



Policy of Irrigation

Introduction

The Mayfield Hinds Irrigation Scheme is designed as a flood irrigation scheme fed from the Rangitata Diversion Race. Water is delivered to farmers via open canals designed to deliver standard 230l/s flows to farms via open channels. Recently on farm irrigation systems have changed to a mix of predominantly spray as well as borderdykes. The scheme operates 'run of the river' and subsequently the amount of water available to allocate is subject to Rangitata and Ashburton River flows. This document describes the policies adopted by the scheme to allow the fair and equitable allocation of water to farmers and the efficient use of the water resource. The Policy of Irrigation is described in the following sections: General Irrigation Policy, Ordering and Delivery, On Farm Storage, and Audited Self Management.

General Irrigation Policy

1. Reference shall be made to the Mayfield Hinds Irrigation Limited Deed of Use for details of the water supply agreement held between The Company and The Farmer. The document describes the rights and obligations of both parties.
2. The allocation as per the Deed of Use is "a standard flow of 230l/s for 18 minutes per week for every hectare of the Contract Area on the days specified by the Board and under such terms and conditions as the Board may see fit to stipulate". At the discretion of the Board a reduced flowrate to accommodate spray irrigation may be permitted, as described further in this document.
3. The scheme is concerned that water is used efficiently by the farmers who obtain the water in terms of their contract. Once water is delivered to a farm the farmer shall ensure that no spillage occurs onto neighbouring properties and / or roads. In the event this happens the farmer will be required to notify the Raceman and remedy any faults in his delivery system.
4. All spray irrigators have an obligation to ensure that spray irrigation does not fall on roads. While there will naturally be a spray drift occurring particularly with a prevailing wind, the scheme will take a strong line against farmers who do not make an effort to carefully plan irrigator run start and stop points and programme pivot end guns to switch off in proximity to roads.

Ordering and Delivery

5. The water delivery is based on a 14 day roster. The roster may be split into a 7 day roster at the Raceman's discretion. If the water on the roster and order programme is not taken up you do not automatically become entitled to a greater amount of water on the following delivery. The water delivered is based on measured flows but the scheme is not responsible for any inconsistencies in these deliveries.
6. The following is a reminder of the procedure for ordering water. We ask that you advise staff who are to be in charge of irrigation to make themselves fully aware of the scheme irrigation policies and procedures:
 - a. **Racemen Ringing times:**
Home 7.30am – 8.30am and 12.30pm – 1.30pm
Cellphone (weekdays) 8.00am – 5.00pm
 - b. Check your races! Prior to water being delivered, visually inspect all culverts and races for any debris that may obstruct or upset the operation of your system. Advise any potential issues in scheme races so that Racemen can attend to them prior to water being switched on.
 - c. Water may be ordered by contacting a Raceman, normally no less than 2 days in advance of when you require water. The scheme operates on a rostered basis and Racemen will endeavour to deliver water to you as soon as possible. Due to the nature of a canal system it is not always possible to deliver single or reduced flows to irrigators when little or no other farmers are requiring water in your area.
 - d. In periods of high demand or restriction, the Racemen will dictate the availability of water on a rostered basis.
 - e. When irrigation water is no longer required **a minimum of 12 hrs notice is required before a flow can be shut off**. As the scheme operates a canal delivery system, there are delays in the time it takes to stop or reallocate water away from your turnout.
7. The Racemen's job is to deliver water fairly to all users. Turnouts are set and controlled by Racemen. In a number of instances the assistance of farmers in opening or closing turnouts is called upon where it is mutually beneficial for the Racemen and farmers. This assistance is greatly appreciated.
8. Users who choose to flaunt the rules by either tampering with set gates or taking water outside of agreed times are in breach of the Deed of Use. The Racemen are extremely vigilant and strong penalties are applied to any users who choose to flaunt the rules.
9. In the event of you wishing to change from the standard 230l/s flow, prior approval of the management and Board will be required and will need to be supported with full detailed plans and specifications of

the proposed change. Any changes will only be approved providing they can be managed within the present scheme delivery system and they do not disadvantage other shareholders. Any additional costs incurred and special requirements will be met by the farmer.

10. **Direct takes.**

- a. A direct take is defined as either of the following:
 - i. A take that is abstracted directly from a scheme race by any method other than an approved scheme turnout.
 - ii. A take via a storage pond of a volume less than 20,000 m³ that has been constructed with the ability to return water back into a scheme race.
 - iii. Any other form of take that may unexpectedly influence the scheme delivery operation and cause downstream flow variation.
- b. Direct takes are discouraged and remain a temporary solution reviewed by the Board on an annual basis.
- c. Direct takes require an approved Electromagnetic or Ultrasonic flow meter for recording instantaneous flowrates and Data Loggers. Racemen shall have access to flow meters and data logger.
- d. Allocation is charged on the maximum instantaneous flowrate multiplied by the rostered hours as per the rules for ordering water i.e. the prearranged start and finish times or through giving a minimum of 12 hours notice before shutting off.
- e. Where it is not possible to accurately measure the water into a direct take storage pond, Management reserve the right to charge on the higher of the installed maximum instantaneous flow rate observed as measured by the flowmeter or an estimated take (e.g. to take into account pond leakage losses).
- f. Any surplus water allocated but not taken, is returned to the scheme for reallocation by the Racemen and no credit is given.
- g. All direct takes are to be connected via telemetry by the 2012 - 2013 season, providing Racemen with access to view current flowrate, historical time trended flowrates and accumulated totals.

11. **Water in excess of allocation.** At times during the irrigation season, water that is not taken by a shareholder may be reallocated to other shareholders over and above their entitlement. A capacity charge shall be incurred for this water and the excess allocation administered as follows:

- a. There is no right to or guarantee of the availability of Water in Excess of Allocation. It is only available when not required by shareholders exercising their allocation rights and must fit in with the roster as dictated by management.
- b. Water in excess of allocation may only be taken when it has been demonstrated that the total depth applied on the area being irrigated does not exceed the Regional Authority daily and seasonal limits. This includes the simultaneous application of scheme, on farm stored and groundwater water sources.
- c. To receive an allocation from MHI, the land that the water is being delivered to must have MHI shares attached to it (maximum 5 per ha).
- d. The charge for this water is based on current share value and annual charges relative to water allocation. This is currently set at \$730 per 24 hour period at 230 L/s, for water taken over and above the 28 day allocation.
- e. There is no credit available to farmers not taking their allocation.
- f. Shareholders may choose to opt out of receiving water that will incur the charge.
- g. There will be times when due to constraints in management operations charges will not be applied e.g. emergency shutdowns.
- h. Farmers will be notified by telephone of when charging will apply, offered the chance to take or turn down water, with confirmation sent by email of any Water in Excess of Allocation ordered. There shall be a minimum of a 12 hour delivery period for Excess water.

12. Policy on Gates and Easements.

- a. A cooperative approach is required by all shareholders to ensure the efficient and fair operation of the scheme. In many locations, scheme easement races are shared and cross farms to neighbouring properties.
- b. A charge shall be made to members who flaunt the rules around moving gates from easements races. The penalty shall be as follows: For every hour lost on water delivery by the Raceman, two hours would be deducted off the allocation of the person responsible for adjusting the gate.

Share Trading and Leasing of Water

The Trading and Leasing of water between farmers within the scheme is encouraged, in order to better utilise our resource. Farmers who are not fully shared or can demonstrate an efficient use for extra water are encouraged to make use of the resource.

13. The Scheme Office shall co-ordinate lease transactions.

14. The Racemen must be able to manage the re-directed flows. Should the race capacity be unable to cope, any modification would be at the purchaser's expense.
15. Leasing would be for a minimum of 28 days with 14 days prior notification. Refer to the website for details of the 28 day reporting periods.
16. Lease allocation may only be taken when it has been demonstrated that the total depth applied on the area being irrigated does not exceed the Regional Authority daily and seasonal limits. This includes the simultaneous application of scheme, on farm stored and groundwater water sources.
17. The vendor of leased shares shall remain responsible for all water charges and obligations under the water supply agreement.

On Farm Storage

18. The design and construction of on farm storage ponds taking scheme water, shall comply with the requirements of the MHIL Pond Signoff Form, a copy attached and also available on the scheme website.
19. Any modification to scheme races requires prior approval of Management and the Board and must meet the requirements of the MHIL Race Realignment Form, a copy attached and also available on the scheme website.
20. The pond sizing and associated irrigation system design shall accommodate your rostered allocation. The Board recommends a minimum storage volume of 250 m³/ha which is the equivalent of one weeks allocation. Where on farm storage volumes and farm management practices do not accommodate the roster, there is no guarantee that the Racemen will be able to deliver your full allocation.
21. The design shall be that once a flow is delivered on farm, it shall remain on farm. The scheme is prepared to consider ponds that allow surplus water to go back into the race through a controlled tail pipe providing these surplus flows can be managed and utilised within the scheme prior to discharge into waste races. The controlled tail pipe allows the scheme to stop waste water returning to it if future demands prevent it from being able to handle this. There is no credit for returned water.
22. The Board reserves the right to charge a penalty for flows of less than 115l/s due to the additional losses incurred through delivery of reduced flows. All reduced flows are subject to being accommodated within the scheme delivery network without disadvantaging other farmers.

Audited Self Management

23. The scheme is required to keep records of water usage in terms of its application consent and the NRRP plan developed by the Regional Council. These records will be made available to individual farmers and be developed in conjunction with them to ensure they do not breach consent conditions.
24. In the event a farmer has a dual take the scheme will be required by the regulators to determine the amount of water being used from wells contained within the contracted farm area to determine the total application of water onto the property for the year.
25. The water is consented for use as irrigation water and therefore should not be used without approval for any other purpose. In the event that the farmer requires an alternative use he will need prior approval of the irrigation scheme management group before proceeding.
26. Monitoring of deliveries is part of the ongoing control within the scheme. This procedure includes:
 - a. Directors receive a report of all deliveries to farmers on a monthly basis compared to contract.
 - b. Flow monitoring will be carried out during the year to determine turnout and race deliveries.
27. The scheme supports the concept of environmental standards which are intended to restrict the use of irrigation water which is causing environmental damage. The major concerns are water quality, nitrate leachate and contamination of other waterways and streams. Farmers are required to restrict any discharges that occur.

Date Approved: 23rd August 2011

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