



AGENDA
ENVIRONMENT COMMITTEE

Wednesday, October 20, 2021, 5:00 P.M. - 7:00 P.M.

ELECTRONIC MEETING

Location for public attendance:
Boardroom, Service and Resource Centre,
411 Dunsmuir Street, Nanaimo, BC.

	Pages
1. CALL THE MEETING TO ORDER:	
[Note: This meeting will be live streamed and video recorded for the public.]	
2. INTRODUCTION OF LATE ITEMS:	
3. ADOPTION OF AGENDA:	
4. ADOPTION OF MINUTES:	
a. Minutes	3 - 10
Minutes of the Environment Committee Meeting held virtually on Wednesday, 2021-MAY-12, at 5:01 p.m.	
b. Minutes	11 - 17
Minutes of the Environment Committee Meeting held virtually, on Wednesday, 2021-JUL-14, at 5:01 p.m.	
5. PRESENTATIONS:	
a. Introduction of Newly Appointed Co-Chair Councillor Bonner	
b. REIMAGINE NANAIMO Environmental Policy Update	18 - 28
To be introduced by Kirsty MacDonald, Parks and Open Space Planner.	
c. Watercourse Protection Framework Review	29 - 38
To be introduced by Kevin Brydges, Environmental Protection Officer.	
6. DELEGATIONS:	

7. REPORTS:

a. 2022 Key Date Calendar

39 - 41

To be introduced by Sky Snelgrove, Steno Coordinator, Legislative Services.

Purpose: To present the Environment Committee with the 2022 Environment Committee Key Date Calendar for information.

8. OTHER BUSINESS:

a. Next Meeting Date

The 2021-NOV-10 Environment Committee Meeting has been rescheduled to Wednesday, 2021-DEC-01, from 5 p.m. to 7 p.m.

9. QUESTION PERIOD:

10. ADJOURNMENT:

MINUTES
ENVIRONMENT COMMITTEE MEETING
VIRTUAL MEETING
WEDNESDAY, 2021-MAY-12, AT 5:01 P.M.

Present: Councillor T. Brown, Chair (joined electronically)
Councillor B. Geselbracht (joined electronically)
D. Chen, At Large Member (joined electronically)
H. DesRoches, At Large Member (joined electronically)
L. Frey, At Large Member (joined electronically)
J. Lesemann, At Large Member (joined electronically)
W. Wells, At Large Member (joined electronically)

Absent: L. McCunn, At Large Member
E. Boulanger, At Large Member

Staff: Jake Rudolph, Chief Administrative Officer (joined electronically)
D. Lindsay, General Manager, Development Services (joined electronically)
B. Sims, General Manager, Engineering and Public Works (joined electronically)
B. Corsan, Director, Community Development (joined electronically)
J. Holm, Director, Development Approvals (joined electronically)
T. Daliran, Manager, Sanitation, Recycling and Cemeteries
M. Squire, Manager, Water Resources
R. Lawrance, Environmental Planner (joined electronically)
K. Kronstal, Social Planner (joined electronically)
M. Desrochers, Client Support Specialist (joined electronically)
S. Snelgrove, Deputy Corporate Officer (joined electronically)
K. Gerard, Recording Secretary (joined electronically)

1. CALL THE ENVIRONMENT COMMITTEE MEETING TO ORDER:

The Environment Committee Meeting was called to order at 5:01 p.m.

2. INTRODUCTION OF LATE ITEMS:

- (a) Add Sarah Bonar, Aquaparian Environmental Consulting Ltd., to Agenda Item 5(d) – Nanaimo Waterfront Walkway – Departure Bay Update.
- (b) Move Agenda Item 5(b) – REIMAGINE Nanaimo – Update on Indicators to Agenda Item 5(d) and reorder Presentations.

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 Environment Committee Meeting held in the Boardroom, Service and Resource Centre, 411 Dunsmuir Street, Nanaimo, BC, on Wednesday, 2021-JAN-27, at 5:01 p.m. be adopted as circulated. The motion carried unanimously.

5. PRESENTATIONS:

(a) Checkout Bag Regulation Bylaw Update

Introduced by Bill Sims, General Manager, Engineering and Public Works.

Presentation:

1. Taaj Daliran, Manager, Sanitation, Recycling and Cemeteries, provided the Committee with a verbal update. Highlights included:

- Reviewed timeline from the first motion made by Council in 2017 to approval of “Checkout Bag Regulation Bylaw 2020 No. 7283” by the Province in early 2021
- 1700 letters have been distributed to businesses in Nanaimo explaining the bylaw and providing information regarding the ban of single use checkout bags
- The City of Nanaimo (the City) has created a webpage on the City website at www.nanaimo.ca that provides information and contacts in case businesses have questions
- July 1, 2021 is the bylaw effective date

(b) Water Supply Strategic Plan

Introduced by Bill Sims, General Manager, Engineering and Public Works.

Presentation:

1. Mike Squire, Manager, Water Resources, provided the Committee with a PowerPoint presentation. Highlights included:

- Staff are in the process of updating the Water Supply Strategic Plan (the Plan) to ensure the City continues to have clean, safe drinking water on demand
- Total residential water use is currently below the National and Provincial average and we have exceeded the 2035 target for water conservation
- Part of updating the Plan is to determine how we can educate the public to conserve even more water and how the City can continue to exceed targets
- 70% of current water storage is used for fisheries flow releases while 30% is for domestic use

- 70% of the above ground water storage is used for fire storage and protection
- The plan will use scenarios presented in the REIMAGINE Nanaimo process to determine future water supply, conversion measures and use
- Climate change is another factor Staff are looking at when revising the Plan as there will be a potential increase in seasonal demand but less water stored in snow packs
- Initial testing found that the Jump Creek Reservoir needed to be replaced in 2023 but water conservation efforts and public education has now furthered the life of the dam to 2035
- Preliminary findings show that there is enough water in the Jump Creek Reservoir for the next 20 years as long conservation efforts and education continue
- Mid-town water supply upgrades are needed and are being accelerated after the water main break on Bowen Road in April of 2020
- Design concepts for the new water main that will connect water from College Heights area to Beban Park
- The connection would work within the REIMAGINE Nanaimo process through active transportation and connectivity
- Staff are looking at different scenarios to place a water main under or over the Parkway and if an overhead pipeline is chosen it could include a pedestrian/cycling path over the parkway

Committee discussion took place. Highlights included:

- Seasonal bulge based on restrictions or non-restrictions and the estimate of reduction in water usage
- Feasibility study needed for the water main to cross the Parkway
- Overhead pipeline and the potential for a cycling and walking path
- Decrease in outdoor water use in the spring and summer months
- Water main on Bowen Road is critical infrastructure

(c) Nanaimo Waterfront Walkway - Departure Bay Update

Presentation:

1. Bill Corsan, Director, Community Development, and Sarah Bonar, Aquaparian Environmental Consulting Ltd, provided the Committee with a PowerPoint presentation. Highlights included:
 - In 2017, the City completed a plan for the creation of a continuous walkway from Departure Bay Beach to the Nanaimo River Estuary which includes 13 km of walkway
 - Public consultation was well received and the plan was endorsed by Council in December of 2017
 - The plan includes 6 segments:
 1. Departure Bay to BC Ferries
 2. BC Ferries to Millstone River
 3. Maffeo Sutton Park to Pacifica

4. Boat Basin to Cameron Island
 5. Cameron Island to South Downtown Waterfront
 6. South Downtown Waterfront to the Nanaimo Estuary
- The Departure Bay segment received the most support and Staff, along with hired consultants, have been studying the feasibility of implementing the walkway by an elevated walkway or build the walkway directly on the beach
 - In 2018 it was decided that building on the beach would have less environmental impact
 - Concerns raised include the pathway being washed away during storms, erosion, slide events, sea level rise and environmental impact
 - Phase 1, the Feasibility Study, was concluded by McElhanney Consultants and included both foreshore and adjacent lands
 - Costs for the three conceptual designs are \$18 – 19 million and a referendum would need to be held in order to undertake the project as the City would need to borrow funds
 - Staff considered a 50-year sea level rise scenario when conducting the study and found that the sea may rise as much as 60 cm
 - The area is considered a low-value habitat area and Staff can ensure that this project includes habitat restoration
 - Staff have consulted with Snuneymuxw First Nation (SFN) elders who have identified archaeological sites and a permit would need to be approved under the Heritage Conservation Act
 - Challenges include permits from the Department of Fisheries, bonding for environmental work, approvals from BC Ferries, Transport Canada and the Regional District of Nanaimo
 - There are 30 private properties along the proposed walkway and riparian rights would need to be obtained from the owners in order to proceed
 - A new communication package will be made public at the end of May or early June
 - Conceptual drawings include a 3 meter wide pedestrian walkway and a separate 3 meter wide cycling track with a comprehensive habitat restoration project
 - The walkway must be accessible to everyone and have access points throughout the area
 - Project will have to be done using a referendum process

Committee discussion took place. Highlights included:

- Private property, riparian rights and bonding
- Connecting the waterfront walkway and alternate routes
- Cost, annual maintenance, cleaning and upkeep of the walkway
- Design of the project such as stability, options of building a bridge that connects the pathways along the waterfront, and cost estimate
- Third option along White Eagle Terrace

Sarah Bonar, Aquaparian Environmental Consulting Ltd, advised the Committee that bonding is for the area outside of the actual walkway and if habitat restoration is completed correctly, the area could actually be higher in habitat productivity than it is now but will need to be monitored for five years.

Committee discussion continued. Highlights included:

- Capital project and ensuring the project is looked at based on life cycle costs, staffing, liability, and maintenance budget
- Purpose of the Environment Committee endorsing the project
- Recommendation to endorse the project on an environmental aspect specifically

It was moved and seconded that the Environment Committee endorse the Departure Bay Waterfront Walkway Project as a flagship environmental restoration project. The motion carried.

Opposed: *Councillor Brown*

(d) REIMAGINE Nanaimo - Update on Indicators

Presentation:

1. Rob Lawrance, Environmental Planner, and Karin Kronstal, Social Planner, provided the Committee with a PowerPoint presentation. Highlights included:
 - Public engagement included 40 participants, 6 Zoom rooms and 75 potential indicators discussed narrowed down to 21 indicators
 - Environmental and ecological indicators generated good discussion with five draft goals organized around the doughnut framework: four for social foundations and one for ecological ceiling
 - The five draft goals include:
 1. Healthy – build a more sustainable community including housing, food and water
 2. Connected – Support access and well-being for all
 3. Empowered – encourage social enrichment
 4. Enabled – promote a thriving society
 5. Ecological – protect and enhance our environment
 - Staff need to ensure that they balance the indicators with the five goals and ensure they are measurable against the doughnut model

Committee discussion took place. Highlights included:

- Data collection and what does this data tell us and how will it be used
- Data collected regarding waste, recycling and compost and not including include all the strata type homes and subdivisions
- Indicators and goals connecting to different parts of the doughnut model and ensuring that the scenarios are interconnected to show goals for the future

- Future discussion regarding goals, indicators and/or scenarios, how these are shared across the doughnut model and how they impact each other

Rob Lawrance, Environmental Planner, advised the Committee that:

- Working with the Regional District of Nanaimo (RDN) on data collection regarding solid waste and may have the ability to work with strata waste collection companies to obtain their data as well
- Development of indicators can change with priority feedback from public consultation and meetings with Council
- Intention of the current indicators is to create the scenarios and goals that are chosen based on community and Council feedback
- Staff are currently in Phase 2 which includes developing scenarios based on chosen indicators and a workshop with Council on 2021-MAY-31 for more feedback before public engagement continues
- Phase 3 will take place in the fall/winter of 2021 with the developing and completion of plans in the first quarter of 2022

Karin Kronstal, Social Planner, advised the Committee that the levels of connectivity within the doughnut model are difficult to present currently and plan to provide Council and the community with a more holistic and clear plan in the near future.

Committee discussion took place. Highlights included:

- Focus on the indicators and how they relate to the original doughnut model
- Mix of specific and broad indicators that span across many parts of the doughnut
- Indicators that were not included and whether some will be added or taken away if they do not fit within the doughnut model
- Difficulty and confusion understanding how the indicators fit into the goals, what they are indicating and what the City wants to achieve
- Communication gaps throughout the process and suggestion of a fulsome discussion on expectations vs. reality
- Missing a strong statement on what people want the City to look like and how values measure what we want to see

Rob Lawrance, Environmental Planner, stated that the scenarios created from the indicators will integrate all the concepts of the doughnut model and will show the interconnectivity.

Bill Corsan, Director, Community Development, spoke regarding the REIMAGINE Nanaimo process. Highlights included:

- The scenarios are being built using the indicators and will influence the new Official Community Plan (OCP) and the Parks and Recreation Master Plan

- Scenarios regarding growth are based on need for land, employment and housing as well as projected 40,000 additional people moving to Nanaimo
- Indicators and scenarios can be tested to show if they will be successful or not for growth and can be altered based on that information

Dale Lindsay, General Manager, Development Services, advised the Committee that:

- Staff are in the process of amending the OCP, Parks and Recreation Master Plan within REIMAGINE Nanaimo and public engagement all at the same time
- Indicators are a valuable tool to measure and evaluate different options and scenarios for what we want to achieve
- There are options for the different Committees and Council, and if they are not comfortable with the current indicators, going back for more discussion on what may have been missed
- Staff are working in a compressed timeframe but preliminary indicators will change and evolve as more discussion takes place
- Potentially returning with indicators after Council's workshop

6. REPORTS:

(a) BC Energy Step Code Acceleration Review

Rob Lawrance, Environmental Planner, provided the Committee with an update regarding the BC Energy Step Code implementation with options to reduce GHG emissions. Highlights included:

- Review of where the City is now in the implementation and compared to other communities
- Recently the Schedule D of the "City of Nanaimo Zoning Bylaw 2011 No. 4500" was amended to provide additional amenity points on new developments
- Amended "Building Bylaw 2016 No. 7224" (2019) to require the Step Code lower steps, beginning with Step 1 in 2020 and gradually increasing to Step 3 in 2022
- Staff are looking at ways to introduce zero emissions for heating and cooling of new developments and need to address the actual energy and fuels used to heat and cool to identify the root problem of green house gas emissions
- Communication and education for developers and home owners is an important step and providing more financial incentives to home owners to switch out their current heating and cooling systems
- A new staff position is being created which will have more focus and expertise on reduction of green house gas emissions in the building sector

(b) Deep Energy Retrofit Feasibility Study for the Nanaimo Region

Rob Lawrance, Environmental Planner, provided the Committee with a brief summary of the report. Highlights included:

- Through the Federation of Canadian Municipalities the City, along with the RDN, has put forward an application to complete a Deep Energy Retrofit Feasibility Study
- The study will explore options to establish a program for home energy upgrades
- Currently there are Federal, Provincial and local rebates available to home owners
- Staff will conduct public consultation on the barriers for upgrading and how the City can make the process more efficient for home owners who want to replace inefficient appliances and windows
- The City is hoping to create an innovative financing program for home owners that will see more uptake to replace old appliances and heating/cooling systems
- The RDN recently endorsed the partnership within the City

7. ADJOURNMENT:

It was moved and seconded at 7:01 p.m. that the meeting adjourn. The motion carried unanimously.

CHAIR

CERTIFIED CORRECT:

CORPORATE OFFICER

MINUTES
ENVIRONMENT COMMITTEE MEETING
VIRTUAL MEETING
WEDNESDAY, 2021-JUL-14, AT 5:01 P.M.

Present: Councillor B. Geselbracht, Chair (joined electronically)
Councillor T. Brown (joined electronically)
E. Boulanger, At Large Member (joined electronically)
L. Frey, At Large Member (joined electronically)
J. Lesemann, At Large Member (joined electronically)
L. McCunn, At Large Member (joined electronically)
W. Wells, At Large Member (joined electronically)

Absent: D. Chen, At Large Member
H. DesRoches, At Large Member

Staff: B. Sims, General Manager, Engineering and Public Works (joined electronically)
J. Holm, Director, Development Approvals (joined electronically)
L. Bhopalsingh, Manager, Community Planning (joined electronically)
S. Snelgrove, Deputy Corporate Officer (joined electronically)
J. Vanderhoef, Recording Secretary (joined electronically)

1. CALL THE ENVIRONMENT COMMITTEE MEETING TO ORDER:

The Environment Committee Meeting was called to order at 5:01 p.m.

2. ADOPTION OF AGENDA:

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

3. ADOPTION OF MINUTES:

Committee discussion took place regarding edits to the Environment Committee Meeting Minutes from 2021-MAY-12.

Sky Snelgrove, Deputy Corporate Officer, explained that Staff will review the 2021-MAY-12 Environment Committee Minutes against the meeting recording and a revised version of the minutes will be brought forward to the next Environment Committee Meeting.

4. PRESENTATIONS:

(a) Greenhouse Gas Action Emerging Options - REIMAGINE NANAIMO

Jeremy Holm, Director, Development Approvals, spoke regarding the REIMAGINE Nanaimo process entering into Phase 2 and the Environment Committee's involvement in the process so far.

Presentation:

1. David Reid, Principal, Landscape Architect, LANARC, and Duncan Cavens, Principal, C2MP Consulting Ltd., provided a PowerPoint presentation. Highlights included:

- Focused discussion on climate action and greenhouse gases (GHG)
- Provided an overview of the agenda

Lisa Bhopalsingh, Manager, Community Planning, spoke regarding REIMAGINE Nanaimo Phase 2. Highlights included the following:

- Council received an update on 2021-JUL-12 regarding Phase 2 of the REIMAGINE Nanaimo process
- Survey regarding the draft foundations (Nanaimo doughnut), targets, and overall goals was launched 2021-JUN-28
- Opportunity for people to provide feedback on three different land use scenarios
- Goal is to consider different ways Nanaimo can move forward while considering different objectives related to climate change and population growth, and how land use can impact those objectives
- At the end of Phase 2, information gathered from the public, stakeholders, government partners, and committees be used to put together a draft Phase 3 plan
- Reviewed plans and policies being incorporated into one integrated City Plan for improved continuity

David Reid, Principal, Landscape Architect, LANARC, continued the presentation. Highlights included:

- Three videos were presented during the 2021-JUL-12 Governance and Priorities Committee Meeting regarding each land use scenario and are available on the City's website
- Reviewed the three draft scenarios:
 - Scenario 1 reflects the current path and what is in the existing Official Community Plan (OCP) and supporting documents
 - Scenario 2 is similar but includes additional mobility hubs
 - Scenario 3 is more central focused and looks at concentrating growth and urban nodes in the Downtown, Vancouver Island University (VIU) and Hospital areas

Duncan Cavens, Principal, C2MP Consulting Ltd., continued the presentation. Highlights included:

- Seeking clarification on where Nanaimo wants to be on greenhouse gas policies
- All three scenarios push Nanaimo towards a reduction in GHG over the time horizon of the OCP

- None of the three scenarios will reach Nanaimo's GHG reduction targets based on the scenarios alone
- Provided a review of what Nanaimo has committed to:
 - Reduce GHG emissions 50% by 2030 and 94% by 2050
 - Nanaimo's targets are more ambitious than the province's while having fewer resources and legislative powers
 - Emphasized how difficult the task will be and that it will require changes in policy and investments
 - Current policies that have been legislated by the province forecast reductions primarily in transportation emissions
- Reviewed three different approaches to achieving GHG reduction goals: current, moderate and aggressive
 - Current policy is unlikely to meet GHG targets without substantial Federal or Provincial intervention
 - A moderate approach pushes current policy and is somewhat within municipal powers. With moderate cost, it increases the chance of meeting targets but still seems unlikely
 - An aggressive approach is assertive and puts demands on residents and businesses. It has a high cost and pushes the boundaries of municipal powers

Committee discussion took place. Highlights included:

- Clarification regarding three scenarios meeting the anticipated growth needs for Nanaimo
- How the scenarios would align with the current, moderate and aggressive approaches to reducing GHG emissions

Duncan Cavens, Principal, C2MP Consulting Ltd., noted that a land use change would not be sufficient on it's own to reach GHG emission targets due to existing land use patterns.

Committee discussion continued. Highlights included:

- Clarification regarding the expected outcomes of the three scenarios and the need for additional approaches beyond simply a land use or mobility plan to achieve GHG emission targets
- Defining the word radical and clarification regarding reference to mixed use in the three scenarios

David Reid, Principal, Landscape Architect, LANARC, noted that there could be more than the three scenarios provided and the intent is to listen to the response from the public about these initial scenarios.

Committee discussion continued. Highlights included:

- Needing to take an aggressive and bold approach to set an example and reach Nanaimo's targets
- Impacts of COVID-19 and densification as people leave larger cities
- Need for an aggressive approach as other options would not be sufficient

- Importance of how wording is framed for the public and potentially changing wording to: status quo, moderate effort, and best we can do

Duncan Cavens, Principal, C2MP Consulting Ltd., continued the presentation. Highlights included:

- Emissions are caused by burning fossil fuels, vehicles, natural gas, oil for heating and hot water
- Emissions are based on the amount of energy needed and how efficiently things operate
- Different fuel types have different carbon emissions
- Renewables (like solar power) don't always reduce GHG emissions
- Reviewed current assumptions regarding buildings and where most building emissions will come from in 2050
- Discussed the potential differences in building emissions under each of the three scenarios:
 - Scenario 1 continues current trend and focuses growth in higher density buildings (less likely to meet targets)
 - Scenario 2 more redevelopment of existing buildings reducing need to retrofit, more multi-family building types
 - Scenario 3 highest density buildings
- Reviewed assumptions regarding new construction: BC Building Code net zero by 2032, 10,000 new units before 2032, 85% use natural gas, all buildings built now will need to be retrofitted by 2050
- Reviewed examples of current, moderate and aggressive approaches to reducing GHG emissions in new construction

Committee discussion took place. Highlights included:

- Lower mainland implementing boundaries and effectiveness of white roofs
- Multiple paths to arrive at a net effect on GHG emissions and need to consult the public
- Unclear on legality of taking a moderate or aggressive approach
- Totality planning needed to reach targets
- Requested a presentation explaining how to pursue the most aggressive approach with examples of how each option/step would impact Nanaimo's GHG emission targets
- Supporting an aggressive approach and fuel switching

Duncan Cavens, Principal, C2MP Consulting Ltd., continued the presentation. Highlights included:

- Reviewed assumptions regarding retrofits: 65% of building stock will still exist in 2050, electric baseboards are currently being replaced by natural gas, approximately 25% of housing units need to have fossil fuel systems replaced with zero carbon systems by 2030
- Reviewed the current policies and incentives being implemented in other municipalities

- Increasing Nanaimo's Better Home BC Grant top ups to \$2000 could cost \$6 million a year

Committee discussion took place regarding clarification of the percentages and dollar amounts provided in the presentation and creating incentive.

Duncan Cavens, Principal, C2MP Consulting Ltd., continued the presentation. Highlights included:

- Reviewed assumptions related to transportation and default is to move vehicles to electric and zero emission
- Discussed the potential differences related to emissions from transportation under each of the three scenarios:
 - Scenario 1 builds on existing policies and trends with moderate densification
 - Scenario 2 services distribution hubs and might reduce transportation demands by locating daily needs closer to homes
 - Scenario 3 focuses services, jobs and homes in the centre which lowers need for travel and result is less vehicle use
 - Scenario 2 and 3 require infrastructure to be in place or they will not be successful

Committee discussion took place regarding Snuneymuxw First Nation (SFN) lands being included in the scenarios provided.

Lisa Bhopalsingh, Manager, Community Planning, noted that Staff are sharing information with SFN to design potential plans.

Duncan Cavens, Principal, C2MP Consulting Ltd., continued the presentation. Highlights included:

- Reviewed assumptions related to active transportation: Transportation Plan increases walking, biking and transit use, reduction in distance driven per individual and if targets are met 17% GHG reduction by 2050
- Reviewed the current actions being implemented in other municipalities under the current, moderate and aggressive approaches to reducing GHG emissions related to active transportation: reducing parking in new development, investing in end of trip bike facilities, actively reallocating road space from parking to active transportation, making dedicated road space for transit to ensure transit is faster than private vehicle, remove parking minimums
- Many changes take 30-40 year time horizon

Committee discussion took place regarding mixing in mobility hubs and increasing transit efficiency and connectivity in scenarios 2 and 3.

Lisa Bhopalsingh, Manager, Community Planning, noted Nanaimo is linear and achieving density is challenging. If it is still convenient for people to drive, they will still choose to drive even short distances.

Duncan Cavens, Principal, C2MP Consulting Ltd., continued the presentation. Highlights included:

- Making driving more difficult and ensuring the infrastructure is available to allow people to be active and use alternative means of transportation
- Reviewed current and projected statistics for electric vehicles in Nanaimo
- Reviewed Nanaimo's current approach to reducing GHG emissions and what other municipalities are doing to take a moderate or aggressive approach

Committee discussion took place. Highlights included:

- Potential costs to developers for implementing electric vehicle chargers
- Equity for purchasing electric vehicles
- Limitations when retrofitting older multifamily buildings due to electrical capabilities and strata regulations

Duncan Cavens, Principal, C2MP Consulting Ltd., continued the presentation. Highlights included:

- Reviewed current assumptions related to solid waste: contributed to 5% GHG emissions in 2017 and 11% by 2050, key driver of GHG emissions from waste is decomposition of organics
- Nanaimo is currently taking a moderate approach to solid waste with high targets set at 90% reduction by 2029 and focus on organics diversion
- Aggressive approach requires deconstruction instead of landfilling in building construction, aggressive reduction in organic matter going to landfill, waste to energy for remaining organics/plastics

Committee discussion took place. Highlights included:

- How GHG emissions are being calculated and feasibility of implementing required building deconstruction in Nanaimo
- Circular City Initiative providing opportunities to build knowledge and leverage opportunities

Duncan Cavens, Principal, C2MP Consulting Ltd., noted that the District of Saanich has done an analysis of embodied emissions and are only decreasing emissions by 20%.

Duncan Cavens, Principal, C2MP Consulting Ltd., continued the presentation. Highlights included:

- GHG modelling will continue into the fall
- Environment Committee might be included in meetings as a stakeholder group; however, it is important to engage with the larger community and educate them so they understand the severity

David Reid, Principal, Landscape Architect, LANARC, continued the presentation. Highlights included:

- Areas of climate/environmental focus going forward:
 - Adaptation of climate change
 - Watersheds: water quality and quantity
 - Habitat conservation and restoration
 - Urban forest and vegetation cover, urban agriculture
 - Potential integrating options
- Encouraged members to review slides provided during the 2021-OCT-07 Environment Committee Meeting and review BC Adapts Video Series online

Lisa Bhopalsingh, Manager, Community Planning, spoke regarding REIMAGINE Nanaimo and Phase 2. Highlights included:

- Surveys on foundations and scenarios are available online for feedback
- Series of workshops scheduled to explore options
- Multiple ways to engage: workshop series, self-guided workshop, a number of videos, and MetroQuest Platform
- MetroQuest Platform allows people to explore where they would like to see different types of construction and amenities in Nanaimo
- Have been engaging elementary student through art with a goal of engaging their parents

Committee discussion took place. Highlights included:

- Priorities in REIMAGINE NANAIMO scenarios drawn from Phase 1 feedback and are intended to create discussion
- Importance of educating the public and communication to the public leading with goals

5. ADJOURNMENT:

It was moved and seconded at 7:00 p.m. that the meeting adjourn. The motion carried unanimously.

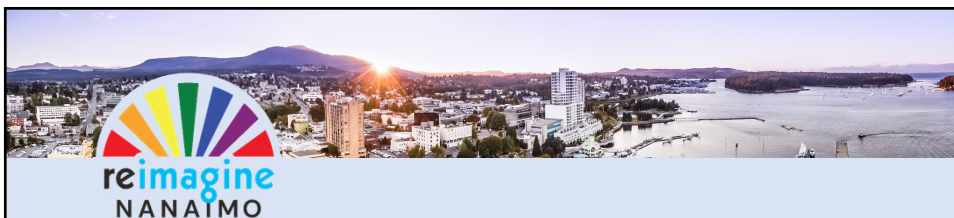
CERTIFIED CORRECT:

CHAIR

CORPORATE OFFICER



REIMAGINE ENVIRONMENTAL POLICY UPDATE
2021-OCT-20



Agenda

1. Process Update (15 minutes)
2. Policy and Action Plan Overview (25 minutes)
3. Next Steps and Project Timeline (5 minutes)



Our river Our mountain Our ocean

As a painter I have walked this land. I have tried to capture the spirit of this land

Our river
Our mountain
Our ocean

This land does not belong to you or I. It belongs to our great great grandchildren. We need to

Take care of our rivers
Take care of our mountains
Take care of our ocean



We need to work collectively,
One body
One mind
One spirit.

The legacy of our decisions today, our children will write tomorrow.



Project Overview

WE ARE HERE!

 PHASE 1 GATHERING IDEAS <small>SUMMER - WINTER 2020</small>	 PHASE 2 EXPLORING OPTIONS <small>SPRING - FALL 2021</small>	 PHASE 3 DEVELOPING PLANS <small>FALL - WINTER 2021/2022</small>
Phase 1 was about sharing information and listening to the community's ideas for Nanaimo's future.	Phase 2 is focused on identifying and evaluating different options for how our community can achieve its shared vision and goals.	Phase 3 will develop preferred directions into plans, policies, and actions that will guide Nanaimo's future.



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NANAIMO**

Phase 1 Engagement –



WHAT ARE OUR PRIORITIES RELATED TO ENVIRONMENT AND CLIMATE CHANGE?

STATEMENTS IDENTIFIED AS TOP ENVIRONMENT AND CLIMATE CHANGE PRIORITIES

- 1 managing impacts to environmentally sensitive areas
- 2 improving solid waste management of organics and reducing, reusing, and recycling
- 3 managing impacts to urban streams and wetlands related to human activities

OTHER COMMONLY MENTIONED PRIORITIES INCLUDE:

- Improving the multi-modal transportation network
- Offering environmental education opportunities
- Creating green land-use plans and policies
- Enhancing and supporting local food systems

HOW IMPORTANT ARE ENVIRONMENT AND CLIMATE CHANGE ISSUES?

Over 60% of respondents in both surveys rated every environment / climate change issue in the surveys as very important or important

Typically, public questionnaire participants placed a slightly higher level of importance on environmental and climate change statements than statistical survey participants

- In general, people love Nanaimo's access to nature but are concerned about loss of natural areas
- Market environmental successes, more to create, more behavioral change
- Indicators and Targets need to reflect more than satisfaction (intangible qualities)
- More networking and direction with volunteer groups
- Place-based survey with neighbourhood groups



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Phase 2 Engagement –2200 participants

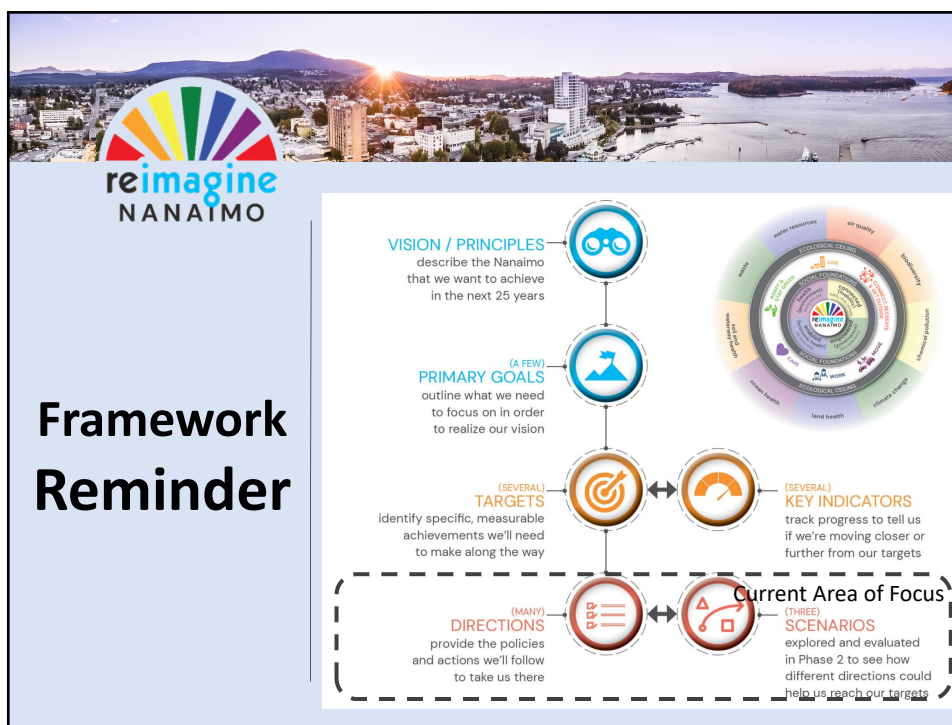


- 8 public workshops and many stakeholder groups (incl. NALT)
- 2 representative sample workshops
- 2 online surveys
- Youth engagement (high schools, art kits, LIT/Quest)
- Community outreach (tourist kiosks, pop-up booths, COVID clinic, community spirit team, static info in public space)
- Social Media (TikTok pilot, Facebook, Instagram, Twitter)

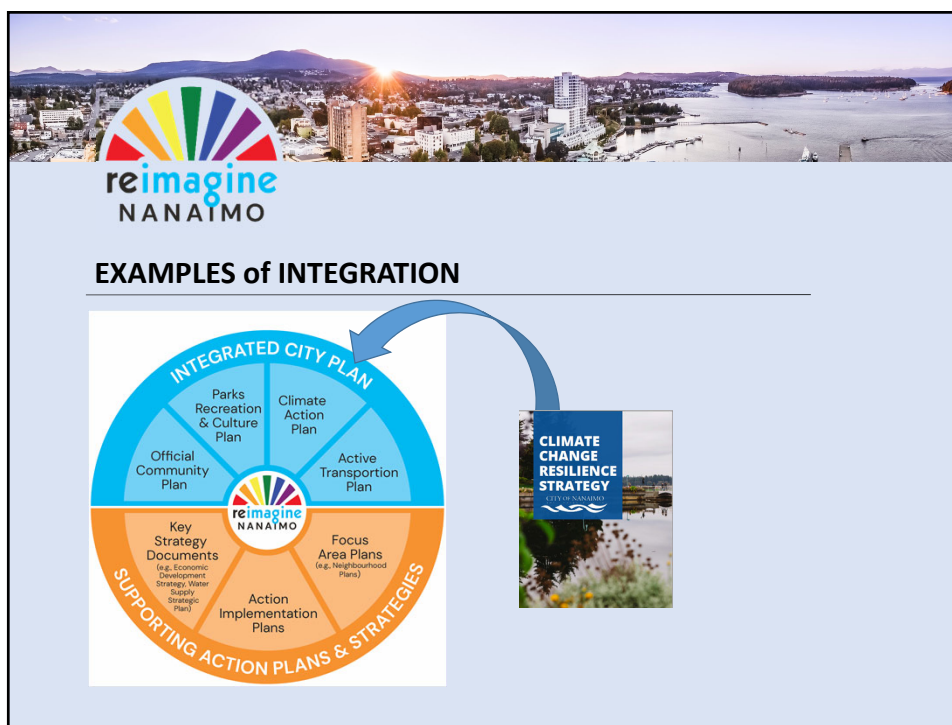



Phase 2 Engagement Summary

- Early themes being identified
- Draft targets and indicators being finalized using input
- Full Phase 2 Engagement Summary by November 2021
- Emerging workshop themes included:
 - Conserving natural assets
 - Creating walkable neighbourhoods
 - Transit improvements to support less car trips
 - Wildlife corridors to connect open spaces
 - Active Transportation important to addressing climate change/GHGs
 - Positive scenario features in both scenario 2 and 3



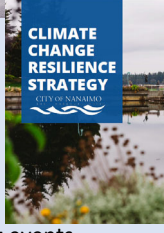






**reimagine
NANAIMO**

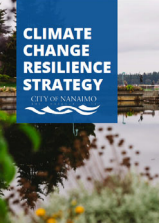
Topic: Climate Change/Environment and Hazards

 **Goal:** A Green Nanaimo

 **City Plan Policy:** Improve community capacity and resilience following events by increasing public awareness of climate change, its expected impacts, and how the community can prepare

 **Action Plan:**

- Develop a sea level rise DPA with guidelines for new development/renovation and infrastructure placement in areas at risk of coastal flooding
- Identify forest interface wildfire risk areas adjacent to residential areas and City infrastructure, and establish a wildfire DPA




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Development Permit Areas

Justification and Objectives in City Plan
DPA Guidelines in Zoning Bylaw | Best Practice and Greater Enforceability

Existing DPAs – Proposed refinements to:

- DPA 1 through DPA 9 and HCA1
- More details on DPA 1 to follow

New DPAs Under Consideration

- Sea Level Rise
- Coal Mine Hazard
- Wildfire Interface

No.	Development Permit Area (DPA)
1	Watercourses (DPA1)
2	Environmentally Sensitive Areas (DPA2)
3	Natural Hazard Lands (DPA3)
4	Nanaimo Parkway Design (DPA4)
5	Steep Slope Development (DPA5)
6	Stewart Avenue Corridor (DPA6)
7	North Terminal Avenue Area (DPA7)
8	Old City Neighbourhood (DPA8)
9	Commercial, Industrial, Institutional, Multiple Family and Mixed Commercial/Residential Development (DPA9)




Topic: Climate Change/Well-being and Preparedness


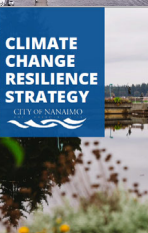
Goal: A Green Nanaimo

City Plan Policy: Continue to work with community partners to minimize health impacts of extreme weather (higher heat days and poor air quality from wildfires) on residents

Action Plan:

- Develop an Extreme Heat Response Strategy that includes information on cooling spaces that can serve community members during heat waves
- Work with Island Health and other stakeholders to deliver coordinated information on what the public can do during heat waves and poor air quality events

****Note actions underway through heat response strategy****

Topic: Climate Change/Flooding and Drainage

Goal: A Green Nanaimo

City Plan Policy: Strive to minimize urban and overland flooding resulting from heavy rainfall

Action Plan:


- Incorporate natural systems that help control storm water flows (i.e. bioswales) into capital planning projects


****Note that this is an action that reinforces what is currently done through City capital projects (e.g. Boxwood Connector Project)****



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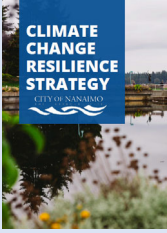
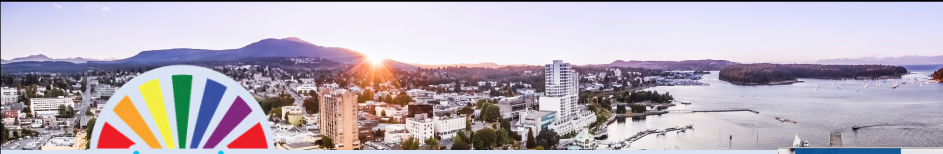
Topic: Climate Change/Government

 **Goal:** A Green Nanaimo

 **City Plan Policy:** Improve the city's agility in responding and recovering from climate related hazard events


 **Action Plan:**


- Incorporate climate change resilience into the review and development of asset management plans
- Ensure contingency reserves that contain an allowance for recovery from climate related events





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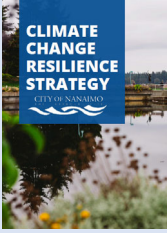
Topic: Climate Change/Partnerships

 **Goal:** A Green Nanaimo

 **City Plan Policy:** Work with neighbouring jurisdictions to support climate change resilience and limit transfer of risk across jurisdictional boundaries

 **Action Plan:**

- Continue to work with the Snuneymuxw First Nation and other regional partners on the Nanaimo Estuary management committee and Nanaimo River watershed routable to support climate adaption initiatives that conserve and enhance habitat and protect property within the watershed





Behavioral Change






Watercourse Protection Framework Review



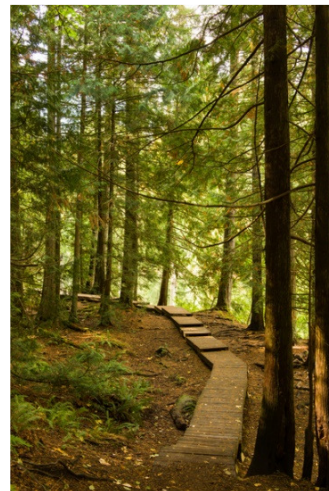
Federal & Provincial Legislation

Federal Legislation

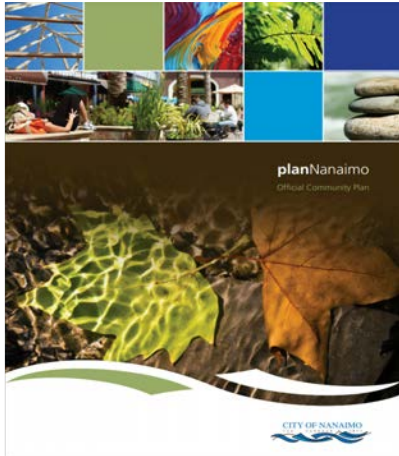
- Fisheries Act
- Species at Risk Act

Provincial Legislation

- Local Government Act
- Wildlife Act
- Riparian Areas Protection Act
- Riparian Areas Protection Regulation
- Water Sustainability Act
- Contaminated Site Regulation

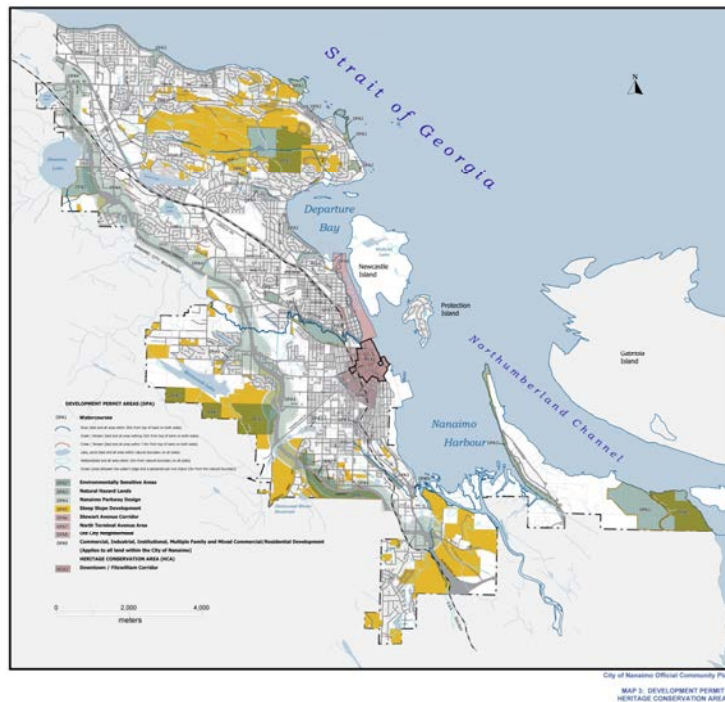


Bylaws



Bylaws

- Official Community Plan (DPA 1 and 2)
- Zoning Bylaw 4500
- Management and Protection of Trees Bylaw No. 7126
- Pesticide Use Bylaw No. 7102
- Soil Removal and Depositing Bylaw 1976 No. 1747

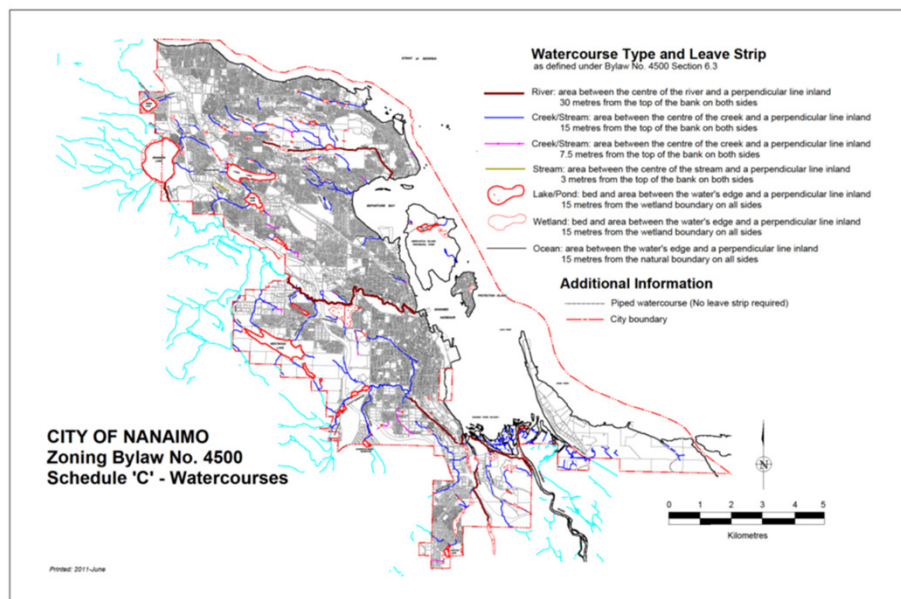


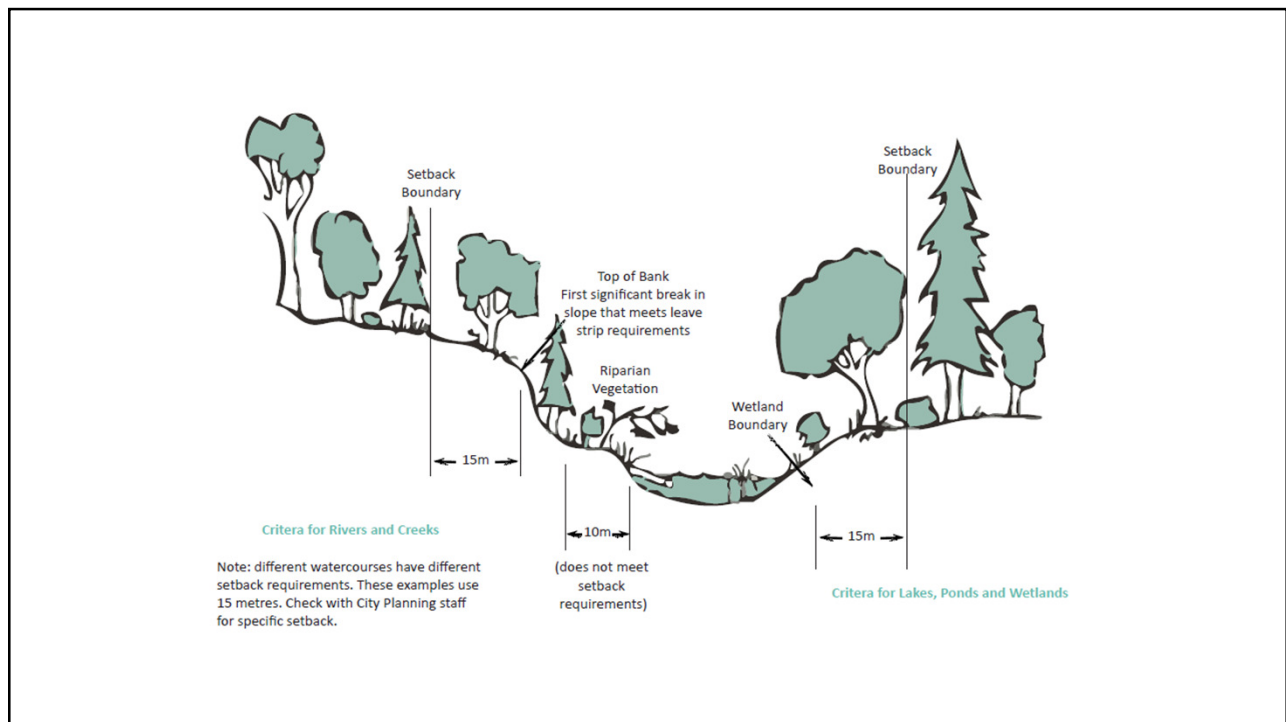
Watercourses

Zoning Bylaw 4500 – Watercourses – Schedule C

No structure shall be within:

- 15m or 30m setback from top of bank of a stream
- 15m setback from wetland boundary of a lake or wetland
- 3m and 7.5m on none fish-bearing watercourses
- Variances through Development Permit Process
- Lot areas calculations exclude the aquatic setback in residential zones





How Did The Current Framework Develop

- Watercourse protection regulations were adopted in Zoning Bylaw 4000 in 1996
- 2004 Fish Protection Act (Riparian Area Protection Act 2019) and Riparian Area Regulation (Riparian Area Protection Regulation 2019) adopted by the Province
- Two options for compliance:
 - Riparian Assessment Areas (RAA) – blanket 30m assessment area
 - Meet or beat RAPR requirement
- City confirmed its bylaw and DPA watercourse setback requirement met or exceed RAPR requirement – RAPR Simple Assessment Methodology

Zoning Bylaw No. 4500

- City of Nanaimo Zoning Bylaw 4000 in place since **1996**
- City of Nanaimo watercourse setbacks meet or exceed RAPR requirements
- RAPR triggered when variance to watercourse setbacks is requested
- RAPR does not consider wildlife habitat
- Local Government has the discretion to have more stringent protection requirements than RAPR



Zoning Bylaw No. 4500

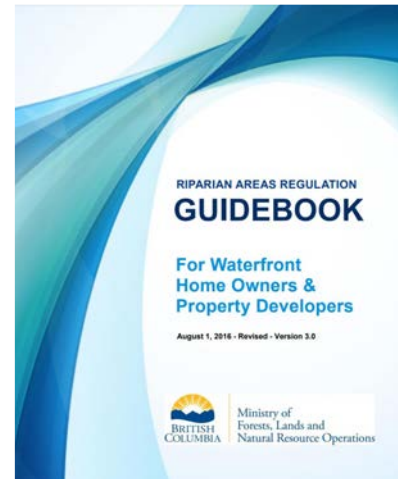


Development Permit Areas (DPA 1)

- Identify and protect aquatic and ESA setbacks
- A lot effected by a DPA is required to go through the DP process
- The DP process is used to vary the Zoning Bylaw when required
 - Existing (prior to 1996) Legal lot
 - all mechanisms to avoid the DPA are exhausted
 - The encroachment is mitigated at no net loss of functional habitat
 - DP conditions ensure mitigation is successful

Riparian Areas Protection Regulation (RAPR)

- Provincial regulation from the Riparian Area Protection Act
- For the protection of fish and fish habitat only
- Streamside Protection and Enhancement Area (SPEA) measured from high water mark
- SPEA is the minimum protection to avoid HADD under Fisheries Act



FAQs

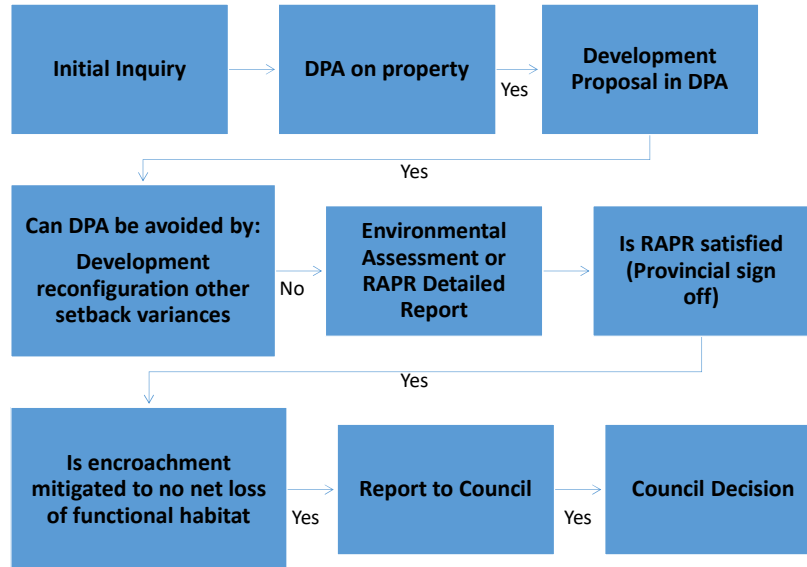
1. Are City Setback and RAR Streamside Protection Areas (SPEAS) always the same?



FAQS

1. When is Council approval required?
2. How are watercourse setback areas protected in new developments?
3. What approvals does the City require to work in and around watercourses?

Development Review Process In DPA



Environmentally Sensitive DPA 2

- Non-fish-bearing watercourses and wetlands
- Terrestrial herbaceous
- Older forest
- SARA (critical habitat protection) and Red/Yellow listed species



Environmentally-Sensitive DPA

Process

- Development application
- Request environmental assessment be completed by Qualified Environmental Professional (RPBio)
- Assessment review by staff
- ESA protection through DP conditions

Marine Foreshore

- 15 m from natural boundary of the ocean



DPA 1 and 2 Review

Review of DPA 1 and 2 Guidelines Identified Potential Changes?

- No net loss changed to net gain
- Stronger wording around priority guidelines - avoid, mitigate and compensate encroachments
- Updated mapping
- Required QEP monitoring, post development inspection and reporting
- Improved planting and maintenance standards for riparian restoration

DATE OF MEETING OCTOBER 20, 2021

AUTHORED BY SKY SNELGROVE, STENO COORDINATOR AND DEPUTY CORPORATE OFFICER

SUBJECT 2022 ENVIRONMENT COMMITTEE KEY DATE CALENDAR

OVERVIEW

Purpose of Report:

To present the Environment Committee with the 2022 Environment Committee Key Date Calendar for information.

BACKGROUND

Each year a meeting schedule is prepared for the upcoming year. The Key Date Calendar is prepared in accordance with "Council Procedure Bylaw 2018 No. 7272" which states that the Corporate Officer is responsible for establishing a regular schedule of committee meetings.

DISCUSSION

The 2022 schedule is based on the 2021 schedule with Environment Committee Meetings held on select Wednesdays, generally every two months, from 5:00 p.m. to 7:00 p.m. Meetings are scheduled to be held in the Boardroom, Service and Resource Centre; however, due to the public health order, meetings are currently held electronically and Staff expect them to continue to be held electronically for the foreseeable future. Meetings will transition back to in person based on public health guidelines and recommendations from the Ministry of Municipal Affairs. Where revisions to the schedule are required, notice must be provided and the key date calendar updated.

Due to the limited availability of Staff and Council's meeting commitments, there is little flexibility to adjust the meeting dates. Any proposed changes will be reviewed by the Corporate Officer prior to the calendar being adjusted.

CONCLUSION

Meeting invitations will be distributed to members and staff once the calendar is received.

SUMMARY POINTS

- Environment Committee meetings are scheduled on select Wednesday's from 5:00 p.m. to 7:00 p.m.

- Meetings are scheduled to be held in the Boardroom, Service and Resource Centre; however, based on the public health guidelines the meeting method may be adjusted.

ATTACHMENTS

Attachment A: 2022 Environment Committee Key Date Calendar |

Submitted by:

Sheila Gurrie,
Director, Legislative Services |

Concurrence by:

Richard Harding
General Manager, Parks, Recreation and
Culture

Dale Lindsay,
General Manager, Development Services

Bill Sims
General Manager, Engineering and Public
Works
|

City of Nanaimo

**ENVIRONMENT COMMITTEE
KEY DATE CALENDAR – 2022**

Committee meetings are currently held electronically. Meetings may transition to in person based on public health guidelines. In person meetings will be held in the boardroom on the first floor of the Service and Resource Centre at 411 Dunsmuir Street unless otherwise stated.

Committee	Start Time	End Time	Day of the Month
Environment Committee	5:00 p.m.	7:00 p.m.	Select Wednesdays, every two months

January 3 New Year's Day observed

January 26 Environment Committee

March 30..... Environment Committee

May 23 Victoria Day

May 25 Environment Committee

July 1..... Canada Day

July 27 Environment Committee

September 5..... Labour Day

September 10-14..... UBCM Conference – Whistler

September 28..... Environment Committee

November 11..... Remembrance Day

November 30..... Environment Committee