

ARAGUAIA

INTERNATIONAL SYMPOSIUM
ON GEOMORPHOLOGY AND
PALEOHYDROLOGY OF LARGE RIVERS
GLOCOPH-1AS

G BOLETIM GOIANO de Geografia

special issue
vol. 19(1): 1999

FEDERAL UNIVERSITY OF GOIÁS
INSTITUTE OF SOCIAL & ENVIRONMENTAL STUDIES - IESA

Geografia
Essentials - IESA - UF

Editora
UFG

HYDROLOGY OF THE BIO BIO RIVER, CHILE

Duyvestein A. and Link O.

*Civil Engineer Department University of Concepción.
Concepción. Chile.*

The Bio Bío river is situated in the 8th region of Chile, named Region del Bio Bio. Its drainage area is 24.000 km². The Bio Bio river is one of the most largest and plentiful rivers from the country, with 380 km length. It rises in two small lakes: Icalma and Galletué, situated in the high Andes, about 1200 meters over the sea level. The river flows into the Pacific Ocean around the parallel 37°, in the province of Concepción with 2000 m width.

Because of the slope (over 5% in the Andes; 0,5 % in the mouth), the flow changes from supercritical to subcritical. In the last 100 km the river shows a braided river pattern with high sedimentation of aluvial particles (150 -200 tons/year/km²).

The precipitation varies between 1000 and more than 1600 mm/year in the Andes.

The water discharge varies from 180 m³/s in Summer to over 13.000 m³/s during the rain season. The average discharge is 900 m³/s.

The water discharge of the Bio Bio river is presented and analyzed, that keeping in mind that the basin area is only 24.000 km².