

is called "water spreading". Water available in times of excess run-off is spread over an area which will allow rapid infiltration to the aquifer being used. A water-spreading project has been undertaken by the Catfish Creek Conservation Authority near Aylmer.

In addition to the multi-purpose projects described earlier, some Conservation Authorities have undertaken specific projects to boost municipal water supplies. The Ausable River Conservation Authority has constructed the Morrison Dam and Reservoir near Exeter to provide water to that town and adjacent municipalities, while the Napanee Valley Conservation Authority constructed a dam to enlarge the usable storage of Second Depot Lake to 7,000 acre feet. Water is discharged during low flow periods to augment the flow in the Napanee River on which the Town of Napanee relies for domestic and industrial water. On the way to Napanee the regulated flow helps mill operators and improves wildlife habitat. Though Second Depot Lake is not large enough to contain all the flood waters from its watershed, the dam is operated to reduce the flood peaks as much as possible.

Similarly the Morrison Dam near the headwaters of the Ausable River conserves water which would otherwise be wasted. This dam was built in conjunction with a township road bridge and illustrates how the various public bodies can co-operate to develop natural resources for public benefit.

The dam has a free overflow concrete spillway section located under the bridge span with earth embankments on either side. It is 20 feet high and stores approximately 50 million gallons of water.

In addition to these larger reservoirs more than 2,500 farm ponds have been constructed for irrigation farm water supply and recreation.

C. LAKE LEVEL REGULATION

Some of the watersheds in Southern Ontario contain many fine natural lakes whose shorelines have been extensively developed for recreation uses. Regulation of levels of these lakes to provide a stable lake surface at certain times of the year is another job undertaken by Conservation Authorities. While it is important that the lakes have a stable level during fish spawning periods, it is difficult to prevent large variations in lake level during periods of high run-off. Indeed, it is desirable from the standpoint of downstream flood control to regulate the outflow from these natural lakes in such a way as to store some of the flood peak for later discharge.

D. COMMUNITY PONDS

In addition to the types of water control projects already described, many Conservation Authorities have established community ponds. Besides providing recreation facilities, the community pond has a number of other advantages. Since these ponds are generally created close to a community they provide a certain degree of fire protection. Many small hamlets do not have adequate water systems to cope with a major fire, and water from community ponds has been used for this purpose on many occasions. This protection applies not only to buildings but also to valuable woodlots and farm crops located nearby. A further asset of the community pond is its ability to provide habitat for various forms of wildlife. Ponds can be stocked with fish and, provided conditions are favourable, wildfowl, muskrats and other desirable animals may be encouraged to inhabit its waters. Besides these material benefits, community ponds have an aesthetic value which cannot easily be measured in dollars and cents.