Section 6 - Technical Note 6

IWCM Issues

This technical note summarises the issues identified in previous technical notes covering CTW, Blayney, Weddin and Cabonne Shire Councils. Where appropriate description notes have been provided to provide basic explanation. The issues below will be paraphrased for presentation at the PRG meeting.

1 Blayney Shire Council

Item	Reference	BSC Issues	Description
1	TN2.2	Level of service failure: ▪ System Failures: o Sewer overflows (LOS=0,2007/8=1) o Pump/power (LOS=2,2007/8=10) o Blockages, collapses (LOS=25,2007/8=314) ▪ Response times(mins) for system failures: Priority 1 –after working hours (LOS=45,2007/8=60)	LOS failures
2	TN4A	Number of mining permits being issued which may affect environment and water demand	Blayney LGA is almost completely covered by current mining leases and mining exploration licences. The granting of mining leases or mining exploration licences does not create any additional environmental impacts. However, any changes in the number of such permits being issued should be noted, particularly with respect to potential for future development. (BSC SOE Report, 2005-06).
3	TN4A	Impact of subdivisions on Lake Rowlands catchment	Blayney LEP allows for rural subdivisions hence there is the possibility of development in the Lake Rowlands catchment.
4	TN4A	Potential Issue: Although there was full compliance with the DECC STP licence for 2007/8 Blayney STP licence reported non-compliance: 2006/07 for pH, P and	

Item	Reference	BSC Issues	Description
		no sampling. Blayney also complied fully in 2003/4, 2004/5 and 2005/6.	
5	TN4A	▪ Meeting DWE Best Practice Management Guidelines (LOS) ▪ Wet weather inflow including illegal connections (excessive inflow) ▪ Reducing sewer chokes and blockages (LOS) ▪ Maintaining an up to date asset register including asset condition and rating ▪ Risk assessment of issues identified by Overflows Investigation Report (2007) ▪ Managing and funding future replacement/ renewal of assets. ▪ Environmental sensitivity of Carcoar Dam (LOS)	

2 Weddin Shire Council

Item	Reference	WSC Issues	Description
1	TN2.2	▪ Frequency of system failures current at 2004 versus targets: ▪ Category one failure due to rainfall and deficient capacity (LOS=Nil, 2004=1/3yrs) ▪ Category three failures due to blockages (LOS=Nil, 2004=40 to 50) ▪ Response time to Priority one(mins) during working hours (LOS=30, 2004=60) ▪ Response times to general or minor customer complaints and inquiries written complaints complaints (LOS=4 days,2004=5days) ▪ 100%ile Total P discharge concentration at 2004 (7.3mg/L) to Emu Creek appears to exceed target 0.3.	LOS failures
2	TN4B	Stream's salinity level	The Grenfell Stormwater Management Plan (Grenfell SMP) report contains information on Shire catchment as follows. Grenfell is located south of the Lachlan River in the Tyagong sub-catchment (840 km^2). The main tributary creeks of this sub-catchment include Emu Creek, Tyagong, Bungalong Creek, Brundah Creek, Burrangong, Cudgell and Bulla Creek. The majority of these creeks are ephemeral (flows occurring in the winter and early spring months). The salinity levels of the streams are increasing.

Item	Reference	WSC Issues	Description
3	TN4B	Noxious plants - potential land and water degradation threat	Land managers in the Weddin Catchment study area have expressed concern at the spread of noxious weeds as a potential land and water degradation threat. These species are also of concern to the local councils in the Weddin Catchment study area (Grenfell SMP, 2001). The WSC SOE (2006/07) report states that WSC has continued its direct weed control activities on Council controlled lands. In addition, infestations of noxious weeds on private lands and those controlled by other public bodies have been monitored and appropriate action has been taken, to ensure suppression, where this has been needed.
4	TN4B	Contaminated site at Gas works site	Potential stormwater pollution source
5	TN4B	Stormwater quality at Grenfell	The absence of water quality data and macro-invertebrate data for Emu Creek has been noted as a stormwater issue for Grenfell (Grenfell SMP, 2001).
6	TN4B	▪ Permanent water supply for Bimbi - issue identified by Council staff ▪ Concern in regards to Grenfell water supply: if the Gooloogong to Grenfell water pipeline is rendered unusable, there is no other main to Grenfell – issue identified by Council staff	
		▪ Bogolong Dam and Company Dam water quality	Bogolong and Company dams represent potential alternative water supplies. Bogolong water quality is poor. Company Dam is silted up; water quality has not been assessed recently.
7	TN4B	▪ Need for a new STP in 2020	Council estimates expect that the plant will require a significant upgrade in 2020.
8		▪ Asset Management Plan and Emergency Plan for STP – issue identified by Council staff	
9	TN4B	Chlorination of the effluent reuse – issue identified by Council staff	There is no chlorination in the effluent reuse system

Item	Reference	WSC Issues	Description
10	TN4B	Weddin STP licence non-compliance: ▪ 2007/08 - Exceeded volumetric discharge limit ▪ 2006/07 – Exceeded volumetric of effluent discharge to irrigation ▪ 2003/04 – Monitoring failure at points 1 and 2	
11	TN4B	Capital works for sewerage and drainage services	There is a need to clarify what the present capital works program is compared to the 2004 SBP.
12	TN4B	Council predictions for STP upgrade	2001 to 2021 NSW planning data in 2004 SBP showed population declining while Council projections indicate increase. Is new STP necessary?
13	TN4B	Stormwater inflow into the sewer mains – issue identified by Council staff	
14	TN4B	Stormwater Management at Quandialla	
16	TN4B	Has Grenfell gas works site been addressed?	Potential for hydrocarbons and heavy metals to be transported to stormwater system and present a health hazard unless the site is treated as per EPA requirements
17	TN4B	▪ Has Council applied the stormwater management options identified in the Grenfell SMP 2001 report? ▪ Location of illegal stormwater connections and sewer overflow	Council policy requires the removal of illegal connections of stormwater from houses in Grenfell to minimise the possibility of overtaxing the system and causing sewerage spills during major rains. Despite the adoption of this policy, Council believes that sewer overflows are still an issue for Grenfell. According to Grenfell SMP (2001), there is limited information about the location of stormwater infiltration points and there is a lack of funds and resources to address the issue. Sewer overflows in Grenfell have been identified as a stormwater issue and corresponding management options have been indentified in the Grenfell SMP report.
18	TN4B	There are four point sources pollution which did not have agreements for waste minimisation in 2001. Is this information current?	The 2001Grenfell SMP report provides a table including stormwater issues and 'hot spots' for Grenfell. It also presents possible causes associated with each issue.

Item	Reference	WSC Issues	Description
19	TN4B	▪ Pollution sources in Grenfell require management ▪ Lack of water quality data for Emu Creek ▪ Emu Creek is degraded in some places ▪ Erosion and sediment controls at construction / road works sites require regulation ▪ Stormwater infrastructure is inadequate causing flooding in some locations	Issues identified in the 2001 Grenfell Stormwater Management Plan
20	TN4B	Mitigation works for Grenfell Floodplain Management Plan - issue identified by Council staff	Flood Study is being undertaken and will identify mitigation works

3 Cabonne Shire Council

Item	Reference	CSC Issues	Description
1	TN3	Potential Issue: In 2005/6 CSC TBL performance below NSW state wide median for: % Urban population without reticulated water (17 vs. 0.9) Water service complaints per 1000 properties (25 vs. 6)	
2	TN3	Although Molong System appears to be satisfactory based on historical information. Uncertainty about future climatic conditions means that yield study and demand calculation scenarios should be developed to take into account possible climate change.	
3	TN4C	Cabonne LGA Sensitive water Resource Map indicates that there are high groundwater vulnerability around Molong and Eugowra. As developments have been identified in these areas does this represent long term issues with the groundwater availability within CSC?	
4	TN4C	Are dam safety systems and emergency plans adequate for the three dams: ▪ Molong Creek dam ▪ Borenore Creek Dam ▪ Lake Canobolas dam (owned by Orange City Council)	
5	TN4C	Impact of land developments in CSC's water	Potential increases in water consumption and/or impacts on catchment: ▪ MOLONG: The Molong Heights estate, East Molong rural residential, Molong industrial area ▪ CANOWINDRA: Longs Corner Estate (Residential), Canowindra Industrial (Industrial) ▪ MANILDRA: Residential ▪ EUGOWRA: Industrial

Item	Reference	CSC Issues	Description
6	TN4C	If pricing does not comply with guidelines, this need to be addressed	Compliance with pricing guidelines is unknown
7	TN4C	Meeting higher standards for effluent reuse – issue identified by Council staff	Council staff has advised that there is no reuse scheme in Molong, however there are some potential recycling markets in the area. CSC aims to meet future higher standards of effluent discharge into Molong Creek. Council is looking at re-use scheme to reuse at Molong Showground and golf course.
8	TN4C	Molong STP licence non-compliances: ▪ 2007/08 – Faecal Coliforms ▪ 2006/07 – pH, P, N, Faecal Coliforms and SS ▪ 2005/06 – pH, N, SS, P and Faecal Coliforms ▪ 2004/05 – Faecal Coliforms, P and exceed discharge volume limit ▪ 2003/04 – Faecal Coliforms, N, P, SS, exceed volumetric discharge limits and Faecal Coliforms analysis omitted for April 2003	
9	TN4C	Canowindra STP non-compliance: ▪ 2007/08 – Insufficient samples for Monitoring Points 3, 5, 6 and 7 ▪ 2005/06 – BODSS, pH and exceed volumetric discharge limit ▪ 2004/05 – pH, N and SS ▪ 2003/04 – pH, SS and exceed volumetric discharge limit	

4 Central Tablelands Water County Council

Item	Reference	CTW Issues	Description
1	TN2.2	From 2007 CTW Management Plan target levels were more stringent than current performance for the following Levels of service: ▪ Min. pressure when delivering 15 L/min needs to be improved from 12 to 20m head. ▪ Max. static pressure needs to be reduced from 90 to 60m head. ▪ Flowrates for domestic (non rural consumers) needs to be increased from 15 to 25 litres/min. ▪ Average frequency of restrictions applied through a repeat of the worst drought on record needs to be reduced from 1/10yr period to none. ▪ The maximum frequency of unplanned consumer disruptions needs to be reduced from 2/yr/customer to less than 2. ▪ Compliance with 1996 ADWG needs to increase from the current 98% percent to 100% for: ▪ Total Coliforms ▪ Thermo tolerant Coliforms	LOS
2	TN3	Potential Issue: In 2005/6 CTW TBL performance below NSW state wide median for: % Urban population without reticulated water (9.8 vs. 0.9) Water quality complaints per 1000 properties (10 vs. 6) Average customer outage time (19mins vs. 6)	
3	TN3	Analysis of CTW system appears to indicate 100ML/y shortfall in supply at 2037 in the base case analysis based on historical information and a 1991 Lake Rowlands yield study. Uncertainty about future climatic conditions means that yield study and demand calculation scenarios should be developed to take into account possible climate change.	

Item	Reference	CTW Issues	Description
4	TN3	Connection of the proposed Cowra pipeline linking CTW's "pipeline C" to Cowra is expected to impact on restrictions in water supply for CTW and Cowra customers. Where Cowra needs emergency water supply this will reduce Lake Rowlands ability to meet supply levels of service during droughts and will necessitate earlier water restrictions being imposed on CTW consumers. If emergency pumping can be implemented it may offer the ability to pump water to CTW customers in the event of problems in CTW's system.	

5 CWBC General Issues

Item	Reference	CWBC Issues	Description
1	TN3	Issue: The NSW Government is funding a $500K CENTROC Regional Water Security study covering all 17 CENTROC councils drought management on a regional basis. The ultimate results of the CENTROC Study, in the longer term (not the short term) may have a large impact on CTW operations; especially drought operations (or, it may have no effect at all). CTW's financial planning and proposed pipeline augmentations may be impacted by these plans at some time in the future.	A number of projects are being promoted within the region including: The augmentation of Lake Rowlands by enlarging the storage from 4500ML to 26500ML. Since 1998 CTW has been advocating for the enlargement of Lake Rowlands and has commissioned numerous studies over that time. The most recent being a 2006 economic needs study conducted by the Western Research Institute, Bathurst with engineering assistance from GHD. The possibility of linking various water storages within the region including Lake Wyangala and Lake Burrendong. A $500K CENTROC regional water security study has been awarded and will begin soon. This project may provide a context for region wide schemes. The feasibility of these projects is expected to be considered as part of this CENTROC study.

Document Control

Revision	Author	Reviewer	Approved for Issue		
			Name	Signature	Date
2	ARA	AFR	Andrew Fraser	Andrew Fraser	12th November 2008