PUBLIC
30/10/14

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27 OCT 2014

Minister for Water; Forestry

Our ref: 52-02010

Hon Ken Travers MLC
Chair
Estimates and Financial Operations Committee
Parliament House
PERTH WA 6000

Dear Chair

QUESTIONS PRIOR TO HEARING – 2013/14 AGENCY ANNUAL REPORT HEARINGS

Thank you for your letter dated 9 October 2014 regarding Questions Prior to Hearing submitted by Members of the Legislative Council for the Water Corporation.

Please find attached the responses from the Water Corporation.

Yours sincerely

Hon Mia Davies MLA
MINISTER FOR WATER

Att

27 OCT 2014

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ESTIMATES AND FINANCIAL OPERATIONS

QUESTIONS ON NOTICE SUPPLEMENTARY INFORMATION

2013/14 Annual Report Hearings

Water Corporation

Hon Stephen Dawson MLC asked –

1. *I refer page 8, the section of the Water Corporation Annual Report dealing with Wastewater and to the section call "Strategy: Wastewater Upgrades" on page 9 of the Water Corporation Strategic Development Plan 2014/2015 to 2018/2019, and ask –*

(a) *Which wastewater assets are operating at or above their design capacity?*

Answer: Wastewater treatment plants (WWTPs) at the following locations are currently operating at or beyond their treatment capacity:

Derby
Halls Creek
Geraldton
Yanchep
Woodman Point
Collie
Kemerton
Pemberton
Waroona
Kojonup
Pingelly
Northam

Treatment plants are able to operate above capacity and the situation is monitored by the Water Corporation.

2. *I refer the section of the Water Corporation Annual Report dealing with Wastewater, page 8, and to page 8 of the Water Corporation Strategic Development Plan 2014/2015 to 2018/2019 where that report says under the section Challenge: Wastewater - "This risk is greater in smaller regional towns where slow and steady deterioration of waste water assets has occurred", and ask –*

a) *Which regional towns have experienced a slow and steady deterioration of waste water assets in the period since 1 January, 2009?*

Answer: Wastewater systems across regional Western Australia consist of many different types of assets (e.g. instrumentation/control equipment, pipes, pump stations, treatment facilities) with a range of expected lives varying from 10 to 100+ years.

Deterioration in the condition of all assets over time through normal operational wear and tear is expected and regional wastewater assets are no different.

The Water Corporation has processes in place to monitor the performance and integrity of wastewater schemes, and also individual key assets, for the purpose of identifying and managing emerging performance risks in a timely manner.

The Water Corporation has plans in place to address the issues identified over coming years. These actions can be a mix of operational and capital investment decisions.

The maintenance regimes for the existing assets provide the required level of service to customers.

3. *I refer the section of the Water Corporation Annual Report dealing with Wastewater, page 8, and to page 8 of the Water Corporation Strategic Development Plan 2014/2015 to 2018/2019 where that report says – "The assets that comprise our various wastewater systems across the State have seen a gradual increase in their risk rating in recent years. This is a result of a growth in demand combined with lower than optimal levels of maintenance repair and replacement works across many schemes due to constraints on funding", and ask –*

a) *Which wastewater systems referred to above have had lower than optimal levels of maintenance repair and/or replacements works in the period since 1 January, 2009?*

Answer: There is no single 'optimal' maintenance/renewal approach to wastewater system assets. The approach taken will be dependent on the specific system circumstances existing at a point in time.

The Water Corporation's maintenance and replacement strategies use a combination of risk and economic analysis to ensure that the required level of service for each system is provided. This includes a combination of planned and corrective activities taking the requirements of the community into account.

The Water Corporation continually monitors the performance of its assets to enable it to determine when changes in maintenance and replacement strategies may be required.

Each of the wastewater systems are currently compliant to the ERA established Operating Licence performance requirements.

The Standing Committee on Estimates and Financial Operations asked –

(4) The 2013-14 Annual Report on State Finances produced by the Department of Treasury noted that the Water Corporation spent $181 million less on infrastructure than estimated at the time of the 2014-15 Budget (p.26) and ask -

(a) Can you provide a table that shows estimated and actual spending for each project listed in the Asset Investment Program (2014-15 Budget Paper No. 2, p.786)?

Answer: The attached document sets out the estimated and actual expenditure on each project listed in the 2014-15 Budget Paper.

Water Corporation **2014-15 State Budget Table** **Actual vs Estimated Expenditure**	**2013-14** **Actual** **$000s**	**2013-14** **Est. Exp.** **$000s**	**Variance** **$000s**	
Metropolitan Water Sources and Distribution	$85 096	$82 487	$2 609	
Groundwater Replenishment Trial Stage 1	$7 342	$10 000	-$2 658	
Jandakot Yarragadee Bore	$2 173	$12 000	-$9 827	
Mundaring Water Treatment Plant	$272 184	$268 121	$4 063	
Southern Seawater Desalination Plant Stage 2 Expansion	$3 204	$2 963	$ 241	
Country Water Sources and Distribution	$119 094	$115 443	$3 651	
Broome Drill & Equip 3 Bores	$ 498	$1 000	-$ 502	
Denham Elevated Tanks Replacement	$ 697	$1 000	-$ 303	
Geraldton Elevated Tanks	$ 277	$1 000	-$ 723	
Gnowangerup Elevated Tanks	$1 556	$1 600	-$ 44	
Goldfields & Agric. Pipe Duplication	$ 179	$ 300	-$ 121	
Great Southern TWS Pump Station Upgrade	$ 563	$1 000	-$ 437	
Hedland Yule Upgrade	$18 313	$16 000	$2 313	
Millstream to Greenbushes Link	$10 115	$12 000	-$1 885	
Onslow Storage & Distribution Upgrade	$4 546	$4 000	$ 546	
Plantagenet Main & PS Upgrade Stage 1	$6 991	$7 000	-$ 9	
Wundowie High Level Tank & Pipework	$ 53	$ 100	-$ 47	
Metropolitan Wastewater Treatment and Conveyance	$73 040	$70 801	$2 239	
East Rockingham Wastewater Scheme	$17 342	$24 000	-$6 658	
Flora St Pump Station Pressure Main Duplication	$ 645	$ 100	$ 545	
Country Wastewater Treatment and Conveyance	$156 830	$152 021	$4 809	
Albany WWTP Improvements	$ 221	$1 000	-$ 779	
Busselton Provence Pump Station Stage 1	$1 989	$8 000	-$6 011	
Derby Pump Station Gravity Sewer	$ 158	$ 500	-$ 342	
Eaton Monash PM to Bunbury WWTP	$1 863	$4 000	-$2 137	
Karratha Wastewater Treatment Plant Upgrade	$34 522	$30 000	$4 522	
Port Hedland Wastewater Treatment Plant Relocation	$72 076	$70 000	$2 076	
Toodyay WWTP Upgrade	$ 185	$ 600	-$ 415	
Infill Sewerage Program	$24 120	$20 000	$4 120	
Other Capital Works	$4 590	$4 640	-$ 50	
Ord Asset Transfer	$ 1	$ 1	$ 0	
Capital Support Cost	$28 640	$22 484	$6 156	
Capitalised borrowings costs	$30 142	$22 484	$7 658	
Regional Infill Sewerage Program	$4 980	$5 000	-$ 20	
Total	**$984 225**	**$971 645**	**$12 580**	**1.3%**

(b) For each project with a variance of greater than +/-5%, when did you realise that the project spend in 2013-14 would be different from the 2014-15 Budget estimate?

Answer: March 2014.

Hon Lynn MacLaren MLC asked –

5. I refer to "How we operate" on pages 6 to 8 of the Annual Report, and ask –

(a) I note the statement on page 6: "Drinking water for the IWSS was supplied within overall water allocation and abstraction license parameters." Was any of this granted through short term, temporary licenses? If so, how much and from which source?

Answer: None of the drinking water for the IWSS was supplied through short-term or temporary licences.

(b) The Septic Tank Effluent Disposal system in Hyden has significantly reduced the costs of disposing of wastewater in small rural towns. What, if any, are other benefits of this system particularly in terms of impacts on the environment?

Answer: Benefits of the Septic Tank Effluent Disposal (STED) scheme, other than a significant cost advantage over traditional infill schemes, include:

1. *Public health benefit*: The STED scheme provides for safe management of wastewater in the town. Wastewater generated in the town is removed from the town precinct and treated in purpose-designed wastewater ponds.

2. *Environmental benefit*: The STED scheme collects flows from leach drains in the town precinct and further treats this wastewater in a purpose-designed wastewater pond system. The STED scheme provides an additional level of treatment to wastewater generated in the town site.

6. I refer to the Financial highlights on page 15 of the Annual Report, and ask -

(a) Can the Corporation provide evidence of the claims that customer tariffs are among the lowest in the country and the operating cost per property remains one of the lowest in the Australian water industry for large scale supply.

Answer: The National Water Commission's *National Water Performance Report 2012-13 for Urban Water Utilities* shows the Water Corporation has one of the cheapest tariffs for water delivery in Australia (Figure 5.6).

The National Water Commission's *National Water Performance Report 2012-13 for Urban Water Utilities* shows the Water Corporation had the lowest reported combined water and sewerage $/property cost in 2012/13 of the 13 water utilities nationally with 100,000 or more connected properties (Table 6.12 of the report). The Corporation also had the lowest combined $/property in this category over the period 2010-11 to 2012-13 inclusive (Figure 6.7 of the report). The 2012-13 report is the latest available with a publish date of April 2014.

(b) What is the Corporation doing, in addition to the Septic Tank Effluent Disposal system in Hyden, to reduce the amount of money needed from government ($566m in 2013/14) to subsidise non profitable services in rural and remote areas of WA?

Answer: The Water Corporation has introduced business improvement initiatives across operating divisions which are concentrated in regional areas and focused on increased productivity. Water Corporation has also commenced a review of the support and capital areas of the business.

7. I refer to the Operational report on pages 21, 22, 23 and ask –

(a) When does the Water Corporation expect to publish its report Water Forever: South West?

Answer: The *Water Forever: South West Draft Report* was released for comment on 21 October 2014. The period for comment closes on 16 December 2014.

(b) What has been the overall benefit to the Corporation's energy and carbon footprint from the development of the new Carbon and Energy Policy?

Answer: The Water Corporation has long had a strong commitment to energy efficiency and minimising greenhouse gases. The Carbon and Energy Policy was developed in order to strengthen and consolidate this position. The release and promotion of the policy has enhanced the awareness of opportunities for cost effective reduction of energy use and greenhouse gas emissions.

An example includes the Water Corporation's development of photovoltaic electricity supply designs as diesel displacement in remote locations.

(c) I note that 28 out of the 52 commercial customers who pledged to reduce their use of water from cooling towers actually did so, what were the major reasons for the others not doing so?

Answer: At the end of the course, attendees are encouraged to fill out a pledge to reduce water use through their cooling tower - 52 did so. The follow up request for information on actioning the pledge is also voluntary, and only 28 responses were received.

The Water Corporation is not able to comment on the reason for the remaining customers not providing feedback as it was voluntary.

8. I refer to Corporate Governance on page 47 of the Annual Report, and ask –

(a) Information on groundwater on page 46 is minimal compared to that for dams. Where are the facts and figures on abstraction vs allocation?

Answer: The attached table has the detailed information for abstraction and allocation for all groundwater licences for metropolitan sources of supply.

- Total allocation for 2013-14 was 125,800 megalitres (ML).

- Total abstraction for 2013-14 was 125,670 ML.

- Total groundwater delivered to the Integrated Water Supply Scheme for 2013-14 was 124,850 ML.

- The difference between abstraction and water delivered to the scheme is as a result of the groundwater treatment processes.

Groundwater Area	Licence No	Aquifer	2013-14 Allocation (ML)	2013-14 Abstraction (ML)
Gnangara	58082	Superficial	350	337
	56589	Superficial	5,970	5,964
	58106	Leederville	11,130	11,127
	59313	Yarragadee	10,860	10,858
Gwelup	56508	Leederville	2,485	2,481
	59355	Yarragadee	1,015	1,014
	58632	Superficial	7,300	7,296
	56522	Mirrabooka	7,410	7,410
Jandakot	59420	Superficial	160	159
	59416	Superficial	430	429
	59417	Superficial	320	319
	59403	Superficial	690	686
	59421	Superficial	1,300	1,297
	56520	Leederville	6,450	6,449
	174565	Yarragadee	3,000	3,000
Mirrabooka	56602	Superficial	1,600	1,597
	56611	Superficial	1,250	1,245
	56623	Superficial	150	149
	152309	Superficial	500	497
	56527	Mirrabooka	150	149
	56525	Mirrabooka	0	0
	152305	Mirrabooka	0	0
	58608	Leederville	7,550	7,547
	159073	Yarragadee	1,700	1,698
Perth	151738	Superficial	2,730	2,729
	100631	Superficial	2,270	2,260
	100636	Superficial	11,650	11,643
	105738	Leederville	10,400	10,398
	59345	Yarragadee	18,880	18,859
	165380	Yarragadee	1,000	1,000
Wanneroo	150353	Yarragadee	5,720	5,697
Yanchep	56641	Superficial	1,380	1,376
		Total	125,800	125,670

(b) *Where are the statistics on gender diversity across the management tiers in the Department?*

Answer: The statistics on gender diversity across the management tiers in the Corporation are provided on page 44 of the Water Corporation's 2014 Annual Report.

For information, attached is page 44 of the Annual Report.

Performance Summary

Performance against key indicators

	Units	2014 Target	2014 Actual	2013	2012	2011	2010	2009	2008
Social Performance									
Employment and Workforce									
Employee initiated turnover	No.	7.0	6.4	6.4	7.5	6.8	4.7	7.2	9.5
Women in senior management - tier 2	%	25.0	12.5	10.0	12.5	12.5	22.2	22.2	28.6
Women in senior management - tier 3	%	25.0	23.8	15.0	9.5	10.5	12.5	17.0	10.0
People from culturally diverse backgrounds	%	12.8	14.8	13.5	14.0	8.6	10.2	11.5	10.2
Indigenous Australians	No.	45.0	59.0	42.0	45.0	42.0	36.0	40.0	40.0
People with disabilities	%	2.8	1.2	1.3	1.4	1.3	1.3	1.5	1.6
Youth (15-24)	%	6.7	5.0	4.4	4.6	5.0	6.7	6.5	6.1
Significant Injury Frequency Rate	No.	5.4	5.9	7.3	9.5	9.1	7.3	7.7	8.1
Public Amenity									
Wastewater Odour Complaints - Major Metro WWTPs	No.		9	15	52	66	43	56	117
Public Health - Safe Drinking Water									
Metropolitan localities meeting requirements for E.coli	%	100	100	100	100	100	100	100	100
Metropolitan localities meeting requirements for amoebae (Thermophilic Naegleria)	%	100	100	100	100	100	100	100	100
Metropolitan localities meeting requirements for health-related chemical quality	%	100	100	100	100	100	100	100	100
Metropolitan localities meeting requirements for radiological performance	%	100	100	100	100	100	100	100	100
Country localities meeting requirements for E.coli	%	100	100	100	100	100	100	100	100
Country localities meeting requirements for amoebae (Thermophilic Naegleria)	%	100	100	100	100	100	100	100	100
Country localities meeting requirements for health-related chemical quality	%	100	100	100	100	100	100	100	98.4
Country localities meeting requirements for radiological performance	%	100	100	100	100	100	100	100	100
Essential Service Provision									
Continuity - properties not affected by interruption > 1 hr	%	75.0*	75.9	80.8	80.5	83.3	87.4	89.2	88.7
Water pressure and flow standards	%	99.80*	100.00	100.00	100.00	100.00	100.00	99.96	99.96
Water quality faults responsiveness	%	95.0	96.8	95.3	94.5	96.6	95.8	96.2	96.0
Installation of new water connections	%	94.0	97.0	96.2	96.1	97.2	95.1	96.7	95.7
Properties without wastewater overflow	%	99.8*	99.9	99.9	99.9	99.8	99.8	99.9	99.9
Demand-Supply Balance									
Number of Waterwise Schools	No.	515	526	516	533	510	475	423	369
Drought response (number of schemes on restrictions)	No.		1	1	3	7	1	1	1
Environmental Performance									
Ecosystem Protection									
Overflows to Swan-Canning - conveyance system	No.	0	3	1	2	1	3	2	4
Overflows to Swan-Canning - pump stations only	No.	0	0	0	1	0	36	4	1
Energy and Greenhouse Gases									
Electricity consumption per unit of output for water	MWh/ML		1.84	1.70	1.50	1.3	1.20	1.20	1.20
Electricity consumption per unit of output for wastewater	MWh/ML		0.79	0.80	0.80	0.75	0.70	0.65	0.66
Total energy consumption	TJ		3,294	3,000	2,733	2,433	2,244	2,205	2,232
Reported greenhouse gas emissions (CO_2 equivalent)	kT		718	692	664	604	568	560	448

* These targets applied to our Operating Licence between 1 July 2013 - 17 November 2013. From 18 November 2013 the Licence was substituted by the introduction of the *Water Services Act 2012*.