Joint IWCM Evaluation Study

Job number A060

Section 5 - Technical Note 5

Data Gaps

This technical note describes Blayney, Weddin and Cabonne Shire Council and Central Tablelands Water data gaps. The strategy to address the data gaps below should take place according to the level of importance defined below:

Importance:

- Low (L) – Data needs to be gathered within 5 years (next cycle of IWCM study)
- Medium (M) – Data needs to be gathered within 6 – 12 months (generally required to complete IWCM strategy)
- High (H) – Data needs to be gathered within 1 month as critical to the IWCM evaluation study completion.

1 Blayney Shire Council

Item	Reference	Data Gaps	Importance	Strategy to address the gap / recommendation
1	TN2.2	Performance against SBP levels of service for 2007/8	H	BSC to identify performance and advise
2	TN4A	Up to date vegetation map	L	BSC to request CMA to provide
3	TN4A	whole Blayney zoning map	M	BSC to integrate zoning maps
4	TN4A	economic value of major industries	M	BSC to identify economic value of major industries
5	TN4A	Do these environmentally sensitive areas (shown in the DWE and DECC maps in TN4A) impact LWU ability to meet levels of service now and in the future? Is there any planned development in these areas that might impact water resources and quality?	H	BSC and CTW to identify existing and planned developments within the sensitive areas shown in the maps

Item	Reference	Data Gaps	Importance	Strategy to address the gap / recommendation
6	TN4A	Is there any regional catchment plan?	H	BSC to write to CMA general manager requesting advice on this
7	TN4A	Updated information about Belubula Dam	M	BSC to assess Belubula Dam capacity, and identify dam usage
8	TN4A	Central West specific Water Sharing Plans for Blayney Shire	H	DWE to be contacted by CTW regarding status of relevant water sharing plan
9	TN4A	Has Carcoar Dam water quality improved?	H	CTW to contact DWE regarding dam water quality
10	TN4A	Infill and new development predictions	M	BSC to document this in a infill and new development report
11	TN4A	2006/07 and 2007/08 Blayney land development type figures	M	BSC to update State of Environment Report data
12	TN4A	2006/07 and 2007/08 Blayney type of subdivisions figures	M	BSC to update State of Environment Report data
13	TN4A	BSC Development Servicing Plan No.2 Blayney Sewer System date	H	BSC to advise
14	TN4A	Location of Cadia Mine PS and King George Oval PS in the schematic diagram of Blayney PS scheme	H	BSC to update BSC SOIR (2007) schematic diagram to include these pump stations
15	TN4A	Current sewage characteristics based on types of users	M	BSC to develop a annual report including this information
16	TN4A	Latest DWE TBL performance report	H	BSC to provide

Item	Reference	Data Gaps	Importance	Strategy to address the gap / recommendation
17	TN4A	Impacts of current developments on the existing sewerage system Current and future potential reuse markets	H	BSC to provide short report containing information on this
18	TN4A	Description of the stormwater system	L	BSC to prepare a stormwater report to include stormwater system diagrams and description of the system
19	TN4A	Stormwater flows	L	BSC to prepare a stormwater report containing this information
20	TN4A	Stormwater infrastructure capacity	L	BSC to prepare a stormwater report containing this information
21	TN4A	Flood study	L	BSC to prepare flood study identifying flooding issues and costs
22	TN4A	Potential areas that could be utilised for Water Sensitive Urban Design schemes such as stormwater harvesting	M	BSC to prepare water sensitive urban water design report that reviews opportunities including stormwater harvesting
23	TN4A	updated map of the sewerage reticulation system	L	BSC to develop general updated sewerage reticulation map covering Blayney Millthorpe system

2 Weddin Shire Council

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
1	TN2.2	Status of actions concerning Company Dam required by Dam Safety Committee.	H	WSC to provide list of actions and status
2	TN2.2	Status of 2008 performance against 2004 Levels of Service	H	WSC to advise
3	TN4B	▪ Which stream shows increased salinity level? ▪ Salinity levels	M	WSC to request salinity information from CMA
4	TN4B	WCAP (1999) report	H	WSC to formally request copy of the report from CMA, DWE and DECC
5	TN4B	▪ 2001 Census data by region ▪ Quandialla 2006 or current population	H	WSC to confirm population and tenement figures for Quandialla WSC to request assistance from DWE to provide 2001 Census data for Quandialla and Caragabal
6	TN4B	Impact of contaminated site on water quality	H	WSC to provide results of contaminated site study, when available
7	TN4B	salinity levels in runoff (in Weddin Shire)	M	WSC to formally request advice on this from CMA
8	TN4B	water quality and macro-invertebrate data for Emu Creek	H	WSC to undertake water quality assessment of Emu Creek and formally request advice from DECC on macro-invertebrate

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
9	TN4B	Do these environmentally sensitive areas impact LWU ability to meet levels of service now and in the future? Is there any planned development in these areas that might impact water resources and quality?	H	WSC to meet with DECC to identify potential developments in sensitive areas that might impact water resources and quality
10	TN4B	Water degradation issues couldn't be identified because the WCAP (1999) report has not been provided Is there any other relevant catchment plan?	H	WSC to formally request advice on any other relevant catchment plans
11	TN4B	Water resources locations in Bimbi	H	WSC to formally request documentation of water resources in Bimbi from DWE
12	TN4B	Is there any water sharing plan and what is it status?	H	CTW to request details of water sharing plans and their existing status from DWE
13	TN4B	Is there any environmental impact regarding water resources within WSC?	H	WSC to request DECC to provide advice of environmental impact of water resources within WSC e.g. Company Dam
14	TN4B	Infill and new development	M	WSC to document this in a infill and new development report

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
15	TN4B	Type and number of commercial buildings, subdivision and developments Type and number of industries (including water demand) Recreational interests and areas for recreation	H	WSC and CTW to provide detailed information regarding this
16	TN4B	WSC Development Servicing Plan for sewerage services	M	WSC to comply with best-practice
17	TN4B	Sewage treatment works units and capacities of each unit	H	WSC to asses STP treatment unit capacities and provide
18	TN4B	Does WSC have sensitive water quality requirements?	H	WSC to contact DECC regarding sensitive water requirements and advise
19	TN4B	Latest DWE TBL performance report	H	WSC to provide
		Information about number of urban properties (assessments) that will be provided with sewerage services	M	WSC to provide
20	TN4B	WSC to confirm sewerage future works and capital works program	H	WSC to review and update 2004 SBP capital works program and provide updated report
21	TN4B	Update growth projection figures	H	WSC to review 2004 growth projections and provide updated projections

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
22	TN4B	Equivalent population projections (future sewer load) Hydraulic loading assessment Analysis of the ability of the current sewerage infrastructure to meet future needs including collection and disposal of future loads Sewer overflow investigation report Wet and dry weather flows Likelihood of sewer overflow	H	WSC to implement study to identify the information in the list on the left
23	TN4B	Current development (if any) and their impacts on the existing sewerage system. Current and future potential reuse markets	H	WSC to provide short report containing information on this
24	TN4B	Stormwater flows (volume, location)	L	WSC to prepare a stormwater report containing this information
25	TN4B	Is there any update information regarding stormwater management options required by RTA?	H	WSC to provide information on this
26	TN4B	Has the 2001 SMP information been updated?	H	WSC to update point sources of pollution table status from 2001 SMP

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
27	TN4B	Stormwater pollution loading data	H	WSC to identify if there are pollution loading sources in the stormwater system. If unknown then over the next five years this should be studied and reported
28	TN4B	Diffuse source of stormwater pollution in Grenfell	H	WSC to identify if there are diffuse source of stormwater pollution in the stormwater system. If unknown then over the next five years this should be studied and reported
29	TN4B	Stormwater infrastructure capacity	L	WSC to prepare a stormwater report containing this information
30	TN4B	Has WSC included any stormwater work into Council's current capital works schedule since 2004?	H	WSC to review existing capital works program and provide update
31	TN4B	Is the SMP monitoring / reporting mechanism being implemented?	H	WSC to communicate status of this
32	TN4B	Flood study including flooding issues and costs related	L	WSC to progress Emu Creek Flood Study and provide
33	TN4B	Is there any further area where WSUD could be implemented?	M	WSC to prepare water sensitive urban design report that reviews opportunities including stormwater harvesting

3 Cabonne Shire Council

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
1	TN2.2	CSC OH&S plan and performance	H	CSC to provide copy of OH&S plan and performance information
2	TN2.2	Status of DSC and DWE actions regarding Molong Creek and Borenore Dams.	H	CSC to provide advice on status of actions identified by Dam Safety Committee and DWE
3	TN2.2	Detailed 2008 performance against 2008 draft Levels of Service for Water supply detailed above.	H	CSC to provide detailed performance information
4	TN2.2	Detailed existing 2008 performance against above 1997 Levels of Service for sewerage above	H	CSC to provide detailed performance information
5	TN3	Latest DWE TBL performance report for water supply	H	CSC to provide
6	TN3	CSC daily water consumption data	H	CSC to implement accurate daily water consumption electronic recording system
7	TN4C	Tourism and population numbers, accommodation and recreational interests	H	CSC to advise on this
8	TN4C	Is there any other major water licence holder within Cabonne? e.g. mining, irrigators	H	CSC to formally request details of water licence holders in CSC area
9	TN4C	▪ Number of wineries in the area and their water consumption, if major ▪ Economic value of these significant industries	H	CSC to formally request advice from NSW DPI and DWE

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
10	TN4C	Has any of the flood mitigation options identified in the floodplain management studies been implemented?	H	CSC to provide information and status on flood management studies
11	TN4C	Do these environmentally sensitive areas impact LWU ability to meet levels of service now and in the future? Is there any planned development in these areas that might impact water resources and quality?	H	CSC to meet with DECC to identify potential developments in sensitive areas that might impact water resources and quality
12	TN4C	▪ Are the CAP targets being achieved within Cabonne LGA? ▪ Is there any other regional catchment plan that covers Cabonne Shire area?	H	CSC to formally request advice from the Central West CMA on the status of CAP targets in Cabonne
13	TN4C	▪ Bell River water extraction licence ▪ Buckinbah Creek Weir, Yeoval and Delgany Bores yields, water quality, existing licensing arrangements ▪ Are there any other potential water sources (e.g. rivers, groundwater, and agricultural dams) that need to be considered? ▪ Seasonal and annual variations in flow or availability of all water sources within Cabonne Shire ▪ Cadiangullong Dam information	H	CSC to provide copies of licences listed on the left and to formally request advice from DWE on potential water sources and seasonal variations (including Cadiangullong)
14	TN4C	▪ Are there any environmental impacts regarding existing or alternative water resources within CSC? ▪ Environmental flow requirements for rivers in the Cabonne Shire area	H	CSC to review environmental impacts with DECC and CMA and advise CSC to identify environmental flows with the assistance from DWE

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
15	TN4C	▪ Holiday and rental accommodation stock ▪ Growth predictions in housing stock (infill and new development areas) ▪ Number and type of commercial buildings	L	CSC to develop growth projections and document
16	TN4C	Infill and new development predictions	M	CSC to document this in a infill and new development report
17	TN4C	Current and future developments water demand	H	CSC to provide advice on this
18	TN4C	Pricing compliance is unknown	M	CSC to develop best-practice pricing
19	TN4C	Molong STP existing treatment plant process unit (s) capacity (ies) and process abilities. This is needed to identify present and future issues regarding ability of the plant to meet existing and future (30 years) levels of service including DECC licences requirements	H	CSC to assess existing Molong STP treatment unit capacities and review of adequacy of plant capabilities to meet DECC licence requirements present and future. This may require a detailed study.
20	TN4C	Canowindra STP existing treatment plant process unit (s) capacity (ies) and process abilities. This is needed to identify present and future issues regarding ability of the plant to meet existing and future (30 years) levels of service including DECC licences requirements	H	CSC to assess existing Canowindra STP treatment unit capacities and review of adequacy of plant capabilities to meet DECC licence requirements present and future. This may require a detailed study.
21	TN4C	Volumes and quality of effluent reuse in Canowindra scheme	H	CSC to advise

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
22	TN4C	Does CSC have sensitive water quality requirements for Canowindra?	H	CSC to provide data and if necessary contact DECC to clarify sensitive water status
23	TN4C	Description on the Eugowra sewage scheme pumping stations	H	CSC to provide
24	TN4C	Eugowra STP existing treatment unit (s) capacity (ies) and processes abilities. This is needed to identify present and future issues regarding ability of the plant to meet existing and future (30 years) levels of service	H	CSC to assess existing Eugowra STP treatment unit capacities and review of adequacy of plant capabilities, present and future. This may require a detailed study.
25	TN4C	▪ Schematic of Eugowra STP operation and effluent management ▪ Details of the effluent reuse scheme ▪ Potential recycling markets and annual volumes (e.g. new development areas, parks, gardens)	H	CSC to provide a report containing this information
26	TN4C	Current DWE TBL performance report	H	CSC to provide this
27	TN4C	Current and future services provided (ET per town/village)	H	CSC to provide this
28	TN4C	▪ Hydraulic loading assessment including current growth projections ▪ Analysis of the ability of the current sewerage infrastructure to meet future needs including collection and disposal of future loads	M	CSC to prepare investigation report

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
29	TN4C	▪ Information on current development and their impacts on the existing sewerage system ▪ Current and future potential reuse markets	H	CSC to provide short report containing information on this
30	TN4C	Are the actions established in the CSC capital works program for stormwater appropriate to address the flooding issues identified on TN 4C?	L	CSC to review
31	TN4C	Stormwater flows in CSC's stormwater systems are unknown	L	CSC to prepare stormwater report containing this information
32	TN4C	▪ Stormwater management responsibilities are unknown ▪ CSC organisation structure	H	CSC to advise on stormwater management responsibilities within Council
33	TN4C	▪ Diffuse source of pollution within stormwater systems ▪ Relationship between urban stormwater work plan and current source of pollution	H	CSC to identify if there are diffuse sources of pollution in the stormwater system and relationship to urban stormwater work plan. If unknown then over the next five years this should be studied and reported
34	TN4C	Stormwater pollution loads	H	CSC to identify if there are pollution loading sources in the stormwater system. If unknown then over the next five years this should be studied and reported

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
35	TN4C	Point sources of pollution	H	CSC to identify if there are point sources of pollution in the stormwater system. If unknown then over the next five years this should be studied and reported
36	TN4C	Stormwater infrastructure capacity	L	CSC to prepare a stormwater report containing this information
37	TN4C	CSC Stormwater Management Plan	L	CSC to develop stormwater management plan
38	TN4C	Status of flood studies activities	H	CSC to advise
39	TN4C	Potential areas that could be utilised for water sensitive urban design schemes such as stormwater harvesting	M	CSC to prepare water sensitive urban design report that reviews opportunities including stormwater harvesting

4 Central Tablelands Water County Council

Item	Ref.	Data Gaps	Importance	Strategy to address the gap / recommendation
1	TN3	Current DWE water supply TBL performance report	H	CTW to provide
2	TN3	Number of tanks, rainwater tank policy, rebate and recommended size in CTW's area of operations.	H	CTW to advise
1st	TN3	Bogolong Dam volume extraction licence	H	CTW to advise

Document Control					
Revision	Author	Reviewer	Approved for Issue		
			Name	Signature	Date
1	ARA	AFR	Andrew Fraser	Andrew Fraser	10th November 2008