

LOWER ORANGE SYSTEM SUPPORT ORANGE RIVER PROJECT

LOCATION

Part of the Orange River Project (ORP) is to support to 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, as well as the weirs, including the Boegoeberg and Neusberg Weirs. The Lower Orange sub-system consists of several sub-systems and schemes, as follows:

- ▣ 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 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 supported along the Orange River.
- ▣ Several Irrigation Schemes, as follows:
 - Douglas Irrigation Scheme ▪ Boegoeberg Irrigation Scheme ▪ Upington Irrigation Scheme
 - Kakamas Irrigation Scheme ▪ Onseepkans Irrigation Scheme
- ▣ Namakwaland Irrigation Area
- ▣ Vioolsdrift Irrigation Scheme
- ▣ Namaqualand Irrigation Scheme
- ▣ Middle Orange Irrigation Area
- ▣ Noordoewer Irrigation Scheme (Namibia)
- ▣ Aussenkehr Irrigation Scheme (Namibia)
- ▣ Komsberg to Noordoewer Irrigation Area (Namibia)



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



Vanwyksvlei Dam (source: SA Dept of Water Affairs)



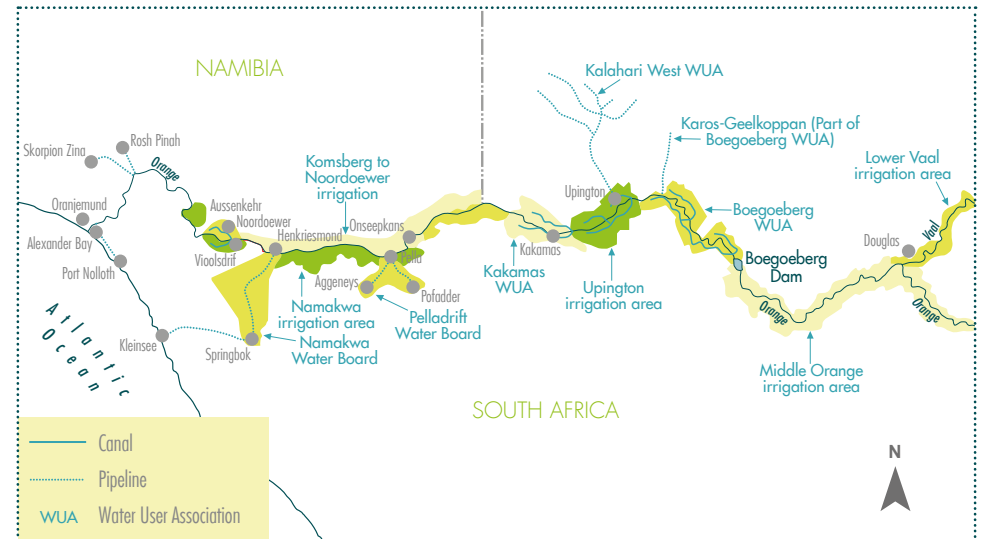
ORANGE RIVER PROJECT

MAJOR WATER SCHEMES IN THE LOWER ORANGE

Scheme Name	Description
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 towns of Springbok, Okiep, Carolusburg and Kleinsee, along with local mining demands, with treated water from Henkries Purification Works (Henkriesmond)
Urban, Industrial and Mining	Many demands 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
Middle Orange Irrigation Area	Includes irrigators along the riparian zone, from Hopetown to Boegoeberg Dam
Boegoeberg Scheme	The 172 km Boegoeberg Canal (capacity 9.76 m ³ /s) runs along the left bank of the Orange River, 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 Gariëp Settlement.

Other schemes

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



Irrigated areas along the Lower Orange River (from ORASECOM map, 001/2007)

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 no hydropower generation within the Lower Orange Water Management Area.

