

SCIENCE TO THE SWIMMERS' RESCUE

Many Canadian beaches, polluted by the circulation of poor water, could probably be made safe for swimmers next summer if municipalities adopt a flow system developed by the National Research Council of Canada.

The system was developed by the Hydraulics Section of NRC's Division of Mechanical Engineering after tests by the Regional Medical Officer of Health showed that all Ottawa beaches were polluted and unsafe for swimming. At the beginning of the summer season "No swimming" signs were posted on all beaches.

However, adoption of the system by the City of Ottawa made it possible for the city's largest beach at Mooney's Bay on the Rideau River to remain open all summer.

Working in co-operation with the Department of Engineering of the City of Ottawa, the Hydraulics Section first built a model of the Rideau River near Mooney's Bay beach, which was severely polluted during the 1970 swimming season, partly because of stagnant water.

Mooney's Bay, and many other beaches on rivers or lakes in Canada, are located in areas of low current for the safety of swimmers and for the prevention of beach erosion. As a result, they often become stagnant, muddy pools without chlorination or circulation of the water.

"On a hot summer weekend, with as many as 3,000 people using the beach at Mooney's Bay, the problem of pollution is self-evident," says Joe Ploeg, head of the Hydraulics Section. "Even if the Rideau River entering Mooney's Bay was completely free of pollu-

tion, the beach would have an unacceptably high pollution count within a few hours after opening."

The hydraulic model studies confirmed that during the summer months, when discharge from the Rideau River is 250 cubic feet a second, there is no flow in the swimming area of Mooney's Bay because there is no water circulation along the beach.

As a result of the studies, two pumps were installed on the Rideau River just upstream from the beach. Water from the midstream area, where the pollution count is low, was pumped through the swimming area at a rate of 50 cubic feet a second, which created a uniform current of one-quarter foot a second in the swimming area and prevented the build-up of pollution.



NRC studies can help keep Canada's beaches free from pollution and clean enough for youngsters to swim.

PLANS FOR 1976 OLYMPICS

One hundred and seventy-five representatives from all levels of Canadian amateur sport recently met in Ottawa at the National Conference on Olympic '76 Development, to discuss programs for improving Canada's participation in the 1976 Olympic Games.

The meeting, sponsored by the National Advisory Council on Fitness and Amateur Sport in co-operation with the Canadian Olympic Association and other sports-governing bodies, originated from an idea in National Health and Welfare Minister John Munro's speech on Sport Canada and Recreation Canada at

the Council's meeting last May.

Delegates discussed the immediate needs of Canadian athletes and how resources could be organized to meet these needs.

Topics included methods for increasing the number and quality of coaching staff and sports facilities, and ways to enlist support of business, industry and the communications media in future sports-development programs.

Delegates included executives of national and provincial sports-governing bodies, intercollegiate and high-school administrators, coaches, consultants and outstanding Canadian athletes.