

Approved / Not Approved / Noted Further information required	
DDG	sch4p4(6) Pers
Dated	23 17 07

**Department of Natural Resources and Water
DEPUTY DIRECTOR- GENERAL BRIEFING NOTE**

TO: Deputy Director-General, Water & Catchment Services

FROM: General Manager Water Allocation and Planning

SUBJECT: Certification Assessment of Overland Flow Works in the Lower Balonne

RECOMMENDATION

It is recommended that the Deputy Director-General:

- note the current status on the certification of overland flow works in the Lower Balonne; and
- approve the recommendations on the assessment on volumetric limits and overland flow take attributes of all outstanding unsupplemented water allocations in the Lower Balonne.

BACKGROUND

- Certification of overland flow works in the Lower Balonne is a requirement of the finalised Condamine and Balonne Water Resource Plan (2004). This requires the landholders to provide a certificate, produced by a Registered Professional Engineer in Queensland (RPEQ), stating the volume of existing storages and the rate of take for overland flow works.
- The Condamine and Balonne Water Resource Plan establishes an overall cap on the authorised diversions of water harvesting and take of overland flow water in the Lower Balonne. This cap is expressed in the form of a limit on the rate of diversion of overland flow water and a limit on the volume of water that may be stored under entitlement on a property.
- The Plan requires that all allocations and entitlements issued under the ROP in the Lower Balonne must specify a limit on the maximum rate of take (in megalitres per day), the flow conditions for taking the water and a volumetric limit for taking water based on the storage capacity of existing works.
- In deciding on these terms the Water Resource Plan requires that the Chief Executive must consider the *lesser* of:
 - the estimated rate and volume that was provided by landholders to the Department during the development of the Plan through the infrastructure audit (2003); and
 - the actual rate and volume of existing works determined through the certification process.
- Certification of works in the Lower Balonne is essentially an assessment of the capacity of existing works to effectively divert and store water under management strategies that are typically applied by enterprises in the catchment.
- Certification is an applicant driven process and no deadlines have been given in the Water Resource Plan for its completion. Without certification of all applicable overland flow works, conversions of all licences cannot take place.
- The draft ROP released on 20 April 2007 only created water allocations for the 19 properties for which the Department had received certification reports. Remaining properties were not converted in the initial draft ROP and these other properties were stated in the draft schedule as '*Awaiting information*'.

CURRENT ISSUES

- A total of 39 properties are required to have their overland flow works certified in the Lower Balonne.
- To date, the department has received all 39 certifications of overland flow works in the Lower Balonne.

- The department reviewed all outstanding certifications and if approved will be used in the hydrological modelling of the Lower Balonne in order to allow the conversion of licences into tradable water allocations.
- The Department is progressing the release of an amended draft resource operations plan/schedule to include the conversion of entitlements of the Lower Balonne water harvesters and overland flow diverters who have provided Overland Flow (OLF) certification information that was still outstanding when the initial plan was prepared and released. It is proposed to release this amended plan late July 2007.

PROPOSED ACTIONS

It is recommended that the Deputy Director-General:

- note the information in this brief.
- approve the assessment on volumetric limits and overland flow take attributes of the 24 outstanding unsupplemented water allocations in the Lower Balonne.

DEPUTY DIRECTOR – GENERAL'S COMMENTS

Released by DNRM under the Right to Information Act 2009

Clyde - Summary of Storage Capacities

Storage	Type of storage	Lot	Plan	Certification	Infrastructure Assessment	Notification
S1	Ring Tank	3	BEL5376	7590	7240	7590
S2	Ring Tank	3	BEL5376	4450	3360	4450
S3	Ring Tank	5	BEL5375			
S4	Ring Tank	3	BEL5376	4000	3560	4000
S5	Ring Tank	5	BEL5375			
S6	Ring Tank	3	BEL5376	2610	4100	2610
S7	Ring Tank	5	BEL5375			
S8	Ring Tank	4	BEL5376	1290	4100	1290
S9	Ring Tank	5	BEL5375			
S10	Gully Dam	4	BEL5376	3000	4100	3000
S11	Ring Tank	5	BEL5375			
		1	BEL5376	11930	11850	11900
		52	BEL5376			
		1	BLM271	40920	35600	40920
		4	SP129702			
		5	BLM367	28390	37300	28390
		6	BLM367			
Tail water returns				830		
Main supply channel				800		
Total				116,930 ML	120,930 ML	115,270 ML

The Volumetric Limit for water allocation 1528 was determined from the combined certified volumes of storages S1 to S8 - 34060 ML (rounded up to 34100 ML).

The Volumetric Limit for overland flow water licence 602025 was based on the combined certified volumes of S1 to S10 + the tailwater returns and the main supply channel – 88540 ML (rounded up to 88600 ML).

The 2594 ML/day rate of take for OLF water licence 602025 was based on the Infrastructure Assessment less 5% in accordance with section 49 of the Water Resource (Condamine & Balonne) Plan 2004.

Anomalies Panel Recommendations

Date forwarded to Anomalies Panel: **25 May 2007**

Anomalies confirmed:

Property based storage volume

- Information provided for Infrastructure assessment report indicates 120,930 ML.
- Certification storage volume of 116,930ML.
- In the infrastructure assessment, information had previously indicated that waterharvesting water was only stored in S1-S5, with S6-S11 storing only overland flow water.
- Certification indicates that waterharvesting water can now be stored in S1-S5 and S10.
- A recent licence amendment (2006) has added Lot 1 on BLM271 as an activity parcel for the waterharvesting entitlement.
- Including the volume of S10 is 40,920 ML as part of the waterharvesting entitlement more than doubles the volume of waterharvesting water that can be stored under the existing arrangements.
- To date modelling has reflects the information provided through infrastructure assessment. This operational change will significantly affect the nominal volume that Clyde's waterharvesting water allocation will receive, including an increase in the total long term diversions in the Lower Balonne and the possible implications for determining nominal volumes for allocations and environmental flow downstream of the property.
- If waterharvesting licences are treated as though they serve the total storage on the property, the conversion would provide a much greater nominal volume than previously assessed.
- S11 storage functions as a surge, with water breaking out from the Narran River flowing into this open ended storage at a rate of up to 17,210 ML/day.

Panel Recommendations

- Adopt two entitlements for the property with different property volumetric limits based on the certified report.
- The water allocation relates to water stored in S1-S8 (volume of 34,060 ML) and have a property volumetric limit set at 34,100 ML (rounded up to nearest 100ML for volumes over 10,000ML).
- This water allocation will include the property parcels: Lot 1 on RP67015, Lot 5 on BEL5375, Lot 4 on BEL5376 and Lot 3 on BEL5376.
- The overland flow licence relates to the entire property and has a property volumetric limit of 88,700 ML (rounded up to nearest 100ML for volumes over 10,000ML). This includes storages S1-S10, but does not include S11 which is considered a surge rather than a storage.
- Overland flow water taken under this entitlement can originate from either the Narran or Bokhara Rivers.
- This OLF licence will include the property parcels: Lot 1 on RP67015, Lot 5 on BEL5375, Lot 4 on BEL5376 and Lot 3 on BEL5376, Lot 1 on BEL5376, Lot 2 on BEL5376, Lot 4 on SP129702, Lot 5 on BLM367, Lot on BLM367, Lot 1 on BLM 271 and Lot 1 on PER208487.

Rate of Take

- Licenced waterharvesting entitlements have the following access conditions:

Flow at JTW	Rate of take (ML/Day)
3000	86
5000	172
8000	344
10000	432
12000	512
14000	592

19/07/2007

Certification –Clyde

16000	672
18000	752
20000	832

- Overland flow take from river breakouts identified in infrastructure assessment as having a maximum rate of 4996ML/day at 200,000 ML at Jack Taylor Weir.
- This includes 1941 ML/day gravity diversion into storage S11. Certification indicates that the maximum rate of take into S11 is 17,210 ML/day, which is nearly an order of magnitude greater than the infrastructure assessment.
- The maximum rate for taking overland flow is identified in the certification as 23,280 ML/day.

Panel Recommendations

- Adopt the rates as provided for the infrastructure assessment minus 5% [Maximum rate:ML/day @ JTW – 1216@40000, 1435@50000, 1938@60000, 2157@70000, 2375@80000, 2594@90000].
- Exclude gravity diversions into S11, which will be recognised as a surge that can be dewatered outside waterharvesting announcements.
- Adopt waterharvesting rate as per licence minus 5% [Maximum rate:ML/day @ JTW – 82@3000, 163@5000, 327@8000, 410@10000, 486@12000, 562@14000 638@16000, 714@18000, 790@20000]]

References

Please see attached

Attachments

Please see attached

Director, Water Planning (SW) Recommendation/s:

Date forwarded to Director Water Planning: 23/05/2007

The Director endorse Anomalies panel recommendations: (✓)

or

The Director endorse Anomalies panel recommendations with the following changes: ()

or

The Director endorse an alternative preference ()

General Manager

GM endorses Director Water Planning (SW) recommendations on further action:

()

or

19/07/2007

Certification –Clyde

Alternative action proposed:

Comment:

Signature:

Date:

Deputy Director General's Final Decision

DDG Approves GM's recommendations on further action

()

or

Alternative action required:

Comment:

approved

DDG Signature:

sch4p4(6) Perso

Date:

23.7.07

Released by DNRM under the Right to Information Act 2009

s.73 Irrelevant information

s.73 Irrelevant information

s.73 Irrelevant information

Property	Infrastructure Assessment		Certification		Draft ROP Schedule VL	Issues/Anomalies	Options
	Volumetric Limit (ML)	Overland Flow Rate of Take (ML/day)	Volumetric Limit (ML)	Overland Flow Rate of Take (ML/day)			
Clyde	120930	4671	116930	23280	NA	Talldrain & storage, 2 others	Allocation 1528
Kia Ora	117210	7600			NA		

Released by DNRM under the Right to Information Act 2009

Released by DNRM under the Right to Information Act 2009

Total	1172488	50109	10403237	815451
Received but not reviewed				Letter 3
Received and reviewed to go to anomaly panel				Letter 1
Seen to anomaly panel				Letter 2
Certification not yet received				

Been to anomaly panel but more information required. Working on

Released by DNRM under the Right to Information Act 2009

s.73 Irrelevant information

Released by DNRM under the Right to Information Act 2009

AHD	RATE	WH	Flow at JTW	Rate of take (ML/Day)	OLF	Flow past JTW	Rate of Take (ML/day)	Cumulated	GD IA	Cumulated -GD
162.45	1350		3000	86		40000	1280	1280		1280
162.75	5650		5000	86	86	50000	279	1559	49	1510
162.85	7740		8000	172	172	60000	636	2195	106	2040
163.05	12750		10000	88	344	70000	383	2578	153	2270
163.2	17210		12000	80	432	80000	420	2998	190	2500
			14000	80	512	90000	230	3228	225	2730
			16000	80	592	100000	225	3453	2730	100000
			18000	80	672	110000	130	3583	2730	110000
			20000	80	752	120000	129	3712	2730	120000
					832	130000	145	3857	145	2730
						140000	145	4002	145	2730
						150000	160	4162	160	2730
						160000	160	4322	160	2730
						170000	79	4401	79	2730
						180000	79	4480	79	2730
						190000	96	4576	96	2730
						200000	95	4671	95	2730

AHD	RATE	WH	Flow at JTW	Rate of take (ML/Day)
1216			40000	86
1434.5			50000	172
1938			60000	344
2156.5			70000	432
2375			80000	512
2593.5			90000	592
			100000	672
			110000	752
			120000	832

1280	40000	81.7	3000	86
1510	50000	163.4	5000	86
2040	60000	326.8	8000	172
2270	70000	410.4	10000	88
2500	80000	486.4	12000	80
2730	90000	562.4	14000	80

Flow at JTW	OLF from Bokhara	OLF from Narrain into S10	Total
40000	998	218	1216
50000	437	437	1435
60000	1283	655	1938
70000	873	873	2157
80000	1092	1092	2375
90000	1311	1311	2594