestrife is present but not yet well established.

Vegetated Upland Ecosystem

Approximately 38% of the Buttertubs Marsh Complex Area is represented by two upland units, one in the East and one in the West Marsh consisting of blackberry, broom/grass, hawthorn shrub land (East Marsh), mixed forest, with English oak in the West Marsh. Most of these uplands exist on remnants of an abandoned farm that was created after dyking.

Vegetation	Wildlife Habitat Values
<ul style="list-style-type: none">• Old farm pasture/hay field with a variable shrub cover dominated by common hawthorn, Scotch broom and Himalayan blackberry.• Limited numbers of native tree and shrub species are present. Some were planted by various groups over the past 20 years (primarily conifers) and others re-colonized, (e.g. red alder, arbutus, cascara, mountain ash (non-native), bitter cherry, Pacific crabapple, snowberry, Nootka rose, trailing blackberry, spreading dogbane, spurge laurel (invasive)).	<ul style="list-style-type: none">• The upland scrub vegetation areas are utilized by numerous bird species for cover and foraging, including many residents, over wintering and migrating song birds attracted by insects and berry crops (e.g. chickadee, Berwick's wren, kinglets, various warblers, American robin, cedar waxwing, house finch). In spring and summer a number of species also nest although the low habitat diversity likely limits this activity (e.g. American robin, spotted towhee, song sparrow, house finch, Bewick's wren, bush tit, orange-crowned warbler, California quail and ring-necked pheasant). Mammals using this habitat include bear, deer, raccoon, eastern cottontail, deer mouse, Townsend's vole and shrews. Garter snakes are fairly common in summer and Pacific tree frogs are present. The lack of decaying large woody debris likely limits terrestrial salamander abundance.

Recorded Rare-listed Fauna

Blue-listed :

- Green heron (*Butorides virescens*)
- Turkey vulture (*Cathartes aura*)
- Short-eared owl (*Asio flammeus*)



Immature Cooper's hawk

Description of Land Uses & Activities

In developing the Buttertubs Marsh Complex Management Plan and land use map, the area was assessed for current and potential land uses. From this, a list of land use activities was developed and defined to form the basis for management direction within each of the 5 defined zones (Table 2).

Table 2 Land Use Activity Definitions for Buttertubs Marsh Complex

Land Use/Activity	Definition
Restoration	Actions to restore natural ecological processes; riparian planting, invasive species removal, fish/wildlife habitat creation, reforestation with native species.
Enhancement	Actions to enhance or introduce desirable environmental features; wetland creation, water flows/storage, wildlife trees, spawning gravel, nest boxes and placement of woody debris.
Scientific/Research	Inventory for Species at Risk, baseline inventory for fish, wildlife and vegetation monitoring.
Education	Public awareness and appreciation. Educational programming, Interpretative signs, Naturalist, Stewardship, Guided tours.
Public Access/Recreation	Passive activities (i.e. walking, wildlife viewing) appropriate to a nature park.
Water Control Structures	Dams, Weirs, Spill ways.
Fixed infrastructure – conservation	Boundary demarcation, regulatory and interpretive signage; Viewing platforms; Trails.
Linear infrastructure	Trails, bridges, gates, culverts, utility lines (stormwater, sewage, water lines), fences, drainage ditches.
Fixed infrastructure - Heritage	Old Barn Foundation, Archimedes Screw, etc.



Upland area West Marsh (Douglas-Fir, Dull Oregon Grape and Sword Fern)



Millstone River with Riparian Vegetation (primarily Red Osier Dogwood)

Land Management Zones

West Marsh Conservation Management Zone

This management zone is managed between DUC and the City of Nanaimo as Tenants in Common, under the Ecological Gifts Program, which is administered by Environment Canada. While the land is owned by the City of Nanaimo, both DUC and the City of Nanaimo are joint recipients of the donation and are responsible for maintaining the conservation values of the land. Areas within this zone include Millstone River Riparian, Vegetated Upland, Marsh Shallow Water, Lower and Upper Shoreline (refer to Appendix 4 – Buttertubs Marsh Conservation Area Map).

Land Use Activity	Management Direction*	Priority Management Actions for West Marsh	5 Year Management Target
Restoration	A	<ul style="list-style-type: none"> - Map invasive species - Invasive species removal - Native species planting - Boundary management along south boundary 	<ul style="list-style-type: none"> - Year 2 – invasive species mapped - Year 5 – 50% reduction in invasive species cover - All boundary issues resolved
Enhancement	A	<ul style="list-style-type: none"> - Undertake hydrological study of West Marsh to identify opportunities for increased open water habitat and to determine appropriate baseline water levels - Improve habitat for Western Painted Turtle and American Bittern - Enhance 30 m riparian zone along Millstone. Seek letter of agreement with property owner of Pryde Vista Golf Course to allow for enhancement work within the Millstone River Riparian Area and north of the West Marsh 	<ul style="list-style-type: none"> - Hydrological study completed with multiple stakeholder engagement - Installation of basking logs for Western Painted Turtle - Undertake study to determine American Bittern habitat requirements
Scientific/Research	A/C	<ul style="list-style-type: none"> - Expand involvement of VIU at Buttertubs - Conduct baseline inventory of West Marsh and establish permanent baseline monitoring plots/transects 	<ul style="list-style-type: none"> - Baseline inventory completed in accordance to standardized protocols; 5-year monitoring plan developed - Annual engagement with VIU
Education	A/C	<ul style="list-style-type: none"> - Support the involvement of VIU or other school groups in conducting research and educational opportunities in the area 	<ul style="list-style-type: none"> - Develop a permit system and protocols for educational and research work in the Marsh Complex with VIU
Public Access/Recreation	C	<ul style="list-style-type: none"> - Complete a trail and access plan that respects the requirements of the eco-gift 	<ul style="list-style-type: none"> - Approved trail plan developed

Water Control Structures	A	- As part of hydrological study assess whether or not a water control structure would benefit the marsh	- Completion of hydrological study - Implementation of restoration work identified by hydrological study
Fixed Infrastructure - conservation	A	- Support the establishment of a field research shelter - Install boundary fencing and signage	
Linear Infrastructure	C	- Formalize access point to the West Marsh - Construct environmental fencing along boundaries currently unfenced. - Identify appropriate corridors for public use trails - Maintain service road/trail to banding station	- Fencing completed in areas of potential threat of trespass/incursion
*A	Acceptable use/activity		
*C	Conditional – subject to provisions identified		
*N	Not acceptable		
*N/A	Not applicable		

Zone Comments

- Management must adhere to conditions of Ecological Gift Program
- Currently public access is limited to permission only



West Marsh Bird Banding Shed

East Marsh Conservation Management Zone

This management zone is the eastern portion of the Buttertubs Marsh Conservation Area that has dual land management obligations with the Province of British Columbia (as the land holder) and TNT of British Columbia (as the lease holder). The City of Nanaimo helps to maintain the trail system and infrastructure features found on the property. The Friends of Buttertubs Marsh coordinate volunteer stewardship activities. Areas within this zone include Millstone River Riparian, Vegetated Upland, Marsh Shallow Water, Lower and Upper Shoreline (refer to Appendix 4 – Buttertubs Marsh Property Title Map).

Land Use Activity	Management Direction*	Priority Management Actions for East Marsh	5 Year Management Target
Restoration	A	<ul style="list-style-type: none"> - Map invasive species - Invasive species removal - Native species planting - Boundary management 	<ul style="list-style-type: none"> - Year 2 – invasive species mapped - Year 5 – 50% reduction in invasive species cover - All boundary issues resolved
Enhancement	A	<ul style="list-style-type: none"> - Improve habitat diversity 	<ul style="list-style-type: none"> - Installation of basking logs for Western Painted Turtle and other wildlife
Scientific/Research	A	<ul style="list-style-type: none"> - Expand involvement of VIU at Buttertubs - Revisit Materi (2004) vegetation report to assess changes 	<ul style="list-style-type: none"> - Annual engagement by VIU Resource Management Officer Training (RMOT) student in conducting field studies
Education	C	<ul style="list-style-type: none"> - Support the involvement of VIU or other school groups in providing educational opportunities in the area - Upgrade West Marsh sign along public trail 	<ul style="list-style-type: none"> - Increase the number of faculty led projects occurring within Buttertubs focused on fish, wildlife and ecosystem inventory/research. - Develop an educational brochure/trail guide for Buttertubs Marsh. - The brochure will be printed and regularly updated and easily available to visitors to Buttertubs Marsh. - Annual faculty inspections completed and necessary repairs undertaken.
Public Access/Recreation	C	<ul style="list-style-type: none"> - Maintain trails cut back tall grass and blackberry - Repair minor surface erosion and maintain drainage 	<ul style="list-style-type: none"> - All trails are maintained to City of Nanaimo standards

		culverts on east and south trails	
Water Control Structures	A	- DUC maintains the water control structure.	- Water control structure maintained annually - Water level managed according to Conservation Agreement with an FSL of 57.16m geodetic
Fixed Infrastructure - conservation	A	- Conduct a sign review and remove old/outdated signs - Install boundary signage as required	- All regulatory signs in the East Marsh will follow provincial template - Interpretive signs are updated as necessary
Linear Infrastructure	C	- Maintain fences along boundaries - Maintain interpretive kiosk signs and replace interpretive kiosk signs adjacent to miner's cottage	
*A	Acceptable use/activity		
*C	Conditional – subject to provisions identified		
*N	Not acceptable		
*N/A	Not applicable		

Zone Comments

- Public access is allowed
- Area is subject to Provincial Wildlife Act Conservation Land Regulations (no dogs, no camping, no motorized vehicles no fires)
- Trails/infrastructure maintained by the City of Nanaimo



Ditch in West Marsh used for drainage by previous owner

Millstone River Riparian Ecosystem

Land Use Activity	Management Direction*	Priority Management Actions	Applies within East or West Marsh Only?	5 Year Management Target
Restoration	A	<ul style="list-style-type: none"> - Remove invasive species - Plant native riparian cover - Identify and map invasive species - Assess opportunities for instream fish habitat enhancement (e.g. Gravel placement/Large Woody Debris placement) 		<ul style="list-style-type: none"> - 50% reduction of invasive species coverage - 50% increase in native riparian vegetation cover
Enhancement	A	<ul style="list-style-type: none"> - Re-vegetation of riparian vegetation - Bird habitat enhancement study - Assess opportunities for off channel habitat for fish - Nest box program development focusing on Wood Ducks and Swallows 	<ul style="list-style-type: none"> - West Marsh - West Marsh 	<ul style="list-style-type: none"> - 25% increase in native plant diversity - Off channel habitat assessment complete - Nest boxes installed. Monitoring program in place
Scientific/Research	A	<ul style="list-style-type: none"> - Establish baseline monitoring plots to gauge effectiveness of riparian restoration projects - Invasive plant inventory - Fish inventory survey 		<ul style="list-style-type: none"> - Establish monitoring plots - Fish inventory survey complete
Education	A	<ul style="list-style-type: none"> - Provide interpretive opportunities - Assess opportunity for development of viewing platform 	<ul style="list-style-type: none"> - East Marsh 	<ul style="list-style-type: none"> - Platform project completed - Interpretive panel about riparian zone developed
Public Access/Recreation	C	<ul style="list-style-type: none"> - Public access is limited to existing trails - No new trails into riparian area other than to viewing platform 	<ul style="list-style-type: none"> - East Marsh - East Marsh 	<ul style="list-style-type: none"> - Sensitive areas fenced off - Riparian restoration signs completed
Fixed Infrastructure - conservation	C	<ul style="list-style-type: none"> - Maintain existing trail network - Maintain water control structure - Fence/sign areas for no public access where required 	<ul style="list-style-type: none"> - East Marsh 	<ul style="list-style-type: none"> - Trails maintained to City of Nanaimo standards - Control structure maintained for conservation needs
Linear Infrastructure	C	<ul style="list-style-type: none"> - Map right of ways; utility corridors 	<ul style="list-style-type: none"> - East Marsh 	
*A	Acceptable use/activity			
*C	Conditional – subject to provisions identified			

Zone Comments

- Goal for the this ecosystem is to have a 30m wide riparian area established

Marsh Shallow Water Ecosystem

Land Use Activity	Management Direction*	Priority Management Actions	Applies within East or West Marsh Only?	5 Year Management Target
Restoration	A	<ul style="list-style-type: none"> - Maintain open water habitat - Map invasive plant species - Prioritize and remove invasive species 	- East Marsh	- 50% removal of priority invasive species
Enhancement	A	<ul style="list-style-type: none"> - Review and assess water license on Buttertubs (e.g. raise or lower levels) - Assess opportunities to increase open water habitat - Assess opportunity for waterfowl / turtle nesting/loafing areas - Assess feasibility of connecting West Marsh and East Side through hydrological study 	- East Marsh	<ul style="list-style-type: none"> - Install turtle basking logs - Install bird nest boxes - Hydrological study - Assessment, design, implementation of hydrological restoration program completed
Scientific/Research	A	<ul style="list-style-type: none"> - Resurvey staff gauges, re-set them to standard map/survey datum for the area - Amphibian and reptile inventory (i.e. ongoing Western Painted Turtle work – install wildlife cameras); Egg laying beach effectiveness monitoring - Complete Fish & Wildlife Inventory 		<ul style="list-style-type: none"> - Staff gauges installed - Year 2 and 5 – complete spring/fall amphibian surveys - Year 1, 3 – complete fish presence/absence utilization surveys - Year 2 – establish photo monitoring plots and revisit every 2 years
Education	A	<ul style="list-style-type: none"> - Work with VIU and local schools to provide educational opportunities - Develop brochure for Buttertubs Marsh 	<ul style="list-style-type: none"> - East Marsh - West Marsh 	<ul style="list-style-type: none"> - Increased partnership with VIU and local school district in providing education and research opportunities - Increased number of faculty lead projects occurring at Buttertubs focused on fish, wildlife, ecosystems inventory
Public Access/Recreation	N	<ul style="list-style-type: none"> - Fence access to wetland (Former duck feeding area) 	- East Marsh	- Access to wetland fenced off

Water Control Structures	A	<ul style="list-style-type: none"> - Maintain water control structure - Review options to reduce outflow obstruction from beaver activity - Remove beaver material from in front of marsh outlet debris grating 	- East Marsh	- Control structure maintained according to Conservation Agreement
Fixed Infrastructure - conservation	A	<ul style="list-style-type: none"> - Assess Osprey, Swallow and Purple Martin nest site - Check & replace, stucco wire wrapped around trees to protect from beaver 	- East Marsh	<ul style="list-style-type: none"> - Breeding bird habitat condition assessed - Enhancement to breeding bird habitat implemented via nest box program
*A	Acceptable use/activity			
*C	Conditional – subject to provisions identified			
*N	Not acceptable			



North Walking trail along the interface with the Millstone River Riparian Area

Lower Shoreline Ecosystem

Land Use Activity	Management Direction*	Priority Management Actions	Applies within East or West Marsh Only?	5 Year Management Target
Restoration	A	<ul style="list-style-type: none"> - Map invasive plant species - Assess feasibility of removal of invasive plants - Prioritize removal targets 		<ul style="list-style-type: none"> - 50% reduction of priority invasive species -
Enhancement	A	<ul style="list-style-type: none"> - Review and assess water license on Buttertubs (e.g. raise or lower levels) - Assess opportunities to increase open water habitat - Assess opportunity for waterfowl / turtle nesting areas - Assess feasibility of connecting West Marsh and East Marsh (hydrological study) 	- East Marsh	<ul style="list-style-type: none"> - Control structure maintained and operated according to DUC/Province Agreement - Implement hydrological study of Buttertubs Marsh including options to increase open water habitat and fish habitat complexity
Scientific/Research	A	<ul style="list-style-type: none"> - Amphibian and Reptile Inventory - Ongoing Western Painted Turtle work – install wildlife cameras; effectiveness monitoring (mammals) - Complete Fish & Wildlife Inventory 		<ul style="list-style-type: none"> - Staff gauges installed - Year 2 and 5 complete spring/fall amphibian surveys - Year 1, 3 – complete fish presence/absence - Year 2 – establish photo monitoring plots and revisit every 2 years
Education	A	<ul style="list-style-type: none"> - Work with VIU and local schools to provide educational opportunities - Develop brochure for Buttertubs Marsh - Refresh Interpretative signage 	<ul style="list-style-type: none"> - West Marsh - East Marsh - East Marsh 	<ul style="list-style-type: none"> - Increased number of faculty lead projects occurring at Buttertubs focused on fish, wildlife, ecosystems inventory
Public Access/Recreation	N/C			
Water Control Structures	N/C			
Linear Infrastructure	N			
*A	Acceptable use/activity			
*C	Conditional – subject to provisions identified			
*N	Not acceptable			

Upper Shoreline Ecosystem

Land Use Activity	Management Direction*	Priority Management Actions	Applies within East or West Marsh Only?	5 Year Management Target
Restoration	A	<ul style="list-style-type: none"> - Map invasive plant species - Assess feasibility of removal of invasive plants - Maintain field mowing in West Marsh to maintain habitat and control Hawthorn. Reassess after hydrological study is complete 	- West Marsh	<ul style="list-style-type: none"> - 50% reduction of priority invasive species coverage by year 5 from mapped areas - Follow Provincial Early Detection Rapid Response approach to invasive species control
Enhancement	A	<ul style="list-style-type: none"> - Assess feasibility of connecting West Marsh and East Marsh (hydrological study) 		<ul style="list-style-type: none"> - Hydrological study completed and recommendations implemented
Scientific/Research	A	<ul style="list-style-type: none"> - Amphibian and Reptile Inventory - Ongoing Western Painted Turtle work - Install wildlife cameras; establish effectiveness monitoring Program (mammals) - Complete Fish & Wildlife Inventory 	-	<ul style="list-style-type: none"> - Year 2 and 5 – complete spring/fall amphibian surveys - Year 1, 3 – complete fish presence/absence utilization
Education	A	<ul style="list-style-type: none"> - Work with VIU/local schools to provide educational opportunities - Develop brochure for Buttertubs Marsh - Interpretative signage 	-	
Public Access/Recreation	N/C			
Water Control Structures	N/A			
Fixed Infrastructure	N/A			
*A	Acceptable use/activity			
*C	Conditional – subject to provisions identified			
*N	Not acceptable			
*N/A	Not applicable			

Vegetated Upland Ecosystem

Land Use Activity	Management Direction*	Priority Management Actions	Applies within East or West Marsh Only?	5 Year Management Target
Restoration	A	<ul style="list-style-type: none"> - Map invasive species - Invasive species removal - Native species planting - Identify priority restoration - Girdle pine trees - Remove Cypress grove and replant with native species in East Marsh 	<ul style="list-style-type: none"> - East Marsh - East Marsh 	<ul style="list-style-type: none"> - Year 2 – invasive species mapped - Year 5 – 50% reduction in invasive species cover - All boundary issues resolved
Enhancement	A	<ul style="list-style-type: none"> - Develop and maintain nest box program for swallows - Remove Squatter's Shelter and debris 	<ul style="list-style-type: none"> - West Marsh - West Marsh 	<ul style="list-style-type: none"> - Nest boxes for swallows, wood duck installed
Scientific/Research	A	<ul style="list-style-type: none"> - Establish baseline monitoring plots - WPT population estimates - Amphibian and Reptile Inventory - Small mammal inventory - Bird banding and Monitoring Program 	<ul style="list-style-type: none"> - West Marsh - West Marsh 	<ul style="list-style-type: none"> - Annual engagement by VIU biology department in conducting field studies - Baseline inventory completed in accordance to standardized protocols; 5 year monitoring plan developed - Year 2 and 5 – complete spring/fall amphibian surveys - Year 1, 3 – complete fish presence/absence utilization surveys - Year 2 – establish photo monitoring plots and revisit every 2 years
Education	A	<ul style="list-style-type: none"> - Work with VIU/local schools to improve opportunities for learning - Develop new brochure for Buttertubs 	<ul style="list-style-type: none"> - East Marsh 	<ul style="list-style-type: none"> - Increased number of faculty lead projects occurring at Buttertubs focused on fish, wildlife, ecosystems inventory

Public Access/Recreation	A	- Passive recreation continued on existing trails	- East Marsh	- All trails in Conservation Area are maintained to City of Nanaimo standards - Annual facility inspections completed and necessary repairs undertaken
Fixed Infrastructure - conservation	A	- Maintain existing trails, viewing platforms, interpretive signs - Boundary and regulatory signage	- East Marsh	
Linear Infrastructure	A			
*A	Acceptable use/activity			
*C	Conditional – subject to provisions identified			
*N	Not acceptable			
*N/A	Not applicable			

Zone Comments

- The Trans Canada Trail should be retained within this ecosystem

Appendix

1. Prior Management Plans
 - Buttertubs Marsh Conservation Area Management Plan (Nov 2004)
 - Management Plan for Buttertubs West Marsh (July 2012)
2. Review of Management Activities in Buttertubs Marsh and Buttertubs West Marsh by Madrone Environmental (2015)
3. Reference Bibliography
4. Maps
 - Properties and Land Ownership
 - Infrastructure
 - Terrestrial Ecosystems
 - Management Zones

Appendix 1 – Prior Management Plans

- Buttertubs Marsh Conservation Area Management Plan (Nov 2004)
 - <https://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/buttertubsmp.pdf>
- Management Plan for Buttertubs West Marsh (July 2012)
 - <http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/ManagementPlanforButtertubsMarshWestJuly2012.pdf>

Appendix 2 – Management Plan Review

Review of Management Activities in Buttertubs Marsh and Buttertubs West Marsh by Madrone Environmental (2015)

<http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/MadroneReportReviewofManagementActivitiesInButtertubsMarsh.pdf>

- Figure 1 Location Map:
http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/MadroneReport_Figure1_Overview.pdf
- Figure 2 Overview Map:
http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/MadroneReport_Figure1Overview.pdf
- Figure 4 Ecosystems and Management Zones:
http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/MadroneReport_Figure4_EcosystemsandManagementZones_Overview.pdf
- Figure 5 Ecosystem Overview:
http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/MadroneReport_Figure5_Ecosystems_Overview.pdf
- Figure 6 Management Zones Overview:
http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/MadroneReport_Figure6_%20Management_Zones_Overview.pdf

Appendix 3 – Reference Bibliography

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Appendix 4 - Maps

- Maps
 - Properties and Land Ownership:
<http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/ButtertubsPropertyOwnershipWithinConservationArea.pdf>
 - Infrastructure: <http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/ButtertubsInfrastructureMap.pdf>
 - Terrestrial Ecosystems:
<http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/ButtertubsTerrestrialEcosystems.pdf>
 - Management Zones:
http://www.nanaimo.ca/assets/Departments/Parks~Rec~Culture/Parks/MadroneReport_Figure6_%20Management_Zones_Overview.pdf

Delegation Request

Daniel Nugent has requested an appearance before the Parks, Recreation, and Wellness Committee.

The requested date is April 26, 2017.

The requested meeting is: Parks, Recreation, and Wellness Committee

Presenter's Information:

City: Nanaimo

Province: BC

Bringing a presentation: Yes

Details of Presentation:

I would like to request permission to set up a small paddleboard station at Westwood Lake to provide rentals and lessons and promote paddle boarding in the community. My set up would be minimal including 4-6 paddleboards, a small tent and table and would be removed each day. Thank you.