name: Wimmera Inlet Channel

Address: Off Golton Road ST HELENS PLAINS

Place Type: Water Supply Channel

Citation Date: 2022



Wimmera Inlet Channel Loop Channel

Recommended Heritage Protection VHR -

HI -

PS

Yes

Integrity

Highly intact section of Irrigation System - one of few remaining channels/ regulator points.

History and Historical Context

The Wimmera Inlet Channel (WIC), constructed between 1918 and 1920, is the largest channel within the Wimmera/Mallee Headworks System and has a capacity of 1,600 mega-litres per day.[1] It is directly associated with the operation of Taylors Lake, an off-stream reservoir located approximately 20km south east of Horsham. The WIC is important for supplying Taylors Lake with water, as well suppling environmental water flow into the Wimmera River.

The prime function of the WIC is to harvest flows from the Wimmera River and direct them into the recreational lakes, Taylors Lake and Pine Lake (decommissioned 2013). The WIC intercepts flood flows from a number of

watercourses, principally the Wimmera River, but also Mount William Creek and Middle Creek. The operation of the WIC is complex, as demonstrated in the attached diagram. Ken Barlow, former district engineer for the Rural Water Commission of Victoria, explains that flood flows that enter the channel are 'discharged over fixed crest escapes and drops, drop board escapes, a radial gate escape and a pipe outlet'.[2] The WIC's managing authority, GWMWater, describes the operation of the WIC as follows:

The channel [is] able to divert Wimmera River and Mt William Creek water into Taylors Lake. The channel commences at Huddleston's Weir, north of Dadswells Bridge, and is able to carry a maximum volume of up to 1,600 mega litres per day. Wimmera River water is typically of poorer quality than found on either the McKenzie River or Mt William Creek water and is therefore a lower priority to harvest. Flows less than around 6,000 ML/day (as measured at Glenorchy) are able to be kept within the Wimmera River at Huddleston's Weir by closing the WIC inlet gates. Flows in excess of around 6,000 ML/day will overtop and bypass the inlet gate structure. The channel is configured to redirect excess water back to the Wimmera River in a way that reflects what would be expected to occur naturally.[3]

The WIC Regulator (ST26585 WIMINLET) and fourteen metre concrete occupation crossing above were installed in 1923.[4] They are situated off Gorton Road between the Western Highway and Horsham Wal Wal Road, St Helen's Plains, approximately 40km south east of Horsham.

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[1] Barlow, K (1988) Wimmera/Mallee Headworks System Reference Manual. Unpublished, p. 21.

[2] Ibid.

[3] GWMWater (2011) Discussion paper: Taylors Lake and Wimmera Inlet Channel. Retreived from http://www.gwmwater.org.au/information/publications/ground-and-surface-water/west-wimmeragma/cat_view/163-reservoir-operating-rules [Accessed 4 May 2014].

[4] GWMWater (2004) Wimmera Mallee Water Channel Register. Unpublished.

Description

Physical Description

Series of earth formed water channels, connecting the Wimmera River, Mt William Creek and Taylors Lake. Reinforced concrete regulator gates and overpasses. Open channel across St Helen's Plains. This section of channel system still operational (2014).

Physical Condition

Good condition. Maintained.

Australian Heritage Commission Criteria

Relevant HERCON Criteria

Criterion A: Importance to the course, or pattern, of our cultural or natural history. (Channel system a significant factor in the agricultural development of the Wimmera region. Demonstrates water supply system to recreational

lakes, environmental flow into the Wimmera River, and tool for management of floodwaters)

Criterion B: possession of uncommon, rare or endangered aspects of our culture or natural history. (The WIC is the largest and last remaining earthen channel system in the Wimmera region)

Criterion F: Importance in demonstrating a high degree of creative or technical achievement at a particular period. (illustrates engineering ingenuity and skill in managing water flow and utilisation of previous natural lake system for water supply across region.)

Comparative Analysis

Only section of channel extant in Horsham Shire today (2014). It is the last remaining earthen channel system in the Wimmera, following the decommissioning and backfilling of open channels due to the completion of the Wimmera Mallee Pipeline in 2010.

Statement of Significance

What is significant?

The channel referred to as the Wimmera Inlet Channel, beginning at Huddleston's Weir and terminating at the McKenzies Drop Regulator. Includes all earth formed open channel and Regulator (ST26585 WIMINLET) gates. Centred on Easting 630878mE, Northing 5922486mN.

It is part of a complex channel system, comprising of a weir (Huddlestons), fixed crest escapes, radial escapes and pipe outlets. The Channel enables high quality water to be redirected back into the Wimmera River for environmental flow, in a way in which best represents how it would naturally occur.

How is it significant?

The Wimmera Inlet Channel is of local historic and technical significance and rarity value to the Horsham Rural City.

Why is it significant?

The Wimmera Inlet Channel is:

- . Of local historic significance, as this channel system was a significant factor in the agricultural development of the Wimmera region. (Criterion A)
- . Of local rarity value, as it is the last remaining earthen channel system in the Wimmera, following the decommissioning and backfilling of open channels due to the completion of the Wimmera Mallee Pipeline in 2010. (Criterion B)
- . Of local technical significance, by illustrating engineering ingenuity and skill in managing water flows and the utilisation of the previous natural lake system for water supply across the region. (Criterion F)

Recommendations 2022	
External Paint Controls	No

Internal Alteration Controls	No
Tree Controls	No
Fences & Outbuildings	No
Prohibited uses may be permitted	No
Incorporated Plan	-
Aboriginal Heritage Place	No

References

Literature title: Wimmera/Mallee Headworks System Reference Manual

Literature type: General Reference

Literature author: Barlow, K

Literature publisher: Unpublished

Literature year: 1988

Literature title: Pipe Dreams: A History of Water Supply in the Wimmera-Mallee

Literature type: General Reference

Literature author: Van Veldhuisen, R. and B. McIlvena Literature publisher: Wimmera Mallee Water: Horsham

Literature year: 2001

Literature title: Discussion paper: Taylors Lake and Wimmera Inlet Channel operating rules

Literature type: General Reference Literature author: GWMWater

Literature publisher: Literature year: 2011

This information is provided for guidance only and does not supersede official documents, particularly the planning scheme. Planning controls should be verified by checking the relevant municipal planning scheme.