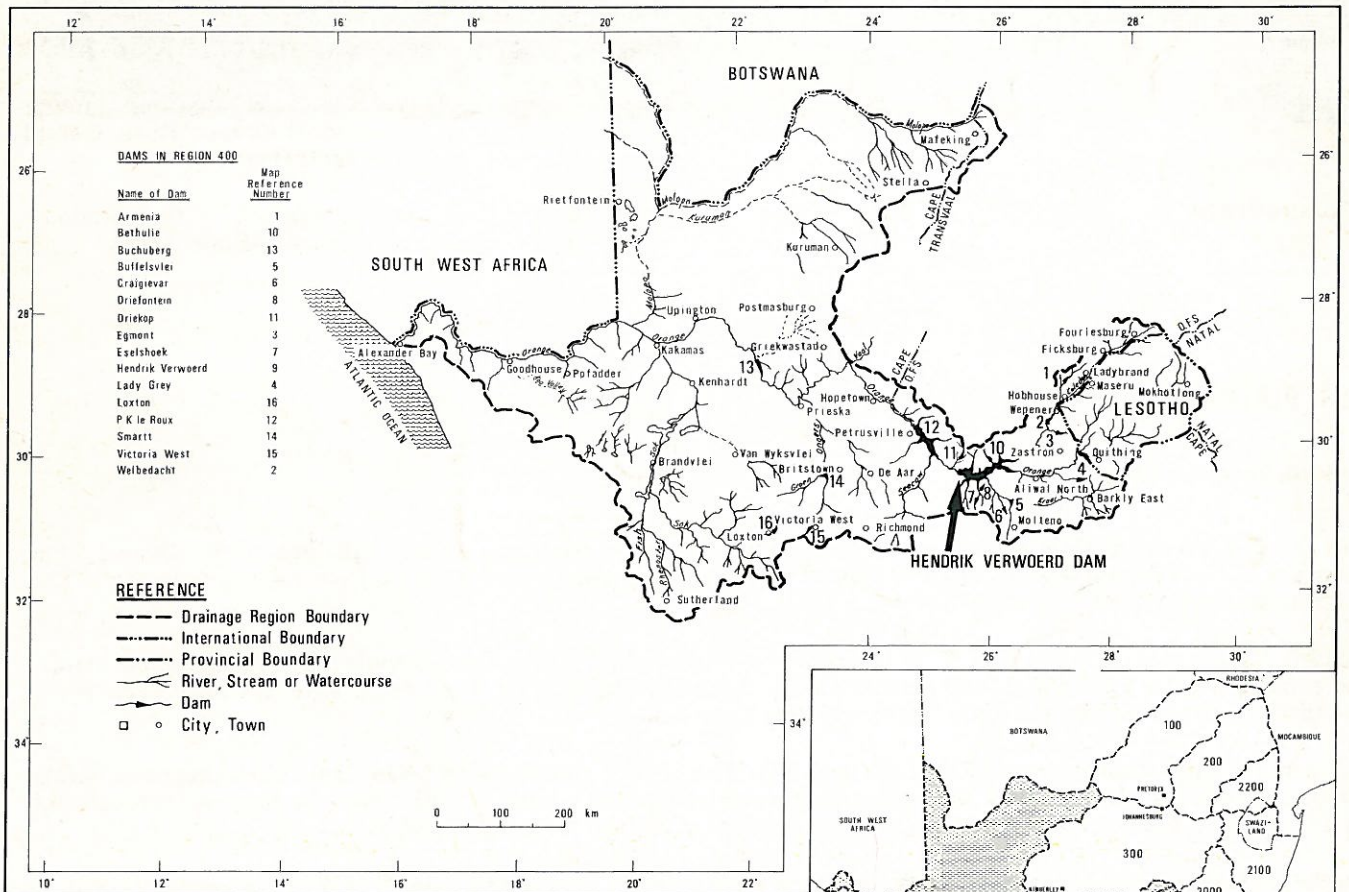
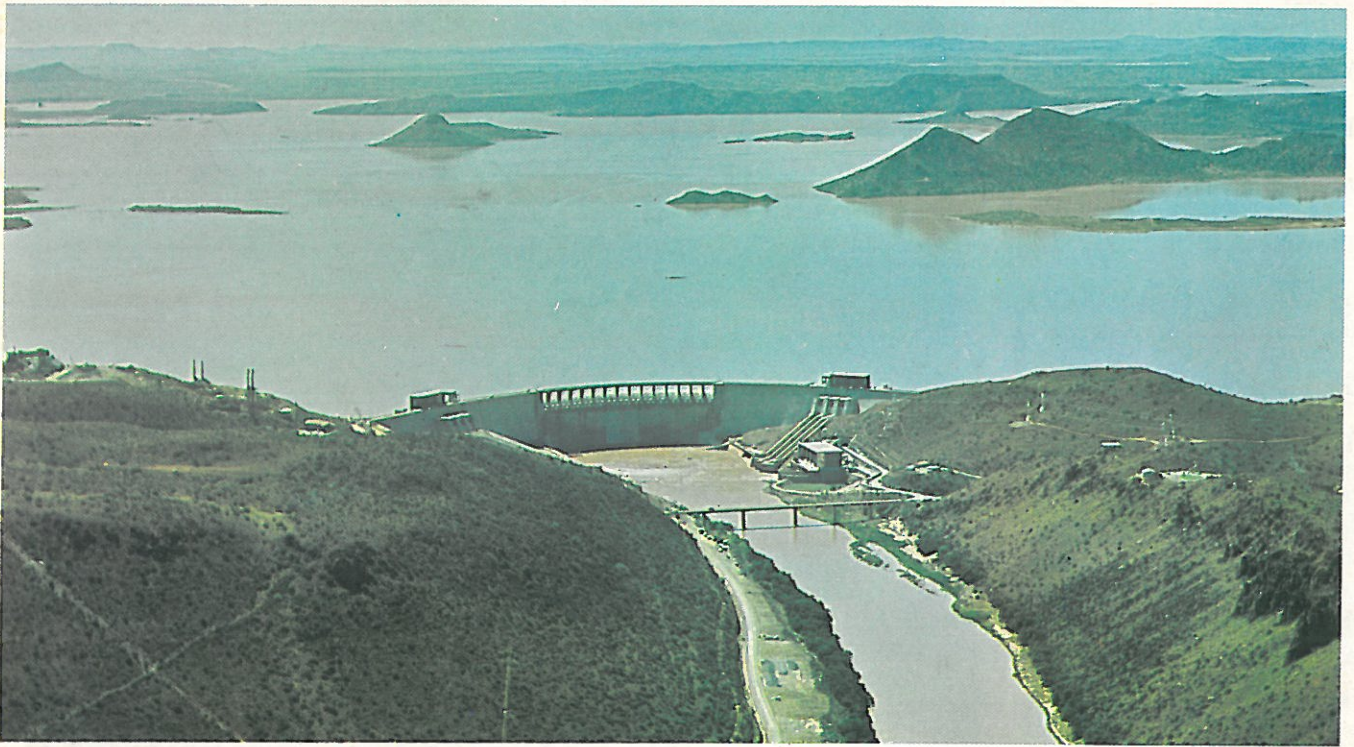


# HENDRIK VERWOERD DAM



## DRAINAGE REGION 400



# HENDRIK VERWOERD DAM

## DATA

Year of completion.....	1972
River.....	Orange
Nearest town.....	Colesberg
Province.....	Orange Free State and Cape Province
Type.....	Arch/Gravity
Height above lowest foundation.....	88 m
Length of crest.....	914 m
Volume content of dam.....	1,730 million m <sup>3</sup>
Gross capacity of reservoir.....	5 954,809 million m <sup>3</sup>
Purpose.....	Irrigation, Water supply and Hydro-electric
Maximum discharge capacity of spillway.....	20 450 cumecs
Type of spillway.....	Controlled and Uncontrolled
Owner.....	Department of Water Affairs
Engineering by.....	Gibb Hawkins and International Orange River Consultants (Pty) Ltd
Constructed by.....	Union Corporation—Dumez—Borie Dams

## DESCRIPTION

### Hendrik Verwoerd Dam

The Hendrik Verwoerd Dam is sited in the north-eastern Cape on the Orange River. It is in a narrow gorge, 5 km upstream of Norvalspont. Floods of 8 000 cumecs or more occur mainly during the summer months, reducing to low flows in winter.

Hendrik Verwoerd is the major dam of the Orange River Project which is aimed at controlling the large floods of summer and providing water for domestic and agricultural use during the dry seasons. The Orange River catchment area is dry and easily erodable and siltation of the reservoir will be a problem.

The dam is of the double curvature concrete arch type with gravity abutments on either flank. Each abutment houses three intake blocks which contain the equipment for controlling the release of water from the reservoir through the chute spillways. The central uncontrolled spillway provides additional discharge capacity.

On the Cape Province side of the river penstocks feed water from the reservoir to four, 80 MW turbo-generators connected to the national power grid.

Construction of the dam wall was started in November 1966 and completed in December 1972. An average of 36 300 cubic metres of concrete was placed per month.

The Orange Free State Provincial Administration has taken over a large number of the construction camp buildings and the services and intends to develop the terrain for recreational purposes.

