

Burdekin-Haughton Water Supply Scheme

History

In the early 1950s the Burdekin River Irrigation Area was established on 7,500 hectares at Clare, Millaroo and Dalbeg, on the levee soils of the lower Burdekin floodplain. Water supplies for this limited area came from the Gorge Weir and Blue Valley Weir. In the 1970s this supply was supplemented from Eungella Dam, on the Broken River behind Mackay.

In March 1980, the Queensland Parliament authorised the establishment of the Burdekin River Project - the largest land and water conservation scheme undertaken in Queensland. The project supplies water for the irrigation of new and existing farms in the lower Burdekin River region, and supplements the urban and industrial needs of the twin cities of Townsville and Thuringowa.

Uses of Water

Irrigation

The Burdekin's warm winters and ample sunlight enable double-cropping of many field crops. Horticultural crops can be produced in winter for southern markets. The traditional "dry" period from April to October also enables programmed farm management for irrigation and harvest of many crops. For cane growers these conditions also produce the highest yield and sugar content in Australia.

The Burdekin's expanding horticultural sector produces a variety of out-of-season winter vegetables and fruit with crops such as capsicums, eggplant, rockmelons, squash, pumpkins, watermelons and sweet corn being grown in the area.

The Burdekin mango industry has been established for a number of years. The fruit is picked from mid-November to early January for the fresh fruit and processing markets. Several central packing sheds operate during this season.

Urban Water Supplies

In 1988 the Townsville/Thuringowa Water Supply Board (NQ Water) completed construction of a pumping station and pipeline from the Haughton Balancing Storage to the headwaters of the Ross River Dam near Townsville.

Water Boards

A significant proportion of the water from the Burdekin Falls Dam is released from Clare Weir and is directed to the North and South Burdekin water boards to supplement groundwater supplies.

Industrial

SunWater has a number of industrial users including quarries and sugar mills.

Major Storage

Burdekin Falls Dam

The Burdekin Falls Dam is one of the largest dams in Queensland. The dam forms Lake Dalrymple, which covers an area of 22,400 hectares and ponds water 50 kilometres up the Burdekin River. The design of the dam has allowed for future increases in storage capacity and for possible future hydro-electric generation.

Construction of the Burdekin Falls Dam commenced in 1984, with 630,000 cubic metres of concrete used for the dam wall from September 1984 to March 1986. Several earth and rockfill saddle dams were also constructed to prevent water held by the dam escaping through the low areas around the lake during flood events.

The left bank saddle dam is 1,150 metres long, and required 960,000 cubic metres of rockfill material. The Mt Graham saddle dam is 3,500 metres long and required 900,000 cubic metres of earth and rockfill material.

Construction of the Burdekin Falls Dam was completed in 1987. It filled following the wet season in 1988.

The Burdekin Falls Dam operates in conjunction with the existing storages of Clare Weir and Gorge Weir on the Burdekin River, and Val Bird and Giru weirs on the Haughton River at Giru. Pumping stations are located on the Burdekin River, within the Clare Weir storage, to divert water to the Haughton, Elliot and Barratta Main Channels.

Channel/Pipeline System

Burdekin Channel System

Channels have been developed on both sides of the Burdekin River and each section is served by major pump stations located on Clare Weir. The pump stations divert water into main channels on each bank of the river and then to customers by a system of distribution channels.

The Tom Fenwick Pump Station services the Haughton and Barratta Main Channels, which provides water to customers between the Burdekin and Haughton rivers. In addition, the Haughton Main Channel supplements the Haughton River and Giru groundwater area.

On the other side of the river, the Elliot Main Channel services the Leichhardt Downs area and has the potential to be extended eastwards towards Bowen.