

Murray Dairy and the draft Basin Plan



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Draft Basin Plan objectives

Achieve a healthy working Basin, including a healthy environment, strong communities and a productive economy, by:

- Retaining or improving the ecological character and ecosystem functions of a site, end-of-system water quality and flow, habitat diversity and food webs.
- Improving ecological resilience to climate change and drought.
- Informing water recovery measures, including water purchasing and infrastructure that improves efficiency of use.
- Providing greater certainty of access to water for all users, including in times of drought and low water availability.
- Providing time for irrigators and communities to adjust to less water.
- Ministerial commitment: Keeping Murray mouth open nine out of 10 years.





The Sustainable Diversion Limit

	Diversion Level 2009 (GL)	Proposed SDL 2019 (GL)	Recovery target by 2019 (GL)	% reduction
Basin - total	13,623	10,873	2750	21%
Basin excl. interceptions	10,903		2750	25%
Northern excl. interceptions	2541		390	15.3%
Southern excl. interceptions	7993		2289	28.6%
Southern disconnected excl. interceptions	369		71	19%





Catchment and 'shared' water recovery targets

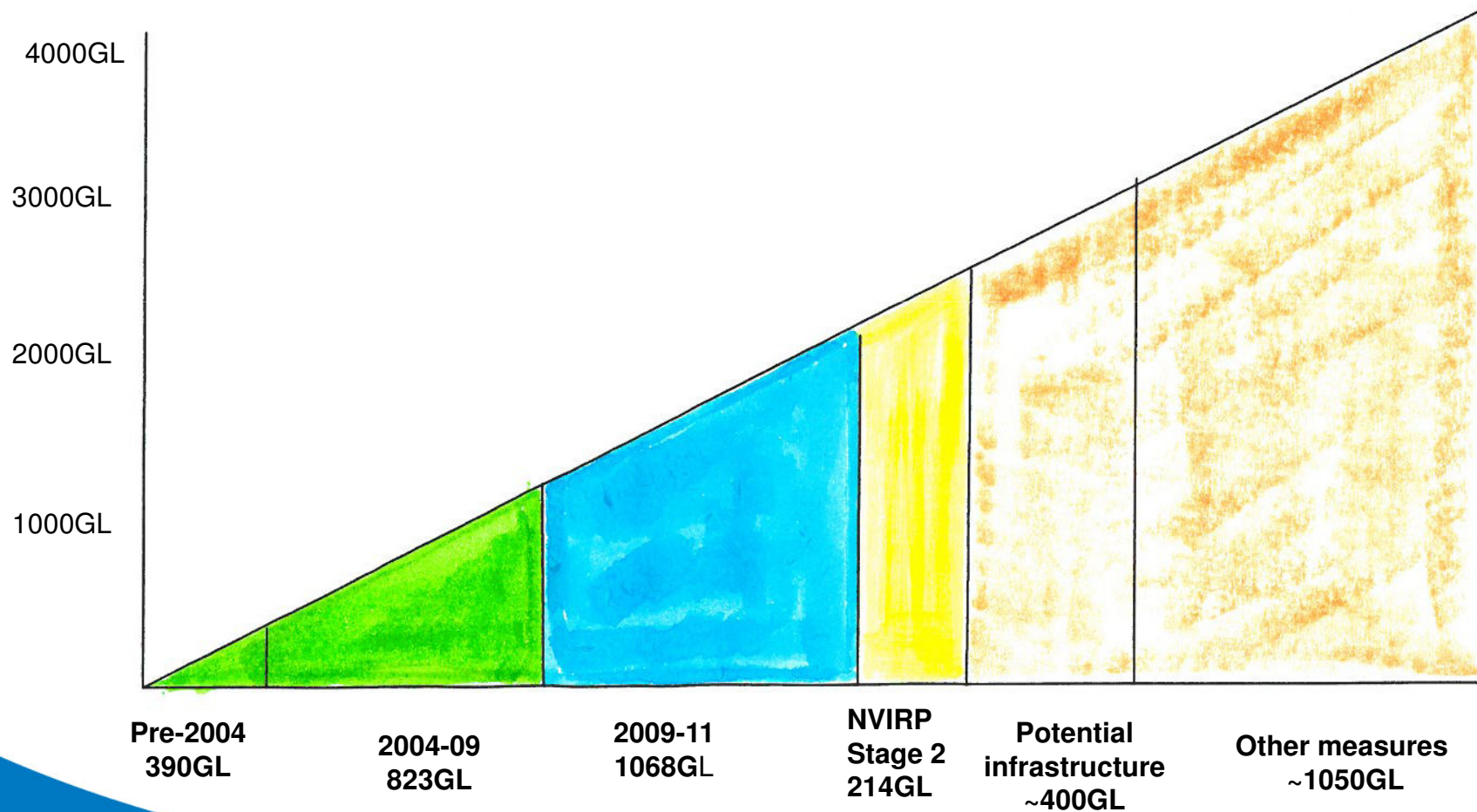
	Catchment GL	'shared' GL	Total target	Recovered 2009-2011	Gap
Northern	247	143	390	165	225
Southern connected	1318	971	2289	1067*	1222
Southern disconnected	71	-	71	48	23
Total	1636	1114	2750	1280	1470

*includes 214GL NVIRP Stage 2 deal





Water recovery for environment





In-catchment water recovery Southern-connected system

	Diversions GL	Catchment recovery target GL	% of diversions	Contracted recovery (incl. NVIRP 2)	Gap
Murrumbidgee	2000	320	16%	137	-183
NSW Murray	1708	262	15%	194	-68
Lower Darling	55	8	15%	0.05	-7.6
Vic Murray	1662	253	15%	657	+30
Goulburn	1580	344	22%		
Campaspe	113	18	16%		
Loddon	89	12	14%		
SA Murray	665	101	15%	79	-22
Kiewa, Ovens, Broken, EMLR	77.3	0	0	0	0

Excludes ACT, Marne-Saunders and SA non-prescribed where SDL is current BDL, and no contribution to 'shared'



'Downstream' water recovery – if shared pro-rata among catchments

	Diversions	Catchment target	Catchment % of diversions	Pro-rata of shared 971 GL	Total % of diversions
Murrumbidgee	2000	320	16%	256	29%
NSW Murray	1708	262	15%	214	28%
Vic Murray	1662	253	15%	202	27%
Goulburn	1580	344	22%	192	34%
Campaspe	113	18	16%	14	28%
Loddon	89	12	14%	11	25%
SA Murray	665	101	15%	83	28%





Total water recovery – Guide vs draft Plan

	Guide – 3000GL	Draft Plan – 2750 GL*	% change
Northern	630	390	-38%
Southern Total	2274	2289	+0.6%
Murrumbidgee	665	576	-13%
NSW Murray	474	476	0%
Vic Murray	442	455	+2.9%
Goulburn	442	536	+21%
Campaspe	40	32	-20%
Loddon	38	23	-40%
SA Murray	173	184	+6.4%

* If downstream 'shared' component shared pro-rata among catchments



Groundwater

	BDL 2009 (GL)	SDL (GL)	Gap (GL)	%
Upper Condamine Alluvium (Central Condamine Alluvium GS67a)	81.4	46	35	-43%
Upper Condamine Alluvium (Tributaries GS67b)	45.5	40.5	5	-11%
Goulburn-Murray: Victorian Riverine Sedimentary Plain (deep; Calivil Formation and Renmark Group (GS8f))	175	127	48	-27%





Murray Dairy region – a snapshot in 2011

Total dairy farms: 1661

Total milk production: 1870 ML (pre-drought ~2700 ML)

Total factories: 9

Total employment(on and off farm): +8000

Farmgate value of milk: ~\$795 million

Total value processed dairy product (gross value-add): ~\$1988m

% of total national milk production: 20.5%

Average dairy farm debt rose 41% from \$408,470 in 2005/06 to \$575,900 in 2010/11.





MDBA: Regional socio-economic impacts

Deniliquin/Murray LGA: 15.6% drop in water use = irrigated production falling \$10.9m (14.4%), offset by \$1.7m increase in dryland grazing.
- 21 farm jobs and 42 flow-on jobs lost.

Shepparton LGA: 22% drop in water use = irrigated dairy and cereal production falling by \$32.4m (10.8%), offset by a \$4.6m increase in dryland grazing.
- 67 farm jobs and 107 flow-on jobs lost.

Gannawarra LGA: 11% drop in water use = irrigated dairy and cereal production falling by \$17.7m (11.6%), offset by a \$2.3m increase in dryland grazing
- 29 farm jobs and 46 flow-on jobs lost.

Murray Bridge LGA: 12% drop in water use = irrigated dairy production to fall by \$2.4m (10.8%), offset by a \$0.3m increase in dryland grazing.
- 6 farm jobs and 12 flow-on jobs lost.





Draft Plan and GMID milk production

GMID produces 78% of milk in Murray Dairy region

Scenario 1: Water recovered to date in Victoria, including buyback and NVIRP stage 2 commitment (+671 GL).

Scenario 2: Water recovered to date in Victoria, plus Victoria's pro-rata (~43%) share of the 971 GL 'downstream' target in southern system (~1047 GL).

Scenario 3: Water recovered to date in Victoria, plus Victoria contributing 70 % of the 971 GL 'downstream' target in southern system (1307 GL)



Impacts

	Historical	Scenario 1 No climate change	Scenario 2 No climate change	Scenario 3 No climate change
Total Feed available to Dairy (million tonnes dm)	2.5	1.9	1.7	1.4
Number of Dairy Farms	1543	1,201	1,044	887
Litres Milk produced in the GMID (billion Litres)	2.3	1.8	1.6	1.3



Implications

- Pressure on regional processing – currently under-utilised capacity .
- Large impacts on host towns if factories close.
- Dairy a high-service industry pre- and post-farmgate – flow through the entire community .
- Further on-farm productivity gains possible via modernised infrastructure, to offset Scenario 1 impacts.
- Scenario 2 and 3: even with productivity gains, challenge will be not to contract further from the current, drought-affected level of production.



Dairy industry position

SDL set to meet catchment environmental needs, with 'downstream' component suspended pending 2015 review.

2015 review to assess SDL in light of environmental works and measures, improved river operations and new knowledge in meeting downstream needs.

No further general buyback tenders in southern system before 2015 review.
Buyback limited meantime to strategic purchases linked to efficiency projects.

More funding to extend \$300 million Farm Irrigation Efficiency Program.

More funding for modernisation programs in the NSW Murray and Murrumbidgee.

Environmental objectives to be achieved using:

- Environmental works for greater water efficiency and improved flows.
- Improved river operations.





Next steps

MDBA will hold 5 public meetings in December:

- 7 December St George (QLD)
- 9 December Murray Bridge (SA)
- 13 December Shepparton (10.30am-1.30pm , East Bank Auditorium, 70 Welsford St)
- 15 December Griffith
- 16 December Deniliquin (8.30-11.30am, Deniliquin Racecourse, Racecourse Rd)

- 20-week consultation ends 16 April 2012
- Approved by Parliament by end 2012 (disallowable instrument)
- **Review in 2015 to re-examine SDLs in light of works and measures, changes to river management and advances in scientific knowledge.**
SDLs may be increased or decreased as a result.
- Any changes to be approved by 2017
- SDLs come into effect in 2019.

