Comox Valley REGIONAL DISTRICT

Staff report

DATE: August 2, 2018

FILE: 6430-04

TO: Chair and Directors
Electoral Areas Services Committee

FROM: Russell Dyson
Chief Administrative Officer

Supported by Russell Dyson
Chief Administrative Officer

R. Dyson

RE: **Coastal Flood Adaptation Strategy and Grant Funding Proposal Baynes Sound (Excluding Denman / Hornby Islands) (Electoral Area A), Lazo North (Electoral Area B), and Puntledge Black Creek (Electoral Area C)**

Purpose
To present a proposed Coastal Flood Adaptation Strategy (CFAS) Terms of Reference and to seek approval to apply for Stream 2 funding through the National Disaster Mitigation Program (NDMP) and the Union of BC Municipalities (UBCM) – Community Emergency Preparedness Fund (CEPF) for coastal flood mapping for Comox Valley Regional District (CVRD) Electoral Areas A, B and C.

Recommendation from the Chief Administrative Officer:
THAT the board authorize staff to make an application to the National Disaster Mitigation Program and the Union of BC municipalities Community Emergency Preparedness Fund for flood mapping and flood mitigation planning for the Comox Valley Regional District Electoral Area A (Baynes Sound - excluding Denman/Hornby Islands), Electoral Area B (Lazo North, and Electoral Area C (Puntledge – Black Creek);

AND THAT the board endorse the Coastal Flood Adaptation Strategy Terms of Reference, attached as Appendix A, to this report dated August 2, 2018, as the basis of the grant application.

Executive Summary

- The CVRD has over 87 kilometres of coastline in its jurisdiction (Electoral Areas A (excluding Denman/Hornby Islands), B and C). With climate change, the area is experiencing greater impacts each year and coastal areas can expect more frequent and severe flooding from sea level rise and storm surges.
- This report is to present the board with a proposed Terms of Reference for the development of a CFAS that will address flood hazard and incorporate long-term flood protection needs resulting from forecast climate change. The goal of the strategy is to help prepare the Comox Valley for a changing climate and support the electoral areas to become more resilient.
- The impetus for this strategy is two-fold: the Regional Growth Strategy (RGS) climate change adaptation goal and the recently amended Provincial Flood Management Guidelines. However, the timing to bring the strategy forward is related to the funding opportunities, which are time sensitive with intake deadlines closing end of summer and fall 2018.
- To develop the strategy, the CVRD will need to obtain coastal flood mapping. The NDMP and CEPF funding programs are currently available to help local governments prepare for disaster mitigation planning and hazard management (deadline for application intake is August 31, 2018).
- Staff is seeking authorization to apply for funding through the NDMP Stream 2 and the CEPF for coastal flood mapping. Once the coastal flood mapping is complete, the CVRD

will be able to update land use regulations relating to the management of lands in coastal areas regarding sea level rise and bring the CVRD into compliance with the recently amended Provincial Flood Hazard Area Land Use Management Guidelines.

Prepared by:	Concurrence:
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Stakeholder Distribution (Upon Agenda Publication)

None	✔

Background/Current Situation

Coastal areas, such as the Comox Valley's coastal floodplain, can expect more frequent and severe flooding from sea level rise and storm surges. The CVRD encompasses a geographic area of approximately 1,725 square kilometres and a population of 66,195 as per the 2016 census. The coastline stretches 87 kilometres from Oyster River in the north to Cook Creek in the south (Electoral Area A (excluding Denman/Hornby Islands), B, and C). These areas are home to residential neighborhoods, farms, businesses, critical infrastructure, public parks, and transportation corridors and internationally recognized bird and wildlife habitat. Each year the region is experiencing greater impacts from climate change that could jeopardize the community. These impacts include damaging winds, heavy snow, rainfall, ice storms, high tides and storm surges.

Sea level rise is driven by a global increase in average temperature which is causing glaciers and ice sheets to melt and ocean waters to expand. By 2100 or sooner, we can expect sea level rise in the CVRD of up to 0.8 metres. At the same time, storms are expected to become more severe and more frequent. A significant storm surge at the same time as a high tide would result in wave run-up and upland flooding. Some low lying coastal areas can expect to be regularly inundated as sea levels and the ferocity of storms continue to increase.

Flood Hazard Area Land Use Management Guidelines Amendment

The Province has amended the Flood Hazard Area Land Use Management Guidelines to account for projected sea level rise impacts (in effect January 1, 2018). The *Local Government Act* (RSBC, 2015, c. 1) (LGA) requires local governments to implement the Provincial guidelines.

Local governments in the region are beginning to undertake mapping exercises and flood risk assessments in order to develop sea level rise adaptation strategies. The Regional District of Nanaimo, City of Campbell River, Town of Qualicum Beach and District of Tofino have begun this process by applying for funding to conduct flood risk assessments and flood mapping areas that will be affected by coastal flooding and sea level rise. Appendix A outlines a terms of reference for the CVRD to prepare a CFAS.

Funding Programs Available

The federal and provincial governments have partnered to offer resources and funding to assist local governments prepare for disaster mitigation planning and hazard management. In 2014, the federal government developed the NDMP. The program addresses rising flood risks and costs, and the development of mitigation investments (e.g. risk assessments and flood mapping) that could reduce

or negate the effects of flood events. The NDMP's fifth and final intake deadline is August 31, 2018. Projects approved for funding will be announced during the spring of 2019.

The Province, through UBCM is offering the CEPF, intended to enhance the resiliency of local governments and their residents in responding to emergencies. The program will announce the second intake deadline soon, but will most likely close October 2018. The funding streams are for flood risk assessment, flood mapping and flood mitigation planning.

Coastal Flood Adaptation Strategy

To prepare for these changes and build resiliency, staff proposes that a CFAS be developed to address flood hazard and incorporate long-term flood protection needs resulting from forecast climate change. The CFAS project will be a multi-year project with several phases outlined in Appendix A. The first phase, consists of seeking grant funding opportunities, named above, for coastal flood mapping. The second phase includes retaining a consultant(s) to undertake the coastal flood mapping. Data would be analyzed to determine new flood construction levels and building setbacks to ultimately inform new land use policy, infrastructure decisions and development approvals.

Relatedly, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (GeoBC) is in the process of collecting LiDAR data and orthoimagery to be used for risk analysis, mapping and management to be made available to all levels of government. This data will inform floodplain mapping, sea level rise, tsunami modelling, climate change analysis, and slope stability across B.C.'s coastal communities. This work will begin in the summer of 2018 and conclude by fall 2018, with the mapping data available in spring 2019. This timing aligns with the projected announcement of successful grant recipients.

Next Steps

Staff is seeking board approval to submit an application under the NDMP Stream 2 for coastal flood mapping of the entire electoral areas' coastline, which will help to identify the boundaries of a potential flood event based on type and likelihood, as well as help identify the specific impacts of a flood event on structures, people and assets. If successful in completing this phase, the CVRD can apply for other streams of funding under the CEPF for flood mitigation initiatives.

Policy Analysis

LGA Section 524 gives authority to local governments to designate lands as a flood plain and determine appropriate building setbacks and flood construction levels. In making flood bylaws, local government must consider the Provincial guidelines and comply with the Provincial regulations and a plan or program the local government has developed under those regulations.

The Rural Comox Valley Official Community Plan Bylaw No. 337, 2014 has several policies that encourage developing strategies:

- Section 14(1) to reduce the impact of sea level rise and increasing storm surges.
- Section 16(7) to explore managed retreat in areas prone to flooding and sea level rise.
- Section 73(6) to seek opportunities to map coastal areas that are at risk due to sea level rise.

Options

The board has the following options:

1. Authorize staff to apply for grant funding on the basis of the proposed CFAS Terms of Reference (Appendix A).
2. Direct staff to return with an alternate proposal to achieve implementation of the new provincial Flood Hazard Area Land Use Management Guidelines.

Based on the discussions contained within this report, staff recommends option 1.

Financial Factors
The CVRD is in need of acquiring flood data and mapping in order to update Bylaw No 2782, being the "Floodplain Management Bylaw, 2005", to come into compliance with the Provincial flood guidelines. The CFAS is intended to be implemented using a phased approach, over multiple years, using external funding where possible and in-kind contributions from the CVRD (e.g. staff time). Projects with similar scope of work (i.e. similar coastlines) (Regional District of Nanaimo and Comox Valley Emergency Program) have been estimated at $150,000 to $300,000. Each funding stream can contribute a maximum of 100 per cent of the cost. If some but not all of the fully budgeted amount of grant funding is obtained, priority areas will be scaled or phased as needed. Any in-kind or cash contributions to the project from the CVRD, community partners or other grant funding will need to be included in the application as information. This amount will be determined when the project budget is established during the application process. The upcoming budget cycle will provide the CVRD with the opportunity to allocate additional funds to this project. Projects (coastal flood mapping) under the NDMP funding stream need to be completed by March 31, 2020.

Legal Factors
LGA Section 524 specifies that local governments must consider the Provincial guidelines and comply with Provincial regulations and a plan or program the local government has developed under those regulations. As the Flood Hazard Area Land Use Management Guidelines were amended January 1, 2018, the CVRD must now consider the new Provincial Guidelines. There is some risk related to not updating the Floodplain Bylaw.

Regional Growth Strategy Implications
This project will set the direction for future actions that will support several goals in the RGS. In particular the strategy relates to climate change, public safety, housing and the environment and ecosystems. Specifically this strategy supports the following:

- Objective 1-D: Direct new housing away from high risk natural hazard areas such as flood plains and areas prone to sea level rise.
- Objective 2A-2: Update environmental mapping to depict critical information such as sensitive ecosystems, watercourses and riparian areas, parks and greenways, and working landscapes including the Agricultural Land Reserve.
- Objective 8-F: Create a climate change adaptation plan as part of future local planning process.
- Objective 8F-2: Promote inclusion of climate change modeling and impacts in future infrastructure and resource studies.
- Objective 8F-5: Consider a regional approach to floodplain mapping and management to account for climate change/potential sea level rise and to ensure consistent application of development controls within floodplain and coastal areas.

Intergovernmental Factors
As mentioned earlier, adjacent local governments are also in the process of updating their flood mapping. The City of Campbell River and the Regional District of Nanaimo have both been awarded funding to conduct a risk assessment and coastal flood mapping through UBCM's CEPF and the NDMP. The CVRD will stay apprised of their work to identify opportunities for a consistent regional approach to coastal flood planning.

The Town of Comox has identified updating the floodplain designation bylaw as a work program item for 2021. City of Courtenay has already completed the Integrated Flood Management Study in

2013 and are working through the study's recommendations. At this time, Engineering Services is reviewing structural mitigation projects such as dike replacement.

The CFAS Terms of Reference (Appendix A) identifies the Town of Comox, the Village of Cumberland, the City of Courtenay and K'ómoks First Nation as stakeholders and Appendix B outlines consultation for the first phase of the project. Once funding has been announced, staff will prepare a consultation strategy for phase 2, identifying opportunities for the municipalities to be engaged. Once the coastal flood mapping is complete, staff will share the data with neighbouring jurisdictions to ensure aligned coastal flood management.

Interdepartmental Involvement

The Comox Valley Emergency Program and Planning services have been working closely together over the last several months in anticipation of the NDMP intake application deadline as both branches have been working towards submitting project proposals for Stream 2 funding. Emergency Management BC, who administers NDMP in BC, has recommended that the CVRD submit a coordinated application for the two projects. The coordinated application would expand the Oyster River/Saratoga Beach project area to include the entire CVRD electoral area coastline in addition to expanding the scope to include climate change impacts such as seal level rise, coastal inundation, erosion and storm surge.

Comments from engineering services (water/wastewater services, liquid waste planning), parks, corporate services (information systems and GIS), Comox Valley Emergency Program and transit and sustainability have been incorporated into the staff report and Terms of Reference. In recognition that sea level rise is a regionally significant issue that affects many departments, and that coastal floodplain mapping will benefit a wide range of CVRD departments, this is envisioned as a cross-departmental project. Various departments have been identified as having an interest in some components of this program. Each department will be invited to join an interdepartmental working group as either an active member, who will take part in quarterly meetings or as an indirect member, who will receive periodic project updates. The working group will advise on the need for technical data to develop the CFAS, oversee and review materials prepared to engage with stakeholders and advise on the development of the flood mitigation strategies.

Citizen/Public Relations

A consultation plan (Appendix B) has been developed internally with coordination from the communications department. The plan identifies the scope and scale of the project's first phase public engagement strategy, outlining the guiding principles, stakeholders, budget, and communications and engagement strategies.

Attachments: Appendix A – "Coastal Flood Adaptation Strategy Terms of Reference"
Appendix B – "Consultation Plan"

Comox Valley REGIONAL DISTRICT

Coastal Flood Adaptation Strategy

Terms of Reference

June 14, 2018

1. Introduction

This Terms of Reference outlines a process for adapting to impacts of sea level rise in the Comox Valley Regional District (CVRD) coastal areas. For the purpose of this Terms of Reference, sea level rise means the effects of climate change on coastal areas including a rise in sea level as well as increased frequency and severity of storms. The project is part of implementing goals and policies in the Regional Growth Strategy (RGS) and Official Community Plan (OCP) that support climate change adaptation.

Sea level rise is driven by a global increase in average temperature which is causing glaciers and ice sheets to melt and ocean waters to expand. By 2100, we can expect a global sea level rise of 1.0 metres which for central Vancouver Island translates to 0.8 metres after taking into account local land uplift. At the same time, storms are expected to become more severe and more frequent. A significant wind storm causing storm surge concurrent with high tide will result in wave run-up further inland, and flooding that could become increasingly more severe.

1.1 Goal

For the CVRD to adapt to the projected impacts of sea level rise and climate change.

1.2 Objectives

- To build knowledge and understanding of the projected impacts of sea level rise both internally and with the public.
- To assess the region's risk and vulnerability to the projected impacts of sea level rise.
- To determine actions for the CVRD to adapt to projected impacts of sea level rise.
- To become compliant with the amended provincial Flood Hazard Area Land Use Management Guidelines.
- To encourage property owners and citizens to take action to adapt to sea level rise and enhance resilience.
- To include sea level rise adaptation in public investment/infrastructure decisions.

1.3 Strategic Direction

The following policies and plans support sea level rise adaptation in the CVRD:

Table 1: Strategic Polices and Plans
Regional Growth Strategy (2011) Objective 1-D
Direct new housing away from high risk natural hazard areas such as flood plains and areas prone to sea level rise.
Objective 2A-2
Update environmental mapping to depict critical information such as sensitive ecosystems, watercourses and riparian areas, parks and greenways, and working landscapes including the Agricultural Land Reserve.
Objective 8-F1
Create a climate change adaptation plan as part of future local planning process.

Objective 8F-2
Promote inclusion of climate change modeling and impacts in future infrastructure and resource studies.
Objective 8F-5
Consider a regional approach to floodplain mapping and management to account for climate change/potential sea level rise and to ensure consistent application of development controls within floodplain and coastal areas.
Official Community Plan (2014) Climate Change 14 (1)
Develop strategies to reduce the environmental, social and economic impact of sea level rise and increasing extreme storm surge events in coastal areas through development permit area designations and conditions and submission of development approval information in accordance with policies included within this OCP.
Climate Change 14 (2)
Work with stakeholders to complete an assessment of risk and susceptibility of the coastal areas to increasing sea level and extreme storm surge impacts.
Natural Hazard 16 (7)
Explore facilitating managed retreat, as appropriate, of development in those areas prone to flooding and facing challenges due to sea level rise.
Community Partnerships 73 (6)
Seek opportunities to work with education institutions and other levels of government to map coastal areas that are considered at risk due to sea level rise.
Strategic Priorities
Rainwater Management Strategy (flood mitigation). Continue to gather data to aide identifying priority areas and refining watershed specific targets and performance standards. Work to increase public understanding of watershed function and health as it relates to rainwater.

2. Background

As the climate changes, coastal areas everywhere can expect more frequent and severe flooding from storm surges and sea level rise. To help our coastal communities become more resilient, the CVRD is developing a Coastal Flood Adaptation Strategy for the Comox Valley's coastal floodplain area.

3. Scope of Work and Key Deliverables

The project is broken into five phases, each with key deliverables.

Table 2: Scope of Work	
Phases	**Key Deliverables**
Phase 1: Initiate	a. Terms of Reference
	b. Grant Funding Applications
Phase 2: Research and Analysis	a. Consultation Plan Phase 1
	b. Coastal Flood Mapping
Phase 2: Engage	a. Consultation Plan Phase 2
	b. Public Engagement
Phase 4: Plan	a. Strategy Development and Phasing
	b. Review of Strategies
	c. Public Engagement on Strategies
	d. Mitigation Planning

Phase 5: Implement	a. Align with Other Strategies
	b. Implementation Plan

3.1 Terms of Reference

The Terms of Reference is the first key deliverable of this project and will help to define the scope and limitations of developing a Coastal Flood Adaptation Strategy.

3.2 Grant Funding Applications

In recognition of increasing disaster risks and costs, the federal government has developed funding programs to assist local governments in preparation for disaster mitigation. Table 3 lists possible sources of grant funding available.

Table 3: Potential Sources of Grant Funding

Grant Program	Deadline
Natural Disaster Mitigation Program (NDMP)	Comox Valley Emergency Program received Stream 1 funding in 2017 for the Oyster River. The planning department intends to apply for Stream 2 funding for the entire CVRD coastline. Intake deadline is August 31, 2018.
Community Emergency Preparedness Fund (CEPF)	Second intake to be announced fall 2018.
Municipalities for Climate Innovation Program	Up to $175,000 for climate change risk and vulnerability assessment and climate change response plan. Deadline is January 1, 2020.
Federal Gas Tax Fund – Strategic Priorities Fund	Supports infrastructure and capacity building projects.
Federal Gas Tax Fund – Community Works Fund	Annual allocation to CVRD, internal decision on how funds are allocated.

The CVRD would like to submit an application under the NDMP Stream 2 for coastal flood mapping of the entire electoral areas' coastline, which will help to identify the boundaries of a potential flood event based on type and likelihood, as well as help identify the specific impacts of a flood event on structures, people and assets. Once this project is complete, the CVRD can apply for other streams of funding under the CEPF for flood mitigation initiatives.

Once given notice of funding approval, staff would prepare the Request for Proposal (RFP) for a consultant(s) to undertake the coastal flood mapping. All funded activities must be completed within one year of notification of funding approval.

3.3 Coastal Flood Mapping

The purpose of coastal flood mapping is to identify the coastal flood hazards and to provide the technical basis for land use planning and developing floodplain bylaws. The floodplain maps will provide the site specific study required in order for the CVRD to determine the appropriate setbacks and flood construction levels for future land use decision and policy.

The CVRD has maps for two floodplains: Oyster River and Courtenay, Puntledge and Tsolum Rivers. For all other watercourses and waterbodies, setback and flood construction levels are included in the CVRD Floodplain Management Bylaw No. 2782. In order to come into compliance with the new provincial guidelines and to account for projected sea level rise, the CVRD will need to acquire new flood mapping with a focus on coastal areas and related riverine areas within the CVRD. Once the mapping has been acquired, this information will be used to identify "sea level rise planning areas". These planning areas are intended to be the focus of future land use planning bylaws and policies as recommended by the provincial guidelines.

As part of this work, it has been identified that the CVRD does not have topographic data to the 0.5 metre accuracy that is required. This has been addressed through a provincial project that is being undertaken by GeoBC. The project involves conducting LiDAR mapping throughout the coastal areas of Vancouver Island during the summer and fall of 2018. This information should be made available to the CVRD in spring 2019.

3.4 Consultation Plan and Public Engagement

A consultation plan will be developed internally with coordination from the Communications department. The plan will identify the scope and scale of the project's public engagement strategy, outlining the guiding principles, stakeholders, budget, and communications and engagement strategies.

3.5 Strategy Development and Mitigation Planning

Once the impacts and risks of sea level rise are known, the next step is to develop and prioritize adaptation strategies with phasing. Strategies will be evaluated against criteria such as urgency, cost, funding and partnerships. The Coastal Flood Adaptation Strategy will provide the strategy's objectives, key activities, timelines and roles and responsibilities.

3.6 Implementation Plan and Alignment with Other Strategies

At the completion of Phases 3 and 4 in developing the Coastal Flood Adaptation Strategy, Phase 5 is primarily technical and will engage specific key stakeholders. Input from decision makers at the Provincial and Federal Government will lay the foundation for future partnerships to later implement the strategy. This strategy will be used to identify future infrastructure considerations.

Floodplain Management and Zoning Bylaw Amendments

A key adaptation strategy will be undertaking amendments to the floodplain management and zoning bylaws based on the new provincial Flood Hazard Land Use Management Guidelines, which is the catalyst for this project. The bylaw amendments will revise the flood construction levels and building setbacks to take projected sea level rise into account. This work could be undertaken at an earlier stage, once Phase 2 is complete, as the new flood construction levels and setbacks will be known at this time.

4. Timeline and Tasks

The timing of this project is dependent on the CVRD's success in receiving grant funding for the various phases over the course of two to four years. The CVRD hopes to apply for funding in the summer and fall of 2018 to undertake coastal flood mapping. Intake deadline for NDMP has been announced as August 31, 2018. CEPF intake deadline has not been announced. Projects approved

for funding will most likely be announced during the spring of 2019 for both funding programs. The funding allocation of $150,000 is anticipated, but additional funding sources may be required to complete the study, as the Comox Valley Emergency Program has been advised this phase of the Oyster River/Saratoga Beach project will cost $175,000. If some but not all of the fully budgeted amount of grant funding is obtained, priority areas will be scaled or phased as needed.

Table 4: Project Timeline Under Successful Grant Funding Scenario		
Task		**Proposed Timing**
Initiate	1. Terms of Reference.	July 2018
	2. Establish interdepartmental working group, terms of reference for group and hold first meeting.	Summer 2018
	3. Apply for grant funding.	Summer 2018
Research	4. Prioritize vulnerable areas.	Fall 2018
	5. Coordinate with GeoBC about LiDAR mapping project.	Fall 2018
	6. Issue RFP for coastal flood mapping.	Spring 2019
	7. Report back to CVRD board on coastal flood mapping.	Summer 2019
Plan	8. Initiate public engagement.	Fall 2020
	9. Draft and prepare Coastal Flood Adaptation Strategy.	Spring 2021
	10. Recommendations for bylaw amendments to adopt new flood construction levels and setback.	Flexible depending on priority
Implement	11. Implementation will occur over time following the adaptation strategy.	Ongoing

5. Resources

This project was initiated in the Planning and Development Services Branch due to a need for the CVRD to consider the new provincial Flood Hazard Area Land Use Management Guidelines and need to amend relevant bylaws. In recognition that sea level rise is a regionally significant issue that affects many departments, and that coastal floodplain mapping will benefit a wide range of CVRD departments, this is envisioned as a cross-departmental project.

Various departments have been identified as having an interest in some components of this program. Each department will be invited to join the working group as active member, who will take part in quarterly meeting or as an indirect member, who will receive periodic project updates. These departments include:

Table 5: Coastal Flood Adaptation Strategy Interdepartmental Working Group	
Department	Representative
Long Range Planning – project management	General Manager Long Range Planner
Planning Services	Manager Planner
Building Services	Manager Building Inspector
Comox Valley Emergency Program	Coordinator Deputy Coordinator
Engineering Services	General Manager Engineering Analyst
Parks	Manager
Finance	Manager
GIS	GIS Analyst

6. Stakeholders

The stakeholders will be identified through the consultation planning process, but will primarily consist of those who will be most involved and affected by this project.

Table 6: Stakeholders	
Internal	**External**
• Engineering Services • Parks • Sustainability and Transit • Planning and Building • Emergency Program • Information Services (GIS) • Finance	• CVRD Municipalities • K'ómoks First Nation, We Wai Kai Nation, Homalco and Wei Wai Kum • Waterfront property owners • Consulting engineers - geotechnical • Other coastal professionals (biologists) • Contractors involved in coastal construction (seawalls, rip rap, waterfront homes, etc.) • General public • Realtors

7. Budget

Based on the experiences of other jurisdictions and discussions with qualified professionals, the cost of coastal flood mapping for the electoral areas is estimated to be $300,000. This project is dependent on receipt of grant funding. Table 3 lists possible sources of grant funding available. If grant funding applications are not successful, project scoping will be undertaken and proposed budget items will be presented in the next budget cycle.

Comox Valley REGIONAL DISTRICT

Communication Plan

Subject: Coastal Flood Adaptation Strategy- Phase 1	File: 6430-04

Purpose
To outline engagement and consultation methods regarding the development of the Coastal Flood Adaptation Strategy Phase 1.

Target Audience(s):

- External
  - Citizens of the Comox Valley
  - First Nations
  - Comox Valley Municipalities
  - Waterfront property owners
  - Coastal professionals – geotechnical engineers, biologists
  - Contractors involved in coastal construction – rip rap, seawalls, waterfront homes
  - Realtors
- Internal
  - Planning and Development Services
  - Comox Valley Emergency Program
  - Engineering Services
  - Sustainability and Transit
  - Parks
  - Finance (Procurement)
  - Information Services (GIS)
  - Board of Directors
  - Communications

Project Background:
To help prepare the Comox Valley for a changing climate and support the electoral areas, the Coastal Flood Adaptation Strategy (CFAS) will be developed to address flood hazard and incorporate long-term flood protection needs resulting from forecasted climate change effects.

The CFAS project will be a multi-year project with several phases. The first phase consists of seeking funding opportunities for coastal flood mapping within the electoral areas. The second phase includes retaining a consultant(s) to undertake the coastal flood mapping. The new data and information would be analyzed to determine new flood construction levels and building setbacks to ultimately inform new land use policy, infrastructure decisions and development approvals. Public engagement will be required at this stage of the project to gather feedback on what strategies are acceptable to the community.

Spokesperson: Robyn Holme

Key Speaking Points: (3-5 key messages for media or target audience)

- To prepare for climate change impacts such as sea level rise and storm surge, the Comox Valley Regional District (CVRD) is developing a Coastal Flood Adaptation Strategy**.**
- The federal and provincial governments are offering resources and funding to assist local governments prepare for disaster mitigation planning and management. The grant funding

would enable the CVRD to acquire the flood data and mapping in order to update the floodplain management bylaw to come into compliance with the Provincial flood guidelines.
- Recognizing that climate change may significantly alter coastal communities, the CVRD will be working with local residents and stakeholders to build a shared understanding of potential impacts and explore options for adapting to climate change.

Guiding Principles:
- Communications included in all project team meetings and in key project-related discussions.
- Project to have budget sufficient to cover communications strategies.
- All materials and communication will follow the CVRD style guide.

Budget:
The budget for the consultation plan will be based on the whether the CVRD is awarded the National Disaster Mitigation Program (NDMP) grant funding for Stream 2. Grant announcements will be made early spring 2019.

Communication Objectives: 3-5 Objectives
- To communicate to residents about the CFAS project - its purpose, vision and if grant funding is received, the process moving forward.
- To collaborate with CVRD departments who may be impacted by the project or whose expertise may be important.
- To demonstrate the CVRD's commitment to protecting the Comox Valley residents and infrastructure in the face of climate change impacts.

Situation Analysis:
Strengths/Opportunities:
- CFAS provides an opportunity to build a shared understanding of climate change impacts and how it specifically affects the Comox Valley region.
- Grant funding provides the CVRD with an opportunity to undertake this study and mapping in order to update our land use bylaws to comply with updated provincial flood guidelines (January 2018).
- CFAS connects to broader work that the CVRD is undertaking with regard to asset management influencing future land use and infrastructure decisions.

Weaknesses/Threats:
- CFAS is dependent of grant funding. Grant announcements will not be made until spring 2019.
- Waterfront property owners and developers may feel their property value will be impacted by proposed strategies. Climate change non-believers may not support the idea of exploring strategies to respond to impacts from sea level rise and storm surge.
- The planning services and the Comox Valley Emergency Program will submit for NDMP funding with a coordinated application. In order to qualify for funding, both projects need to align and coordinate, and depending on whether both departments are awarded the grant funding, the projects may be combined.

Communication/Engagement Strategies:

Tactic	Description	Responsibility	IAP2 Spectrum	Budget	Due Date
CVRD website project page	Launch CFAS project to spread awareness on the project and create a placeholder for project developments such as event details, staff reports.	Content/Webpage Building: Planning Review/Approvals: Communication	Inform	Staff Time	Fall 2018
Social Media	Announce project on Facebook and Twitter. Use social media to promote program and future events.	Content: Planning Distribution: Communications	Inform	Staff Time	Fall 2018
Internal Engagement	Convene interdepartmental working group to meet quarterly.	Planning	Consult		Summer/Fall 2018
Connect CVRD Internal Newsletter	Create an article for the Connect CVRD internal staff newsletter. 100-200 words with a pic.	Planning	Inform	Staff Time	September edition due August 8, October edition due Sept 12
Newsletters	Create project newsletter (2/year) to share information and build knowledge within the community. Newsletters will be available online, printed for open houses.	Content: Planning Design/Production: Communications	Inform	$800/ newsletter design	Fall & Spring version

Next Steps:

- **Approval and Implementation of Phase 1 Communication Plan.**
- **Development of Phase 2 Communication Plan (once funding received).**

Approval History

Created by:	Robyn Holme/Jennifer Steel July 16, 2018
Amended:	