

Dams

OWNED AND/OR DESIGNED BY SUNWATER

Atkinson



Beardmore Dam



Bill Gunn Dam



Bjelke-Petersen Dam



Boondooma Dam



Borumba Dam



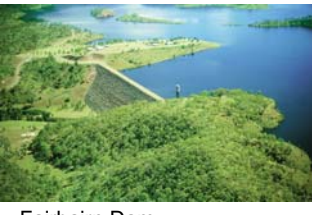
Burdekin Falls



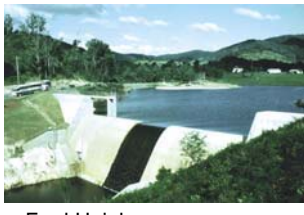
Callide Dam



Cania Dam



Cedar Pocket Dam



Coolmunda



Eungella Dam



Fairbairn Dam



Fred Haigh



Julius Dam



Kinchant Dam



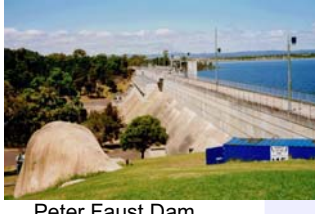
Kroombit Dam



Lake Clarendon Dam



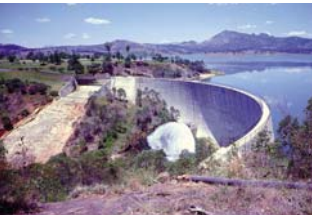
Leslie Dam



Maroon Dam



Moogerah Dam



Paradise Dam



Peter Faust Dam



Teemburra Dam



Tinaroo Falls Dam



Wuruma Dam



Wivenhoe Dam



Glenlyon Dam



Awoonga Dam



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Beardmore Dam

QUEENSLAND



E.J. Beardmore Dam, was built approximately 20 km upstream from St George on the Balonne River, to provide water for the extending irrigation area.

The dam supplies water by gravity feed to two storages located along the Thuraggi watercourse, namely Moolabah and Buckinbah Weirs.

From these storages water is utilised within the St George Irrigation area, supplying essential needs for cotton production.

Dam Type

Earthfill and mass concrete with vertical lift gates

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Balonne River

Stream distance

251.40km

Nearest town

St George

Description of dam

Earthfill and mass concrete with vertical life gates

Storage level AHD

207.12

Storage level above original bed

12.10m

Storage capacity

81,700ML

Area covered at FSL

2,850Ha

Catchment area

75,160km²

Embankment crest level AHD

208.65m

Date completed

1972

Bjelke-Petersen Dam

QUEENSLAND



Bjelke – Petersen Dam, forms part of the Barker – Barambah Irrigation Project. The project comprises the dam, Joe Sippel Weir on Barambah Creek, and a 6.2 km long gravity feed diversion channel to convey water from the dam to the weir.

This scheme provides water for irrigation to approximately 6,000Ha of land adjacent to Barambah Creek.

Dam Type

Earthfill and rockfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Barker Creek

Stream distance

1.3km

Nearest town

Murgon

Description of dam

Earthfill and rockfill

Storage level AHD

307.30m

Embankment crest level AHD

315.60m

Storage level above original bed

26.30m

Storage capacity

134,900ML

Area covered at FSL

2,250Ha

Catchment area

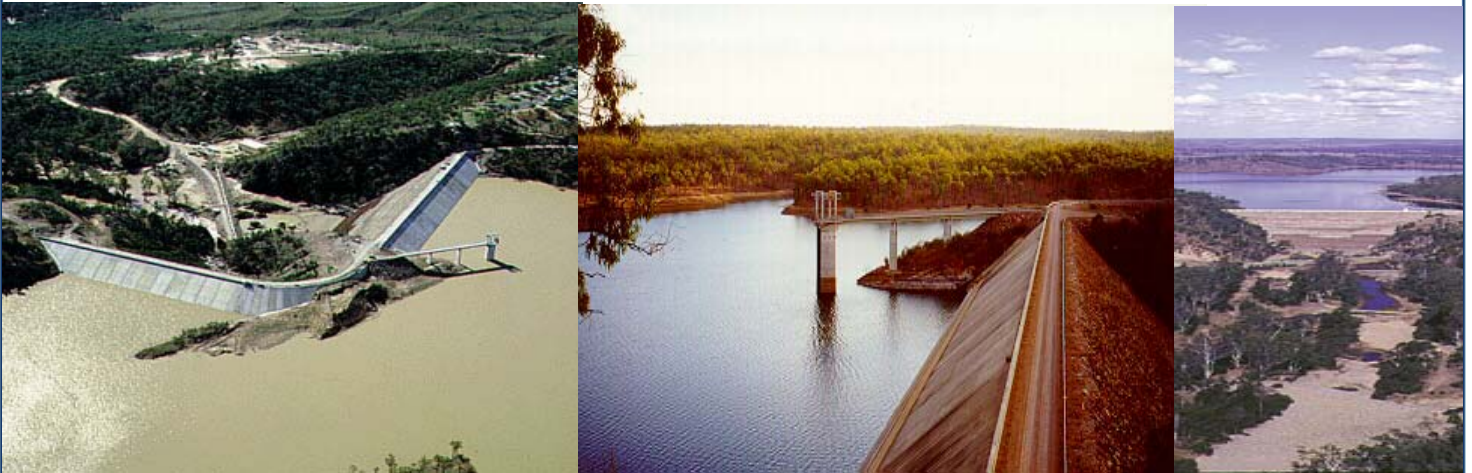
1,640km²

Date completed

1988

Boondooma Dam

QUEENSLAND



Boondooma Dam is located at AMTD 86.7km on the Boyne River at a site known locally as “Grimes Boilers”. The dam has been constructed primarily to provide a water supply to the 1400MW Tarong power station via the Tarong pipeline. Of the dam’s yield capacity, three quarters is allocated to the power station, and the remainder is for irrigation by riparian users downstream of the junction with the Burnett River at Munduberra.

The dam comprises two connected concrete faced rock fill (CFR) dams, the major dam across the Boyne River, and the second across Sandy Creek, a tributary on the left side. The dam incorporates a largely unlined chute spillway, an inlet tower, access bridge, tunnel, outlet works, and a cross river pipeline to the Boondooma Pump Station.

The dam has been designed to allow for future raising to the topographic limit of the site. The stage 2 development would involve raising the full supply level by 12m and increasing the storage capacity to 620,000ML. The embankments would require raising by 8m.

Dam Type

Concrete faced earthfill dam

SunWater’s Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Boyne River (ATMD 86.70km)

Catchment Area

4,195km²

Max probable flood

13,400m³/s

Storage capacity

204,200ML

Surface area

1,815Hs

Normal storage level AHD

280.40m

Height – Boyne River embankment

64m

Height – Sandy Creek embankment

41m

Embankment length

577m

Embankment crest level AHD

295.50m

Spillway crest length

115m

Volume of excavation for spillway

950,000m³

Total volume of concrete in all structures

26,000m³

Design thickness of concrete walls

300mm

Date completed

1982

Burdekin Falls Dam

QUEENSLAND



The Burdekin River Irrigation Project is based on water supplies from the Burdekin Falls Dam.

Hundreds of new farms have been developed and auctioned in the area surrounding the lower Burdekin River, bounded by the Haughton River in the north, and the Elliot River in the south.

The dam also supplies water for urban requirements including those for the City of Townsville.

Dam Type

Mass concrete dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Burdekin River

Stream distance

159.30km

Nearest town

Ravenswood

Description of dam

Mass concrete

Storage level AHD

154m

Embankment crest level AHD

169.20m

Storage level above original bed

40.00m

Storage capacity

1,860,000ML

Area covered at FSL

22,000Ha

Catchment area

114,240km²

Date completed

1987

Callide Dam

QUEENSLAND



Callide Dam stage 1 was initially built to supply water to the Calcap Power Station, on the Callide open cut coal field. Water from the dam is also used to supply the township of Biloela, for irrigation purposes and to supplement the groundwater supplies through recharge within the Callide Valley.

With the completion of Callide Dam Stage 2 (addition of radial gates) the storage capacity of the dam was more than doubled. The dam supplies water for the Callide Power Stations, and water within the storage is supplemented by pipeline from the Awoonga Dam.

Dam Type

Earthfill dam with radial gates

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Callide Dam

Stream distance

80.10km

Nearest town

Biloela

Description of dam

Earthfill with radial gates

Storage level AHD

216.10m

Storage level above original bed

34.80m

Embankment crest level AHD

219.24m

Storage capacity

136,300ML

Area covered at FSL

1,240Ha

Catchment area

520km²

Date completed

1965/88

Cania Dam

QUEENSLAND



Cania Dam, on Three Moon Creek, was initially constructed to provide additional water for groundwater recharge, and for irrigation in the Monto area.

Dam Type

Earthfill and rockfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Three Moon Creek

Stream distance

110.10km

Nearest town

Monto

Description of dam

Earthfill and rockfill

Storage level AHD

331m

Storage level above original bed

40.10m

Embankment crest level AHD

338m

Storage capacity

85,000ML

Area covered at FSL

760Ha

Catchment area

280km²

Date completed

1982

Cedar Pocket Dam

QUEENSLAND



Cedar Pocket dam, located about 20km East of Gympie, is owned and operated by SunWater and was constructed over the period 1983 to 1984.

The main purpose of the dam was to provide an irrigation water supply for dairy land pastures downstream of the catchment.

The dam wall consists of a mass concrete gravity dam with an earthfill embankment and an ungated ogee crest spillway.

Recreational use of the storage and surrounding areas is promoted and stocking of the dam with a variety of fish species encourages recreational fishers to enjoy the ponded area.

Dam Type

Mass concrete gravity dam with earthfill embankment

SunWater's Role

SunWater manages the dam and carries out periodical Dam Safety reviews and reports.

Technical data

Stream

Deep Creek (East)

Stream distance

25.20km

Nearest town

Gympie

Description of dam

Mass concrete gravity dam with earthfill embankment

Storage level AHD

100.93m

Storage level above original bed

12.30m

Embankment crest level AHD

105.93m

Storage capacity

730ML

Area covered at FSL

22Ha

Catchment area

17km²

Date completed

1984

Coolmunda Dam

QUEENSLAND



The dam is situated on Macintyre Brook at its junction with Bracker Creek, approximately 19km upstream from Inglewood.

When completed, Coolmunda Dam provided an assured supply of irrigation water in Macintyre Brook, to enable the irrigation of 3,440 ha along the Brook from the damsite to its junction with the Dumaresq River, a distance of 77km.

Dam Type

Earthfill dam with radial gates

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Macintyre Brook

Stream distance

78km

Nearest town

Inglewood

Description of dam

Earthfill with radial gates

Storage level AHD

314.70m

Storage level above original bed

16.10m

Storage capacity

69,000ML

Area covered at FSL

1,645Ha

Catchment area

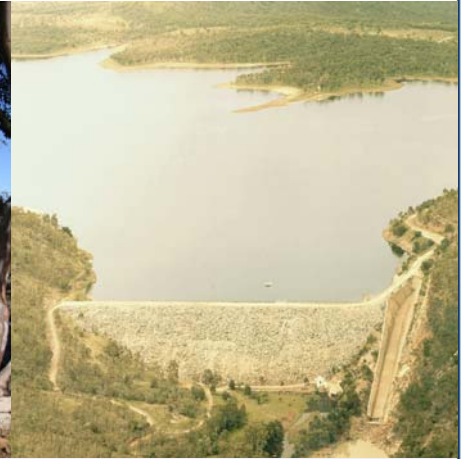
1,760km²

Date completed

1968

Eungella Dam

QUEENSLAND



Eungella Dam is owned and operated by SunWater. It is located approximately 80km west of Mackay on the Broken River at AMTD 71.8km.

The dam was constructed over the period 1965 to 1969 and its intended use was to supply water to the Collinsville Power Station and for a limited amount of irrigation.

The dam waters now also supply the coalfields near Moranbah south-west of the dam site.

Dam Type

Earthfill and rockfill dam

SunWater's Role

SunWater manages the dam and carries out periodical Dam Safety reviews and reports.

Technical data

Stream

Broken River

Stream distance

71.80km

Nearest town

Mackay

Description of dam

Earthfill and rockfill

Storage level AHD

562.71m

Storage level above original bed

44.50m

Storage capacity

112,400ML

Area covered at FSL

848Ha

Catchment area

142km²

Date completed

1969

Fairbairn Dam

QUEENSLAND



Fairbairn Dam, supplies water for the Emerald Irrigation Area and the ever growing cotton industry in the surrounding districts.

Water from the dam is also diverted by the Emerald Shire Council for the town water supply.

Fairbairn Dam also supplies water for irrigation, and groundwater recharge. Water is also used for coal washing, and stock water purposes within the region.

Dam Type

Earthfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors

This dam is owned and managed by SunWater.

Technical data

Stream

Nogoa River

Stream distance

685.60km

Nearest town

Emerald

Description of dam

Earthfill

Storage level AHD

204.23m

Storage level above original bed

31.70m

Embankment crest level AHD

218.86m

Storage capacity

1,301,000ML

Area covered at FSL

15,000Ha

Catchment area

16,317km²

Date completed

1972

Fred Haigh Dam

QUEENSLAND



Fred Haigh Dam, the Monduran pump station, and the Gin Gin main channel, were constructed to provide water to the potentially lucrative sugar cane industry within the Bundaberg area.

Funding for the scheme was shared by an agreed joint Commonwealth-State undertaking and led the way for the development of the Bundaberg Irrigation Area.

Fred Haigh Dam has a secondary function as a tourist attraction within the region, and facilities for boating and picnicking have been developed.

Dam Type

Earthfill and rockfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors

This dam is owned and managed by SunWater.

Technical data

Stream

Kolan River

Stream distance

74.60km

Nearest town

Gin Gin

Description of dam

Earthfill and rockfill

Storage level AHD

75.56m

Storage level above original bed

43m

Embankment crest level AHD

84.09m

Storage capacity

562,000ML

Area covered at FSL

5,345Ha

Catchment area

1,310km²

Date completed

1975

Julius Dam

QUEENSLAND



Julius Dam and the associated supply system was constructed to provide urgently needed additional water for the rapidly expanding needs of Mount Isa City, and Mount Isa Mines Limited.

The dam reservoir provides excellent aquatic recreational facilities in the area as well as improving the ecology generally.

Dam Type

Overshot multiple arch concrete dam

SunWater's Role

SunWater is responsible for the dam safety reviews and inspections and operation and maintenance of this dam.

Technical data

Stream

Leichhardt River

Stream distance

390.90km

Nearest town

Mount Isa

Description of dam

Multiple arch

Storage level AHD

223.54m

Storage level above original bed

25.20m

Embankment crest level AHD

232.68m

Storage capacity

107,500ML

Area covered at FSL

1,255Ha

Catchment area

3,650km²

Date completed

1976

Kinchant Dam

QUEENSLAND



Kinchant Dam, forms part of the Eton Irrigation Project, and because of the limited catchment of the dam, the storage is subsidised by pumping from the Mirani Weir (and pump station) on the Pioneer River, near Mirani.

The supply from Kinchant Dam also recharges the groundwater within the area.

Dam Type

Earthfill and rockfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Sandy Creek

Stream distance

9.40km

Nearest town

North Eton

Description of dam

Earthfill and rockfill

Storage level AHD

57.21m

Storage level above original bed

18.10m

Embankment crest level AHD

61.21m

Storage capacity

62,800ML

Area covered at FSL

920Ha

Catchment area

30.80km²

Date completed

1977/86

Kroombit Dam

QUEENSLAND



The primary purpose of the dam is to store water for groundwater recharge. Kroombit dam is also used as a supply for irrigation within the area.

The dam was constructed within one year due to innovated adopted design and construction methods, namely a Roller Compacted Concrete (RCC) spillway was used in the river channel, with flanking embankment dams on each abutment.

Dam Type

Earthfill and rockfill dam with RCC spillway

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Kroombit Creek

Stream distance

68.80km

Nearest town

Biloela

Description of dam

Earthfill and rockfill with RCC spillway

Storage level AHD

265.80m

Storage level above original bed

18.60m

Embankment crest level AHD

270.70m

Storage capacity

14,600ML

Area covered at FSL

289Ha

Catchment area

328km²

Date completed

1992

Leslie Dam

QUEENSLAND



Leslie Dam was built to provide regulated supplies of irrigation water in Sandy Creek and the Condamine River, down to Cecil Plains, and to augment the existing water supply for the City of Warwick. Water from the dam is used for irrigation, domestic supplies, and for stock watering.

With an increase in demand, the dam was raised with the addition of radial gates, in 1986, which more than doubled the original storage capacity of the dam.

Dam Type

Mass concrete dam with radial gates

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Sandy Creek

Stream distance

8.40km

Nearest town

Warick

Description of dam

Mass concrete with radial gates

Storage level AHD

473.63m

Storage level above original bed

28.90m

Embankment crest level AHD

472.41m

Storage capacity

106,200ML

Area covered at FSL

1,288Ha

Catchment area

603km²

Date completed

1965/86

Paradise Dam

QUEENSLAND



Paradise Dam supplies the Bundaberg Irrigation Area and will compliment 25 existing storages on the Burnett and Kolan Rivers.

This scheme provides water for existing and future water supply requirements for the lower Burnett River.

Dam Type

Roller compacted concrete dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Burnett River

Stream distance

131.40km

Nearest town

Biggenden

Description of dam

Roller compacted concrete

Storage level AHD

67.60m

Right abutment overflow level

78.0m

Storage capacity

300,000ML

Area covered at FSL

2,995Ha

Catchment area

30,785km²

Date completed

2005

Peter Faust Dam

QUEENSLAND



Peter Faust Dam, completed in 1990, provides water for the Proserpine Irrigation Area.

The dam is also utilised for flood mitigation, reducing damage due to flooding within the Proserpine region.

Dam Type

Earthfill and rockfill

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Proserpine River

Stream distance

57.70m

Nearest town

Proserpine

Description of dam

Earth and rockfill

Storage level AHD

85.60m

Embankment crest level AHD

94.30m

Storage level above original bed

39.60m

Storage capacity

491,400ML

Area covered at FSL

4,335Ha

Catchment area

260km²

Date completed

1990

Teemburra Dam

QUEENSLAND



Teemburra Dam is located some 60km west of Mackay on the central coast of Queensland, and has been constructed to augment water supplies in the Pioneer Valley. The dam site is at AMTD 20.4km on Teemburra Creek which is one of the headwater tributaries of the Pioneer River. The reservoir is formed by the main dam on Teemburra Creek and two saddle dams located on the eastern rim of the storage.

Teemburra dam comprises a concrete faced rock fill embankment some 57m high with a crest length of 350m. The downstream face includes reinforcement placed to withstand floods during construction.

The spillway consists of an unlined cascade, with a 60m wide concrete control crest designed to safely discharge the maximum PMF of 650m³/second.

The dam has been constructed to its ultimate development level.

Dam Type

Concrete faced rockfill dam.

SunWater's Role

SunWater was responsible for, engineering studies during the detailed design and documentation, and then for the planning and feasibility phase, and supervision of construction by contractors.

The dam is owned and managed by SunWater.

Technical data

Stream

Teemburra Creek (ATMD 20.40km)

Full supply level

EL 290m

Surface area of reservoir

1,270Ha

Surface area of reservoir at FSL

1,085Ha

Max probable flood level

El 293.8m

Overall height

57m

Embankment length

350m

Spillway crest length

115m

Volume of excavation for spillway

950,000m³

Volume of concrete in structures

18,000m³

Design thickness of concrete face

300mm

Storage capacity

174,600ML

Catchment area

66km²

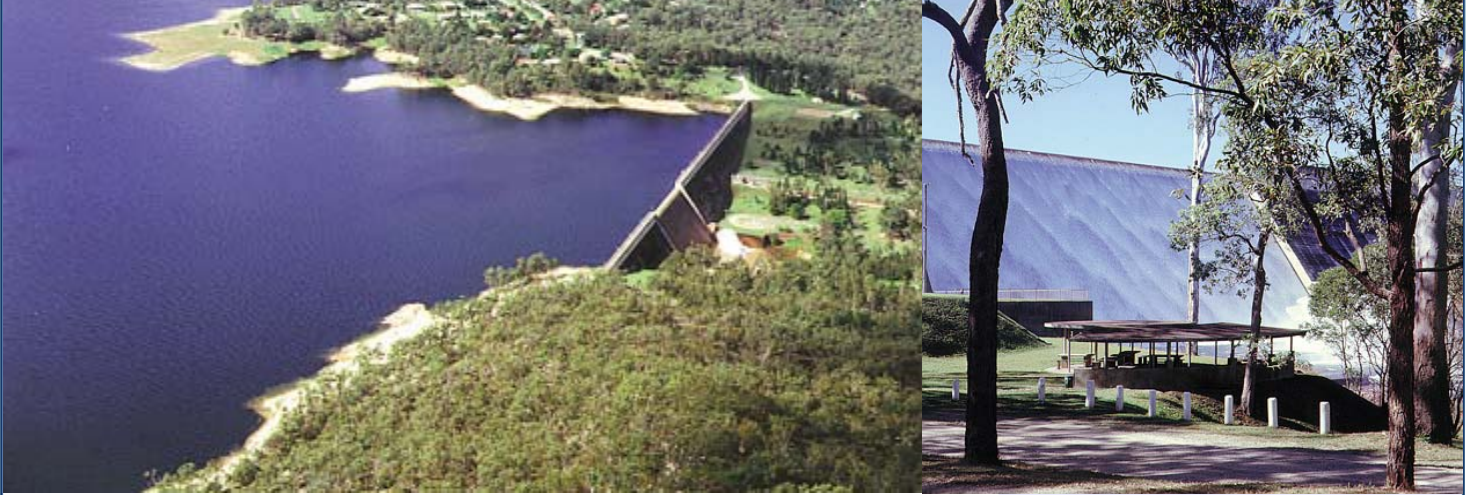
Date completed

1996

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Tinaroo Falls Dam

QUEENSLAND



Tinaroo Falls Dam was initially built to provide a water supply for the tobacco industry in an area south of the Walsh River, and as far west as Dimbulah.

From this supply, the Mareeba-Dimbulah Irrigation Area eventually developed.

The development of this irrigation scheme was coordinated with the building of the hydro-electric generating station at the Barron Falls, and water from the Tinaroo Falls Dam, is utilised both for irrigation and supplement the supply for the production of electricity.

Dam Type

Mass concrete dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Barron River

Stream distance

101.40km

Nearest town

Atherton

Description of dam

Mass concrete

Storage level AHD

670.42m

Embankment crest level AHD

674.00m

Storage level above original bed

41.80m

Storage capacity

438,900ML

Area covered at FSL

3,500Ha

Catchment area

545km²

Date completed

1958

Wuruma Dam

QUEENSLAND



Wuruma Dam, on the Nogo River, constitutes the first stage of the Upper Burnett Irrigation Scheme, and together with the Mundubbera Weir, some 88km downstream, ensures a supply of water sufficient to irrigate farmland along 160km of the Burnett river to Mingo Crossing, below Gayndah.

With the upgrading and/or construction of additional weirs, the supply for irrigation, stock and domestic use has been greatly increased within the area.

Dam Type

Mass concrete dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is owned and managed by SunWater.

Technical data

Stream

Nogo River

Stream distance

23km

Nearest town

Eidsvold

Description of dam

Mass concrete

Storage level AHD

228.29m

Storage level above original bed

36.60m

Embankment crest level AHD

235.46m

Storage capacity

165,400ML

Area covered at FSL

1,639Ha

Catchment area

2,320km²

Date completed

1968

Atkinson Dam

QUEENSLAND



The Lower Lockyer Irrigation Project involved an off stream storage formed by the construction of an embankment (Atkinson's Dam) across the outlet of Atkinson's Lagoon.

Water supply for the storage is obtained mainly by diverting water from the catchments of Buaraba Creek, and Seven Mile Lagoon/Lake Clarendon.

Recreational use of the storage and surrounding areas is encouraged with the provision of boat ramps, and picnic facilities. The dam is also stocked with a variety of fresh water fish species, to promote recreational fishing within the ponded area.

Dam Type

Earthfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is not owned by SunWater.

Technical data

Stream

Atkinson's Lagoon

Stream distance

N/A

Nearest town

Lowood

Description of dam

Earthfill

Storage level AHD

65.72m

Storage level above original bed

9m

Storage capacity

30,400ML

Area covered at FSL

556Ha

Catchment area

32.70m

Embankment crest level AHD

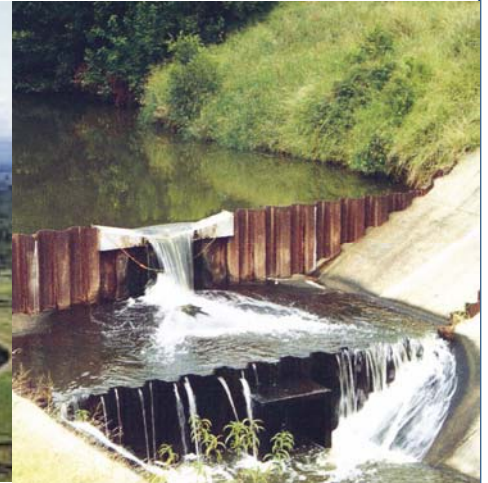
68.60m

Date completed

1970

Bill Gunn Dam

QUEENSLAND



Bill Gunn Dam, 1.5km west of Laidley was developed to increase the capacity of the existing Lake Dyer, a natural lake adjacent to Laidley Creek. The 1170m long earth filled structure has a maximum height of 12m and an overflow spillway that diverts excess water into Laidley Creek.

With a natural catchment area of only 4km² the flood flows in Laidley Creek at the Laidley West Recharge Weir must be diverted into Bill Gunn Dam to fill the storage.

The release of stored water back into Laidley Creek is regulated to assist in augmenting groundwater and surface water supplies in the area.

Dam Type

Earthfill and rockfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is not owned by SunWater.

Technical data

Off-stream storage
Lake Dyer

Stream
Near Laidley Creek

Nearest town
Laidley

Description of dam
Earthfill and rockfill

Diversion pipeline length
4,200m

Storage level AHD
110m

Storage capacity
6,940ML

Average annual rainfall
822mm

Area covered at FSL
100Ha

Catchment area
3km³

Date completed
1987

Borumba Dam

QUEENSLAND



The dam was initially built to provide a water supply for Queensland's Sunshine Coast, and the Mary River Valley. The dam is located on Yabba Creek, 31km from the creek's confluence with the upper Mary River.

Recent studies found that the storage capacity of the dam provided insufficient storage for growing future demands within the area and as such, the dam was initially raised in 1998, by some 2.5m with an ultimate raising of 25m to be completed by the year 2010.

Dam Type

Concrete faced rockfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is not owned by SunWater.

Technical data

Stream
Yabba

Stream distance
31.10km

Nearest town
Imbil

Description of dam
Concrete faced rockfill

Storage level AHD
135.01m

Embankment crest level AHD
145.61m

Storage level above original bed
33.5m

Storage capacity
46,000ML

Area covered at FSL
480Ha

Catchment area
465km²

Date completed
1964/98

Lake Clarendon Dam

QUEENSLAND



Lake Clarendon, 10km north-east of Gatton is a natural, low lying feature adjacent to Lockyer Creek. A zoned earthfilled dam built across the lake has increased its storage to 24,300ML.

The dam was built to augment existing irrigation supplies by:

- Increasing the recharge of groundwater adjacent to Lockyer Creek
- Increasing the availability of pumping supplies from within Lockyer Creek
- Piping water to farms in the Morton Vale area

Flood flows in Lockyer Creek are diverted into Lake Clarendon Dam to increase the storage yield. Water is later rediverted into Lockyer Creek, and is distributed to 4,500ha of farming land on 95 properties, while another 45 properties within the Morton Vale district are supplemented by pipeline.

Dam Type

Earthfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is not owned by SunWater.

Technical data

Stream

Off-stream storage – Lockyer Creek

Diversion channel length

6,500m

Reticulation pipeline length

15,500m

Description of dam

Earthfill

Reservoir Area

2339Ha

Natural catchment area

3.4km

Embankment crest level AHD

97.10m

Storage level AHD

96m

Storage Height

13m

Storage capacity

24,300ML

Average annual rainfall

791mm

Date completed

1992

Maroon Dam

QUEENSLAND



This central earth core and rockfill structure situated on Burnett Creek approximately 25km above its confluence with the Logan River, permitted expansion of irrigation along Burnett Creek and the Logan River for about 130km downstream of the dam.

This more than doubled the existing area being irrigated prior to the dam being built. Recreation facilities also make the area around the dam a popular tourist attraction.

Dam Type

Earthfill and rockfill

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is not owned by SunWater.

Technical data

Stream

Burnett Creek

Stream distance

23.50km

Nearest town

Boonah

Description of dam

Earthfill and rockfill

Storage level AHD

207.14m

Storage level above original bed

33.60m

Embankment crest level AHD

219.90m

Storage capacity

37,500ML

Area covered at FSL

310Ha

Catchment area

106km²

Date completed

1973

Moogerah Dam

QUEENSLAND



Moogerah Dam, provides irrigation supplies to riparian landholders along Reynolds Creek, and through a series of diversions, also supplies water to Warrill Creek, and the Warrill Valley farmers.

Public access across the dam wall enables visitors to enter Mt Edwards Nation Park, and beautification of the picnic areas around the dam has made these sites a tourist attraction within the area.

Dam Type

Mass concrete – double curvature arch dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is not owned by SunWater.

Technical data

Stream

Reynolds Creek

Stream distance

15.30km

Nearest town

Kalbar

Description of dam

Mass concrete – double curvature arch

Storage level AHD

154.91m

Storage level above original bed

32m

Embankment crest level AHD

160.71m

Storage capacity

83,700ML

Area covered at FSL

827Ha

Catchment area

228km²

Date completed

1961

Awoonga Dam

QUEENSLAND



Awoonga Dam is located at AMTD 22.7km on the Boyne River, several kilometres above the tidal limit and approximately 20 kilometres south of the city of Gladstone. The current dam is the sole water supply source for the city of Gladstone, and for the considerable industry in the Gladstone area. Almost a third of the Awoonga's yield supplements supplies to the Callide power station, which is based near Callide Dam. All supplies are delivered by pipeline.

The dam embankment is of concrete faced rockfill construction. Flood flows are passed via a side channel chute spillway on the left abutment, with concrete control section and dissipater, and partially lined entry and discharge channels. A dry well multilevel intake tower delivers water to two downstream pumping stations, separately supplying Gladstone and Callide, and also to river discharge works via a single conduit under the dam.

Nominal allowance has been made to raise the dam from the present full supply level of EL 30m to a maximum of EL 53.5m. Such raising would require the construction of extensive saddle dams, high on the left bank. Current considerations of raising full supply level to EL 62m would require extensive modifications to the existing dam and to its ancillary structures, and would require major saddle dams.

Dam Type

Earth fill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors of the original Awoonga High Dam.

This dam is not owned by SunWater.

Technical data

Storage capacity
270,000ML

Full supply level (AHD)
EL 30m

Surface area of reservoir at FSL
3,250Ha

Embankment height (max)
42.60m

Embankment length at crest level
650m

Spillway crest length
120m

Wavewall height
1.50m

Top of wavewall
EL 45.70m

Max flood level (PMF)
EI 45.85m

Total volume of concrete used
60,400m³

Volume of excavation in spillway
2,200,000m³

Total volume of rockfill
1,043,100m³

Date Completed
1982

Glenlyon Dam

QUEENSLAND



Glenlyon Dam, on Pike creek was constructed on behalf of the Dumaresq – Barwon Border Rivers Commission, to provide assured irrigation supplies by private diversion for riparian landholders along the Dumaresq, Macintyre and Barwon Rivers.

Although not a SunWater owned Dam SunWater has had Engineering input into the construction, maintenance, operation, and Dam Safety aspects of Glenlyon Dam.

Dam Type

Earthfill and rockfill dam

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors

This dam is not owned by SunWater.

Technical data

Stream

Pike Creek

Stream distance

6.60km

Nearest town

Stanthorpe

Description of dam

Earthfill and rockfill

Storage level AHD

411.73m

Storage level above original bed

47.40m

Embankment crest level AHD

423.60m

Storage capacity

254,000ML

Area covered at FSL

1,800Ha

Catchment area

1,295km²

Date completed

1976

Wivenhoe Dam

QUEENSLAND



Wivenhoe Dam, on the Brisbane River at AMTD 150.4km, was initially built to supplement Brisbane's Town water supply. The dam was also fitted with radial gates which increase the storage capacity, and are utilised to release water at set times during flood possibility events, thus lowering flood heights in the Brisbane River, and surrounding Brisbane Valley.

The Dam was built in conjunction with Splityard Creek Dam and water from the Wivenhoe reservoir is pumped into Splityard Creek Dam where it's potential and kinetic energy are transformed into electrical energy. This cost effective method is used for power generation in periods of high demand (peak periods).

SunWater carries out Dam Safety inspections and operation and maintenance of Wivenhoe dam for the owners - SEQW Corporation.

Dam Type

Earthfill and rockfill dam with gated mass concrete spillway

SunWater's Role

SunWater was responsible for, planning and feasibility studies, detailed design and documentation and the supervision of construction by contractors.

This dam is not owned by SunWater.

Technical data

Stream

Brisbane River

Stream distance

150.40km

Nearest town

Lowood

Description of dam

Earthfill and rockfill with gated spillway

Storage level AHD

67m

Storage level above original bed

56m

Storage capacity

1,150,000ML

Area covered at FSL

10,750Ha

Date completed

1985

Wivenhoe Dam and Splityard Creek Dam, (together with Somerset Dam and North Pine Dam) are owned and operated by the South East Queensland Water Corporation.