

upon in preparing the report, most important of which are the excellent soil surveys carried out over the last 24 years by the Soils Department of the Ontario Agricultural College in co-operation with the Experimental Farms Service, Canada, and the basis work in physiography by Chapman and Putnam of the Ontario Research Foundation.

Forestry:

The forestry report provides information regarding the condition and extent of the original forest, the sequence of wood-using industries, forest products and their yields, and conservation measures in progress on the watershed at the time of the survey, together with recommendations for future conservation measures.

Water:

Water problems begin in the office with a careful examination of all available data. Hydrometric and meteorological records kept over the years are checked and tabulated, and all available flood records are investigated and related to the gauge records of the river in question, after which the number, size and location of reservoirs required to control floods and regulate summer flow are determined. All small lakes, community ponds and old mill dams are mapped and examined.

Wildlife:

Wildlife surveys include general inventories of all species of wildlife, both game and non-game, and special emphasis is laid on vanishing or threatened species. Streams are classified as to their condition and suitability for particular species of fish.

Recreation:

Recreation surveys include estimates of the present and future population of the area served, descriptions of the present use of all recreation facilities by local and outside residents, rating of all recreation facilities—publicly or privately owned—and recommendations for new recreation areas for both the urban and rural population of the watershed.

INITIATION OF A SCHEME

When the report is presented, the authority must assume responsibility for initiating the schemes which it considers most urgent; it must also make approaches to the government departments or other bodies from which it hopes to get assistance, either financial or otherwise.

If, for example, a scheme undertaken by an Authority has to do with land use, it must seek assistance from the Ontario Department of Agriculture, which maintains agricultural representatives in all the counties of Ontario, as well as a large extension service at the Agricultural College at Guelph, including the Soil Advisory Service. If the scheme involves a forestry or wildlife problem, then the Department of Lands and Forests, which is similarly organized is asked for assistance. In the case of flood control the Authority must engage a consulting engineer to do the engineering and designing up to the point of calling for tenders and to carry the work through the construction stage. Similarly, where an Authority acquires large conservation areas which may include parks and recreation, it may be necessary to employ men specially trained in this work to design the park areas.