

§ 5.6 (d)(3)(xiii): River Basin Description

Half-Moon Cove is a tidal basin which is not substantially influenced by fresh water inflow from a traditional river basin. A drainage area could be drawn around the perimeter of Half-Moon Cove to delineate fresh water inflow from rain incidents and snow melt; however, the volume of this water would be inconsequential when compared with tidal flow as represented by an average tidal range of 18.1 feet. For a root-mean-square tidal range of approximately 19.0 feet, the total water volume in Half-Moon Cove is equal to approximately 11,500 acre feet with an average discharge of 16,000 cubic feet cycle during the period from high tide to low tide (i.e., 6 hour 25 minutes).

(xiii) River basin description. A general description of the river basin or subbasin, as appropriate, in which the proposed project is located, including information on:



**FIGURE HMC-29: TOPOGRAPHIC MAP OF PROJECT AREA
[TAG IMAGE FILE FORMAT – TIFF] {repeat}**

As illustrated above, Half-Moon Cove is in the center of the drawing and is under the influence of tidal waters from Cobscook Bay (water body south and west of HMC). Passamaquoddy Bay (east of HMC) does not provide tidal waters into Half-Moon Cove.

The topography around Half-Moon provides a limited inflow of fresh water from small streams, rain, and snow melt.

§ 5.6 (d)(3)(xiii)(A): River Basin Area

(A) The area of the river basin or subbasin and length of stream reaches therein;

n/a

§ 5.6 (d)(3)(xiii)(B): Major Land & Water Uses

(B) Major land and water uses in the project area;

The proposed tidal power project will not impact any land and fresh water use within and around Half-Moon Cove.

§ 5.6 (d)(3)(xiii)(C): Dams & Diversionary Structures

(C) All dams and diversion structures in the basin or sub-basin, regardless of function; and

At present, the project area does not have any dams and diversion structures which would be impacted by the proposed Half-Moon Cove project.

§ 5.6 (d)(3)(xiii)(D): Tributary Rivers & Streams

(D) Tributary rivers and streams, the resources of which are or may be affected by project operations;

Since the high tide level will be unaffected by the project, the operation of the proposed facility will not have an impact on any tributary rivers and streams.