

Coastal Flood Management Strategy

| Date: | November 5, 2021 | | |
|------------------------|---|--|--|
| Department, GM: | Kate Zanon, General Manager of Community Development | | |
| Project Manager: | Mary De Paoli, Manager of Policy Planning | | |
| Staff Lead: | Laura Sampliner, Senior Sustainability and Energy Coordinator | | |
| Project Origin: | □ Council Motion □ Staff Initiated □ Other: Climate Action Plan project | | |
| Priority Area: | ☐ Exceptional Service ☐ Environmental Leadership ☐ Healthy City | | |
| | □ Economic Prosperity □ Community Evolution | | |
| Strategic Alignment | Objective: Provide leadership in climate change by thinking globally and acting locally | | |
| | Action: Respond and adapt to climate change through planning and policy development | | |
| Proposed Priority | \boxtimes Priority Level 1 \square Priority Level 2 \square Priority Level 3 | | |
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| Project Description | | | |

Develop a Coastal Flood Management Strategy for Port Moody.

Relevant Background

In July of 2020 Council endorsed Port Moody's first Climate Action Plan, a comprehensive set of goals, targets, and actions to guide Port Moody in becoming a carbon neutral, climate resilient community by 2050.

In February of 2021 council endorsed a Phase One Climate Action Implementation Strategy, outlining 23 actions from the Climate Action Plan to implement from 2021 to 2022. Developing a Coastal Flood Management Strategy is one of the 23 actions endorsed for implementation in 2021.

Port Moody is already experiencing the effects of climate change, such as sea level rise and urban flooding which the community will continue to experience for centuries to come. The City must adapt and reduce vulnerabilities to these flooding risks by strategically addressing the risks now and into the future. As a community on the Burrard Inlet, Port Moody would like to understand the impacts from sea level rise and coastal events. According to the Fraser Basin Council, unmitigated year 2100 coastal flooding could result in estimated regional (Vancouver Lower Mainland) costs up to \$24.7 billion.

Project Objectives

- Using scientifically rigorous and field-tested tools to conduct an analysis to determine flood risk areas due to climate change sea level rise and developing flood models and maps (City Wide);
- Exploring changes to coastal floodplain depths and extend over time in response to changing sea and tectonic conditions;
- Conducting an impact analysis to identify and catalogue affected areas, populations, infrastructure, and services within those areas including structures, roads, water and sanitary sewers;
- Assessing and quantifying the level of exposure, vulnerability, measure of impact and risk from inundation, storm surge and coastal erosion;
- Making recommendations based on analysis for policies, programs, and requirements with a consideration of the impact these recommendations may have on greenhouse gas emissions; and
- Undertaking public and stakeholder engagement, building collective understanding of coastal hazards.

| Scope | |
|--------------|--|
| In Scope | Creation of a staff task force Research, modelling, and analysis Developing a coordinated list of recommendation actions Collaboration and engagement with external stakeholders (the public, potential partners, civic committees, expert research groups, consultants) Reporting and presenting to Council |
| Out of Scope | - Implementation of the Strategy |

| Work Plan Overview | | | |
|--|------------------------------|--|--|
| Project start date: January 2022 | Project end date: April 2023 | | |
| Deliverable/Milestone: | Date: | | |
| Phase 1: Define Project – establish project team and scope project. | Q1 2022 | | |
| Phase 2: Project Initiation and Analysis – seek consultant assistance. Gather project data and perform initial project analysis and mapping. | Q2 - Q3 2022 | | |
| Phase 3: Stakeholder and Public Engagement – design and implement a stakeholder and public engagement strategy. | Q4 2022 – Q1 2023 | | |

| Phase 4: Recommended Strategy and Action – work with stakeholders to develop recommended actions and details. | Q4 2022 – Q1 2023 |
|--|-------------------|
| Phase 5: Draft Strategy – present to Council | Q2 2023 |

| Budget | | | | |
|---|-----------|--|--|--|
| Budget Source: | | | | |
| New Initiatives Reserve 2022 (approved) | \$90,000 | | | |
| Drainage Capital Reserve 2022 (approved) | \$100,000 | | | |
| New Initiatives Reserve 2023 (not approved) | \$40,000 | | | |
| ☐ Request Referral to Finance Committee | | | | |

| Decision Notes | | | | |
|----------------|---------|----------|--|--|
| Date | Meeting | Decision | | |
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