South Gippsland Basin

September 2013

Introduction

Southern Rural Water (SRW) is the water corporation responsible for administering and enforcing the South Gippsland Local management Plan (LMP).

The purpose of the South Gippsland LMP is to:

- Document the management objectives for the system;
- Explain to licence holders (and the broader community) the specific management objectives and arrangements for their water resource and the rules that apply to them as users of that resource
- Clarify water sharing arrangements for all users and the environment, including environmental flow requirements; and
- Document any limits, including water use caps, permissible consumptive volumes or extraction limits that apply to the system;

Management objectives

The objective of the LMP is to ensure the equitable sharing of water between users and the environment and the long-term sustainability of the resource.

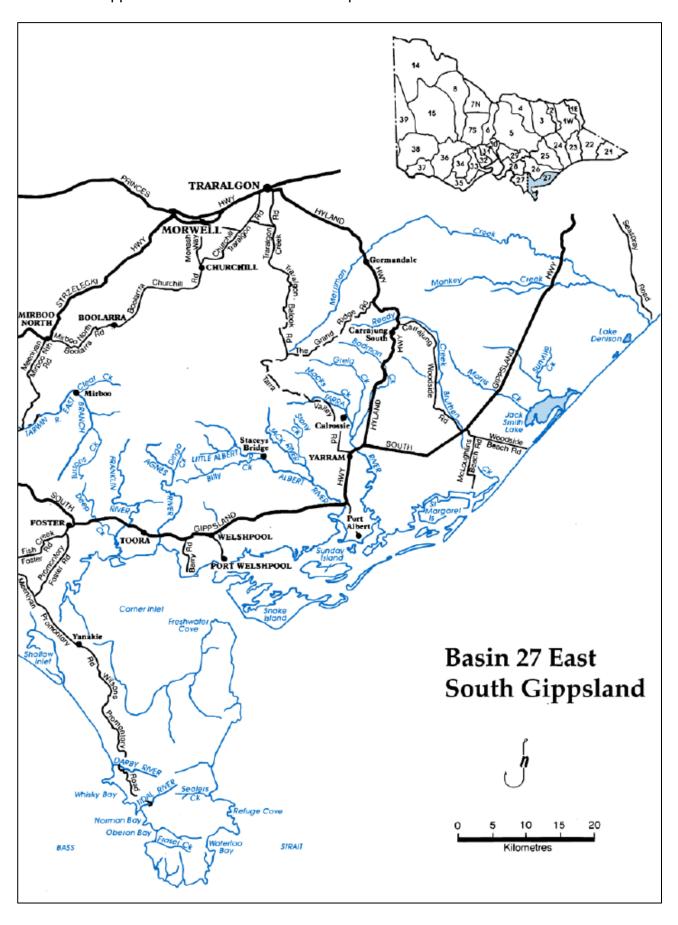
Water systems covered

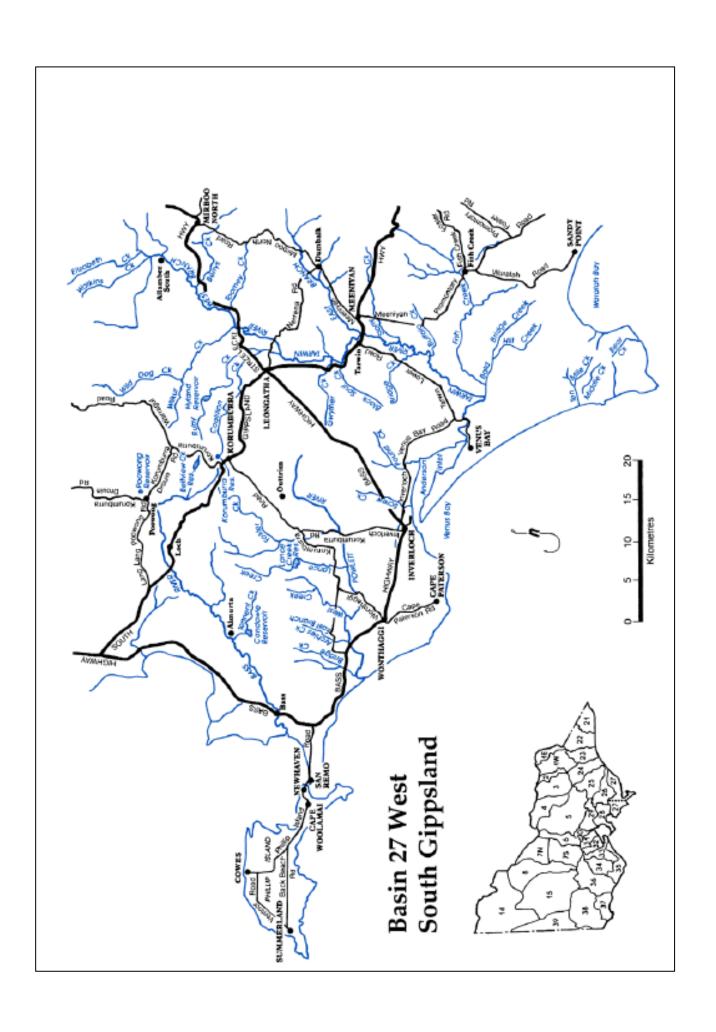
The LMP covers all the rivers and creeks in the South Gippsland Basin and includes:

- Agnes River
- Albert and Jack Rivers (intersect near the tidal zone)
- Bruthen Creek
- Franklin River
- Merrimans Creek
- Tarra River
- Tarwin River



The South Gippsland Basin is shown in the maps below.





Catchment Information

The average annual long term inflow into the basin is 911,500ML. Diversions make up a relatively small proportion of the inflows with around 2% of the inflows diverted for consumptive use in 2010-11. Most inflows leave the basin and flow into the Bass Strait or Westernport Bay. Corner Inlet and Westernport Bay are listed as significant wetlands under the Ramsar Convention and are dependent on water input from the Basin. Water usage within the basin is diverse, consisting of horticulture (mainly potato growing) in the hills, to dairy farming and mining of sand on the plains. Gippsland and South Gippsland Water also hold bulk entitlements.

Water entitlements

Licence Type	Number of Licences	Volume (ML)
Irrigation* - direct	125	6,336
Irrigation - winterfill	105	4,487
Registration**	604	10,588.9
Domestic and Stock	247	564.8
Commercial / Industrial /Dairy	302	1,662.6
Total	1,383	23,639.3

^{*} Includes amalgamated D&S and Commercial licences

More detailed information can be located in the Victorian Water Register.

General Rules

Licences in the South Gippsland Basin are managed in accordance with the Water Act 1989 and Policies for Managing Take and Use Licences. A copy of these policies can be found at

http://waterregister.vic.gov.au/Public/TakeAndUseLicences.aspx

New Licences

 Sustainable diversion limits have been set for the various catchments and subcatchments within the basin. In some areas of the catchment there is limited water available for filling dams during the winter period. All applications are subject to a water availability assessment.

Metering

- Diversions are metered and licence holders must not use more than their licensed volume.
- Meters are installed on all active licences of 10ML or greater or all new licences (as a result of a transfer) regardless of the volume.

^{**}Includes Dairy and Commercial licences

Meters are read at least twice per year.

Restrictions

 Take and use licences allow for Southern Rural Water to roster and restrict extraction during periods of low water availability. Restrictions will be applied by Southern Rural Water as required. Notifications will be provided to licence holders in advance of their implementation

Transfers

- Temporary transfers of a licence (or part of a licence) can be for up to 5 years, and conclude at the end of the water season (30 June).
- Permanent or temporary transfers of a direct stream (all-year licence) may only be approved if:
 - o the licence will be transferred to a downstream user, or
 - o the licence is issued to the buyer as a winterfill licence
- A winterfill licence cannot be transferred to be a direct stream (all-year licence).

Renewals

 Licences are renewed in accordance with the Water Act 1989 and Policies for Managing Take and Use Licences.

System specific rules

Some systems within the Snowy River Basin require more specific management rules that address rostering, restrictions and trade. In the Snowy River Basin specific rules exist for the following systems:

- Agnes River refer to appendix 1
- Albert and Jack River refer to appendix 2
- Bruthen Creek refer to appendix 3
- Franklin River refer to appendix 4
- Merrimans Creek refer to appendix 5
- Tarwin River refer to appendix 6
- Tarra River refer to appendix 6

Annual reporting

Southern Rural Water produces Local Water Reports for each river basin. These reports include information on licences, water use and seasonal conditions. A copy is sent to each licence holder each year.

Consultation and review

SRW will consult with licence holders and relevant stakeholders before making changes to the Local Management Plan, other than administrative changes or clarifications.

The Local Management Plan will be reviewed every 5 years, unless an update is required sooner.

References

- Gippsland Region Sustainable Water Strategy
- West Gippsland Regional River Health Strategy

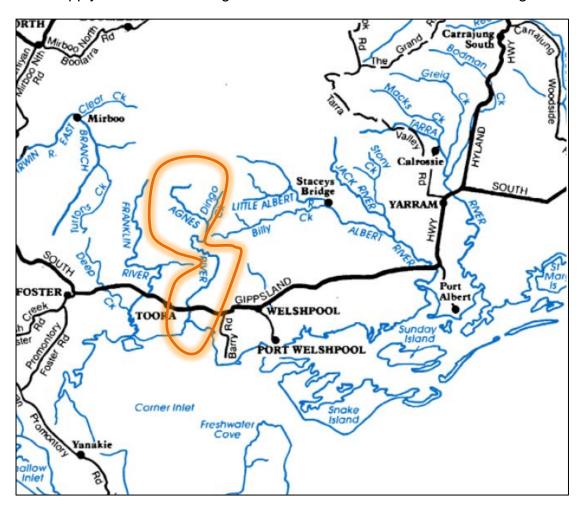
Contact details

For general information call 1300 139 510 or visit www.srw.com.au

Agnes River Rules

Area Description

These rules apply to all licenced irrigators located on the mainstream of the Agnes River.



Licences

Licence Type	Number of Licences	Volume (ML)
Direct Irrigation	6	283.5
Irrigation Winterfill	1	36
Commercial (Inc Dairy)	12	52.4
Registration	7	136.6

More detailed information can be located in the Victorian Water Register.

Management of Licences

All active irrigators on the Agnes River are metered.

In low flow periods, SRW liaises with South Gippsland Water (SGW) which regulates the river flow between Cooks Weir and its off-take point at Agnes Weir. SGW's Bulk Entitlement enables it to divert up to a maximum 4.8 ML/d at the Falls on the condition that 1.0 Ml/d is passed downstream. The same passing flow is enforced by SRW.

Usage under Conditional Licences is banned once rosters are introduced.

A ten day cycle, 2 Stage Roster is used during restrictions. Stage 1 gives the equivalent of 50mm water depth for each licence holder. Stage 2 reduces usage by 50%. If required, the roster can be varied from year to year. The roster type is calculated on the number of active irrigators for the particular season.

Restriction Stages	Trigger Value for Introduction of Next Stage of Restriction	Percentage Reduction
Stage 1	9 ML per day	0%
Stage 2	7.5 ML per day	50%
Ban	6 ML per day	100%

Compliance Point

Agnes River Gauging Station No 227211 is located on the mainstream between Cooks Weir and the Agnes Falls. An outside gauge board at the recorder site is used for compliance and roster determination purposes. Irrigation pump outputs below the site are taken into consideration when determining passing flow requirement.

Transfers

- Temporary transfers of a licence or part of a licence can only be for one year and conclude at the end of the water season (30 June).
- Permanent or temporary transfers of a direct stream (all-year licence) may only be approved if:
 - o the licence will be transferred to a downstream user: or
 - o the licence issued to the buyer is a winterfill licence.
- A winterfill licence cannot be transferred to be a direct stream (all-year licence).

Consultation

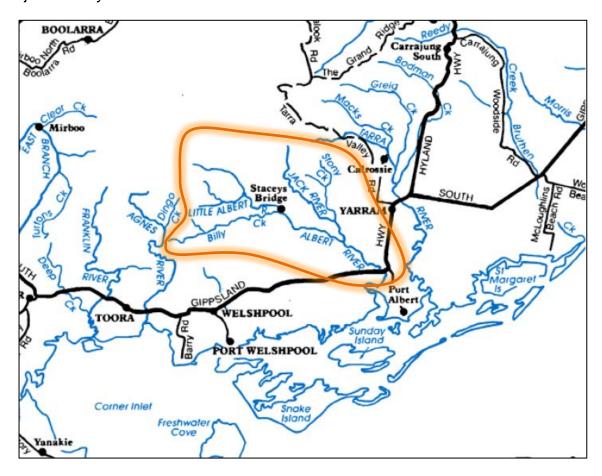
Southern Rural Water liaises with the customers from the catchment as the need arises.

Review

Albert/Jack River Rules

Area Description

These rules apply to licenced irrigators located on the mainstream of the Albert River and its major tributary the Jack River.



Licences

Albert River

Licence Type	Number of Licences	Volume (ML)
Direct Irrigation *	10	626.3
Winterfill	9	339.0
Commercial (incl Dairy)	36	205.1
Registration	40	1239.2

^{*}Includes some dairy component

Jack River

Licence Type	Number of Licences	Volume (ML)
Direct Irrigation *	8	416.4
Winterfill	1	18.0
Commercial (incl Dairy)	19	95.2
Registration	5	43.6

^{*}Includes some dairy component

More detailed information can be located in the Victorian Water Register.

Management of Licences

All active irrigators on the Albert and Jack Rivers are metered.

The mainstream of the Albert River and its tributary the Jack River are rostered separately. This is because they have different flow characteristics and the junction of the rivers is close to the tidal zone. There are no direct pumping irrigators on either of the rivers tributaries.

Usage under Conditional Licences is banned once rosters are introduced.

The filling of dams in the winter period is not normally restricted.

Albert River

There are no gauging stations on the Albert River. Visual inspection points near the Millar Hill Road and Alberton West bridges' are used as monitoring points.

It is envisaged that rosters and/or bans will be invoked most years.

A ten day cycle, 4 Stage Roster is used during restrictions. Stage 1 gives the equivalent of 50mm water depth for each licence holder. Subsequent stages are reduced by 25% for each stage until total ban level.

If required, the roster can be varied from year to year. The roster type is calculated on the number of active irrigators for the particular season.

Restriction	Trigger Value for Introduction of Next Stage of Restrictions.	Percentage
Stages	Millar's Hill Road Site.	Reduction

Stage 1	8ML per day	0%
Stage 2	7ML per day	25%
Stage 3	6ML per day	50%
Stage 4	5ML per day	75%
Ban	4ML per day	100%

Jack River

A visual Inspection point at Gillon's Road Bridge is used to determine the restriction levels.

It is envisaged that rosters and irrigation bans will be invoked most years.

A 10 day, 2 stage roster cycle is normally used during restrictions. Stage 1 gives the equivalent of 50mm depth of water for each licence holder. Stage 2 is a 50% reduction of Stage 1. Stage 3 is a Total Ban.

If required, the roster can be varied from year to year. The roster type is calculated on the number of active irrigators for the particular season.

Restriction Stages	Trigger Value for Introduction of Next Stage of Restriction Gillon's Road Site	Percentage Reduction
Stage 1	8ML per day	0%
Stage 2	5.5ML per day	50%
Ban	3ML per day	100%

Compliance Points

Visual flow assessments at the above mentioned sites are also used to monitor compliance.

Irrigation pump outputs below the site are taken into consideration when determining passing flow requirement.

Transfers

- Temporary transfers of a licence (or part of a licence) can be for up to 5 years, and conclude at the end of the water season (30 June).
- Permanent or temporary transfers of a direct stream (all-year licence) may only be approved if:
 - o the licence will be transferred to a downstream user, or
 - o the licence is issued to the buyer as a winterfill licence
- A winterfill licence cannot be transferred to be a direct stream (all-year licence).

Consultation

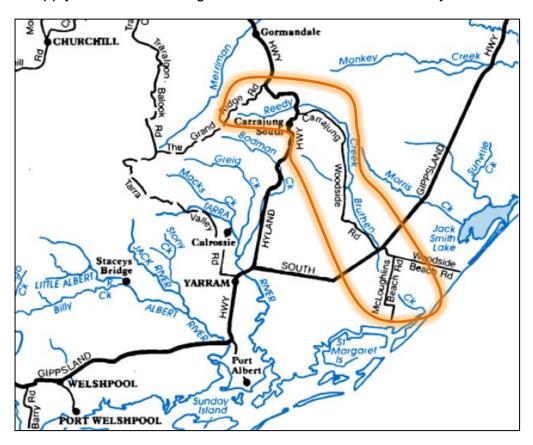
Southern Rural Water liaises with the customers from the catchment as the need arises.

Review

Bruthen Creek Rules

Area Description

These rules apply to all licenced irrigators located on Bruthen Creek system.



Licences

Licence Type	Number of Licences	Volume (ML)
Irrigation – Direct*	3	48
Irrigation - Winterfill	11	355.9
Registration	13	232.7
Commercial/Dairy	9	20.9

^{*} Includes a dairy component.

More detailed information can be located in the Victorian Water Register.

Management of Licences

All active irrigators on the Bruthen Creek are metered.

There is only one direct irrigation diverter who is entitled to irrigate outside the winterfill period. This irrigator is placed on an irrigation ban once the flow at the South Gippsland Highway at Woodside drops to 2.0ML/d. No roster is required.

On occasions, there is a requirement to delay winterfill diversion until there is sufficient water flow in the mainstream and its tributaries. The restriction is lifted when the estimated flow rate exceeds 20.0 ML/d at the South Gippsland Highway at Woodside.

There is no stream flow measuring device at Woodside. The flow rate calculation is based on a visual estimate.

Further information can be obtained from the local field officer based at the SRW Morwell office.

Compliance Point

Flow estimates at Woodside Highway and Napier Road bridges are used to monitor compliance.

Transfers

- Temporary transfers of a licence (or part of a licence) can be for up to 5 years, and conclude at the end of the water season (30 June).
- Permanent or temporary transfers of a direct stream (all-year licence) may only be approved if:
 - o the licence will be transferred to a downstream user, or
 - o the licence is issued to the buyer as a winterfill licence
- A winterfill licence cannot be transferred to be a direct stream (all-year licence).

Consultation

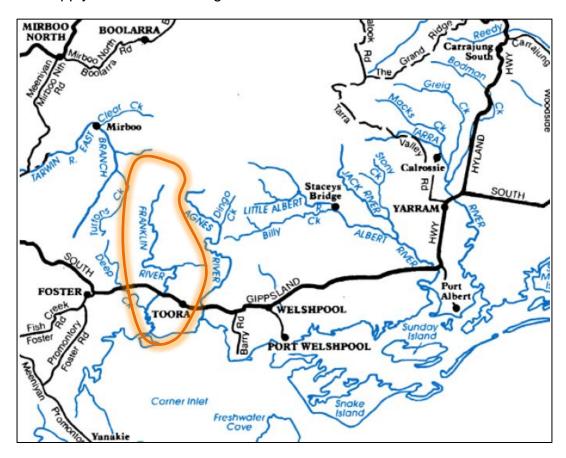
Southern Rural Water liaises with the customers from the catchment as the need arises.

Review

Franklin River Rules

Area Description

These rules apply to all licenced irrigators located on the Franklin River.



Licences

Licence Type	Number of Licences	Volume (ML)
Irrigation – Direct*	6	283.5
Irrigation - Winterfill	1	36
Registration	7	136.6
Commercial (Incl -Dairy)	12	52.4

^{*} Includes a dairy component.

More detailed information can be located in the Victorian Water Register.

Management of Licences

All active irrigators on the Franklin River are metered.

Readings taken from an outside gauge located at a flow recording station located of Downings Hill Road, Toora North assist in determining the level of restrictions.

A ten day cycle, 2 Stage Roster is used during restrictions. Stage 1 gives the equivalent of 50mm water depth for each licence holder. Stage 2 reduces usage to 25mm depth.

If required, and in consultation with the customers, the roster can be varied with the view of obtaining the best outcome for the users, management and the environment.

Usage under Conditional Licences is banned once rosters are introduced.

Restriction Stages	Trigger Value for Introduction of Next Stage of Restriction	Percentage Reduction
Stage 1	7.5 ML per day	0%
Stage 2	6.0 ML per day	50%
Ban	2.5 ML per day	100%

Compliance Point

The Franklin River at Toora Gauging Station (No 227237) located off Downings Hill Road, Toora North is use as a compliance point.

Irrigation pump outputs below the site are taken into consideration when determining passing flow requirement.

Transfers

- Temporary transfers of a licence (or part of a licence) can be for up to 5 years, and conclude at the end of the water season (30 June).
- Permanent or temporary transfers of a direct stream (all-year licence) may only be approved if:
 - o the licence will be transferred to a downstream user, or
 - o the licence is issued to the buyer as a winterfill licence
- A winterfill licence cannot be transferred to be a direct stream (all-year licence).

Consultation

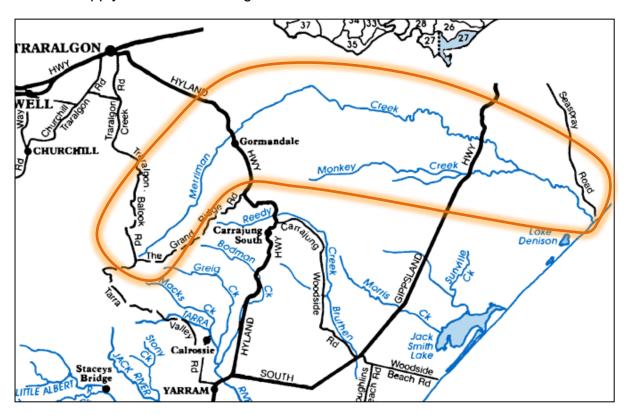
Southern Rural Water liaises with the customers from the catchment as the need arises.

Review

Merrimans Creek Rules

Area Description

These rules apply to all licenced irrigators located on Merrimans Creek.



Licences

Licence Type	Number of Licences	Volume (ML)
Direct	8	395.9
Winterfill	1	3
Registration	11	168.6

More detailed information can be located in the Victorian Water Register.

Management of Licences

All active irrigators on the Merrimans Creek are metered.

There are 8 direct pumping licences on Merrimans Creek that are subject to roster

The creek is split into three sections for management purposes.

- Section 1 Upstream of South Gippsland Hwy
- Section 2 South Gippsland Hwy to Seaspray Township Off-take
- Section 3 Downstream of Seaspray Offtake

There is no formal irrigation roster on this creek due to the scattered nature of irrigation activity. There is an irrigation ban for each section. If needed, irrigation can be restricted within each section.

Section 1

Flows are monitored by observing outside gauge boards at the recording station at Callignee South.

Restriction Stages	Trigger value for introduction of next stage of restriction	Percentage Reduction
Ban	<6 ML per day	100%

There is generally no need to restrict winter-fill diversions.

Section 2

A temporary gauge board located under the South Gippsland Highway Bridge is used to measure the flows in Section 2. Irrigation is banned when the flow drops below 5.0 ML/d. This is calculated on leaving 0.8 ML/d for Gippsland Water usage at Seaspray and the balance for the environment and downstream usage.

Restriction Stages	Trigger value for introduction of next stage of restriction	Percentage Reduction
Ban	<5 ML per day	100%

There is generally no need to restrict winter-fill diversions.

Section 3

Irrigation in this section is banned when the flow rate at the Seaspray Bridge falls to 4.0 ML/d. The irrigators in this area are subject to salt water intrusion due to tidal influence. The salt water accumulates behind a sand bar at the creek's mouth for a substantial part of the year.

Restriction Stages	Trigger value for introduction of next stage of restriction	Percentage Reduction
Ban	<4 ML per day	100%

There is generally no need to restrict winter-fill diversions.

Compliance Point

The trigger point sites listed the above-mentioned sections are also used to monitor compliance

Irrigation pump outputs below the site are taken into consideration when determining passing flow requirement.

Transfers

- Temporary transfers of a licence (or part of a licence) can be for up to 5 years, and conclude at the end of the water season (30 June).
- Permanent or temporary transfers of a direct stream (all-year licence) may only be approved if:
 - o the licence will be transferred to a downstream user, or
 - o the licence is issued to the buyer as a winterfill licence
- A winterfill licence cannot be transferred to be a direct stream (all-year licence).

Consultation

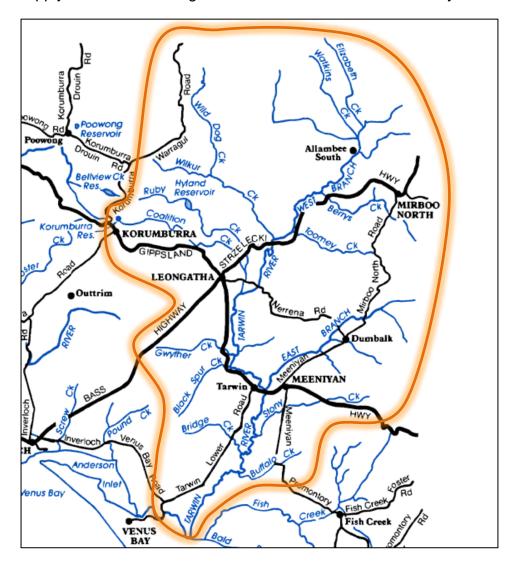
Southern Rural Water liaises with the customers from the catchment as the need arises.

Review

Tarwin River Rules

Area Description

These rules apply to all licenced irrigators located on the Tarwin River System.



Licences

Licence Type	Number of Licences	Volume (ML)
Irrigation – Direct*	44	2084.4
Irrigation - Winterfill	57	1914.8
Registration	269	4333.9
Commercial/Dairy	128	652.0

^{*}Includes dairy component

More detailed information can be located in the Victorian Water Register.

Management of Licences

All active irrigators on the Tarwin River System are metered.

Conditional Licences are banned once rosters are introduced.

No formal roster is currently used due to the number of sleeper licence holders on the mainstream and the West branch.

A ten day cycle, 4 stage roster followed by a ban level has been established in case there is a sudden upturn in usage. Stage 1 gives each customer the equivalent of 50mm depth of watering over their licensed area. Subsequent stages are reduced by 25% for each stage until the total ban level.

Restriction Stages	Trigger Value for Introduction of Next Stage of Restriction	Percentage Reduction
Stage 1	30 ML/d	0%
Stage 2	26ML/d	25%
Stage 3	23ML/d	50%
Stage 4	20ML/d	75%
Ban	16ML/d	100%

If required, and in consultation with the customers, the roster can be varied with the view of obtaining the best outcome for the users, management and the environment.

Compliance Point

The Tarwin River at Meeniyan Gauging Station (No 227202) located near the South Gippsland Hwy bridge at Meeniyan is use as a compliance point.

Irrigation pump outputs below the site are taken into consideration when determining passing flow requirement.

Transfers

- Temporary transfers of a licence (or part of a licence) can be for up to 5 years, and conclude at the end of the water season (30 June).
- Permanent or temporary transfers of a direct stream (all-year licence) may only be approved if:
 - o the licence will be transferred to a downstream user, or
 - o the licence is issued to the buyer as a winterfill licence

• A winterfill licence cannot be transferred to be a direct stream (all-year licence).

Consultation

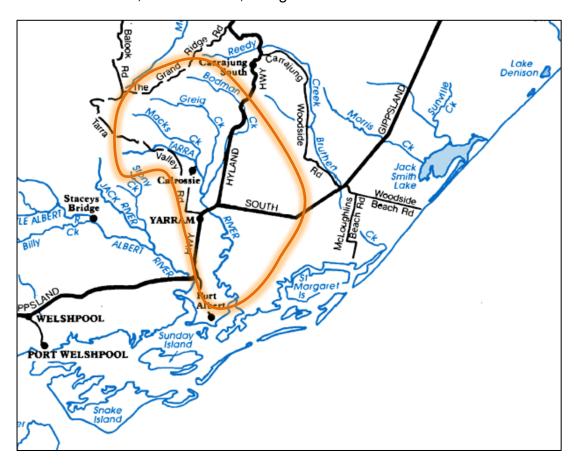
Southern Rural Water liaises with the customers from the catchment as the need arises.

Review

Tarra River Rules

Area Description

These rules apply to all licenced irrigators located on the Tarra River System, which includes the Tarra River, Macks Creek, Griegs Creek and Bodmans Creek.



Licences

Licence Type	Number of Licences	Volume (ML)
Irrigation – Direct*	24	1507.7
Irrigation - Winterfill	6	731.0
Registration	16	283.9
Commercial/Dairy	27	121.8
Totals	73	2,644.4

^{*}Includes dairy component

More detailed information can be located in the Victorian Water Register.

Management of Licences

Most active irrigators on the Tarra River are metered.

There is a mix of normal annual licences and conditional (sporadic conversion licences) on the system. It is a condition of conditional licences that they be banned when annuals go on stage one restrictions. It is anticipated that rosters will be invoked most years and bans in 2 out of 3 years. It is anticipated that short term winterfill restrictions will be required in 2 out of 10 years.

Restrictions are based on a ten-day cycle with irrigators restricted to a percentage of their total licence volume. This percentage has been calculated on previous practise of allowing a 50mm watering over the licensees irrigated area once in the ten day cycle. Stage 1 is "organised pumping" ie customers can use 100%. Time restrictions are used to share the flows evenly. Rosters are updated as required.

Tarra River and Macks Creek

Restriction Stages	Trigger Value for Introduction of Next Stage of Restriction	Percentage Reduction
Stage 1	9ML/d	0%
Stage 2	7ML/d	25%
Ban	5ML/d	100%

Griegs Creek

Restriction Stages	Trigger Value for Introduction of Next Stage of Restriction	Percentage Reduction
Stage 1	5ML/d	0%
Stage 2	3ML/d	25%
Ban	1ML/d	100%

If required, and in consultation with the customers, the roster can be varied with the view of obtaining the best outcome for the users, management and the environment.

Compliance Points

Restrictions on the mainstream and Macks Creek are triggered by the flows at monitoring recorder site on the mainstream at Yarram and at Berryman's property on Griegs Creek.

Due to its size and nature there is no flow recorder on Bodmans Creek. Management is by site inspection and liaison with customers.

A flow recorder at the South Gippsland Water off-take on the Tarra River is used as a guide to determine as to what flows to expect downstream.

Transfers

- Temporary transfers of a licence (or part of a licence) can be for up to 5 years, and conclude at the end of the water season (30 June).
- Permanent or temporary transfers of a direct stream (all-year licence) may only be approved if:
 - o the licence will be transferred to a downstream user, or
 - o the licence is issued to the buyer as a winterfill licence
- A winterfill licence cannot be transferred to be a direct stream (all-year licence).

Consultation

Southern Rural Water liaises with the customers from the catchment as the need arises.

Review