NSW Government Response

to the report by the Legislative Council Standing Committee on State Development into the Adequacy of Water Storages in NSW

Introduction

The NSW Government welcomes the report into the Adequacy of Water Storages in NSW by the Legislative Council Standing Committee on State Development.

The report, and the Government's response, comes at a time of significantly deteriorating climatic conditions across much of regional and rural NSW.

These deteriorating conditions are yet another stark reminder that water is a limited and precious resource and must be managed both for immediate needs and for long-term economic and environmental sustainability.

With increasing demands for water, sound policies are required to ensure a sustainable supply of water for present and future generations.

The NSW Government has a multi-faceted and strategic approach to achieving this. Programs include:

- Cap and Pipe the Bores recovering water in the NSW Great Artesian Basin by capping and piping free-flowing artesian bores.
- Ground water drilling specialist services to government agencies and communities for water well drilling, particularly for very deep bores.
- Sustaining the Basin with the Commonwealth Government, funding is directed to water savings projects that secure water savings and funds four NSW State priority projects:
 - Basin Pipe replacing wasteful replenishment systems, open drains, channels and dams with pipeline schemes to provide farmers with more secure, better quality supplies of stock and domestic water.
 - o Irrigated farm modernisation investing in management, information and technological farm infrastructure.

- NSW metering upgrading meters on the regulated rivers and installing or upgrading meters on the groundwater and unregulated rivers.
- o Healthy floodplains reforming the management of water on floodplains through the modification of floodplain structures.
- o Pipeline NSW piping open channels for stock and domestic water from NSW Rivers into farm dams.
- Country Towns water supply and Sewerage program ensuring high quality drinking water and sewerage services is provided to regional and remote communities.

Major regional water infrastructure projects completed since March 2011 include:

- Wingecarribee Dam improvement works
- Accelerated Sewerage Program
- Upper Canal refurbishment
- Prospect Reservoir works
- Warragamba pipelines
- Kangaroo Tunnel relining
- Dam safety upgrade works
- Copeton Dam spillway construction
- · Burrendong Dam: crest raising works
- · Chaffey Dam auxiliary fuse-plug spillway works
- Keepit construction of two spillways and three saddle dams
- Split Rock Dam wall crest raising
- · Wyangala Dam safety upgrade
- Hume Dam upgrade works

State Water's Fish Superhighways Program, the largest fish passage restoration program in Australia is set to open up more than 2,700km of waterway to native fish:

- \$1.3 million Booligal fishway completed 2013 opening up 114km of water way
- \$4.5 million Stevens Weir and Yallakool fishways completed opening up approx. 180km of water way

\$3.5 million Marebone fishway completed opening up 214km of water way

The NSW Government is committed to evidence-based decision making and the Standing Committee's report is a significant contribution to this process.

During 2014 the Government will review the State's 31 Water Sharing Plans to improve the transparency, comprehensiveness and consistency of the first-round plans, while ensuring a more integrated approach with other landscape management and associated monitoring.

The NSW Government will continue to closely engage with all stakeholders as policy in the area of water storage and management continues to evolve.

January 2014

Government responses to Committee Recommendations

Recommendation	Response
That the NSW Government clearly communicate to stakeholders the purpose of all major water storages in NSW.	Support.
	Clarifying and stating the purpose of major water storages in NSW will help to address some of the misconceptions held by the community as to the purposes of water storages. This will also help to resolve the differing views held between stakeholders on the purpose of water storages.
	The Sydney Catchment Authority, State Water Corporation and Hunter Water Corporation each include information on the water storages they manage on their websites. Further information will be provided to specify the purpose of each of the major water storages. The NSW Government will look at identifying opportunities to communicate the purpose of each major water storage dam to relevant stakeholders.
	However, as community needs change over time in response to population growth, economic trends and climate variation this may affect or change the purpose of water storages. Stakeholders will have the opportunity to work through and agree upon these changes as they happen.
2. That the NSW Government publish the outcomes of its review of the potential role for Warragamba Dam in flood mitigation.	Support.
	The Hawkesbury Nepean Valley Flood Management Review is looking at all facets of managing flood risk in the region including governance, land use planning, emergency response, flood modelling and data and any potential infrastructure options for flood mitigation.
	The Government will publish the outcomes of the Stage 1 of the Review shortly and will seek community input on options to improve flood management.
3. That the NSW Government and local councils continue to support and promote demand management practices and urban	Support.
	Local council water utilities throughout NSW are currently required to develop Integrated Water Cycle Management Strategies, under the NSW Best Practice Management of

water conservation measures such as stormwater harvesting and recycling waste water.

Water Supply and Sewerage Framework. This includes adopting comprehensive demand management strategies and exploring water conservation options, such as stormwater harvesting.

The Best Practice Management framework operates in tandem with councils' Integrated Planning and Reporting framework, ensuring that long-term community planning includes consideration of water management.

Although individual water utilities are achieving compliance with the Best Practice framework, their capacity to plan on a catchment-wide basis and deliver water management programs can be inhibited by their geographical size. However, many councils have sought to address these concerns by forming voluntary water alliances, county councils, or working through Regional Organisations of Councils.

The Independent Local Government Review Panel has suggested more formalised regional arrangements. This may provide an opportunity to improve opportunities for water management in rural, coastal and regional areas. The Government will respond to any recommendations at the appropriate time.

The Metropolitan Water Directorate undertakes research on water conservation, water recycling and stormwater harvesting to determine the extent to which these contribute to the portfolio measures that secure greater Sydney and the lower Hunter's water security into the future.

4. That the NSW Government:

(i) financially support the agriculture sector to use more efficient water practices and encourage contributions from industry and the Commonwealth Government to support research and development in this area;

Support-in-principle.

The NSW Government currently supports the agricultural sector to use more efficient water practices via a number of mechanisms:

- The 2013-14 Budget reserved \$40 million from the Restart NSW capital fund for infrastructure projects to secure water supplies and drought-proof regional communities.
- The NSW Priority Project "Sustaining the Basin: Irrigated Farm Modernisation" provides incentives to farmers to upgrade and modernise their irrigation systems to increase water use efficiency. This project is undertaken in partnership with the Australian Government, with the bulk of financial contribution provided by the

Commonwealth. The project includes subsidised Irrigated Farm Water Use Efficiency Assessments which provide individual farmers with an indication of where water savings can be achieved and the best irrigation method to achieve savings.

- Agriculture NSW has developed the "ProWater" capacity building program. This is a 13 module learning course that educates farmers on best practice irrigation methods with a strong focus on water use and infrastructure efficiency.
- Agriculture NSW has developed and delivered the WaterSmart Farms project in the Hawkesbury Nepean catchment in conjunction with the Hawkesbury Nepean CMA. This development project assisted farmers to improve production efficiency and reduce costs.
- Agriculture NSW has partnered with the Australian government and industry on many occasions to research and develop water use efficiency methodology in both rain-fed and irrigated farming systems. Some current research includes:
 - channel flow and seepage measurement (in partnership with CSIRO)
 - evaporation control technology evaluation (in partnership with the Polymers CRC)
 - improved productivity of rice in Australia and Cambodia (in partnership with the Australian Centre for International Agriculture Research)
 - Keysites water and salinity modelling at the catchment scale
 - CATPlus linking groundwater, surface water and land use (in partnership with Future Farm Industries CRC)
 - SaltCap and SaltDecide salinity management decision support tools (in partnership with Future Farm Industries CRC).

Some current development courses include:

- improving irrigation with pivots and laterals
- promoting Water Smart infrastructure investment in NSW (in partnership with Cotton R and D Corporation)
- short term agricultural training assistance livestock water harvesting (in partnership with the Primary Industries Innovation Centre UNE)

4. That the NSW Government:

- (ii) ensure that after the 2,750 gigalitres in sustainable diversion limits for the Murray Darling Basin Plan objective has been met, any further funding for on-farm efficiency savings should be provided based on:
 - State funded projects returning 100 per cent of water savings back to the irrigator, and
 - any State participation in federally funded programs for on-farm water savings be based on irrigators retaining at least 50 per cent of the savings.

5. That the NSW Government develop a state-wide policy of waiving fixed water charges during exceptional drought conditions.

Evergraze (in partnership with the Future Farm Industries CRC).

Note

The NSW Government's position is that the Commonwealth is required to fund the recovery of water to meet the SDL reductions required under the Basin Plan.

The current Farm Modernisation project, administered by the NSW Department of Primary Industries, in the northern NSW basin is funded in the main by the Commonwealth and the savings are split 50:50 between the irrigator and the Commonwealth with the Commonwealth savings to contribute to bridging the gap to the 2,750 GL.

The Commonwealth has not as yet provided the details for how it will recover additional water beyond the 2,750 GL reduction but has noted that if it is to be from on-farm works it must be at the equivalent of market rates. The NSW Government position will continue to push for water recovery mechanisms and strategies that provide the greatest benefits for, and least adverse impacts on, local and regional communities.

Note.

The NSW Government entered into the Intergovernmental Agreement on National Drought Reform Program with the Commonwealth, state and territory governments in 2013 (IGA).

Under the IGA, the Commonwealth and the states and territories recognise they have a common interest in reforming drought—related programs and need to work together to help farmers manage drought risk and prepare for future challenges. The NSW Government will assess the effects of exceptional drought conditions as and when those conditions occur. At times of exceptional drought, the NSW Government will consider the appropriate measures in response to the drought conditions.

The Government is monitoring deteriorating conditions across much of rural and regional NSW and will continue to respond accordingly.

6. That the NSW Government review the management and impact of water releases from Blowering Dam on the Tumut River.

Support-in-principle.

The management of Tumut River has been reviewed many times since the construction of the Snowy Scheme and the advent of increased flows into the Tumut River, including a review of water management during the 2010 flood events in the Tumut and Murrumbidgee Rivers.

The NSW Office of Water manages an annual program of works and measures worth \$800,000 that is designed to maintain the carrying capacity of the river and prevent erosion and unwanted inundation consistent with the Management Plan developed with the Tumut River Advisory Committee.

7. That the NSW Government review the environmental flow allocations for all valleys in NSW and make representations to the Commonwealth Government for it to review the environmental flow allocations for NSW valleys in relation to the Murray Darling Basin Plan.

Note.

The water sharing planning process has already defined an appropriate method of determining environmental water allocations for valleys, and in addition to that the current environmental flow provisions in NSW valleys are community-supported provisions.

The Basin Plan makes provision for the review of SDLs in the surface water sources in the northern Basin, upstream of the Menindee Lakes. This will include a review of the environmental flow needs of those rivers.

The State's 31 water sharing plans are due to expire in June 2014 and the Minister for Primary Industries, after considering advice provided from both the Natural Resources Commission and the NSW Office of Water, has indicated it is appropriate to make some degree of change to these plans. These changes would be designed to improve the transparency, comprehensiveness and consistency of the existing plans, while ensuring a more integrated approach with other landscape management and associated monitoring. Work will be undertaken to ensure the replacement plans are consistent with the current legislative framework.

The environmental flow rules in the NSW water sharing plans will be reviewed as part of the process of re-development as water resource plans by 2019 under the Basin Plan. However, the NSW environmental flow provisions have already been incorporated by the MDBA into the current benchmark extraction limits in the Basin Plan. Any changes that reduce existing NSW environmental allocations could result in the Basin Plan requiring

	further SDL reductions.
8. That the NSW Government amend the principles of the <i>Water Management Act</i> 2000 to ensure that the commercial water supply for towns and utilities and high security needs in regulated rivers are prioritised above environmental needs.	Not support.
	At this time, the NSW Government considers there is flexibility in the <i>Water Management Act 2000</i> for the Minister responsible to suspend the operation of any management plan in a particular water management area or water source in times of severe water shortage. Therefore the NSW Government does not propose to amend the water management principles set out in the <i>Water Management Act 2000</i> .
	The NSW Government considers the existing water management principles achieve the right balance between protecting and restoring water sources throughout the State, protecting and enhancing the quality of such water sources and maximising the social and economic benefits of the community.
9. That the NSW Government clarify with the Commonwealth Government the NSW Government's liability for environmental water releases made under the Murray Darling Basin Plan that inundate private land, in time to feed into the process of developing the water sharing plans that must comply with the Plan and be enacted by 2019.	Support
	The NSW Minster for Primary Industries has made it clear that NSW will not support changes to environmental releases without adequate consideration of the third party impacts. Further, releases from storages in NSW are subject to rules within respective Water Sharing Plans and the Operating Licence issued for State Water Corporation. Any operations outside of those rules will need to consider potential impacts and who would be liable for any damages arising.
10. That the NSW Government fund and implement the Computer Aided River Management system across all NSW river systems.	Support-in-principle.
	The NSW Government is supportive of efforts to save water through accurate water metering systems.
11. That the NSW Government implement the water metering project across NSW, to	Two metering projects are already underway in New South Wales. The Murray Pilot Project, funded by the Commonwealth, is currently being undertaken by State Water Corporation, which will see in the first instance up to 1200 state of the art, telemetry

support the state-wide implementation of the Computer Aided River Management system.

enabled meters installed in the upper Murray catchment. The Murray Pilot will be used to evaluate installation options and techniques prior to the roll out of the project across the southern Murray-Darling Basin in NSW.

Running parallel with the Murray Pilot is the metering component of the Murrumbidgee CARM project, which involves the installation of approximately 600 meters on the Murrumbidgee River. Metering is just one of five components of the CARM project, which also includes capital works and technology upgrades.

State Water is currently developing a business case for potential Commonwealth funding of CARM in the northern NSW basin.

12. That the NSW Government:

- make representations to the Commonwealth Government to resolve who will provide funding for the augmentation works at the Menindee Lakes; and
- reaffirm and complete plans to enable construction to commence as soon as practicable.

Support.

In 2007 the Commonwealth Government announced it would fund changes at Menindee Lakes to reduce evaporation and improve water efficiency to recover water for the environment.

NSW's preconditions for any changes to Menindee Lakes were that the proposal had to ensure the supply for Broken Hill and not compromise the environmental and cultural values of the lakes and the security of supply to downstream users.

Recently, the NSW and Commonwealth Governments announced a funding agreement of up to \$800,000 for the NSW Government to undertake project planning, stakeholder consultation and detailed design work for a water savings project to reduce average evaporation at the Menindee Lakes by 80 gigalitres. The project planning work to be undertaken by the NSW Government will include consultation with the local community.

13. That the NSW Government make representations to the Commonwealth and South Australian Governments to initiate a review of the current management of the lower lakes of the Murray Darling Basin. This review should focus on returning the lakes to an estuarine system by building

Support.

The NSW Government has raised these issues through the development of the Basin Plan, when there was considerable debate around the management of the Lower Lakes and the barrages. With the making of the Basin Plan in November 2012 by the Commonwealth Government, the current management of the Lower Lakes is endorsed by Commonwealth legislation. NSW is involved in a Basin working group that is looking at

barrages upstream rather than at the mouth, thereby reducing the volume of water currently required and improving the productive and environmental outcomes for NSW.	options for the management of the Lower lakes.
14. That the NSW Government, in undertaking the review of the NSW Dam Safety Committee and its relevant legislation, take into consideration the concerns raised in this inquiry and that the outcomes of the review be made public.	Support.
	The Dams Safety Review included a public consultation period from 8 October to 5 November 2013. A consultation paper and the report prepared by KPMG were made publicly available during this time.
	The Dams Safety Review will consider the outcomes of the public consultation when making recommendations to Government on the appropriate dams safety regulation.
15. That the NSW Government investigate the potential of strategically placed enroute storages to extend water use and provide flexibility in water delivery in some river systems, particularly in the Murray Darling Basin.	Support-in-principle.
	The Government is committed to maximising water supplies for all uses through the efficient use of water storages. As the costs of constructing or augmenting water storages are ultimately passed on to water users, due to IPART and ACCC regulated prices, this should only be considered where the public benefit exceeds the economic cost.
	The NSW Government will also be working with the Commonwealth and the Murray Darling Basin Authority to consider, develop and implement water efficiency projects in the Murray Darling Basin.
16. That the NSW Government commit to continuing an integrated water management and conservation policy, and that it foster responsible use of water in urban, industrial and agricultural settings.	Support
	The NSW Government acknowledges that the long-term sustainability of our communities relies on adopting an integrated approach to water management and conservation. Urban, industrial and agricultural water use is managed under a number of frameworks and processes all of which are dedicated to fostering the responsible use of water.
	For example, the Metropolitan Water Plan (MWP) and the Lower Hunter Water Plan (LHWP) are developed to ensure that the most populous regions of NSW have access to a sustainable supply of potable water while also addressing the health of rivers affected by water supply dams. The MWP and LHWP are developed in close consultation with the

community and based on the latest data, techniques and research in line with the COAG endorsed National Urban Water Planning Principles. Each of the plans are periodically reviewed to ensure they are based on the most accurate and up-to-date data and reflect best-practice approaches to water management.

Water Sharing Plans also take an integrative approach to balance water use between the environment, water for Aboriginal communities, town water supply and productive uses of water.

Finally, the NSW Government supports councils undertaking long-term integrated planning on their communities' behalf. A key component of the NSW Office of Water's *NSW Best Practice Management of Water Supply and Sewerage Framework* is Integrated Water Cycle Management (IWCM).

IWCM is a way for local water utilities to sustainably manage their water systems to maximise benefits to the community and environment. It also achieves improved communication between local water utilities, water users and water managers. A water utility's 30-year IWCM Strategy identifies the water, sewerage and stormwater scenario which provides best value for money on the basis of social, environmental and economic considerations. IWCM will deliver an integrated and sustainable water business with a strategic outlook ensuring equitable access to water for the environment and all current and future population of the community.

17. That the NSW Government ensure that new storage proposals are comprehensively assessed in terms of costs, benefits, storage efficiency, geological suitability of the site, environmental considerations, community expectations and other factors as appropriate.

Support.

As noted in the NSW Government's submission to the Inquiry (page 9), under NSW planning conditions, all proposals for a new dam or weir require assessment and approval under both State and Commonwealth legislation. In addition to these approvals, to be a viable proposal, any new storage needs to demonstrate that it provides a net public benefit, is cost effective, suitable to the location and environment and is compliant with existing policy settings governing water storage and supply in a given area.

The NSW Government's submission to this inquiry also provides details on the specific approaches applicable to the assessment of augmentation proposals in metropolitan and non-metropolitan areas on pages 9 and 10 respectively.

IPART also plays an important role in assessing, through its price determination processes, the capital proposals of the major water utilities (Sydney Water, Hunter Water, Sydney Catchment Authority, State Water and the locally owned Gosford and Wyong water utilities). IPART also monitors the infrastructure performance of the major State owned utilities against their operating licence requirements.

Infrastructure NSW, an independent statutory agency, assists the NSW Government in identifying and prioritising the delivery of critical public infrastructure for NSW and would bring additional rigour to any assessment process.

- 18. That the NSW Government establish an Integrated Water Management Taskforce comprised of representatives of each of the key water user groups and government, with the following roles:
- to drive innovation in responsible water conservation, use and management; and
- to build collaborative relationships and promote the sharing of knowledge and expertise between and within water user groups across NSW.
- 19. That the NSW Government commit to investing in water efficiency research and development, to inform an integrated, best practice approach to water management, and to further advances in this area.

Note.

While there is benefit in ensuring an integrated approach to water management, it should be noted that there are currently multiple stakeholder and industry groups operating in this regard.

Further analysis of this option will be undertaken to ensure that the taskforce could provide tangible benefits beyond those currently achieved through existing stakeholder networks.

Support.

The NSW Government's approach to water planning and management policies is guided by the goals in NSW 2021 which seek to secure potable water supplies (Goal 21) and help protect our rivers (Goal 22) at minimum cost to water consumers (Goal 5). They are also informed by key national principles and intergovernmental agreements such as the National Water Initiative, COAG endorsed National Urban Water Planning Principles and the Murray Darling Basin reforms.

In addition to the research and development activities listed in response to

recommendation 4, Agriculture NSW is currently preparing a variety of preliminary research proposals for consideration by Industry Research and Development Corporations. To promote a strategic approach the NSW Government is drafting a five year action plan linking State and Australian Government, industry and investor research and development priorities to better target funding sources, collaborative partnerships and the needs of farmers and industry.

Agriculture NSW also employs 10 permanent research officers and technical specialists to undertake dedicated water related research. This research informs water use efficiency in both rain-fed and irrigated farming systems. There are 6 development officers that work with industry and individual farmers promoting water use efficiency in NSW.

Additionally, the NSW Priority Project "Sustaining the Basin: Irrigated Farm Modernisation" employs an additional two development officers to assist farmers with entry into and implementation of the project.

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