

City of Port Moody Report to Finance Committee

Date:May 27, 2022Submitted by:Community Services Department – Environment DivisionSubject:Rocky Point Dredging and Disposal Costs

Purpose

To request additional budget for dredging at Rocky Point based on available disposal options.

Recommended Resolution(s)

THAT an additional budget of \$500,000 be allocated from the Community Amenity Contribution Reserve to support maintenance dredging at Rocky Point (PK22013) as recommended in the report dated May 27, 2022, from the Community Services Department – Environment Division regarding Rocky Point Dredging and Disposal Costs.

Background

Dredging is typically required every five years at Rocky Point to remove built-up sediment and maintain facility use and safe operation of the navigational channel and boat launch. Dredging was last done in 2016, but dock areas were not dredged at that time due to budget limitations. Docks are now grounding on the mudflat at low tide, and boater access is restricted, causing environmental and safety concerns.

The 2022 Capital Plan includes a budget of \$250,000 for the dredging program based on current depths of the channel, boat basin, and dock areas, and inclusion of the original dredge footprint along the west dock. The scope of the 2022 program was intended to address environmental and safety concerns, improve the useability of Rocky Point boat basin for motorized and non-power boats during low tides, and possibly reduce dredging frequency in the future. This budget assumed dredged material would be approved for ocean disposal.

Environment and Climate Change Canada (ECCC) is the permitting agency for ocean disposal. In Fall 2021, ECCC required that sediment at Rocky Point be tested for persistent organic pollutants (i.e., dioxin, furans, and PBDE¹) based on available data from nearby sites in Port Moody Arm, and because of recent stakeholder concerns and data that suggest such pollutants may be accumulating at ocean disposal sites. This is the first time that analysis of these

¹ Dioxin/furans are by-products of industrial activities and synthetic processes (e.g., pulp and paper; manufacture of chlorinated substances; incineration of waste and salt-laden wood; some wood preservatives; and diesel combustion). PBDEs are used as flame retardants. These organic pollutants bind to sediments. Present-day sources may include movement of historic sediment contamination, as well as runoff or atmospheric drift.

parameters has been required. Sediment samples collected from Rocky Point exceeded current criteria for these pollutants. ECCC advised that the concentrations measured at Rocky Point are not unexpected for Port Moody Arm; however, ocean disposal for material dredged from Rocky Point cannot be permitted by ECCC based on these results². The only option for disposal of this dredged material under current regulations is at an upland landfill facility.

Discussion

ECCC required inclusion of persistent organic pollutants in Fall 2021 and data were available by March 2022, after staff submitted the 2022 Capital Plan budget of \$250,000 which assumed ocean disposal. The cost of ocean disposal of dredged material is significantly lower than upland disposal. The full cost of disposing dredged material at an upland landfill is expected to almost triple project costs.

Based on the bathymetry survey and current shallow conditions at Rocky Point, work is needed in 2022 to ensure safe accessibility to all marine recreational boat traffic. Staff recommend increasing the budget and continuing with the original scope of work for the 2022 dredging program at Rocky Point. The full scope of work will:

- provide access for all boats along the navigation channel and in the boat basin to design criteria of -1m chart datum;
- ensure City docks are no longer grounding on the mudflat at low tide;
- expand access around all docks and improve safety for motorized and non-power boats;
- maximize cost efficiency per amount of material dredged (i.e., some costs are fixed regardless of dredging volume); and,
- provide the best opportunity to maximize the period before dredging is needed again (i.e., next full dredging cycle might be delayed between seven to 10 years), and allow time for budget planning and consideration of outputs from the Rocky Point Master Plan

Other Option(s)

 THAT an additional budget of \$300,000 be allocated from the Community Amenity Contribution Reserve to support maintenance dredging at Rocky Point (PK22013) as recommended in the report dated May 27, 2022, from the Community Services Department – Environment Division regarding Rocky Point Dredging and Disposal Costs.

Under this alternative option, the scope of the 2022 dredging program would be reduced to only address the shallowest areas of the boat basin and docks and expand access around docks to improve safety for non-power boat users. However, depths will not be maximized, cost efficiency will decrease (i.e., higher cost per unit effort), and future dredging may be required more frequently, providing less time to consider all management options for this area.

Financial Implications

Maintenance dredging at Rocky Point has historically been funded through annual contributions from boat ramp user fees to the Boat Ramp Reserve. The dredging projects previously

² Based on sediment chemistry results, toxicity testing was required to measure short-term biological impacts. Samples from the boat basin passed toxicity tests, but samples from the navigation channel did not. Dredged material from the navigation channel would consequently not be permitted for ocean disposal.

approved as part of the 2022 Capital Budget have fully depleted the Boat Ramp Reserve. As part of 2023 budget planning and deliberations, staff will consider options for gradually adjusting contributions to the Boat Ramp Reserve, which may include increases to boat ramp fees from all user groups, cost recovery from partners, and adjustments to the Parks operating budget. Other strategies for reducing dredging frequency may be considered as part of the Rocky Point Park Master Plan. In the interim, it is recommended that the additional budget request of \$500,000 be funded from the Community Amenity Contribution (CAC) Reserve, which has an estimated 2023 opening balance of \$8.7 million. CACs are intended to be used to fund public amenities deemed appropriate by Council, such as: community facilities, parks and recreation facilities, environmental enhancements, arts and cultural facilities, public art, and streetscape and pedestrian improvements.

Communications and Civic Engagement Initiatives

No additional communications needed.

Council Strategic Plan Objectives

This project supports the following Council Strategic Plan Objectives:

- Exceptional Service: Ensure our customers are highly satisfied with the quality of our service;
- Environmental Leadership: Expand and make the most of our parks and green spaces and design them to create positive and diverse experiences throughout the community; maintain and enhance Port Moody's natural and built assets while reducing the impact on our planet; and,
- Community Evolution: Ensure City assets are optimized, maintained, and funded for current and future needs; and bring people together by activating public spaces.

Attachment(s)

1. Map of proposed 2022 dredging area at Rocky Point.

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Report Approval Details

Document Title:	Rocky Point Dredging and Disposal Costs.docx
Attachments:	- Attachment 1 - Map of proposed 2022 dredging area at Rocky Point.pdf
Final Approval Date:	Jun 6, 2022

This report and all of its attachments were approved and signed as outlined below:

Julie Pavey-Tomlinson, Director of Environment and Parks - Jun 1, 2022 - 11:55 AM

Anna Mathewson, General Manager of Community Services - Jun 2, 2022 - 8:26 AM

Natasha Vander Wal for Rosemary Lodge, Manager of Communications and Engagement - Jun 2, 2022 - 1:08 PM

Paul Rockwood, General Manager of Finance and Technology - Jun 2, 2022 - 1:42 PM

Tim Savoie, City Manager - Jun 6, 2022 - 10:37 AM