

# U.S. studies Fundy project

**N.Y. Times Service**

AUGUSTA, Maine — Contracts have been awarded for two studies of the potential impact on Maine of a giant tidal dam that Canada has proposed building in the Bay of Fundy to generate electricity.

The 290-km-long (180-mile) bay, immediately north of Maine's coast between New Brunswick and Nova Scotia, has the greatest tidal variation in the world. The funnel shape of the bay and its steadily rising floor account for tidal differences up to 16 metres (53 feet). The proposed dam would trap the water in the bay at high tide and then direct the flow through turbines as the tide receded, thus generating electricity.

Maine's Planning Office has awarded the Bigelow Laboratory of Ocean Sciences, at Boothbay Harbor, \$44,000 to look at the damage, or the benefits, that Maine is likely to receive if the dam is built.

In addition, the Marine Law Institute

at the University of Southern Maine, in Portland, has been granted \$125,000 from the William H. Donner Foundation, of New York, in part for a two-year study of the Canadian decision-making processes involved in planning the dam.

THE CONTRACTS come a year after a Canadian scientist, David Greenberg, of the Bedford Institute of Oceanography in Dartmouth, Nova Scotia, predicted that if the dam were built, it would increase high tides along the coast of New England by 15 cm (six inches), and correspondingly decrease low tides by the same amount.

"We need to know what the environmental implications are," Alec Giffen, director of resources at the State Planning Office here, said of the aim of the studies.

"Some people are concerned about what the effect might be on Maine beaches, on Maine shore lands and structures along the coast, and these could be minuses," Giffen added. "We won't know for sure until after the project is

built whether the earlier predictions were accurate."

"If the tides increase along the coast of Maine," Giffen continued, "there undoubtedly will be some increase in erosion, some changes in the habitats along the Maine coast."

As an illustration, he pointed to "salt marshes that are very eloquently tuned to the tidal heights of the plants that are there. So, if you change tidal heights, you are going to change the composition of those plant communities."

GIFFEN said the focus of the study by the Marine Law Institute "is to look at ways that the United States and Canada can improve joint decision-making on projects that have international ramifications." He said the Canadians would use only 10 per cent of the power developed by building the dam.

Any tidal dam in the Bay of Fundy would affect the entire Gulf of Maine, which extends from Cape Cod to the tip of Nova Scotia. The gulf includes the Georges Bank, a rich fishing ground.