

COORDINATES (degrees, minutes, seconds)

| LATITUDE | LONGITUDE | | |
|----------------|----------------|--|--|
| 26°55′50.93″ S | 17°56′16.05″ E | | |

LOCATION

The Naute Dam is located on the Loewen River in the Fish River catchment in quaternary catchment D46G in Namibia.

DESCRIPTION

The Naute Dam is a double curvature circular arch structure.

PURPOSE

Water is treated at the dam via a 1.9 km pipeline to the water treatment plant. Then the purified water reaches the town of Keetmanshoop via a 44 km pipeline. Water is also provided for a 270 ha irrigation scheme via a 2 km gravity pipeline.

PHYSICAL INFORMATION

| Dam name | River | Quaternary catchment | FSC* (million m³) | SA (km²) | Owner | Wall height (m) | Wall length (m) |
|-----------|--------|-------------------------|-------------------|----------|----------|-----------------|-----------------|
| Naute Dam | Loewen | D46G | 83.58 | 11.55 | NamWater | 37 | 470 |

^{*} Live full supply capacity (ORASECOM)





Naute Dam (source: www.wikipedia.org)



| Year of completion | | /abstractions (millio | n m³/a) | 1:50 yield (million m³/a) | Maximum spillway capacity (m³/s) |
|--------------------|----------|-----------------------|---------|------------------------------|-------------------------------------|
| rear or completion | Domestic | Irrigation | Other | | |
| 1971 | 2.1† | 3.3 † | Unknown | 12 | 2 380 |

† SA Dept of Water Affairs PB D000/00/4303 Source: NamWater and ORASECOM 001/2007

AREA-CAPACITY RELATIONSHIP

| Elevation (m) | Storage (million m³) | Surface area (km²) |
|---------------|----------------------|--------------------|
| 732 | 83.58 | 11.53 |
| 731 | 72.80 | 10.05 |
| 727 | 40.54 | 6.58 |
| 725 | 28.53 | 5.42 |
| 721 | 12.03 | 2.86 |
| 719 | 7.29 | 1.83 |
| 714 | 2.38 | 0.49 |
| 711 | 1.32 | 0.31 |
| 703 | 0.00 | 0.00 |

OPERATING RULE

The Naute and Hardap Dams are operated as a sub-system, known as the Fish River sub-system. The operating rule for this sub-system allows the dams to supply the demands imposed upon them until the dams reach their respective minimum operating levels



