



Product Approval

Product: Peak Flow Entitlement Sharing Rules
Scheme: Nogoia Mackenzie Water Supply Scheme

1. Product Overview

Channels in the Emerald irrigation system were designed with a maximum capacity based on a peak flow entitlement for land irrigated at that time. A peak flow entitlement share (*PFE share*) has been allocated to each of the original outlets. See Attachment 1 for details of PFE shares.

During peak flow periods, the available capacity of the channel system is shared between the customers with PFE shares. When the volume of water orders reaches the capacity of the channel system, priority is given to the customers with PFE shares with the balance shared between customers with off peak outlets. See Attachment 2 for details of channel capacities.

Customers with off peak outlets are permitted to take water only during off peak flow periods. The flow rate for off peak outlets is calculated by sharing the residual flow available after the demand by peak flow entitlement orders has been met.

Construction of an off peak outlet is only approved when the customer agrees not to divert water during peak times and is at the customers risk. This is confirmed in writing at the time of approval for the construction.

Peak flow entitlement is only relevant to channel customers in the Emerald Irrigation System and PFE shares cannot be transferred between the Selma and Weemah channel systems.

2. General Product Rules

Peak flow restrictions are only imposed during periods when irrigation demand exceeds the capacity of the infrastructure. The available peak flow capacity varies within parts of the system depending on the water level in Fairbairn Dam, channel capacity, siphon capacity, weed growth and location of demand.

Customers with PFE shares are given priority when ordering water during times of restrictions.

A customer/manager may transfer the whole of their PFE share/s based on the following criteria:

- a. An application to transfer a whole PFE share from one water supply contract holder to another water supply contract holder, subject to system constraints, for a minimum period of 1 month, applications must be submitted to the SunWater Customer Support a minimum of 10 working days prior to the commencement date that the PFE share is to be transferred. Late applications will not be considered within the ten day period.
- b. Applications for the grouping of PFE shares where the water supply contracts are in the same name, for a period is permitted. This allows the taking of Peak Flow Entitlement through any



Product Approval

of the grouped outlets subject to system constraints. An application to group PFE shares must be made by 30 September each year. Applications to group outlets can be made for a minimum of 1 year or until further advised. Late applications will not be considered until the following year.

- c. Applications will be assessed and approved subject to system constraints within the scheme;
- d. In general, applications for PFE shares to be transferred on the same section of channel or transferred upstream will be approved however Peak Flow Entitlement that is transferred to a downstream location will require assessment to determine the impact on other PFE share holders.
- e. Should the location of demand or system capacity change resulting in a restriction of supply in that section of channel where the peak flow has been transferred, the original peak flow farms in that section will be given priority to access their Peak Flow Entitlement over PFE shares which have been transferred in.
- f. Applications will be assessed by SunWater following consultation with local operational staff within 5 working days of receiving the application.
- g. Applicants will be advised of the outcome of their application by SMS or email.
- h. SunWater will maintain an updated register of PFE shares. This register will be accessible to Emerald Operations staff.
- i. An application fee will be applied to the buyer's next quarterly invoice; this fee will cover the cost of administrating the PFE share trading and notification process. The application fee for the 2014/15 water year will be \$30; this fee will be reviewed annually and published in the fees and charges schedule which can be found on the SunWater Website.

3. Scheme Specific Rules

Selma

Details of PFE shares for the Selma System are shown in Attachment 1.

Details of the Selma channel capacities are shown in Attachment 2, Table 1.

Weemah

Details of PFE shares for the Weemah System are shown in Attachment 1.

Details of the Weemah channel capacities are shown in Attachment 2, Table 2.

4. Fee and Charges

Administration Fee

5. Customer Consultation



Product Approval

This product was developed in consultation with the Emerald Irrigator Advisory Committee.

6. Implementation

- The approved product approval guidelines and conditions to be uploaded onto the SunWater website by Customer Accounts.
- Advice to customers as necessary to be provided by Customer Accounts.
- Develop an application form for transfer and grouping of PFE shares;
- Develop a register of PFE shares, groupings and transfers.

7. Definitions

- **“Customer/Manager”** is the customer or the customers manager, who owns or manages the Peak Flow Entitlement;
- **“Peak Flow Entitlement”** is the entitlement to a non-divisible share of the capacity of the channel system during peak demand periods based on the original design of the channel distribution system. Outlets constructed since the original scheme was built do not have a Peak Flow Entitlement.
- **“Peak flow capacity”** is the available capacity of the channel system. The Peak flow capacity can vary depending on the water level in Fairbairn Dam, channel capacity, siphon capacity, weed growth and location of the demand in the channel system.
- **“Peak flow period”** is the period when peak flow entitlement water orders are equal or greater than the available capacity of the channel system.
- **“Off peak flow periods”** are periods when the total of peak flow entitlement water orders is less than the available capacity of the channel.
- **“PFE share”** is the non-divisible share of the available flow capacity of the channel system able to be taken by customers who own a non-divisible peak flow entitlement share, during a peak flow period.
- **“Peak flow restrictions”** are restrictions on the flow rate that can be taken by customers during peak flow periods. Restrictions are imposed when demand by peak flow entitlement water orders equals or exceeds the available capacity of the channel system. Priority is given to the supply of water to customers with peak flow entitlement and the balance of the channel capacity is shared between customers with off peak outlets.
- **“Peak flow outlets”** are outlets that were supplying original farms allocated water during the design of the scheme.
- **“Off peak outlets”** are outlets constructed post original scheme design, and do not have an allocated peak flow entitlement.
- **“Period”** is length to time a transfer or grouping of peak flow entitlement applies eg water year, 3 years etc.
- **“Water Supply Contract holder”** is the customer/s whose name in on a current Water Supply Contract with SunWater.

	Product Approval	
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Review Date: 3 years from approval.

Statement by signatories:

The above product parameters are in accordance with business rules and relevant policies for this product, and can be provided without compromising SunWater's ability to comply with its obligations under its Resource Operations Licence.

This product has also been endorsed by the Nogoia Mackenzie Irrigators Advisory Committee as per minutes from meeting 13 August 2014.

Recommended:



 Service Delivery Manager, Irrigation Systems

Date: 17/9/2014



 Customer Accounts Manager, BWIS

Date: 17/9/14.

Endorsed:



 Commercial Manager, BWIS

Date: 17/9/14

Tom Vanderbyl
 General Manager
 Bulk Water & Irrigation Systems

Approved:



 General Manager, BWIS

Date: 18/9/14



Product Approval

Attachment 1 – Emerald Irrigation System Peak Flow Entitlement (PFE) Shares

Selma Farm no	PFE Shares (No farms)	Selma Farm no	PFE Shares (No farms)	Weemah Farm No	PFE Shares (No farms)
501171	1	500521	1	500556	0.2
500532	0.5	500522	1	920	0.3
501181	0.5	500576	1	500244	0.5
500488	1	500577	1	500501	0.5
500491	1	500583	1	502112	0.5
500487	1	500497	1	501735	0.12
500530	1	500524	1	500533	0.275
500515	1	500578	1	501736	0.105
500498	1	500499	1	500544	0.05
500558	1	500527	1	500543	0.05
500529	1	TOTAL SELMA	44.04	500542	0.05
500500	0.5			500512	1
500552	1			500511	1
500492	1			500480	1
500554	1			500546	0.4
500551	1			500545	0.5
500520	1			426525	0.35
500557	1			501574	0.05
500490	1			501921	0.1
500500	0.5			501920	0.1
500493	1			500510	1
500494	1			547	0.4
500495	1			501640	0.1
500486	1			500580	0.5
500513	1			500555	1
500514	1			500503	1
500550	1			500502	1
167	1			500548	1
500553	1			500233	1
500516	1			500506	1
500523	1			500549	1
500518	0.04			500509	1
500519	1			500505	1
500525	1			500504	1
500526	1			500507	1
500528	1			500508	1
500479	1			TOTAL WEEMAH	21.15



Product Approval

Attachment 2 – Emerald irrigation system channel capacities

Channel Distance (m)	Structure	Capacity (ML/d)
0	Fairbairn Dam Outlet ⁽¹⁾	
7,282	St Helen's Creek ⁽²⁾	710
15,017	9 Mile check (not used)	710
17,099	10 Mile Check	710
20,930	13 Mile Check	560
24,123	15 Mile Check	530
27,442	17 Mile Check	372
31,309	19 Mile Check	352
34,226	21 Mile Check	250
38,703	24 Mile Check	140
40,582	25 Mile Check	70
42,300	Ford Creek	70
46,759	End of Channel	0

Table 1 – Selma Channel Capacities

Channel Distance (m)	Structure	Capacity (ML/d)
0	Fairbairn Dam Outlet ⁽¹⁾	
4,084	1st Syphon	300
6,227	2nd Syphon	300
16,742	Windmill Gully Syphon	300
19,600	Pilot Farm (not used)	300
23,178	Springsure Hway (not used)	300
25,382	Blackgully Syphon	300
28,887	Kielys Syphon	275
33,195	Rockhampton Highway Siphon	235
36,950	1st spare xing	235
38,150	2nd spare xing	235
39,350	1st pivot xing	235
40,818	Old Faithful Syphon	220
52,550	End	0

Table 2 – Weemah Channel Capacities

Note: Peak flow entitlement shares can not be transferred between the Selma and Weemah channel systems.