

# TECHNICAL NOTES AND NEWS

## COMMISSION FOR HYDROLOGY OF WMO

The Fifth Session of the Commission for Hydrology was held in Ottawa (Canada) from July 5 to 17, 1976. Two members of our Canadian National Committee actively participated in the meeting of the Commission. Dr. T.H. Anstey, Research Branch, Agriculture Canada and ICID Vice-President represented the ICID at the meetings. Mr. R.H. Clark, Senior Engineering Adviser, Environment Canada, chaired the organizing committee for the two-week Ottawa meeting.

Several items of direct interest to ICID were discussed. One dealt with methods of measuring evapotranspiration. The Hydrology Commission recognized the need for them to approach the subject in concert with similar studies being conducted by ICID. A second subject of common interest is the glossary of terms prepared on Hydrology.

Mr. R.H. Clark was elected President of the W.M.O. Commission for Hydrology for a four-year term.

## BYPASS DRAIN IN ARIZONA (USA)

A bypass drain (U.S. section), to dispose of waste brine from the world's largest desalting plant to be built near Yuma, Ariz., will transport the desalting plant's brine to the Santa Clara slough in Mexico. It is estimated to cost \$ 4,416,420 to the USBR. Until the plant becomes operational in 1981 the drain will carry the full flow of irrigation drainage water from the Wellton-Mohawk Irrigation District to the slough.

The desalting plant and its associated facilities are part of Title I of the Colorado River Basin Salinity Control Project, a multi-million dollar effort to improve the quality of Colorado River water delivered to Mexico.

Nearly 145,000 acre-feet (179 mil m<sup>3</sup>) of brackish drainage water which flows annually from irrigated farms in the Wellton-Mohawk District will be treated by the desalting plant before being put back into the river for delivery to Mexico. Previously, the brackish drainage water has been flowing directly into the river, seriously affecting the quality of water going to Mexico.

The bypass drain will be a 16-mile (25.74 km) open canal lined with unreinforced concrete. It will extend from Morelos Dam near Yuma to the U.S. Mexico border, where it will connect with a 35-mile (56.32 km) Mexican reach currently under construction.

## UPPER DRAINAGE PROJECT II (ARAB REPUBLIC OF EGYPT)

The World Bank and its affiliate, the International

Development Association (IDA), are lending \$ 40 million and \$ 10 million respectively to help Egypt finance a drainage project.

The \$ 282 million project forms part of the continuing program of Egypt to install drainage works in the entire irrigated land in Egypt. The objective of the drainage component is to be carried out over 210,000 hectares. The project will help arrest the steady and persistent decline in yields, that would have exceeded 30 per cent over the next 35 years, due to waterlogging and salinity. It will also bring about a substantial increase in agricultural production and farm incomes. Some 880,000 persons, living on small farms, will benefit.

Execution of the project will be the responsibility of the Egyptian Public Authority for Drainage Projects.

The IDA credit to Egypt is for a term of 50 years including 10 years of grace. It is interest-free, except for a service charge of 3/4 of 1 per cent to meet IDA's administrative costs. The Bank loan of \$ 10 million is for a term of 25 years including 5 years of grace. It will carry interest at 8.85 per cent per annum.

## ANDHRA PRADESH IRRIGATION AND COMMAND AREA DEVELOPMENT COMPOSITE (INDIA)

The composite project at a total cost of \$ 297 million, includes the completion of the construction of the irrigation and drainage works of the Nagarjunasagar project. It provides the first stage, covering three years, of development on 72,000 hectares in the command areas of four irrigation systems in Andhra Pradesh. The project is the first step in a program that will ultimately cover an area of over one million hectares.

The World Bank announced (May 1976) the approval of a "Third Window" loan of \$ 145 million to assist in financing the development of irrigation works and command areas of the above major irrigation systems in India's Andhra Pradesh State. Other Agencies, who will help in financing the Project are—Government of India, State Government, Agricultural Refinance and Development Corporation and participating agricultural development and Commercial Banks.

The project consists of (1) completion of 105-km Nagarjunasagar left main canal and the construction of irrigation and drainage facilities for the left bank; (2) completion of the 46-km Nagarjunasagar right main canal and construction of drainage for the right bank; (3) rehabilitation, upgrading or construction of 1,575 km of rural roads; (4) command area development on 72,000 hectares; (5) a program to monitor water use