



connections project



Operational Rules

December 2018

Version 2



Contents

Introduction	2
GMW channel and pipeline capacity	3
Service points	3
On-farm works	7
Operation and maintenance compensation	8
Co-contribution	8
Property consolidation	9
Voluntary de-irrigation or dry-off	9
Road crossing ownership	10
Land acquisition and compensation	10
Fencing	11
Construction disturbance compensation	11
Exceptional circumstances	11
Complaints management	12
Meanings and definitions	12

If you would like to receive this information in an accessible format (such as large print or audio), please phone the Connections Project hotline on 1300 163 006 or email connections@gmwater.com.au

Published by the Connections Project, a division of Goulburn Murray Water, January 2017 and updated December 2018.

© The State of Victoria 2017

This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the *Copyright Act 1968*.

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.



Introduction

The Connections Project is a win:win for water users, the environment and our region.

In September 2016, the Victorian and Australian governments approved the Connections Project's Reset Delivery Plan. The Reset Delivery Plan sets out the way forward for the Project. It ensures the Project will be delivered on time, on budget and meet its targets.

The Connections Project is a win:win for water users, the environment and our region. It ensures we're generating water savings by creating a world leading delivery system that boosts irrigator productivity, helps communities thrive and fosters healthy waterways and wetlands.

The Reset Delivery Plan set a desktop plan for the management of each channel and the associated service points. The next step is putting this desktop plan into practice. It is here we speak to landowners – to test the desktop assumptions and work together to develop a final plan for delivery.

We understand landowner input is essential in this process. We work hard to ensure our final plan meets the Project's Operational Rules and landowner needs.

This document sets out to explain these rules. It's the framework we use to make decisions on how the Project is delivered. The Rules are designed to ensure the Project is developing solutions that meet irrigators needs and that we're spending money wisely.

These Rules will, and have been, updated by the Project Director to incorporate new learnings. They are designed to be read in conjunction with the Connections Project Landowner Guide which is available on the Project website at www.connectionsproject.com.au.

For landowners there's an ongoing fee for each service point. Rationalising can provide cost benefits through reduced service point fees.

Fit for purpose means landowners are getting the flow rate they need. It also means the Project is spending money wisely. To use an analogy we're not building four-lane freeways when a single lane road is required.

GMW channel and pipeline capacity

The level of service (capacity or sizing) of new GMW pipelines and channels, and remediated channels, is based on historical deliveries and annual usage requirements. This ensures the Project is providing the right level of service – it means landowners are getting the capacity they need.

Unless agreed with landowners, existing supply levels will not change and the requirement to order water and schedule deliveries will remain.

Service points

Determining the Fit for Purpose Flow rate

The Project aims to:

- Rationalise as many service points as practicable, which will minimise ongoing costs to irrigators and GMW
- Provide a flow rate that is fit for purpose and meets irrigators' needs.

The fit for purpose flow rate to be provided through a modernised service point is initially based on the 90th percentile flow rate delivered during the 2011-2012 to 2013-2014 irrigation seasons. These years were selected because there were 100 per cent allocations during this time and they are seen as the most representative of recent use patterns.

The 90th percentile means that of all recorded flow rates on all orders during the 2011-2012, 2012-2013 and 2013-2014 irrigation seasons, only 10 per cent were larger than the proposed flow rate for a new service point. For example, if a flow rate is 5ML/d for 95 per cent of the time, but 6ML/d is used for 5 per cent of the time, the 90th percentile flow rate will be 5ML/d.

The flow rate can be modified in circumstances where:

- a. Recent flow rates are different to the years above
- b. A landowner can demonstrate a different flow rate is needed (whether this is higher or lower than that determined by the Project) and the Project team agrees to change the flow rate. We'll need documented evidence showing current or future farming practices to support any change, or
- c. A landowner makes a co-contribution (refer to page 8).

Once the Project and landowner have resolved the flow rate it is known as the determined flow rate. It will then be recorded in the relevant reconfiguration plan and/or landowner agreement for on-farm works, GMW's IPM system (known to landowners as WaterLine) and the Water Register.

Where it is decided to increase a flow rate at the Project's cost, the landowner must hold appropriate delivery share across the properties to support this increase in accordance with Table 1. The landowner always has the choice to fund the upgrade themselves and delivery share will remain untouched (refer to page 8).

The Connections Project gives landowners the opportunity to terminate delivery share at no cost and under strict criteria. This provides further opportunity for irrigators to reduce costs.

Table 1 - Delivery share guide where the project upsizes or downsizes the flow rate of a service point

Service Point Type	Minimum delivery share to be assigned to the service point (ML/d)
375mm closed conduit	1
450Mann Pit	1.2
450Mann Pit with shroud	1.5
600Mann Pit or 600Slipmeter	2
Flume Gate Meter (FGM)	2.5

If a landowner accepts a lower flow rate than determined above and this results in the downsizing of the service point, the lower flow rate will be adopted as the determined flow rate. The corresponding delivery share will then be terminated (pro-rata) at no cost to the landowner equivalent to the reduction in service point size.

Table 1 is to be used to determine the delivery share that will remain on the service point. For example, the meter selected for a landowner is 450mm, but the landowner elects for lower flows and a 375mm service point. The difference in delivery share requirements is 0.2ML/d, therefore up to 0.2ML/d will be terminated providing the minimum 1ML/d required for a 375mm service point is retained.

Where the flow rate adopted does not meet the landowner’s personal expectations, the landowner can contribute the additional capital cost of the upgraded service point (refer to page 8).

Where multiple service points supply a property that will be replaced with one service point, they are to be treated as one service point for the purposes of determining the flow rate to the property. For example, if the property has three service points, each with historical flow rates of 7ML/d, and:

1. They all operate at different times then the flow rate will be 7ML/d for the new service point, or
2. Two operate together and the third at different times then the flow rate will be 14 ML/d for the new service point, or
3. All three service points operate together, and are required to do so in the future, then the flow rate will be 21ML/d for the new service point.

Determined flow rates cannot exceed the capacity of the GMW delivery system or capacity of on-farm systems.

Unless specifically provided for in these rules, existing delivery share will be retained for all properties where irrigation supply is retained.

Modernised outlets provide lower headloss and therefore higher commandability.

Headloss through a modernised service point

A large Detheridge meter outlet (LMO) was designed to utilise 75mm of head across the service point. What this means is that the water level on the farm side of the LMO is 75mm lower than the water level in the GMW channel.

The modernised service points are designed to utilise only 50mm of head across the service point, an increase in water level of 25mm on the farm side of the service point. The design head loss for service points on channels using greater than 15ML/d, or on GMW owned pipelines, is 75 mm.

While we stipulate a determined flow rate, there may be instances where the service point can deliver greater flows. For example, Table 2 shows that if the determined flow rate is 8ML/d, a 450mm Mann service point would be installed, which can deliver up to 10.3ML/d. Please note that this is dependent on the channel and on-farm conditions.

The determined flow rate will be recorded in the Victorian Water Register and GMW's IPM system (known to landowners as WaterLine).

Table 2 - Typical flow rates at adopted head loss

Service Point Type	Typical flow rate (ML/d)
300mm closed conduit	3.5
375mm closed conduit	5.5
450Mann Pit	10.3
450Mann Pit with shroud	12.5
600Mann Pit or 600Slipmeter	25
Flume Gate Meter (FGM)	>25

Fees are also charged for each Domestic and Stock Service Point – so reducing SPOs can also help reduce costs.

Domestic and Stock Service Points (SPOs)

The aim is to utilise the irrigation service point to provide D&S where practicable, or provide one SPO where this is not practicable.

The Project may elect to meter any SPOs installed, typically:

- the usage will exceed 10ML/yr, or
- the supply is for commercial use (i.e. dairy wash down, factory, etc.), or
- supply is via a pipeline designed to provide a head at the SPO of 6 m or greater.

Retaining service points with low water use is one way the Project ensures it's spending money wisely. It means we're focusing on upgrading our region's primary producers.

Service points on retained channel

Service points on retained channels will fall into one of three categories.

Rationalise (existing service point removed)

A one-off incentive payment of \$5,440 is available to landowners in return for their agreement to rationalise a service point and in lieu of any on-farm works.

Where on-farm works are needed to enable the rationalisation of a service point, the Project will do works up to the equivalent value of replacing the service point that is to be rationalised. Where the cost of connecting works exceeds the cost of the service point, co-contribution can be made to make the works cost neutral to the project.

Replace (remove existing service point and replace with new)

A service point will be replaced where it is determined the service point cannot be rationalised, uses greater than 10ML/yr and is value for money to replace.

Landowners will be responsible for future service point fees in accordance with the standard fee schedule dependent upon the type of service point installed.

Retain

Where it is determined the service point cannot be rationalised, and the use is less than 10ML/yr, the service point will be retained as is.

All small pipe outlets (SPOs) will be retained.

Service points on channels to be rationalised or replaced with GMW pipelines

The Project aims to rationalise as many service points as practicable, and will typically construct only one irrigation service point per WUL held, with the following exceptions:

- one service point will not meet the existing demand of the property, or
- the property has demonstrated water use in excess of 500ML/yr, or
- it costs more to replace only one meter with on-farm works than replacing multiple meters.

Where an irrigation service point has no history of usage, and there is no demonstrated requirement for an irrigation flow rate, there will be no provision of irrigation supply. Where required, the Project will provide a SPO.

The Project uses experienced farm designers to work with landowners to design and construct on-farm systems that allow irrigators to take full advantage of the modernised delivery system.

On-farm works

On-farm works are to be designed to maintain existing service arrangements. This means reconnecting the irrigation footprint as it currently exists where service points are rationalised, as cost effectively as possible. Where a landowner wishes to irrigate additional land or undertake additional works, this is to be undertaken at the landowner's expense through a co-contribution.

The order of preference for on-farm infrastructure required for connection is generally:

- Gravity channel⁴
- Gravity pipeline
- Gravity channel lift pump
- Pumped pipeline.

Pipelines are to be favoured over channels where the infrastructure crosses another property (anywhere other than immediately adjacent to the property boundary).

In addition, pipelines are preferred where construction, drainage or flooding, environmental or cultural heritage constraints do not permit channel construction.

Where the on-farm works offered do not meet the landowner's personal preferences, the landowner may decide to contribute the additional capital cost of the works (refer to section 4).

Where a landowner is taking over an existing GMW channel, it may need to be remediated to make it more suitable for on-farm usage unless it will be used as a storage or is kept full for other reasons.

The Project will design and construct on-farm works to standards developed in conjunction with farm designers with many years' experience in the Goulburn Murray Irrigation District (GMID). The Project will provide 12 months warranty for the design and construction of on-farm works.



⁴Where a gravity channel requires the bed of the channel to be above natural service, alternatives will be investigated to minimise the risk of leakage and blow outs.

Co-contribution allows our region's innovative farmers to leverage smarter on-farm irrigation systems and technology. Private on-farm works can drive dollars further, by engaging several sub-contractors.

Operation and maintenance incentives

Where a preferred solution requires a landowner to own additional assets, incentives will be provided to offset the ongoing operation and maintenance costs of these assets. This will be paid as a one-off Present Value payment based on a 20-year period.

Co-contribution

During negotiations a landowner may advise that they plan to undertake additional on-farm works over and above the solution to be delivered by the Project.

This may be the GMW infrastructure itself (service point) or may be the on-farm works, or both.

A co-contribution agreement can be developed, with either the Project or the landowner undertaking the works. In either case, the Project will undertake the works necessary to upgrade the GMW assets.

The Project will undertake all works where there is certainty on the delivery schedule and cost. For example, a service point or pipe size upgrade, or upgrade of a simple farm channel to a gravity pipeline, would be undertaken by the Project.

The additional cost will include any cost increase associated with the GMW assets (pipelines, meters, etc.) and on-farm works. For example, when the landowner proposes to materially change the irrigation layout or the irrigation method (e.g. from gravity to pumped irrigation), the landholder must pay all of the estimated costs above the original solution to the Project, before a date nominated in the construction schedule. Should payment not be received by the Project, the original proposed scope will be constructed.

In some cases, the landowner may be permitted to undertake on-farm works themselves. This is where the additional works cost and delivery schedule do not have certainty. Where this option is selected, a calculated value of incentive will be paid to the landholder to complete the works (equal to the value of the on farm works required as part of the landowner's reconnection solution). This is a fixed sum payable by the Project, paid progressively as works are completed. All risks for design and cost are to be met by the landowner where there is identified environmental or cultural heritage management associated with the works. The landowner must engage and utilise an appropriately qualified and experienced project manager to oversee the works on farm.

Landowners can ask the Project to investigate opportunities to consolidate contiguous properties. This can provide benefits to landowners through less service points and less infrastructure to maintain

Property consolidation

Property consolidations are the amalgamation of two separately owned, contiguous properties that can enable the consolidation and rationalisation of irrigation infrastructure, thereby generating water savings or reducing the number of private connections. The Project may provide contributory funding related to the purchase of a property in agreed circumstances.

Consolidations will only be investigated by the Project as a result of an approach from a landowner. The Project will never initiate a property consolidation. Landowners should contact the Project as early as practicable if they are interested in exploring consolidation opportunities.

The Project will undertake the calculations and assess the feasibility of the request. Offers will only be valid for 30 days, 85 per cent of the payment will be made at settlement, 15 per cent is retained by the Project until all asset works are completed.

The Project or Connections representative is not involved in any negotiations in respect of property transfer. Where a connections payment has been made on a purchased property no further payments (e.g. further connections or dry off) will be made in respect of that property other than for rationalisation of infrastructure.

Payments will not be made to landowners retrospectively.

Voluntary de-irrigation or dry-off

Voluntary de-irrigation is the term used when a landowner agrees to terminate irrigation service and replace this with a stock and domestic supply. Dry-off is the term used when the property is provided no service from the irrigation network.

These options will not be considered for landowners on channels that are retained.

The de-irrigation or dry-off option will only be offered when it is the highest value for money, and preferred option. In the case of a de-irrigation, the property will be converted from a Water Use License (WUL) to a Water Use Registration (WUR).

The delivery share will be proportionally terminated by the Project commensurate with future use and is undertaken at no cost to the landowner. The delivery share will be the annual use divided by 100. For example, a WUR created to supply 2ML/yr will have the delivery share reduced to 0.02ML/d (4 ML/yr would be reduced to 0.04 ML/d).

Partial dry-offs will be considered where a property is physically split by assets such as roads, drains or railway lines and each section has its own individual service point.

Road crossing ownership

Any road crossing of domestic and stock infrastructure installed by the Project, outside of a piped water district, including both private and syndicate infrastructure, will be landowner owned, and therefore private responsibility.

This also includes irrigation infrastructure constructed by landowners to transfer water across a road to an adjoining property, where initiated by the landowner to manage their enterprise (i.e. is not as a result of the Project).

Land acquisition

The Project may need to acquire a land interest to facilitate GMW asset construction. The acquisition of land interests by the Project is generally undertaken by voluntary agreement with landholders and is guided by expert valuation advice.



Did you know? The Project uses drones to fly over GMW assets and properties before construction starts. This means we can assess any disturbance easily and action clean-up works.

Fencing

As a general rule, landowners are responsible for ensuring their property has a boundary fence. However, the Project recognises that in some cases, GMW channels to be rationalised have performed the purposes of a fence, and in many instances a new fence will be erected. Where an existing fence is removed to allow for the construction and decommissioning works a replacement fence will be erected.

The Project will provide a standard seven wire pine post and dropper fence design. If a landowner requires a higher standard, the landowner must pay the additional cost. However, where the Project removes a fence that is of a better standard and is in good condition, it will be replaced to a similar standard.

Construction disturbance compensation

These arrangements will be agreed upfront and detailed in the landowner agreement for on-farm works.

Exceptional circumstances

Landowners who require significant on-farm works and are experiencing exceptional circumstances that are directly impacting on their ability to engage with the Project, may be eligible for exceptional circumstances consideration.

Exceptional circumstances can include (but are not limited to) a major personal crisis which has occurred beyond the landowner's control, and impacts their capacity to make decisions, as evidenced by a medical practitioner.

Once approved, the Project can make allowances of up to a four week extension, depending on the progress of the connection. We will also try to provide additional assistance to the landowner by proactively providing support in the form of counselling, independent financial or engineering advice, or similar.

An allowance for exceptional circumstances will not be made where only a minor interruption to the landowner's services will be experienced.

Complaints management

To ensure greater accountability for, and responsiveness to, landowner and stakeholder complaints, a complaints management system has been developed.

The Project will accept complaints verbally or via phone and email.

A response to a complaint will deal with the substance of the complaint, or in more complex cases, will inform the landowner or stakeholder when they will receive such a reply. The response issued will provide reasons for any decision given, and if appropriate, will include the legislative or policy basis for the decision.

If you have a complaint phone 1300 163 006 or email connections.solutions@gmwater.com.au

Meanings and definitions

DFR

Determined flow rate.

DS

Delivery share - an entitlement to have water delivered to land in an irrigation area. It gives access to a share of the available capacity in the channel or piped network that supplies water to the property.

D&S

Stock and domestic supply.

Landowner agreement for on-farm works

The formal legal agreement that we use to carry out any works on farm to reconnect water supply.

LMO

Large meter outlet

Reconfiguration plan

A plan for the reconfiguration of GMW-owned water delivery infrastructure which is developed in accordance with Part 7A of the *Water Act 1989*.

Service point

The location where water is delivered to an individual farm from the communal water system.

SPO

Small pipe outlet (supplies stock and domestic water)

WUL

Water-use Licence - an entitlement to irrigate a specific parcel or parcels of land

WUR

Water-use Registration - authorises the use of non-irrigation water like stock and domestic or some industrial uses