BUDGET ESTIMATES 2009-2010

QUESTIONS ON NOTICE

General Purpose Standing Committee No. 5
Water, Regional Development

Friday 18 September 2009

(Answers to be lodged by: Wednesday 14 October 2009)

Questions from Dr Kaye

***Q1**. Why is the Hunter Region not required to have the same demand management and water efficiency measures, or Water Wise Rules, as Sydney and many other urban areas in NSW and Australia?*

RESPONSE:
The lower Hunter has been fortunate not to have experienced the drought that continues in many other parts of Australia, and the consequent need for restrictions. The people of the Hunter have made a consistent effort since the 1980s to reduce water consumption. The Hunter region has one of the lowest levels of water consumption in the State. Hunter Water and the Government support and encourage the efforts of all NSW residents who continue to be water wise.

***Q2**. Why did the Minister announce that Central Coast customers would not be paying for Tillegra Dam in January 2009?*

RESPONSE:

In the lead up to the Federal Election in late 2007, the Central Coast secured $80 million funding from the Federal Government towards the cost of a new pipeline linking their coastal Mardi Dam to their large inland dam at Mangrove Creek.

While the Central Coast Water Plan 2050 identifies accessing water from Tillegra Dam as a future option, the Central Coast Councils decided they did not wish to secure access to Tillegra Dam in the short term.

As a result of this decision Hunter Water's pricing submission to IPART did not include a contribution from Central Coast customers to pay for Tillegra Dam. My announcement in January 2009 clarified this position. However the option remains for the Central Coast Councils to consider accessing water from Tillegra Dam in the future and making a contribution.

Q3. *How much will Hunter Water ratepayers be paying towards Tillegra Dam in the next round of IPART pricing from 2012 to 2017?*

RESPONSE:

This is a matter for the Independent Pricing and Regulatory Tribunal (IPART) to decide in its next determination.

IPART has developed a fair and equitable approach to cover the cost of Tillegra Dam that recognises the significant benefit of the dam to future generations.

The current determination will add $32 per annum, or 60 cents a week, to a typical existing customer's bill by 2012/13. It is a small price to pay for securing the water needs of the region.

Q4. *Why is heavy industry given bulk water discounts for using potable water in the Hunter Region?*

RESPONSE:

This is a matter for the Independent Pricing and Regulatory Tribunal (IPART) to determine.

The price structure set by IPART recognises that there are lower costs for servicing some high volume users that are located close to the water source. However usage charges for location based customers are still the largest component of their bill so they are still encouraged to adopt demand management initiatives.

Q5. *Why did the Minister regazette the Tillegra Dam proposal as a Critical Infrastructure Project under section 75C of the Environment Planning and Assessment Act on 22 May 2009 when new reports have shown that the dam is not needed?*

RESPONSE:

Decisions under the *Environmental Planning and Assessment Act* fall under the responsibility of the Minister for Planning – not the Minister for Water.

Contrary to the suggestion that the dam is not needed, a secure water supply is essential for the Hunter Region. The Tillegra Dam proposal will ensure this occurs and accordingly, it is a critical piece of infrastructure essential for the future prosperity of New South Wales.

Q6. *Can the Minister explain why Hunter Water sent a letter to Dungog Council in April 2004 telling them to proceed with a $1 million investment in a local bridge as the proposed Tillegra Dam was not on its 20 year planning horizon?*

RESPONSE:

I am advised Hunter Water did not tell Council to proceed with a $1 million investment.

Q7. *Figures from the independent SKM Report commissioned by IPART show that Tillegra would be an absurd level of drought security. How does the Minister justify the $477 million needed for the dam when the Hunter has a 1 in 10,000 year chance of storages falling to 5%?*

RESPONSE:

The independent SKM report confirmed that Hunter Water's system, notwithstanding the negative impacts of climate change, will need to be augmented, In addition, it found that Hunter Water's method for calculating yield was considered to be reasonable and robust. The calculation of yield takes into account many facets of system performance, including the risk of entering restrictions and the ability to ensure water supply in a severe drought.

The approach that Hunter Water has taken is to calculate the much more common risks of triggering actions in the drought response strategy that would be required to cope with severe droughts for the range of scenarios, and to look at the acceptability of triggering these actions.

Using this approach it is quite clear that construction of Tillegra Dam is a reasonable and cost effective option for the region. While the dam alone does not completely eliminate the risk of running out of water, it substantially reduces the risks of implementing drought response actions, and provides sufficient time to implement the actions should they ever be called on. It is not acceptable for storages to fall to 5%.

Q8. *How can the Minister justify using $477 million of the state's borrowing capacity to build a white elephant when areas like health, roads, rail, and education are all screaming for capital expenditure?*

RESPONSE:

Tillegra Dam is a vital part of the NSW Government's plan to secure the water future of the Lower Hunter region.

Tillegra Dam will provide certainty of supply for businesses, jobs and a range of recreational opportunities for the people of the Hunter. Monash University research shows Tillegra Dam will increase aggregate investment in the Hunter by $588 million and Gross Regional Product by approximately $1.18 billion over

25 years, as well as providing 280 direct jobs in construction and about 1850 jobs in total.

Q9. *Dungog Council has passed a unanimous motion for an Upper House inquiry into the need for the proposed Tillegra Dam. As Hunter Water and the NSW Government have not been able to produce a single document to justify the need for this $477 million infrastructure, will the Minister agree to a transparent investigation into the dam's need?*

RESPONSE:

The need for Tillegra Dam has been justified in a number of sources, including *Why Tillegra Now?* and Hunter Water's *$H_2$50 Plan*. The Environmental Assessment Report for this critical infrastructure project is currently on public exhibition, providing all stakeholders and interested parties with the opportunity to provide comments as part of the planning process.

The project is being assessed under Part 3A of the *Environmental Planning and Assessment Act*, which will ensure a rigorous and transparent assessment process.

Q10. *Can the Minister explain why Hunter Water personnel were dishonest with the Tillegra Dam Community Reference Group and Hunter community over the critical infrastructure gazetting of the proposed Tillegra Dam?*

a. Does the Minister consider their behaviour a breach of the State Owned Corporation Act?

RESPONSE:

I am not aware of any instance where Hunter Water staff have been dishonest with the Tillegra Dam Community Reference Group or the Hunter community.

Q11. *Can the Minister explain why Hunter Water is being investigated by the Ombudsman over their FOI actions in relation to the proposed Tillegra Dam?*

RESPONSE:

The Member's question would be best directed to the NSW Ombudsman.

Q12. *Can the Minister explain why, in a radio interview on Newcastle's 2HD, he told listeners that the proposed Tillegra Dam would create up to 1850 jobs, when an FOI application by the Nationals has proved this to be untrue? (280 jobs and up to 5 long term jobs)*

RESPONSE:

The economic modelling conducted by Monash University indicates that increased aggregate employment in the lower Hunter through Tillegra Dam's construction and operation periods would generate 280 direct jobs in construction and about 1850 jobs in total.

Q13. *Presently there are 13,000 Hunter residents on partial payments, struggling to pay their water bills. Why is the Minister wasting $477 million of the taxpayer's money when water specialists are saying that there are cheaper and better alternatives?*

RESPONSE:

Tillegra Dam is a vital part of the NSW Government's plan to secure the water future of the Lower Hunter region for generations to come.

With 160,000 more people forecast to be living in the Hunter by 2031, the Dam will secure the water future of the region for the next 50 years, meeting the challenges of an increasingly variable climate.

A cost effectiveness analysis, conducted in line with NSW Treasury guidelines, confirms that Tillegra Dam is the most cost effective option to augment the Hunter's water supply.

The dam is a major piece of infrastructure that will create hundreds of jobs.

Research by Monash University shows that Tillegra Dam will generate an increase of $588 million in aggregate investment in the Hunter, and increase gross regional product by approximately $1.18 billion over a 25 year period. The dam will create around 280 direct construction jobs and at least 1850 jobs in total – a huge boost to the local economy of the Hunter.

The Independent Pricing and Regulatory Tribunal has developed a fair and equitable approach to cover the cost of Tillegra Dam that recognises the significant benefit of the dam to future generations.

Q14. *Why would Hunter Water executive apply for a critical infrastructure gazetting of the proposed Tillegra Dam?*

RESPONSE:

I am advised neither Hunter Water's executive, nor any staff member of Hunter Water, applied for a critical infrastructure gazettal.

Q15. *When Hunter Water applied for a critical infrastructure gazetting to the Department of Planning, it noted: Such a declaration is considered sensible by*

Hunter Water, as it reduces the risk of project delays and increased costs on the assumption that government will finalise the required planning approval. What are the Minister's comments in relation to this statement?

RESPONSE:

See response to Question 14.

Q16. *Why hasn't the Minister explained which parts of the Institute for Sustainable Futures Report on the proposed Tillegra Dam he disagrees with?*

RESPONSE:

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With 160,000 more people forecast to be living in the Hunter by 2031, the Dam will secure the water future of the region for the next 50 years, meeting the challenges of an increasingly variable climate.

A cost effectiveness analysis, conducted in line with NSW Treasury guidelines, confirms that Tillegra Dam is the most cost effective option to augment the Hunter's water supply.

The dam is a major piece of infrastructure that will create hundreds of jobs and contribute significantly to the economic development of the Hunter region.

The Environmental Assessment Report, currently on public exhibition, provides all stakeholders and interested parties with the opportunity to submit comments as part of the planning process.

The project is being assessed under Part 3A of the *Environmental Planning and Assessment Act*, which will ensure a rigorous and transparent assessment process.

Questions from Ms Pavey

Q17. *Desalination Plant*

a. *What are the estimated retail prices of water from the desalination plant produced with (a) black electricity and (b) green electricity?*
b. *What is the projected carbon footprint of the desalination plant when it is operating on black electricity?*

RESPONSE:

a) Sydney Water's retail price for drinking water is a single uniform price, no matter what the source, spread across Sydney Water's customer base in

Sydney, Illawarra and the Blue Mountains. This is often referred to as "postage stamp pricing".

A new 67-turbine wind farm at Bungendore, near Canberra is sized so that it can provide more than enough wind power to offset all of the desalination plant's energy requirements. The desalination plant will be 100% powered by renewable energy.

b) The desalination plant will be 100% powered by renewable energy.

Q18. *Recycled Water*

a. Given that both the 2007 and 2008 Progress Reports on the Metropolitan Water Plan both state that the projected water saving for 2008/09 is 31 billion litres and that for 2009/10 is about 44 billion litres of water, why does the latest information of the Sydney Water Web Site indicate that the water saving for 2008/09 is only 25 billion litres?

b. Is the advanced water treatment plant at St Marys on budget and on time and what is its scheduled completion date?

RESPONSE:

a) The figure on the Sydney Water website refers to the water recycled in the 2007/08 year since the final figure for 2008/09 is currently being verified.

Assessment to date suggests we are on track for the recycled water target of 70 billion litres by 2015.

Recycling is a key part of the Metropolitan water Plan and will provide 12% of Sydney's water needs by 2015. Just some of the projects underway include:

- Australia's largest residential recycled water scheme in Rouse Hill which currently provides over 1.4 billion litres of water a year to over 17,500 homes and is being expanded to supply 4.2 billion litres of water to over 36,000 homes.
- The Rosehill/Camellia recycled water scheme is expected to be operational by 2011 and initial providing 4.3 billion litres of recycled water a year to industrial and irrigation customers in Western Sydney.

b) Construction of the advanced water treatment plant is on budget and on time. The plant is expected to be complete by July 2010.

Q19. *Consultants*

a. How many consultants, on Water Portfolio issues, has the Department of Climate Change the Environment and Water and its predecessors engaged since 8 September 2008?

b. What are the names of each of these consultants and/or their companies?

c. How much was each consultant paid?

d. On what specialist projects were each of these consultants employed?

e. Which of these consultants did the Minister directly appoint and which were appointed by way of a public tender process?

f. If directly appointed what were the specific professional qualifications upon which the appointment was made?

RESPONSE:

I am advised consultants are only engaged when the required professional expertise is not available internally or cannot be provided in a more cost effective manner.

Details of consultancy expenditure over $30,000 are reported in agency annual reports.

Q20. *Water Embargo*

a. What specific conditions must Victoria meet before the NSW embargo will be lifted?

b. Given reports in the media that the Victorian Parliament is likely to lift the 10% cap on the volume of water entitlements that can be purchased by licence holders outside of Victoria, will you review the embargo on the further sales of water licences to the Federal Government Water Buy Back Scheme?

c. What is the status of your discussions with the Federal government to come to an agreement about a volumetric allocation of water that can be purchased from each State as part of the Federal government's Water Buy Back Scheme?

RESPONSE:

a. The NSW embargo on the purchase of licences by the Commonwealth was lifted on 24 September 2009 as a result of the signing of a Memorandum of Understanding (MOU) in relation to water for the environment by the NSW Premier and the Acting Prime Minister. In developing the MOU with the Commonwealth, the NSW Government acknowledged that the Victorian Government had made progress towards lifting some of its trade barriers, specifically the 10% limit on entitlement owned by non-landholders, which the Victorian Government lifted on 15 September 2009.

b. The NSW embargo on trade of water for the environment has been lifted.

c. The MOU sets an upper limit of 890 gigalitres of NSW general security entitlement or equivalent that the Commonwealth can purchase by 2013. This limit includes the 532 gigalitres of NSW purchases the Commonwealth has already finalised or will now finalise.

Q21. *Diverting Water Inland*

a. When was the most recent study of the feasibility of turning waters from northern NSW rivers, such as the Clarence, inland to provide additional flows into the Murray Darling basin undertaken?

b. What was the outcome of this report, its costings and did it recommend any specific locations or routes for pipelines?

RESPONSE:

a&b In the 1980s, the NSW Government undertook a cost-benefit analysis of a number of possible schemes for pumping fresh water from coastal areas to the inland regions of the State. The analysis established that the costs far outweighed any economic returns generated from the use of the water and that the impact on coastal industries, including fisheries, would be significant. Also, inland diversion schemes could adversely affect unique coastal ecosystems which rely on flood flows.

The Government does not support the further diversion of water from the coast to the inland for agricultural purposes. Rather, our focus is on water efficiency and savings measures to meet water needs for farming communities and the environment into the future.

Questions from Mr Cohen

Q22. *Water Management Act Compliance/Metering*

a. According to the Department of Water and Energy Annual Report, there hasn't been a single prosecution for non-compliance over the last four years and only one licence suspension. Considering there are roughly 117,000 water licences managed by DWE, is the Minister satisfied with the enforcement capacity of the Department?

RESPONSE:

The NSW Government does not tolerate water theft and is committed to enforcement of NSW water laws.

Since 2007 the NSW Office of Water (formerly the Department of Water and Energy) has undertaken 7 prosecutions in Local Courts and the Land and Environment Court for offences against water legislation. Offences have related to unlawful taking of water, meter tampering and controlled activities. In the last financial year total fines of $70,800 were imposed and $56,800 in costs. The Office has a number of investigations underway which may result in prosecution.

Enforcement is one tool used by the Office in implementing its new regulatory powers. A range of enforcement actions are available, including remediation notices, stop work orders, penalty notices, suspension or cancellation of licences and civil penalties, depending on the nature and seriousness of the offence. The Office also uses preventative measures to promote compliance with the legislation such as education and visible uniformed patrols.

Q23. *Cap and Pipe the Bores Program*

a. How successful has the Cap and Pipe the Bores Program been this year in reducing water loss to the basin?

i. Could the Minister confirm that in the first four years of the program 24GL was saved and the end of 2009 would save 47GL?

ii. If this correct this would mean 23GL would have been saved over 2009. What would account for this disproportionate savings in 2009?

b. Can the Minister confirm that the pressure of the Great Artesian Basin has gone up since the start of the Cap and Pipe program, as opposed to the pressure just going down at a slower rate?

i. How much of this might just be attributed to increases in rainfall since the worst of the drought rather than the program itself?

c. Will the Minister indicate what price was paid for the 1.2 GL of water sold off at the Walgett auction in July this year?

d. Will the Minister detail how auction proceeds will be spent, and how future funds from similar auctions, if they go ahead, will also be applied?

e. Under the Cap and Pipe the Bores program farmers have to pay for one half of the costs of projects. In light of this, has the Minister consulted with any farmers unhappy about the auction prior to and after the auction?

i. If yes, how will the Minister be responding to these farmers?

f. Is the Minister concerned about the reaction of farmers participating in the program to the Walgett auction? Is the Minister concerned that the auctioning might deter future program participation given that many farmers have said on the record that they wouldn't have spent their money if they had known that the savings would be sold off?

g. Will the Minister give an update on the progress of negotiations with the Commonwealth to extend the program for a further five years?

h. If the program is to be extended, can he give any details of what changes there might be in relation to funding arrangements?

RESPONSE:

23a, (i) and (ii) The program has been very successful in saving water and restoring pressures. The 47 GL of savings referred to were made over the ten year period from 1999 to 2009. Savings during both the Great Artesian Basin Sustainability Initiative (GABSI) Stages 1&2 are similar in magnitude. During the first five years of GABS 1 there were 24GL saved, during the second five years of GABSI 2, 23GL were saved.

23b. The GAB is a very large groundwater system which underlies about 20% of Australia and water discharging from artesian bores in NSW is up to a million years old. Due to its enormous size the GAB does not respond quickly to climatic effects or Capping and Piping bores. There is a lag time between the capping of bores and a broad pressure increase. Nevertheless most schemes in the program report a 20% increase in pressure at the bore head within six months of capping. Away from these sites the pressures are now starting to increase.

Computer modelling in NSW shows eventual pressure gains of up to five metres in some areas. Currently, the Office is receiving reports from

landholders in the Coonamble Lobe of the Surat Basin that the increase in pressure is causing previously ceased to flow bores to start flowing again. Likewise some bores west of Moree are starting to trickle again after not flowing for decades.

23b(i). Water in the GAB sandstones is estimated to flow at the rate of about 1 to 4 metres per year. The aquifer is buried deep below the ground surface (up to one kilometre) and is capped by an impermeable shale in all but the eastern outcrop area. Due to this, and the magnitude of the GAB, short term episodic climatic events such as recent drought and floods are not expected to impact on the pressures and flows of the artesian part of the GAB.

23c. The controlled allocation of 1.2 GL of artesian water raised $870,000.

23d. The proceeds from the controlled allocation will go to the Cap and Pipe the Bores program to be used as additional grant funds and will be matched by the Commonwealth under the GABSI program. The Office of Water has given an undertaking to review the economic, social and environmental implications of the sale and undertake community consultation before any further controlled allocations are announced.

23e. Prior to the commencement of the GAB Water Sharing Plan consultations with farmers and other stakeholders were held across the Basin.

In addition, meetings were held with landholder representatives prior to the controlled allocation.

23e(i). Since the controlled allocation, staff of the Office of Water have attended the annual general meeting of the Artesian Bore Water Users' Association of NSW to discuss the controlled allocation and other matters. In addition, the GAB Advisory Group (GABAG), which advises me on GAB issues, is now being expanded to ensure all views across the GAB are considered.

23f. The GAB Cap and Pipe the Bores Program provides grants of up to 50% of the cost of water infrastructure renewal on private properties. This grant to individual farmers can often be substantial and is not repayable.

There are a number of pipeline schemes being planned at the moment which are to be prioritised for funding next year, and interest in the program remains strong.

23g. The Commonwealth has indicated its intention to continue funding the program for a further five years with matching NSW funding.

23h. In partnership with the Commonwealth, the program will run for a further five years in NSW (2009/10 to 2014/15). The main change in the GABSI 3 agreement is the prioritisation of schemes on a $/ML saved basis. This will ensure the most cost effective schemes are given highest priority and align more closely with other Commonwealth initiatives.

Q24. *Cold water pollution*

a. Has State Water implemented the operating protocols for dams with multi-level offtakes mentioned on page 70 of the 2007/2008 State Water Annual Report?

i. If not, why not?

b. How was the development of the operating protocols funded?

c. Would State Water have the financial capacity to contribute to costs associated with cold water pollution attenuation or share the cost burden with water extractors?

d. When reporting performance against the operating protocols, State Water must take into account the 'Guidelines for Managing Cold Water Releases from High Priority Dams'. Are the guidelines publicly available?

i. If not, would the Minister object to placing these guidelines on the State Water website?

e. Would you also provide an outline of proposed activities of the Cold Water Pollution Inter Agency Group, along with their notional costs?

RESPONSE:

24a. No. While State Water has progressed the development of operating protocols for dams with multi-level offtakes, there have been a number of factors which required further clarification and program planning to enable State Water to proceed to integrating and using the protocols in its dam operations in a cost-effective manner. These include:

- the need to understand the implications and compliance requirements of the *Environmental Performance Guidelines for Cold Water Releases,*
- an incomplete monitoring network,
- the complex nature of the interaction between cold water pollution, dam management constraints associated with manipulating these towers and the interaction between CWP mitigation and other environmental factors (i.e algae, water delivery requirements and thermal shock considerations).

The full cost implications of implementing protocols due to the above constraints are not well understood. As such, State Water plans to pilot the operating protocols at Glennies Creek Dam during the current spring/summer. Based on the outcomes of this trial, cost, resource and performance implications will be better understood and State Water will work towards the roll out of results protocols at the remaining dams.

This staged roll out approach has been tabled and endorsed by the CWP Inter Agency Group - the cross agency/operator group charged with the implementation of the NSW CWP Strategy.

24b. The development of the protocols to date and proposed finalisation has been / will be funded within State Water's operational expenditure budget.

24c. The State Water Statement of Corporate Intent outlines how funding of capital projects is undertaken. State Water will fund these projects from primarily debt funding. State Water receives revenue as determined by the Independent Pricing and Regulatory Tribunal (IPART), from extractive users and government to recover costs of bulk water delivery and a return on capital expenditure, which will adequately service the debt incurred by State Water

24d. The NSW Office of Water website may be the appropriate location for the Guidelines. In the meantime, State Water will pilot operating protocols in Glennies Creek Dam to assess its ability to meet the Guidelines, without compromising management of other operational constraints, such as blue green algae bloom management and thermal shock. State Water and the NSW Office of Water will also continue to work in close collaboration to improve the monitoring network and data needs to meet the Guidelines.

24e. The strategy to address cold water pollution operates in five year stages. Stage one commenced in July 2004. The Cold Water Pollution Interagency Group has recently completed drafting the achievements of Stage 1 of the Strategy in a report to be provided to Government. Achievements have included completion of works at two major dams; investigation of upgrades at two others; amendments to legislation and issuing of works approvals that address cold water pollution; and a governance structure that includes regulators, operators, and natural resource management agencies to guide implementation.

In their report, the interagency group has also drafted recommendations for actions to be undertaken in Stage 2. These are currently being costed. The final report and costings will be provided to the Natural Resource and Environment CEO Cluster in November 2009 for consideration.

Q25. *Snowy Hydro Water Licence*

a. Have you received the Snowy Hydro Water Licence Review Report and the Collation of Proposed Licence Variations from the Corporate Licencing Unit of what used to be Dept of Water and Energy?

i. If yes, when can we expect these reports to be approved by you?

ii. If no, have you asked the Corporate Licencing Unit what is holding up their presentation of the report to you?

b. The Federal Minister for Water, Senator Penny Wong indicated on the 25th June 2009 that she wrote to you requesting that the draft outcomes of the review of the Snowy Water Licence be released as soon as possible. Minister have you responded to the Federal Minister?

i. If yes, what was the nature of your response?

c. As of June 2009 what was the total entitlements in gigalitres recovered in NSW by Water for Rivers for the Snowy River?

i. Of the total entitlements recovered in NSW by Water for Rivers, how many gigalitres of entitlements were high security entitlements?

d. What was the average unregulated flow over Mowamba and Cobbon creek weirs prior to the decommissioning of Mowamba Aqueduct in August 2002?

e. What was the average diverted flow of the Moonbah River via Mowamba Aqueduct into Jindabyne Dam prior to the decommissioning of Mowamba Aqueduct in August 2002?

f. The Engineering Features of the Snowy Mountains Scheme SMHEA 1993 p114, lists the diversion capacity of Mowamba Aqueduct as 4.8 m3/s, the Snowy Water Licence 2002, p.42, lists the diversion capacity of Mowamba Aqueduct as 6.0m3/s. How and when was the capacity at discharge of Mowamba Aqueduct increased?

g. In which year and which month were the dry inflow sequence provisions in the Snowy Water Licence triggered?

h. Would the Minister please provide the complete details of the calculation of the Dry Inflow Sequence Volumes equation (Snowy water Licence Schedule Four, s. 8.1) which triggered the provisions?

i. Would the Minister please explain how the triggering of the dry inflow provisions specifically affected the repayment of the Mowamba Borrowings Account?

RESPONSE:

25a. The Snowy Water Licence Review is being finalised.

25b. The Federal Minister for Water, Senator Penny Wong wrote requesting that the draft outcomes of the review of the Snowy Water Licence be released as soon as possible. I responded, providing a copy of the "Adequacy of the Environmental Releases to the Snowy River" report produced by the Snowy Scientific Committee and assuring Senator Wong that the NSW Government was conducting a transparent licence review process.

25c and (i). As at 10 July 2009, the total entitlements recovered by Water for Rivers was 197 GL, of which 135 GL was recovered in NSW. I understand that the Lake Mokoan project near Wangaratta is almost complete.

The NSW entitlements do not include any entitlements in the high security category, but do include 35 GL of stock and domestic replenishment savings and 25 GL in the conveyance categories, which are similar in reliability to high security entitlements.

25d. Around 1 GL/year on average.

25e. Around 36 GL/year.

25f. The diversion capacity of Mowamba Aqueduct has not been increased. The reference to the capacity of the aqueduct in the Snowy Water Licence (6 m3/s) represents that actual "as-constructed" capacity of the aqueduct. Some older documentation indicates a lower value for the capacity of the aqueduct, possibly based on initial design calculations.

25g. In 2006/07 southern NSW recorded low inflows. The Dry Inflow Sequence Volume (DISV) triggered formal planning (by downstream water

authorities) for a reduction in Required Annual Releases from Snowy Hydro in November 2006.

25h. The Dry Inflow Sequence Volume (DISV) is calculated under Cl.8 of Schedule 4 to the Snowy Water Licence. This is a running calculation performed each month to assess whether there is sufficient water in storage to deliver the Required Annual release. Essentially, the DISV is a cumulative difference between the observed inflows and the combination of required releases and observed evaporation, since the last point at which the Scheme was deemed "full" (referred to as the Target Storage Level).

When extrapolated to the end of the current water year using the lowest inflows recorded into the scheme in a year, the DISV gives a measure of the potential shortfall in water required to meet the Required Annual Releases if the assumed drought conditions were to occur. At the commencement of a water year, this procedure can sometimes indicate a shortfall, but there is a very high probability that inflows will be higher than minimums, and the DISV reduces to zero within a few months.

In the 2006/07 water year the DISV persisted to the point where the risk of shortfall was considered too great and, in November 2006, water authorities in downstream valleys commenced planning for releases from the Snowy Scheme that were less than the Required Annual Release for that year. History shows that drought conditions persisted through that year, leading to the Scheme ultimately experiencing a new inflow sequence that was lower than the previous worst inflow sequence used to design the Snowy Scheme.

25i. The triggering of the DISV has not directly affected the repayment of the Mowamba Borrowings Account. The triggering of the DISV has obviously contributed to the record low water availability in the Murray and Murrumbidgee Valleys, along with the record low inflows into those valleys, and hence the low allocations to water savings entitlements.

The low volumes of water savings arising from the drought have triggered Cl.19.6 of the Snowy Water Inquiry Outcomes Implementation Deed, which requires that, if the normal sharing of savings between payback to the Mowamba Borrowings Account and water for release to the Snowy River (cl.19.5) do not provide a minimum of 38 GL for release to the Snowy River, then the payback of water to the Mowamba Borrowings Account should be reduced to ensure that 38 GL is available for release to the Snowy River each year. This has led to reduced volumes of payback to the Mowamba Borrowings Account in recent years to ensure that a minimum of 38 GL was available to be released to the Snowy River.

Q26. *Weir Removal and Ownership*

a. In 2007 a Transfer Vesting Order to transfer ownership of unregulated river weirs from Department of Natural Resources to State Water was completed. What percentage of weirs in NSW does State Water now own? Which Government agency owns or has control of the remaining weirs?

b. Would the Minister advise of the structures (weir names) that have potential to be removed, those that will be maintained and those that may require fish passage works under the State Water Total Asset Management Program (TAMP)?

c. Would the Minister object to the Total Asset Management Program been available on the State Water website?

d. Target 23B in the State Water Management Outcomes Plan is to remove at least 10 priority weirs or structurally modify 15 priority weirs. Assuming the funding for the 5 year works program is available from the Community Service Obligation Fund which weirs will be prioritized in the 5 year works program and at what expected cost for each weir?

e. If funding is not available through the Community Service Obligation Fund for the 5 year works program what alternative funding sources will the Minister consider?

f. Will the Department be issuing a new State Water Management Outcomes Plan?

i. If no, would the Minister seek to incorporate State Water Management Outcomes Plan targets into State Water's licence?

RESPONSE:

26a. State Water Corporation is responsible for managing 64 unregulated weirs in NSW. Ownership of the remaining weirs varies between private, local government and other State agencies.

26b. State Water's Total Asset Management Program (TAMP) for Unregulated Structures recommended retention of the following structures, which will likely require investigations for future fish passage improvements: Barwon Darling River Weir No. 1 (Camilaroi Weir); Darling River Weir No. 2 (Presbury Weir); Darling River Weir No. 4 (Barnarway Weir or Mogil Mogil); Darling River Weir No. 5 (Collarenebri Weir); Darling River Weir No. 8 (Calmundi Weir); Darling River Weir No. 11A (Walgett Weir); Darling River Weir No. 15 (Brewarrina Weir); Darling River Weir No. 19A (Downstream Bourke); Darling River Weir N0. 20A (Upstream Louth); Darling River Weir No. 21 (Downstream Louth); and Darling River Weir No. 24 (Tilpa Weir).

The TAMP identified the following weirs for possible removal, pending appropriate stakeholder consultation: Barwon River Weir No. 10 (Woorawadian Weir); Cato Bokhara Weir; Tenandra Weir; Mullumbimby Creek Weir (works in progress for removal); Shannon Brook (Deep Creek) Weir; Manyweathers Weir, Casino (already removed); Hickeys Creek Weir (already removed); Rudders Creek Weir; Mungay Creek Weir No. 8; Gulph Creek Weir (already removed); Allsops Creek Weir; Grawan Creek Regulator; Bora Creek Regulator; Mungay Creek Weir No. 6; Tapitallee Creek Weir; and Barren Jack Dam.

26c. I have advised State Water to consider making relevant information on its asset management program available on its website.

26d and e. *State Water has developed a draft Total Asset Management Plan for the unregulated structures now under its ownership. During the development of this Unregulated TAMP some structures were identified as potentially redundant and therefore requiring additional investigations to determine whether they could be decommissioned.*

For weirs on unregulated rivers, all works are funded through the Community Service Obligation Fund. For regulated rivers the cost for construction of fishways is shared 50 / 50 between the Community Service Obligation Fund and charges on water users.

Questions concerning removal of other weirs should be directed to the Minister for Primary Industries.

26f. *The State Water Management Outcomes Plan has lapsed. The Basin Plan currently being developed by the Murray Darling Basin Authority will identify key environmental assets, and set objectives and sustainable diversion limits for the Basin. Given that the Basin Plan will commence in 2011, it would be premature to develop a new SWMOP, without risking inconsistencies with the Basin Plan.*

Q27*. Office of the Hawkesbury-Nepean*

a. Will the Minister outline some of the projects the office is undertaking this year?

RESPONSE:

27a. The Office of the Hawkesbury-Nepean will be involved a range of projects including the following:

- Overseeing the $77 million Hawkesbury-Nepean River Recovery Program. The program comprises seven projects, with the objective of improving river health by making more water available for environmental flows and reducing nutrient inputs to the river system.
- Overseeing the installation of the Nepean Weirs – Environmental Flows and Fish Passage Project in conjunction with Sydney Catchment Authority. The project involves upgrading the existing weirs in the Nepean River to provide for passage of environmental flows required by the Water Sharing Plan. Fish passage within the Nepean River is also being improved by the installation of fish ladders where required.
- Acting as a single point of access for information and advice on the Hawkesbury-Nepean river system, and
- Establishing arrangements or procedures for the purpose of coordinating works and other activities to manage aquatic weeds in the Hawkesbury-Nepean river system.