

4. THE BAY AND SHORELINE

ISSUES

Significant landfill in the Bayshore site or western Marathon site could affect the appearance of the relatively enclosed bay of Coal Harbour west of Deadman's Island. Are there locations where filling should be minimized in order to maximize the amount of water area suitable for small boat moorage? Are there waterfront areas that are less sensitive to filling?

If there is significant landfill, should it be designated for private development or for public use?

Alterations to the shoreline will probably improve the appearance and public usability of the water and land. Is the existing pattern of uses preferred?

What role and character should the waterfront edge have? As a formal sweeping, monumental shoreline? Or as a more incremental, fine-grain, diverse and less formal shoreline? Or as a mixture of both?

The shoreline treatment could facilitate boating and traditional port activities, or it could be a relatively pristine urban seawall, or it could be a natural place of 'soft edges'. What shoreline treatments are appropriate adjacent to the central business and tourist district?

The existing 'soft' shoreline and inter-tidal areas provide significant fish habitat important for migrating and resident fish stocks in Burrard Inlet. Proposed filling and shoreline improvements in Coal Harbour would affect these fish habitat areas.

How best can the objectives to achieve no significant loss in the productive capacity of fish habitat be balanced against the needs of water users, visitors and residents to improve aspects of the Coal Harbour shoreline? Can the needs of all be accommodated by particular shoreline designs?

Should shoreline elevations be set higher than normal to take into account the possibility of a rise in ocean levels resulting from climatic trends?

FACTS

In this document, fill shall mean any material deposited in the water area or permanent decking attached to the shore that covers or reduces the extent of the usable water area.

The area's existing shoreline, the result of haphazard filling, is mostly unimproved, unattractive and is largely inaccessible for public use.

The existing land area on the Marathon site (Existing CWD Sub-areas 1 and 2) amounts to 36.4 acres, with the existing water area out to the harbour headline being 45.6 acres.

The existing land area on the Bayshore site comprises 16.1 acres, with the existing water area out to the harbour headline being 6.5 acres.

At the westerly part of the area, the waterbody between Deadman's Island and the existing shoreline at the foot of Jervis Street is 350 m. wide. The minimum distance between Deadman's Island and the Harbour Headline is approximately 200 m. At the easterly end of the Coal Harbour area, Burrard Inlet is several kilometers in width.

Because of the prevailing storm wind direction from the east and southeast, the open exposure of Coal Harbour to Burrard Inlet and the proximity of wave-generating marine activities (e.g. Seabus), Coal Harbour is frequently exposed to serious wave and boat wash conditions. This requires some form of breakwater or physical buffer to adequately protect marina areas and to allow for safe boat moorage conditions.

The Federal Department of Fisheries and Oceans is concerned with all areas of potential filling in of tidal ocean water and shoreline changes where fish habitat could be affected. In principle, the Fisheries Department policy is to ensure no net loss in the productive capacity of existing fish habitat. Federal Government (Department of Fisheries and Oceans, and Canadian Coast Guard) approval is required for any filling or shoreline changes.

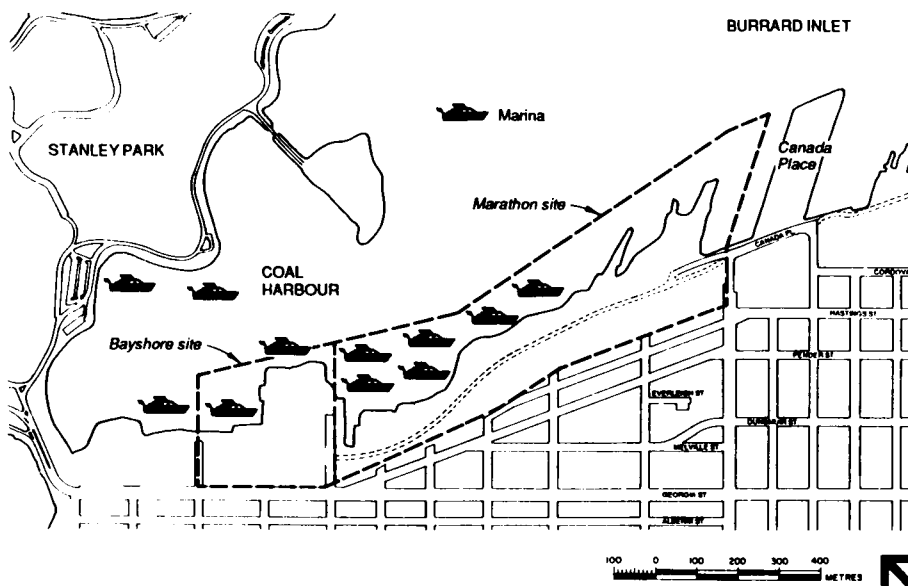


Figure 5. Coal Harbour Basin and Existing Shoreline

PAST POLICY

1979 CWD ODP:

- Limited fill and/or excavation permitted, but must provide a public benefit such as open space, improvements to tidal movements and/or water quality, improvements to the safety and visual appearance of the shoreline, or the provision of port facilities. 40 acres noted as the maximum land area for Sub-areas 1 and 2 for density calculation purposes (which would allow an approximate increase by filling to existing site of 10 percent, or approximately 3.6 acres).

POLICY

FILL

Except for refinements in the shape of the shoreline, discourage additional fill at the portion of the Coal Harbour waterbody west of Jervis Street opposite Deadman's Island, where it begins to be constricted and where small boat moorage is best suited. If there is additional fill, consider it primarily at the eastern portion of the Coal Harbour waterbody where it widens into Burrard Inlet and where port uses, public activities and open space, and large ship moorage are best suited.

Ensure that the fill provides a needed public benefit such as open space, improvements to tidal movement and/or water quality, improvements to the safety and visual appearance of the shoreline, or the provision of port facilities.

For the Bayshore site, generally discourage additional fill or significant changes to the shoreline that could reduce boat moorage areas, unless it is for the purpose of widening the existing waterfront walkway adjacent to the hotel to meet required standards.

For the Marathon site as an overall limit, the total amount of land area (including fill and pier structures covering the water area) should not exceed 50 percent of the total site area of 82.0 acres, unless it is considered to be in the public interest to increase the amount of fill in order to create a public amenity or additional public open space above the standard park requirements on the waterfront.

Ensure that the loss in usable water area in the westerly part of the Marathon site between Jervis and Cardero Streets resulting from additional fill is minimized. The fill should not reduce water areas suitable for small boat moorage by more than approximately 10%, with at least 50% of the site remaining as water.

Ensure that impacts on fish habitat areas due to the filling of the foreshore are complemented by other compensating measures to ensure no net loss in fish habitat productive capacity in the general Coal Harbour area.

SHORELINE

Define the shoreline in a manner that relates to the character of the water uses adjacent to it -- incremental and varied with a fine-grained character at the western end, and more formal with less variation at the eastern end.

Ensure that the seawall treatment is of a high quality standard that relates to its urban context. It should also be visually attractive, meet health concerns, accommodate fish habitat requirements, minimize on-going maintenance costs, and be structurally stable.

Set the shoreline elevation at a level that allows for the possibility of a limited increase in sea levels, or can be modified in future to deal with this situation, should it occur.

Ensure that the shoreline treatment and design allows for opportunities for recreational water activities, particularly public boat rental facilities.

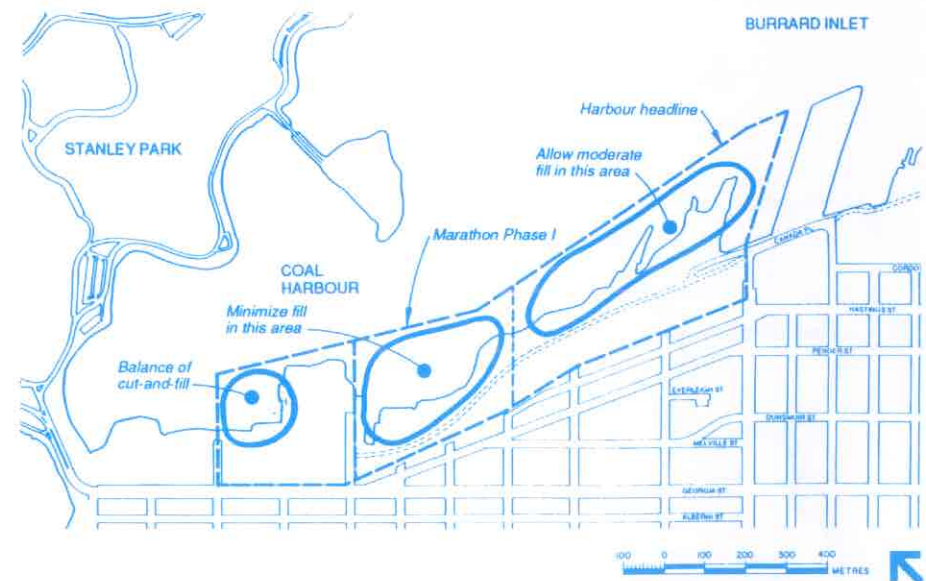


Figure 6. Coal Harbour Fill and Shoreline