Fact Sheet

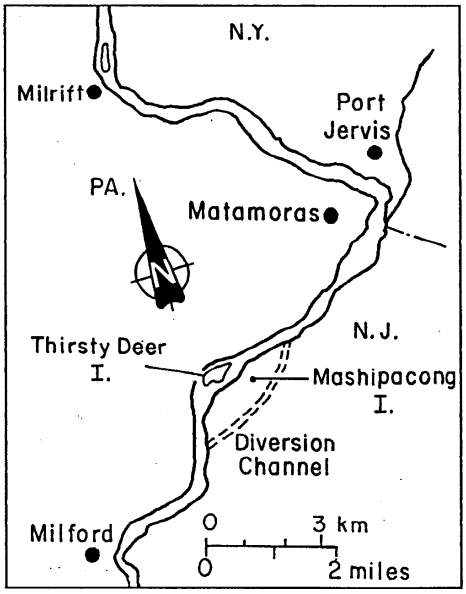
ICE DIVERSION CHANNEL

PROBLEM

In February 1981, ice on the Delaware River lodged against the Thirsty Deer and Mashipacong Islands and created a frozen dam that backed up the river, eventually causing blocks of ice to flow over the Delaware's banks in the Port Jervis and Westfall Township areas. The flood claimed one life and caused an estimated $14.5 million in damages.

SOLUTION

Local communities, with the support of the Delaware River Basin Commission (DRBC), requested through Congress that the Corps of Engineers study the problem. The DRBC later agreed to act as the project's sponsor after studies undertaken by the U.S. Army Cold Regions Research and Engineering Laboratory (CRREL) at the request of the Philadelphia District confirmed the feasibility of constructing an ice diversion channel. The diversion channel was designed by CRREL. The project, funded by the Philadelphia District, called for the selective clearing of trees within an existing natural overflow channel about 13,000 feet long and 200 feet wide along the southeast side of Mashipacong Island, providing a route for Delaware River overflow water and ice to move unimpeded past Thirsty Deer and Mashipacong Islands. The contractor, Avila Construction, has cleared more than 30 acres of trees from the diversion channel. This project will be completed in spring 1996.



RESULTS

The January 1996 ice event at Port Jervis was a good test in that it showed that the channel would carry ice and water. The discharge in the Delaware River rose so quickly, however, that any ice jamming was very short-lived (the jam failed long before any flooding occurred). The discharge was three to four times that experienced during the 1981 event. As a result, the ice had little to no effect on water levels. Although ice and water were carried into the diversion channel, it cannot be said that the project reduced water levels, since the main channel was open during the event.

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