

Harris Dam Project - WA

Harris Dam Eases Salinity Problems



Objectives and Challenge:

The Harris Dam near Collie, WA, was built in 1990 to supply high quality water to 31 towns, communities and agricultural ventures in the Great Southern Region of Western Australia.

Extensive clearing for agriculture during the post WWII expansion period, affected the salinity balance in the Wellington Reservoir catchment. Over the years salinity rose to unacceptably high levels necessitating the establishment of the new dam.

The site chosen was on the Harris River, a tributary of the Collie River, some 11 km upstream of the township of Collie.

The dam itself is founded on completely weathered soils some 20 to 30 metres deep, which produced some interesting geotechnical problems due to seepage and settlement.

The new Harris Dam has a catchment area of 321 square kilometres, a reservoir capacity of almost 72,000 megalitres and will yield 17,000 megalitres annually.

A 9.4km, 914 mm OD rising main connects the Harris Dam reservoir with the existing Great Southern Town Water Supply (GSTWS) main.

This is one of the first large diameter rubber ring jointed pipelines installed by the Water Authority of Western Australia and has been a major success in terms of speed of installation and cost.

Solution:

SINTAKOTE, cement lined, spiral welded steel pipe was selected for the job because of the proven operational performance of the product and the quality of manufacturing systems.

Due to topographical considerations, the Harris Dam project required both slip-in welded joint pipe and SINTAJOINT rubber ring joint pipe.

The welded joint pipe was used in two steep river crossings while the SINTAJOINT pipe was used for the majority of the line.

Through its role as a key environment manager, the Authority ensured that environmental considerations were an integral part of the Harris Dam project.

Harris Dam Project

Client Water Authority of Western Australia (Water Corporation)

Project Harris Dam Pipeline

Pipeline 9.4km of 914 mm OD x 7mm WT MSCL SINTAJOINT Pipe

Construction Major Project Group
Water Authority of Western Australia

Construction Period Commissioned December 1990