

LOWER ORANGE SYSTEM SUPPORT

ORANGE RIVER PROJECT

LOCATION

Part of the Orange River Project (ORP) is to support the Lower Orange catchment demands, even though the Gariep and Vanderkloof dams are situated in the Upper Orange catchment.

DESCRIPTION

The transfer makes use of the Smartt Syndicate Dam and the Vanwyksvlei Dam, and a number of weirs, including the Boegoeberg and Neusberg weirs. The Lower Orange consists of several sub-systems and schemes:

- ▣ Karos–Geelkoppes Rural Water Supply Scheme: Upstream of Upington; used for stock watering
- ▣ Kalahari West Rural Water Supply Scheme: North of Upington; uses treated water from plants for stock watering and rural domestic demands
- ▣ Pelladrift Water Supply Scheme: Supplies water to Pofadder, Pella and mines at Aggenya and Black Mountain (operated by Pella Water Board)
- ▣ Springbok Regional Water Supply Scheme: Supplies the towns of Springbok, Okiep, Carolusberg and Kleinsee, along with local mining demands, with treated water from Henkries Purification Works (Henkriesmond)
- ▣ Urban, industrial and mining: Many demands are supported along the Orange River
- ▣ Douglas Irrigation Scheme: Located at the downstream end of the Vaal River; part of the Orange–Vaal Transfer Scheme and therefore receives water from both rivers
- ▣ Boegoeberg Irrigation Scheme: The 172-km Boegoeberg Canal (capacity 9.76 m³/s) runs along the left bank of the Orange River and supplies water to the Rouxville West Scheme (now part of the Boegoeberg GWS). The Noord-Oranje Canal, which runs along the right bank, supplies water to the Noord-Oranje Irrigation Board. Downstream, a siphon and canal convey water to the Gariep Settlement
- ▣ Middle Orange Irrigation Area: Includes irrigators along the riparian zone, from Hopetown to Boegoeberg Dam.



Smartt Syndicate Dam (source: SA Dept of Water Affairs)

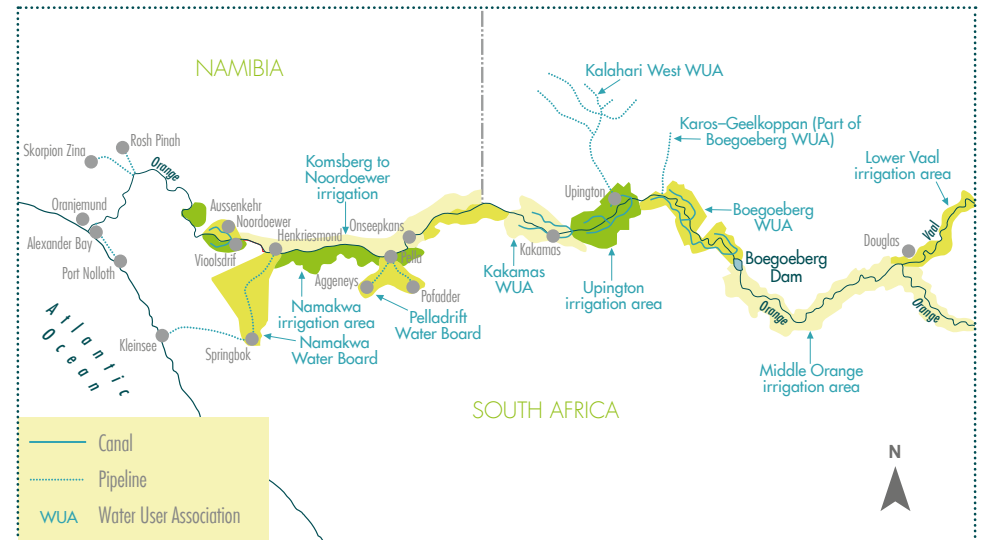


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- ▣ Uppington Irrigation Scheme
- ▣ Kakamas Irrigation Scheme
- ▣ Onseepkans Irrigation Scheme
- ▣ Namaqualand Irrigation Area
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- ▣ Aussenkehr Irrigation Scheme (Namibia)
- ▣ Komsberg to Noordoewer Irrigation Area (Namibia).

Other schemes

- ▣ Gifkloof Weir
- ▣ Kalahari Rural Water Supply Scheme
- ▣ Kakamas Government Water Scheme
- ▣ Neusberg Weir
- ▣ Rhenosterkop Weir
- ▣ Keimoes Canal Irrigation Area
- ▣ Onseepkans Irrigation Area
- ▣ Namaqualand Irrigation Area
- ▣ Pelladriift Water Supply Scheme
- ▣ Namakwa Water Board Supply Scheme
- ▣ Vioolsdrift and Noordoewer Irrigation Area (South Africa and Namibia)
- ▣ Alexander Bay.



Irrigation areas and controlling bodies along the Lower Orange River (adapted from ORASECOM, 2007a)

PURPOSE

The purpose of this system/scheme is to supply demands between Marksdrift and the river mouth. These demands include irrigation, urban and industrial. There is currently no hydropower generation within the Lower Orange Water Management Area.

