

Responses to Questions Taken On Notice – Water Utilities

Question:

CHAIR: I refer to an answer given in the last budget estimates hearing on the Water Utilities portfolio when it was stated, "A project such as this would have a total capital cost of almost \$4 billion", referring to Sydney's capability to achieve high levels of waste water recycling. According to the Metropolitan Water Plan fact sheet 5, entitled "Sea Water Desalination Compared to Recycling" the projected cost is \$2.845 billion. Will you enlighten the Committee as to the discrepancy between these figures?

Dr SCHOTT: I can be more precise if I take it on notice.

Answer:

The estimated total cost of \$2.8 billion was a result of preliminary investigations. A more detailed assessment on the total capital cost has now been done and a more accurate figure is \$3.845 billion.

Question:

CHAIR: Perhaps we could have the percentage of treated and untreated effluent going down those pipelines and the potential for its reuse, with perhaps a schedule so that we have an idea when that will come into play.

Dr SCHOTT: Yes.

Answer:

The North Georges River Submain transfers approximately 150 megalitres per day of effluent from areas upstream of Bankstown.

Treated effluent (secondary treatment) from Liverpool Sewage Treatment Plant and Glenfield Sewage Treatment Plant makes up 45 per cent of the flow.

Growth in south-western Sydney will increase the flow to the sewage transfer system by approximately 25 megalitres per day in the next 20 years. To cater for this growth, Sydney Water is planning to amplify the system.

The Liverpool to Ashfield Pipeline is part of the South Western Sydney Sewerage Scheme. It is expected that the Pipeline will be completed in mid 2008. In late 2008, treated effluent from Liverpool and Glenfield sewage treatment plants and untreated effluent from Fairfield and Smithfield catchments will be diverted from the North Georges River Submain to the Liverpool to Ashfield Pipeline. With reduced flow in the Submain, safe and efficient rehabilitation can commence.

The rehabilitation of the Submain is expected to be complete in late 2010. Treated and untreated effluent can be transferred by both the Pipeline and the Submain to Malabar Sewage Treatment Plant. After 2010, the split of flow to the Submain and Pipeline will depend of wastewater operational requirements and potential demand for reuse.

Question:

The Hon. DON HARWIN: Has Sydney Water done any studies on whether the public is ready for drinking recycled water?

Dr SCHOTT: Not to my knowledge. It is not the sort of thing that we would do surveys about.

The Hon. DON HARWIN: You say not to your knowledge, which is fair enough. Are you prepared to take the question on notice and check?

Dr SCHOTT: Yes, certainly.

Answer:

In July 2005, UMR Research Pty Ltd conducted an independent study on behalf of the NSW Government into whether the public is ready to drink recycled water. The research showed that 68% of Sydney residents are uncomfortable with the idea of drinking recycled sewage, even when treated to potable standard. These findings support previous studies by Sydney Water and the CSIRO. These studies were made available to the public in July 2005.

Question:

The Hon. DON HARWIN: A lot of Sydney Water customers are already drinking recycled effluent, are they not?

Dr SCHOTT: If you are referring to the effluent that is discharged around the North Richmond region, the answer is yes. If you are referring to the effluent that goes from the Wingecarribee Sewage Treatment Plant and others that discharge into the upper reaches of the catchment, the answer is yes.

The Hon. DON HARWIN: And there are nine of those plants, including the Wingecarribee plant?

Dr SCHOTT: I will have to take that on notice. There are a lot of kangaroos and others too helping with the quality of the water.

The Hon. DON HARWIN: Indeed. Would it be correct to say that waste water makes up about 2 per cent of the water flow into the Hawkesbury-Nepean catchment?

Dr SCHOTT: The waste water?

The Hon. DON HARWIN: The waste water from that plants, and you have agreed to Wingecarribee.

Dr SCHOTT: I am not sure of the percentage. Obviously it would depend greatly on the flow of the river, whether it was normal or in drought condition. The Department of Natural Resources [DNR] would be better at answering that question. I can take it on notice if you wish. DNR monitor the flow of the river quite carefully.

The Hon. DON HARWIN: The building at No. 1 Martin Place receives some support from the Water Savings Fund. How much stormwater will the project at No. 1 Martin Place harvest?

Dr SCHOTT: I am not sure. I will take that on notice.

Answer:

Six Sydney Water Sewage Treatment Plants discharge into the Hawkesbury-Nepean River upstream of the North Richmond Water Filtration Plant – namely Blackheath, Winmalee, Picton, Warragamba, West Camden and Picton. All these Sewage Treatment Plants use tertiary treatment and disinfection.

Averaged combined discharges from Sydney Water's 15 Sewage Treatment Plants on the Hawkesbury-Nepean River account for approximately two per cent of the river volume throughout the year.

All of Sydney Water's Sewage Treatment Plants on the Hawkesbury-Nepean River operate under Department of Environment and Conservation licence requirements and have consistently met necessary limits in terms of nutrients, solids and faecal coliform counts.

Drinking water supplied to the Hawkesbury region is of the same high quality as that provided to other parts of Sydney – meeting requirements and standards set out by NSW Health and the Australian Drinking Water Guidelines.

To ensure that drinking water produced at Water Filtration Plants is consistently of the highest quality, Sydney Water carries out rigorous testing of bulk water in the catchments, after filtration and at customer's taps.

Since 1993, Sydney Water has spent more than \$450 million on upgrading and constructing sewerage infrastructure in the Hawkesbury-Nepean catchment.

The effluent quality from Sydney Water's sewage treatment plants discharging to the Hawkesbury-Nepean River has significantly improved over the last ten years. During this period, the phosphorus load discharged has reduced by over 75 per cent and the nitrogen load by almost 45 per cent.

Wingecarribee is out of Sydney Water's area of operations.

Question:

The Hon. DON HARWIN: Dr Schott, or Mr Duffy, why were the details of the grants to No. 1 Martin Place not detailed on the Department of Energy, Utilities and Sustainability [DEUS] web site?

Mr DUFFY: I will take that on notice, but I do not know if we give out the details, apart from funding. I will take advice on that; no, I will take it on notice.

Answer:

A list of successful funding recipients for each funding round is posted on the DEUS website following the announcement. No 1 Martin Place has not applied, nor received, funding from the Water Savings Fund in the two rounds announced to date.

Question:

The Hon. DON HARWIN: Dr Schott, you would obviously be aware of the Australian Governments \$2-billion water fund that is used to support innovative, nationally significant water projects. Has Sydney Water applied to use this money for any projects? If so, how much and where, and if not, why not?

Dr SCHOTT: The applications to that particular fund are co-ordinated through the Cabinet Office and the metro water people within it. I am aware that there are several projects that Sydney Water is running—they will not necessarily be Sydney Water

projects at the end of it all—that are on the list. But I would prefer to take that question on notice and co-ordinate a response through my colleagues in the Cabinet Office. It is something that they run and I am not intimately involved with, apart from putting projects on the list.

Answer:

Yes.

The \$310 million Recycling in Western Sydney project seeks Commonwealth Government support for two of the major recycling projects in the NSW Government's 2006 Metropolitan Water Plan: the Western Sydney Recycled Water Initiative Replacement Flows project and the Camellia Recycled Water project. The Western Sydney Recycled Water Initiative will see up to 27 billion litres of water per year recycled for use in residential gardens, agriculture and to replace water currently released from Warragamba Dam for environmental purposes. The Camellia Recycled Water project will see up to 6 billion litres of water used by industry in the Camellia area, near Parramatta.

Question:

The Hon. HENRY TSANG: Often Australians do not appreciate how good they are with recycling and saving water. Will you advise the committee whether Sydney Water helps to train or advise visitors from Asia to look at how Australia recycles? Are there any programs to assist our neighbouring countries?

Dr SCHOTT: I am aware that we do various ad hoc things but I will take the substance of that question on notice and get back to you.

Answer:

From time to time, Sydney Water receives delegations from Asia. This has included World Bank sponsored tours. Sydney Water provides a variety of information to the delegates, depending on their requirements.

In January 2005, Sydney Water donated \$100,000 to the Red Cross to help with the Tsunami recovery process.

Question:

Ms SYLVIA HALE: Hunter Water owns land at Minmi in the Stockton area. It is land that was formerly used as wastewater treatment works, is flood prone and is zoned 7B environmental protection. I understand Hunter Water wishes to sell that land and the Valuer General has put a valuation on it of \$100,000. The land also adjoins land at the Hexham Swamp which is under the control of the Hunter Central Rivers Catchment Management Authority. The Catchment Management Authority has offered Hunter Water \$100,000 for it, but Hunter Water has rejected that offer and says it wants more. It is one government agency trying to extract an undue amount of money from another government agency. I want to know whether the Minister will intervene to instruct Hunter Water to sell that land to the Catchment Management Authority.

Mr DUFFY: That is probably a question that we can more appropriately take on notice for you and come back to the committee on.

Ms SYLVIA HALE: First, whether they will instruct Hunter Water to that effect and, second, if so, when will it be likely that the land will be transferred.

Answer:

Hunter Water decommissioned its Minmi wastewater treatment plant in 2001 under the Hunter Sewerage Project and diverted flows to the upgraded Shortland treatment plant.

Hunter Water is committed to protecting a substantial part of the biodiversity corridor by imposing restrictive covenants on over 75% of the land. These covenants, controlled by Hunter Water, will exist on the land title indefinitely and will ensure the wetlands remain as open space.

Question:

CHAIR: How much has the Government spent in the past year on water infrastructure for the delivery of recycled water?

Dr SCHOTT: I will need to take that on notice and give you a little explanation of the projects in the answer because you would appreciate each of them are in slightly different development phases. While we may not have to date spent very much on some because we have just finished the planning, we will start ramping up the spend over the next year or so.

CHAIR: At the same time would you provide detail on how much is intended to be spent on that infrastructure in the coming year?

Dr SCHOTT: Yes, and I will also put the estimated re-use volumes so you can see the replacement of the potable water which is the important facet of it.

Answer:

Sydney Water has a number of recycling schemes that are at a variety of stages including operation, delivery, planning, and commissioning. These schemes include:

- North Head Sewage Treatment Plant
- Wollongong Stage 1 (BlueScope Steel)
- Rouse Hill Stage 2
- Hoxton Park recycled water scheme
- Ropes Crossing
- West Camden Stage 1
- Penrith Stage 1
- Camellia
- Local Recycled water schemes
- Bankstown Airport
- West Dapto
- Camden
- Parramatta Road Corridor
- Northwest and Southwest growth sector
- On-site reuse at Bondi, Malabar and Shellharbour

To complete these schemes Sydney Water will be spending approximately \$1.2 billion. This includes approximately \$28 million in 2005/06 and 2006/07.

When completed, these schemes will deliver over 220 megalitres of reuse per day. Based on 2005/06 consumption this equates to over 15 per cent.

Question:

CHAIR: I understand that the Howard Government recently announced a \$2.6 million stormwater harvesting project for the Central Coast. Though there have been some recent heavy rainfalls along the coast and in urban areas of New South Wales, there has been a continuing lack of rain over the Sydney catchment area. Could you explain to the Committee what plans the New South Wales Government or your department has regarding stormwater harvesting, particularly in light of this movement of the catchment?

Dr SCHOTT: I can take on notice the stormwater projects going on at the moment.

Answer:

There are a number of significant stormwater harvesting and recycling projects under development in Sydney. These include:

- A set of 24 projects funded under the Water Savings Fund
- Botany Aquifer
- Busby's Bore

Sydney Water has a number of significant stormwater harvesting and recycling projects under development.

Although Botany Aquifer is the largest aquifer in Sydney, it does not lend itself to large-scale aquifer storage and re-use for non-potable uses. Large portions of the aquifer are highly contaminated and the number of irrigation and industrial customers within the vicinity of the aquifer is limited.

However, large scale recycling of stormwater from the aquifer is occurring at Centennial Parklands. Most recently the parklands received approximately \$140,000 in Round 1 of the Water Savings Fund to upgrade the pipe system in Centennial Park in order to take pond water to the rose garden, toilets and equestrian jumping arenas, eliminating the need for potable supply. Centennial Park sits above the Botany Aquifer and its ponds are the surface manifestation of the aquifer. The project will save more than 10 megalitres of water a year.

Question:

CHAIR: The Government recently released a discussion paper proposing to allow Sydney permanent access to the water of the Shoalhaven River. How much money is the Government committing to this scheme?

Dr SCHOTT: Sydney Water is not part of that matter; it is a catchment authority matter. Mr Duffy might be able to answer that.

Mr DUFFY: I will take that on notice.

CHAIR: Thank you, Mr Duffy. What research has been done on the level of greenhouse gas emissions, and what did this research find? In the *Sydney Morning*

Herald of Saturday 26 August there were claims that two tonnes of greenhouse gases are released for every million litres of water pumped from the Shoalhaven. Can you clarify that?

Mr DUFFY: As I am informed, we have not done specific research work on greenhouse gases. The movement of water in the catchment authority area is probably a question that is best directed to the catchment authority. It may well have done some work in that area, but the Department of Energy and Utilities has not done any analysis of that.

CHAIR: As the Department of Energy, you would not have an idea of what the consumption rates actually are?

Mr DUFFY: I do not have anything with me. I suspect you could do some analysis that would give you a ballpark figure, but I do not have that in front of me.

CHAIR: Perhaps you could take that on notice.

Mr DUFFY: Yes.

Answer:

Questions regarding Shoalhaven transfers should be directed to the Minister for the Environment.

Question:

CHAIR: This also might be for the catchment authority, but I understand, and perhaps you could agree or disagree with these figures, that Sydney uses some 634 thousand million litres of water each year. If Sydney consumption per household was the same as the Shoalhaven, it would save some 66 million litres per year. Would you like to comment on that at all?

Dr SCHOTT: I will comment further on notice, but the amount of water that Sydney used in 2005-06 was 527 billion litres.

Answer:

The ten year average demand in Sydney is 600,000 megalitres per year. During 2003/04 and 2004/05, average residential consumption was less in Sydney than in the Shoalhaven. If dwellings in Sydney used the same amount of water as dwellings in the Shoalhaven, total consumption in Sydney in 2003/04 and 2004/05 would have been, respectively, 20 and 30 gicalitres (20,000 and 30,000 megalitres) higher than observed.

Question:

CHAIR: In June 2004, the then Minister for Utilities, Frank Sartor, wrote to a constituent claiming, "The estimated cost of the Shannon Creek dam is in the order of \$35 million to \$40 million, and not \$110 million, as suggested in your letter". I am just wondering whether you could let the Committee know the projected cost of the Coffs-Clarence regional water supply?

Mr DUFFY: I think that probably the best thing to do is to take that on notice because I cannot recall exactly what the Minister told this Committee last time. I am happy to take that on notice.

CHAIR: Also, perhaps you could take on notice whether that water treatment in those projections includes the water treatment to deal with algae.

Mr DUFFY: Yes.

Answer:

The previously advised costs were based on the concepts and budgets in the "Regional Water Supply Project -Environmental Impact Statement (January 1999)" where the total project was estimated at \$110 million and the dam component in the order of \$35 to \$40 million. The Ministerial advice sought to correct the constituent's misunderstanding that the dam comprised the total project.

The NSW Government has committed \$12.58 million in assistance towards the Shannon Creek Dam project. If the Honourable member requires more detail he should contact the local water utility responsible for the project.

Water treatment allowances and management practices are based on project specific water quality studies and recommendations. Full treatment facilities are not required to deal with algae under the proposals.

Question:

The Hon. RICK COLLESS: Mr Duffy, correct me if I am wrong, but earlier I think you said that No. 1 Martin Place had not received any Water Savings Fund grants under either round one or round two. Is that the case?

Mr DUFFY: That is my advice.

The Hon. RICK COLLESS: The Minister stated on radio 2GB on 12 September, "No. 1 Martin Place, for example, is a building that has received some support from the Water Savings Fund to do some of these sorts of projects."

Mr DUFFY: If my answer is not consistent with the Minister's answer, then I will take it back on notice and confirm.

The Hon. RICK COLLESS: Could you just check that because there is a bit of a conflict there.

Mr DUFFY: Sure. I understand that No. 1 Martin Place has been required to submit a water savings action plan, which is a requirement for large users to basically analyse their usage and see if they can identify ways of saving, but I am informed that they have not received any financial support under the Water Savings Fund. I will confirm that back to the Committee.

Answer:

It can be confirmed that No 1 Martin Place has not received Water Savings Fund money. However, No 1 Martin Place was one of the first 10 buildings to have its Water Savings Action Plan approved by the Minister. High water users such as the No 1 Martin Place property, are required to prepare a plan. No 1 Martin Place Pty Ltd has been very proactive in water management, as its Water Savings Action Plan indicates. In the past five years, water savings actions at the site include installing flow restrictions on taps, installing smart meters and steps to prevent leaks and wastage from the cooling tower. Opportunities it has identified to save even more water in the future include installation of real-time alarms for unusual flows and replacing cisterns for smaller flushes. In view of the large quantities of water used in office buildings in Sydney, these are important steps leading to significant savings.

Question:

The Hon. DON HARWIN: Is it not a fact that if it were not for the Shoalhaven water transfers we would be below that 30 per cent figure already and that, in fact, the massive increase in water transfers from Shoalhaven have been so that the desalination plant can be put off until after the 2007 election?

Dr SCHOTT: The impact of the Shoalhaven transfers is an issue for the Sydney Catchment Authority, we can add it to the questions on notice to be dealt with by them.

Answer:

Questions regarding Shoalhaven transfers should be directed to the Minister for the Environment.

Question:

The Hon. DON HARWIN: On 15 September Sydney Water invited tenders for the design and construction and operation of an oceanographic current monitoring station it just happened to be east of Kurnell. Is there a relationship between that current monitoring station and the desalination plant?

Dr SCHOTT: I will take that on notice, but I imagine that there is a very direct relationship.

Answer:

In February 2006 the NSW Government released a progress report on its Metropolitan Water Plan. The report concluded that Sydney's water supplies could be secured without building a desalination plant at this time.

If dam levels drop to around 30 per cent, Sydney Water would be ready to build a desalination plant quickly, delivering water supply security to Sydney.

It will be possible to deliver a desalination plant quickly because:

- Sydney Water has acquired a site at Kurnell
- the planning approval process is well underway
- Sydney Water will undertake the necessary pilot testing and prepare a blueprint for a desalination plant.

As part of this readiness preparation, Sydney Water will carry out a range of geotechnical investigations, which will include drilling on the ocean bed offshore from the Kurnell Peninsula, drilling in Botany Bay and in various locations on land.

This will ensure that construction of a plant is not delayed in the unlikely event Sydney's dam storage levels reach 30 per cent.

An essential part of being ready to construct a desalination plant and associated infrastructure at short notice is the testing and proving of the desalination process using pilot plants.

Sydney Water has established two small pilot plants on the preferred site at Kurnell to carry out necessary testing of water quality and process requirements to ensure that a desalination plant would perform to the standard required.

Sydney Water has called for tenders for the design, construction and operation of an Oceanographic Current Monitoring Station.

The station will be used to characterise oceanographic patterns in the near shore area adjacent to the Kurnell headland.

The information obtained from the Oceanographic Current Monitoring Station will be used to assist the design of the seawater intake and the design and specific location of the seawater concentrate diffusers for a desalination plant should one ever be required.

Question:

The Hon. DON HARWIN: What is the expected cost of the monitoring station?

Dr SCHOTT: I do not know, I will take that on notice.

Answer:

Tenders closed on 19 October 2006, however, Sydney Water does not expect this figure to have a significant impact on the desalination program readiness budget and the cost of this work can be accommodated in the budget.

Question:

The Hon. DON HARWIN: I have one follow-up question relating to the monitoring station at Kurnell that, as you said, is very much related to the desalination plant. As I understand it, the tender closes on 12 October, the contract period is eight months from the beginning of November 2006, with the possibility of a contract extension incorporated into tender submissions. If the desalination plant does not need to be on line until 26 months after dam levels fall to 30 per cent, why is it so important to have this station, which obviously is integrally linked to the desalination plant, operational by July 2007?

Dr SCHOTT: It is part of the planning and design work that is being done to ensure that we are in a state of readiness to be able to build a desalination plant, if we are required to do so. I think that the current monitoring station title is probably giving it rather more presence than it probably has. I have taken it on notice and I will get the details of it.

Answer:

The monitoring station forms part of the extensive preparatory work being done (outlined above) so that should it become necessary, the delivery of a desalination plant can occur quickly.

Question:

Mr DUFFY:

I will take on notice the proposals that have been identified in round two and give you further details on those, as I will give you a complete rundown of the projects that were agreed under round one.

Answer:

The following stormwater and rainwater harvesting projects have received funding under the first two rounds of the Government's Water Savings Fund:

Project	Funding	Total Saving (kl)
Centennial Parklands Foundation	\$139,980	141,275
Hornsby Shire Council	\$206,818	135,425
Lane Cove Council	\$49,550	56,250
Mosman Municipal Council	\$140,000	168,500
Nationwide News, a division of News Limited	\$220,000	302,950
North Sydney Council	\$300,000	990,000
Port Kembla Coal Terminal Limited	\$420,000	950,000
Warringah Aquatic Centre	\$53,500	40,000
Rainsaver Pty Ltd	\$800,000	1,544,130
Baulkham Hills Shire Council	\$28,000	53,388
Stockland Development Corporation	\$120,000	145,333
Mowlemsodexho	\$125,725	161,580
Auburn Council	\$55,000	724,631
Campbelltown City Council	\$70,000	40,226
Northbridge Golf Club Ltd	\$534,071	902,900

Question:

Ms SYLVIA HALE: Can I confirm that while the pilot desalination program has been under way you have also been in active discussion with affected councils about aspects of the project and you are not just referring to discussions that might have occurred prior to the announcement by the Minister to defer the major desalination?

Dr SCHOTT: Yes. You would appreciate that I am not as close to the detail of this as some of my staff. But I will get the detail on that and come back to you.

Answer:

Sydney Water has maintained a dialogue with affected councils and has been available to respond to any inquiries. A delegation from the Sydney Coastal Councils visited the pilot plants in October 2006.

QUESTION

The Hon. RICK COLLESS: Mr Harris, does your department have any guidelines on how to handle allegations of serious misconduct?

Mr HARRIS: Absolutely.

The Hon. RICK COLLESS: Can you give a brief outline of what they might be?

Mr HARRIS: The guidelines are contained in the departmental handbooks. They are also available on the department's intra web site. All employees of the department undertake a complete background on these issues when they join the department. There are regular updates. People are required to do this as part of their induction course. It is all readily available.

The Hon. RICK COLLESS: You said it is on the department's intranet. Would you be able to provide the Committee with a copy?

Mr HARRIS: Certainly. Departmental guidelines are available and I would be able to do that.

ANSWER

A copy of the Department of State and Regional Development's Fraud and Corruption Prevention Policy and Guidelines are attached as requested, for the information of the Committee.

QUESTION

The Hon. DON HARWIN: How many staff from your department are seconded to the office of Minister Campbell?

Mr HARRIS: I think we have one. I will have to check.

The Hon. DON HARWIN: How many are seconded to other Ministers? I am talking about the ministerial staff, not the departmental liaison officers.

Mr HARRIS: The number is extremely small. I will have to check.

The Hon. DON HARWIN: You have taken both questions on notice.

Mr HARRIS: Yes, for all four Ministers.

The Hon. DON HARWIN: Other than the four Ministers who have a direct role, can you tell me how many staff from your department are seconded to Ministers other than those four?

Mr HARRIS: I do not believe there are any, but I will take that on notice.

The Hon. DON HARWIN: In terms of all departmental staff who have been seconded to any Minister, and therefore have a right of return to jobs in the Department of State and Regional Development, can you provide me with details of the jobs that they currently perform within those ministerial offices, details of the level of the job to which they have a right of return and a description of the grades and those details?

Mr HARRIS: I can certainly provide the second part of the information. In relation to the specific tasks performed in ministerial offices, I would have to check.

The Hon. DON HARWIN: I am seeking the specific job titles.

Mr HARRIS: I will seek that from the Ministers' offices.

ANSWER

One. Right of return to a Clerk Grade 9/10 position.

QUESTION

Ms Sylvia Hale: Mr Harris, will you tell me if the department of the Minister has been in any negotiations to create a public / private partnership to complete the Maldon Dombarton rail link?

Mr Harris: I am not aware that the department has been involved in any such activity. I will take the question on notice and refer it to the Minister.

Ms Sylvia Hale: In particular, would you ask the Minister if there have been any talks with Toll or with the Walker Corporation in that regard? If so, what was the substance of those talks and will any announcements be made in relation to the completion of the Maldon Dombarton line?

ANSWER

The Minister has not had any discussions with Toll or Walker Corporation on this issue.