

**Submission
No 97**

**INQUIRY INTO ADEQUACY OF WATER STORAGES IN
NSW**

Organisation: NSW Irrigators' Council

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Submission to the

Standing Committee on State
Development

Adequacy of Water Storages in NSW

120831

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Introduction

NSW Irrigators' Council (NSWIC) represents more than 12,000 irrigation farmers across NSW. These irrigators access regulated, unregulated and groundwater systems. Our members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries.

This document represents the views of the members of NSWIC. However each member reserves the right to independent policy on issues that directly relate to their areas of operation, or expertise, or any other issues that they may deem relevant.

Background

NSWIC, being the peak body for irrigators in NSW, appreciates the opportunity to make a submission to this Inquiry. Our organisation and its Members support the development and growth of sustainable irrigated agriculture through a commitment to the ongoing management of our working rivers to ensure the indefinite provision of water for human use, ecosystems and biodiversity values.

The Committee's Terms of Reference are:

That the Standing Committee on State Development inquire into and report on the adequacy of water storages in NSW, and in particular:

- a) the capacity of existing water storages to meet agricultural, urban, industrial and environmental needs,*
- b) models for determining water requirements for the agricultural, urban, industrial and environmental sectors,*
- c) storage management practices to optimise water supply to the agricultural, urban, industrial and environmental sectors,*
- d) proposals for the construction and/or augmentation of water storages in NSW with regard to storage efficiency, engineering feasibility, safety, community support and cost benefit,*
- e) water storages and management practices in other Australian and international jurisdictions,*
- f) any other matter relating to the adequacy of water storages in NSW.*

Consultation

NSWIC is pleased to see that the Committee are planning on holding “a number of public hearings over the course of the inquiry”¹.

There will be substantial public and stakeholder interest in this issue. We cannot emphasize enough the importance of working with communities and stakeholder groups to identify key issues and keeping all of these groups involved as a plan to address the adequacy of water storages issue is developed.

Attached to this submission is our “Consultation – The Expectations of Industry” policy.

¹ The Hon Rick Colless MLC – email introducing the inquiry and Terms of Reference – 7 June 2012

The Issue

NSWIC recognises that water storages have been and always will be a topic of great debate. From the time the first dam was completed in 1907, there has been debate as to the need, benefit and costs of dams.

Less than a century ago, large sections of NSW were either uninhabitable or of marginal agricultural value. The development of a dependable and regular supply of water has opened up areas such as Namoi, Macquarie, Hunter, Lachlan, Murrumbidgee, Murray and each supports large and small towns that total millions of people, this happened largely because we added a regular supply of water.

All water that enters the system is allocated, either to productive use or to the environment. If there is a need for more water, it has to be diverted from an existing water user.

Water users in NSW operate within defined legislation, regulations, licence conditions and ever changing Government policies which add additional complexities and constraints to water use. When additional water is required in the future it will necessitate Government to make a conscious decision to make that happen.

NSWIC is of the opinion that NSW does in fact receive sufficient water to underwrite a secure future. The water is just not supplied on a regular basis. The past 12 months have demonstrated this point quite clearly with vast amounts of fresh water flowing through the Eastern States and out to sea. When viewed on a medium to long term basis Australia has sufficient rainfall, the issue is the variability of that rainfall across the medium term. In order to best serve the needs of all water users, the capacity to regulate the delivery when natural provision is irregular is vital.

There are several factors contributing to the urgency of ensuring we have a safe and secure supply of water into the future:

- the predicted population growth in NSW will put pressure on urban water supplies,
 - Australian Bureau of Statistics predicts Australian population to be between 33.7 and 62.2 million by 2101²
 - With average use of 220 litres per person per day³ and a present usage of 1,302,947 ML⁴ in the NSW urban sector, urban water usage must be anticipated to at least double in NSW by the year 2101
- the management of environmental assets not only in NSW but in surrounding States will put pressure on environmental and productive water supplies,
- producing food and fibre for an increasing local population and the positioning of Australia as Asia's food bowl⁵ will put pressure on irrigation and industrial water supplies, and
- the uncertainty of variable climate and weather patterns in the future could put pressure on every sector that uses water.

The implications of these pressures could be severe if we do not address the needs of each sector and our ability to deliver a workable solution which will better regulate supplies and avoid or mitigate the impacts of future drought and population growth.

² ABS – Population Projections, 2006 to 2101 (3222.0)

³ National Water Commission – Water Use in Australia

⁴ NSW Office of Water Performance Monitoring Report – 2010-11 (page 74 & 76)

⁵ PM Julia Gillard – Global Foundation conference Melbourne – 03 May 2012

TERMS OF REFERENCE

The capacity of existing water storages to meet agricultural, urban, industrial and environmental needs,

We understand that NSW has an active storage capacity of approximately 22,929,633 Megalitres (ML)⁶ throughout 62 dams or structures which are utilised to varying degrees for urban, environmental, industrial and agricultural needs. Some of these dams are also utilised for flood mitigation purposes; this capacity (air space) has already been removed from the total capacity of those dams. Our current water availability is approximately 94% of capacity⁷.

There are many other structures which store water on private property, however this water is not accounted for in the overall storage total. The majority of on-farm storage takes place in the north of the state and is necessitated by the lack of large water storage facilities to regulate the river and provide a reliable supply.

Through the last drought in NSW, it became obvious that there was insufficient storage to provide a reliable water supply to all entitlement holders. The severity of the drought meant that even critical human needs water would have been affected had the drought continued much longer. It is hard to envision that at the moment with a majority of our storages sitting close to full, changes in our water use patterns could affect this long term security into the future.

Over time our utilisation and management of storages has changed, with increased carryover provisions, annual trade and held environmental water, translating into effects such as reduced early season reliability for water users.

The Prime Minister recently described Australia as the “*food bowl of Asia.... It would involve building our food-processing industry so that it can supply Asia's growing consumer markets and developing the research, technologies and logistics that strengthen irrigation, grow higher-yield crops and improve safety*”⁸.

With the present capacity for capture and storage in NSW, we do not see how this state can plan to participate in this growth as there simply is insufficient storage to encourage further development and offer security to industry. As demand increases with urban development and the like, the only way that we can grow or more importantly, maintain agricultural production in the face of increasing internal and external demand, is to increase storage capacity.

⁶ Water Storage NSW – Table 1 – page 11 – information from Bureau of Meteorology, Sydney Catchment Authority and Hunter Water.

⁷ Current as of 16 August – based on Table 1 (Water Storages NSW) pages 13 & 14

⁸ PM Julia Gillard – Global Foundation conference Melbourne – 03 May 2012

Models for determining water requirements for the agricultural, urban, industrial and environmental sectors,

We are extremely concerned to learn that the models for determining agriculture, industrial and environmental future water requirements are insufficient in many areas within the Murray Darling Basin. We have also discovered that neither the NSW Office of Water nor State Water Corporation, the entities responsible for operating and managing the water resources in NSW, have done significant modelling of, or planning for the future water requirements in NSW.

The lack of future modelling could be attributed to the existing NSW cap on diversions or the uncertainty over the proposed new sustainable diversion limits through the Murray-Darling Basin Plan. However, we ask that the Inquiry take note of this and recommend that modelling of future demand should be undertaken as a matter of urgency.

The differences between inland and coastal systems also needs to be considered, with modelling in coastal areas undertaken that shows how demand for water from non-agriculture sectors (specifically urban and industrial) will affect the agriculture sector.

The present modelling undertaken for the environment, irrigation and industry sectors uses an Integrated Quantity Quality Model (*IQQM*). This model is used as a tool for planning and evaluating water resource management in the State (regulated and unregulated rivers) and in the ongoing development of Water Sharing Plans.

We understand that *IQQM* provides information on the impacts of water resource management and policy decisions, but it cannot be used as a predictive model to anticipate future needs. NSWIC supports the use of *IQQM*, however we consider it necessary to recalibrate this model to incorporate the changes in environmental use behaviour. This would provide more accurate information on our present situation. However the need for modelling of our future demands remains essential.

Environmental water (planned or purchased entitlement) utilises the same water storage facilities and infrastructure as the urban, industrial and irrigation sectors. The increasing entitlement of environmental water has the potential to severely affect other users due to the varying times in which this water is used. With current storage space already being maximised, long term holding of water without use can negatively impact on storage use for other urban, industrial and agricultural uses.

Storage management practices to optimise water supply to the agricultural, urban, industrial and environmental sectors,

This has also been an area which was difficult to fully expand on due to the lack of information available. If very little has been done in the way of future planning for water requirements, it is difficult to anticipate changes required to optimise the water supply for all sectors.

Irrigators must plan ahead for the coming season and allocation announcements play a vital role in this strategy. Management practices which incorporate the changing use patterns of storages and which optimise water supply to the agricultural, urban, industrial and environmental sectors must be adopted. Conservative announcements will limit irrigators planning and management decisions, affecting the volume of commodities produced and their business success.

With the recent flooding in NSW, there has been increasing discussion around the use of dams as a flood mitigation measure. This is a perfectly acceptable practice, if the dam or storage facility was designed to accommodate flood water in the first instance and there are management practices in place to facilitate this use. We do however need to point out that a majority of dams in NSW were not built for flood mitigation and any move to use them as such will have considerable negative implications for entitlement holders and will be vigorously opposed by NSWIC. Any capacity for flood mitigation must be new capacity and not impact on existing users.

Flexibility needs to be integrated into management plans to enable the wise use of water. An example was the opportunity for greater water conservation measures within the Snowy Hydro Scheme. In September 2010 Snowy Hydro released large volumes of water into an already flooded river system as their previous license conditions required them to release both the normal Required Annual Release (RAR) and the accumulated Dry Inflow Sequence Volume (DISV) from the previous four years.

Due to the high level of inflows already being experienced by the storages of the Murray and Murrumbidgee valleys, forced releases occurred from storages below the Snowy Scheme at times that were not benefiting any water users paradoxically including downstream wetland environments. Snowy Hydro has now implemented changes to their operating license and created the ability to hold water in a Drought Account for release when it can be better utilised.

Management practices, regardless of the storage should include minimisation of losses as a primary objective. For example, the Menindee Lakes are not a very efficient storage facility. Menindee has very complicated management arrangements with control switching between NSW Office of Water and the Murray-Darling Basin Authority depending on the volume in storage, it also has significant environmental value and is the essential water supply for Broken Hill, stock and domestic water users, irrigation users and an additional supply for South Australia.

These large open shallow lakes have high evaporation rates and due to the need to draw them down in parallel to maintain pressure for releases, the surface area and hence evaporation are never reduced. Any changes to address inefficiency could have a positive outcome for all water users who rely on the storage.

Proposals for the construction and/or augmentation of water storages in NSW with regard to storage efficiency, engineering feasibility, safety, community support and cost benefit,

NSW progressively increased its water storage capacity and its ability to manage these resources over an 80 year period (1907 – 1987)⁹. This progressive approach has all but stopped for the last 25 years, with dam upgrades being undertaken but no major increases in storage capacity being approved.

The last attempt to build a dam in NSW (Tillegra Dam) was cancelled in November 2010 after not receiving Planning Approval. There have been other sites explored as possible locations for dams, but it seems that there are no firm plans or sites under development.

The building of additional water storages has been a high risk political topic over the past 30 years. In that time period however, having not pursued any new projects we have limited our options for the future. If there is not a change in attitude in the short to medium term, we will face a future which is characterised by water shortages and the flow-on effects from that will impact on every Australian.

NSWIC is aware that several “proposed” dam sites exist which are potentially feasible and should be investigated further. This includes Murray Gates, Chowilla Dam and a location East of Bethanga Bridge (Northern arm of Lake Hume).

Murray Gates Dam above Hume Weir would allow Snowy Hydro to use Eucumbene storage to generate electricity without unnecessarily releasing water downstream, allowing it to be held until it is required.

The Chowilla Dam as proposed could have stored over 5 million ML of water and, if built, would presently be overflowing. The benefits of this would now be felt in Victoria and South Australia also.

As mentioned earlier, a majority of on-farm storage is located in the north of the State and although Government at the time would not invest in more headwater storage resulting in the need for private investment into on-farm storage, there may be an opportunity to offer a trade-off with irrigators in this area. With the large number of small, shallow storages we are increasing the impact of evaporation and in some cases seepage from these works. Having one or several strategically placed, deep storages which replaced these small storages, could potentially save a great deal of water without increasing the amount that is extracted or held in storage. This is not a policy position, but rather an idea that could assist in extending the use of water in NSW.

Changes to on-farm storages could also be reviewed as a means to improve the efficiency of these works. By assisting private storage owners to deepen and or segmenting their works, it could mitigate losses from evaporation and seepage.

Consideration should also be given to other storage methods which increase the efficient use of water in NSW. An example of this could be the creation and use of “en-route” storage facilities. This type of storage could be utilized when water is being delivered from a dam and an event occurs which either fulfills or cancels the need of those who ordered the water. By “parking” the ordered water in storage it may then be used more efficiently by meeting future requirements instead of flowing unused through the system.

⁹ Table 2 – History of Dams in NSW

Any new storage proposal would need to have no negative third party impact on current entitlement holders and would need to be considered environmentally sustainable. The long term benefit to the state or to the water user would also need to be cost effective.

Capacity to generate hydro electricity would be an additional positive economic, social and environmental benefit of new dam construction. The Snowy Mountains Scheme, built between 1949 and 1974 is a perfect example of a specific purpose storage which pays for itself through electricity generation. Hydro electric plants have long economic lives, do not require substantial labour to operate and are one of the most reliable renewable energy sources in the world. As our population increases, so does the need for energy, in fact it is essential for the socio-economic development of a nation.

Water storages and management practices in other Australian and international jurisdictions.

During the last 30 years the World Bank has funded over 500 large dams across 92 countries around the world. Water is our most precious resource and many countries are moving to ensure they have security into the future.

These include the 67 km long Yacyreta Dam on the Parana river in Argentina, four large dams on the Amazon river in Brazil, (Brazil intends to build three to four dams a year for the next 15 years), a 1,500 megawatt dam on the Zambezi River in Zambia, the Lesotho Highlands Water Project of 5 dams in South Africa, numerous dams in other African nations like Kenya and Ethiopia and numerous others on all continents except Australia.

China is presently building 12 large dams on the Jinsha river alone and is planning to have 729 dams capable of generating carbon credits as a result of their hydro power capacity by the end of this decade.

China aims to be producing over half of its power needs from hydro power within 30 years. Outside of China in Asia and Africa the Chinese Government is funding over 200 separate dams for the production of hydro power.

Hydro electricity accounts for 16% of global electricity consumption. The United States currently has over 2,000 hydroelectric power plants generating 49% of its requirements. Norway has 98% and Paraguay has 100% hydro power plus it exports 90% to Brazil.

Hydropower facilities in the United States can generate enough power to supply one-quarter of all households--28 million of them--with electricity. This is the equivalent of nearly 500 million barrels of oil or 100 average-sized coal power plants.

While Australia for the last 35 years has not built any dams of significance (except Wivenhoe in Queensland in response to the 1974 flood) the rest of the world has been very industriously building dams for water conservation, the production of clean hydro power and for flood mitigation.

Countries have further recognised that rather than adversely affecting a watercourse, with the use of new technology, correctly sited and practically managed new dams can actually enhance the stream environment and provide increased habitat for aquatic flora and fauna.

Other matters relating to the adequacy of water storages in NSW.

NSWIC believes that one of the biggest factors affecting the adequacy of water storages in NSW is the political will to do something about it. There appears to be some disconnect between the questions this Inquiry is asking and the political reality that exists around water use and storage in NSW.

Inadequate storage results in a negative impact on irrigation entitlement holders as demand for additional water for other uses, such as for urban or environmental needs, increases. Any increase in demand from a higher category of water will negatively impact on the other water categories and could affect the lowest water category permanently. Without modelling what the future demands will be, there is no way of knowing how severe these impacts could be.

NSWIC and its Members understand that with population growth there will be changes in demand for urban water, however without an increase in water availability through additional water storages or better management of existing water and or infrastructure, any additional water required must currently be obtained through the purchase of existing entitlements.

Even with widespread measures to conserve water with improvements in irrigation technology, river management and dam upgrades, we are not sufficiently bridging the gap between need and availability.

Although NSW has a large number of capture and storage facilities, a certain amount of this space is allocated to other states for their use (SA / VIC). Although not against the established agreements, any change in availability or management of these facilities means NSW is held accountable for them.

Conclusion

If NSW is serious about looking at its storage and regulatory capacity, logically it would need to be based on long term benefits to the state. Planning for a future which accounts for the immense challenges we face and yet provides opportunities to prosper, will require substantial work, foresight and a conscious change in attitude on everyone's part.

With Australia's predicted population growth, the increased demand for food production and an overall need for more fresh water, we must address the ever increasing need for greater security of our water resources. At the very least, we must look at a rate of growth equal to that of non-agriculture water demand.

Any change must be about balance. With the proper identification of purpose, consultation, planning and implementation it is possible to provide a safe and secure water supply for the future.

Current water storages reflect a finite resource. Modelling needs to determine whether this capacity will be adequate in 50 to 100 years with continued growth and demand. Without this modelling and understanding of the pressures the system will be under into the future, we must then be resigned to the fact that we will manage with what we have and that this state has already reached its full storage and therefore productive capacity.

NSWIC Members would support the construction of dams and use of water management tools when they have clear benefits for a variety of purposes, provided the cost of building, maintaining and operating them is seen as a benefit to all and therefore the costs shared by all.

Table 1**WATER STORAGE - NSW**

WATER STORAGES	ACTIVE STORAGE (ML)	DEAD STORAGE (ML)	TOTAL CAPACITY (ML)	PRESENT VOLUME (ML)	PRESENT % OF ACTIVE CAPACITY
Avon Dam	146,700	67,660	214,360	116,323	79.3
Blowering Dam	1,607,440	23,970	1,631,410	1,577,047	98.1
Blue Mountains	2,550	340	2,890	2,550	100.0
Brogo Dam	8,786	194	8,980	8,848	100.7
(1) Burrendong Dam	1,156,255	33,774	1,190,029	1,188,689	102.8
Burrinjuck Dam	1,023,036	3,291	1,026,327	1,001,262	97.9
Carcoar Dam	35,917	214	36,131	35,913	100.0
Cataract Dam	97,190	180	97,370	69,693	71.7
Chaffey Dam	59,468	2,359	61,827	59,626	100.3
Chichester Dam	21,500	0	21,500	21,482	99.9
(2) Cochrane Dam	2,700	0	2,700		
Copeton Dam	1,342,908	18,487	1,361,395	1,338,103	99.6
Cordeaux Dam	93,640	0	93,640	84,530	90.3
(3) Dartmouth Dam	1,908,380	91,190	3,907,950	1,737,000	91.0
Fitzroy Falls Reservoir	9,950	12,970	22,920	8,510	85.5
Geehi Reservoir	13,040	8,067	21,107	6,965	53.4
(1) Glenbawn Dam	735,290	14,710	750,000	751,519	102.2
(4) Glenlyon Dam	144,866	160	254,310	248,000	171.2
Glennies Creek Dam	282,303	1,072	283,375	276,468	97.9
Googong Dam	119,409	1,674	121,083	119,409	100.0
Grahamstown Dam	189,991	0	189,991	182,229	95.9
Greaves Creek Dam	301	0	301	230	76.4
Guthega Pondage	1,380	168	1,548	860	62.3
(3) Hume Dam	1,491,104	22,948	3,005,157	2,934,756	196.8
Island Bend Pondage	2,325	688	3,013	899	38.7
Jounama Pondage	31,050	12,750	43,800	13,122	42.3
Keepit Dam	418,936	6,577	425,513	416,275	99.4
Khancoban Pondage	21,409	103	21,512	11,862	55.4
Lake Brewster	149,059	4,561	153,620	112,804	75.7
Lake Cargelligo	30,163	6,370	36,533	31,680	105.0
Lake Cawndilla	544,972	86,080	631,052	620,589	113.9
Lake Eucumbene	4,366,900	432,100	4,799,000	2,204,651	50.5
Lake Jindabyne	388,990	300,800	689,790	294,515	75.7
Lake Medlow Dam	326	0	326	297	91.1
Lake Menindee	568,628	60,860	629,488	670,106	117.8
Lake Pamamaroo	248,795	28,930	277,725	313,922	126.2
(3) Lake Victoria	288,290	100,041	676,620	325,557	112.9
Lake Wetherell	192,656	522	193,178	197,186	102.4
Lostock Dam	19,736	489	20,225	19,693	99.8
Lower Cascade Dam	305	0	305	170	55.7
Mangrove Creek Dam	189,896	86	189,982	91,569	48.2
Middle Cascade Dam	167	7	174	160	95.8
Mooney Creek Dam	4,526	54	4,580	4,493	99.3
Murray 2 Pondage	1,121	311	1,432	541	48.3

Nepean Dam	67,730	370	68,100	64,850	95.7
Oberon Dam	45,000	1,000	46,000	45,000	100.0
Pindari Dam	311,920	80	312,000	285,675	91.6
Prospect Reservoir	33,330	14,890	48,220	27,491	82.5
Split Rock Dam	394,241	3,156	397,397	342,487	86.9
(5) Talbingo Dam	160,280	760,210	920,490	139,431	87.0
Tallowa Dam	82,500	690	83,190	82,840	100.4
Tantangara Reservoir	238,768	15,312	254,080	40,807	17.1
Tooma Reservoir	25,466	2,659	28,125	749	2.9
Toonumbar Dam	10,814	235	11,049	10,884	100.6
Tumut 2	1,501	1,180	2,681	1,056	70.4
Tumut Pond	49,974	2,844	52,818	30,033	60.1
Upper Cascade Dam	1,791	0	1,791	1,619	90.4
Warragamba Dam	2,027,000	4,000	2,031,000	2,004,412	98.9
Windamere Dam	366,989	1,131	368,120	219,535	59.8
Wingecarribee Reservoir	24,130	1,750	25,880	18,646	77.3
Woronora Dam	71,790	0	71,790	61,507	85.7
Wyangala Dam	1,217,035	725	1,217,760	1,187,768	97.6
62					
TOTALS	22,929,633	1,394,779	28,121,470	21,525,462	93.88%

Active Storage - volume of water that is available for use

Dead Storage - water located below the outlet which cannot be extracted without pumping

(1) Dams also used for Flood Mitigation - air space set aside for floods has been removed from these numbers

(2) Cochrane Dam is used for Hydro-electric Power generation ONLY (storage capacity of 2700 ML)

(3) Dartmouth capacity shared with VIC 50/50 - NSW share listed (50%)

Hume Dam capacity shared with VIC 50/50 - NSW share listed (50%)

Lake Victoria capacity shared with VIC 50/50 - NSW share listed (50%)

(4) Glenlyon capacity shared with QLD 57/43 - NSW share listed (57%)

(5) Talbingo Dam storage used to create head of power for Tumut, not for useable storage (volume removed from totals)

Information current as of 16 August 2012 - from the Bureau of Meteorology (BoM)

<http://water.bom.gov.au/waterstorage/awris/#urn:bom.gov.au:awris:common:codelist:region.state:newsouthwales>

Information also generated from Sydney Catchment Authority - as of 16 August 2012

<http://www.sca.nsw.gov.au/dams-and-water/weekly-storage-and-supply-reports/2014/26-July-2012>

<http://www.sca.nsw.gov.au/dams-and-water/major-sca-dams/blue-mountains-dams>

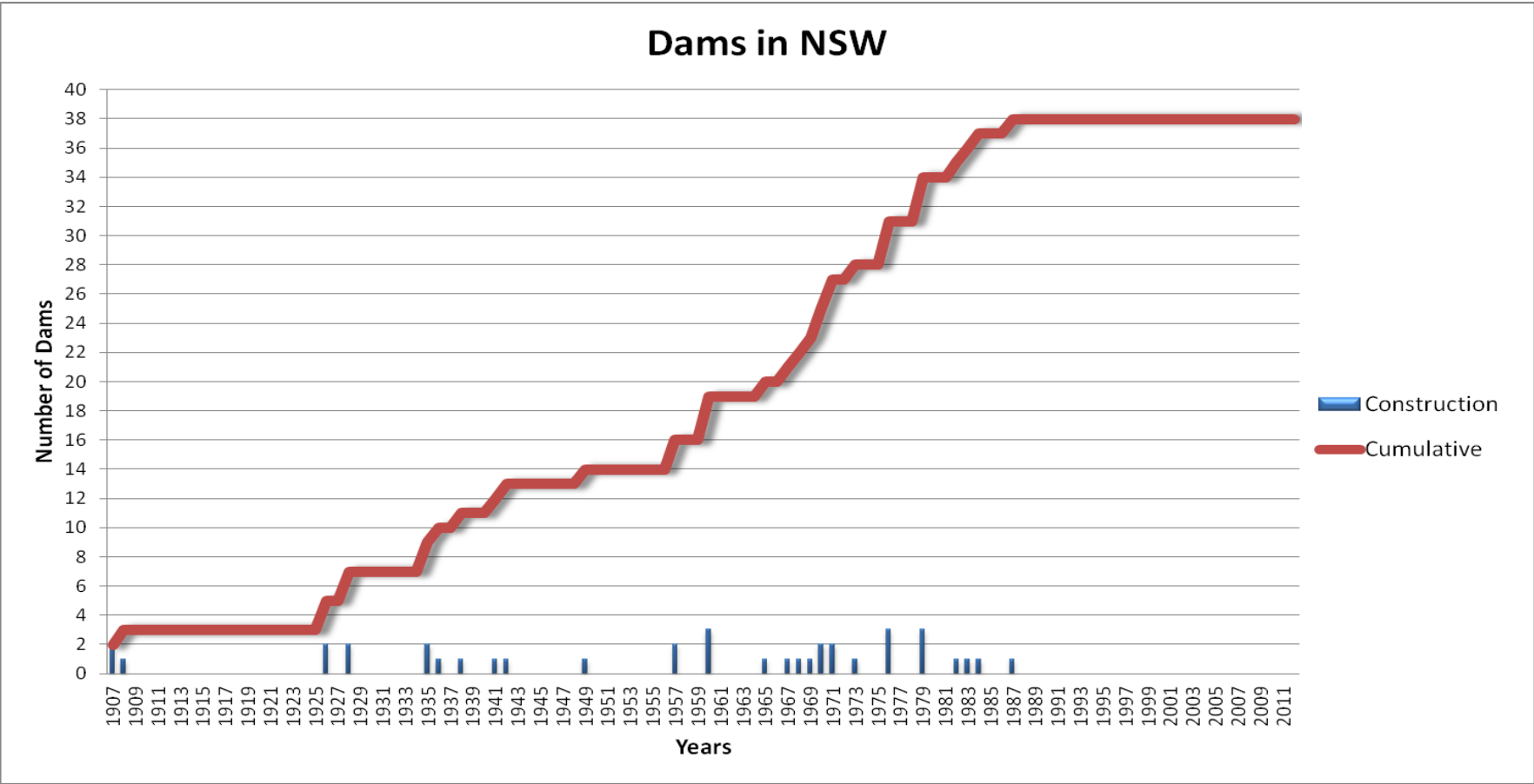
Information also generated from Hunter Water - as of 16 August 2012

<http://www.hunterwater.com.au/Water-and-Sewer/Water-Supply/Water-Storage-Levels.aspx>

Dead storage amounts retrieved from BoM and Waterinfo NSW

<http://www.waterinfo.nsw.gov.au/sr/storagesummary.shtml>

TABLE 2



* Information from State Water - <http://statewater.com.au/Water+delivery/Dams>

Data used to populate Table 2

The Building of Dams in NSW

Storage Facility	Year constructed completed	Years between storage construction
Lake Medlow Dam	1907	0
Cataract Dam	1907	0
Middle Cascade Dam	1908	1
Chichester Dam	1926	18
Cordeaux Dam	1926	0
Avon Dam	1928	2
Burrinjuck Dam	1928	0
Nepean Dam	1935	7
Wyangala Dam	1935	0
Hume Dam	1936	1
Upper Cascade Dam	1938	2
Woronora Dam	1941	3
Greeves Creek Dam	1942	1
Oberon Dam	1949	7
Rydal Dam	1957	8
Glenbawn Dam	1957	0
Menindee Lakes	1960	3
Keepit Dam	1960	0
Warragamba Dam	1960	0
Grahamstown Dam	1965	5
Burrendong Dam	1967	2
Blowering Dam	1968	1
Pindari Dam	1969	1
Carcoar Dam	1970	1
Talbingo Dam	1970	0
Lostock Dam	1971	1
Toonumbar Dam	1971	0
Copeton Dam	1973	2
Glenlyon Dam	1976	3
Brogo Dam	1976	0
Tallowa Dam	1976	0
Dartmouth Dam	1979	3
Chaffey Dam	1979	0
Googong Dam	1979	0
Mangrove Creek Dam	1982	3
Glennies Creek Dam	1983	1
Windamere Dam	1984	1
Split Rock Dam	1987	3
Present Day	2012	25



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Member Organisations: Bega Cheese Limited, Border Rivers Food & Fibre, Coleambally Irrigation Co-Op Ltd, Cotton Australia, Gwydir Valley Irrigators' Association Inc., High Security Irrigators Inc, Hunter Valley Water Users' Association, Lachlan Valley Water, Macquarie River Food & Fibre, Mid Coast Dairy Advancement Group, Mungindi-Menindee Advisory Council, Murray Irrigation Limited, Murray Valley Water Diverters' Association, Murrumbidgee Groundwater Inc., Murrumbidgee Irrigation Ltd, Murrumbidgee Private Irrigators' Inc., Murrumbidgee Valley Food and Fibre Association, Namoi Water, NSW Farmers' Association, Ricegrowers' Association of Australia, Richmond Wilson Combined Water Users Association, Riverina Citrus, Southern Riverina Irrigators, South Western Water Users', West Cororgan Private Irrigation District, Western Murray Irrigation, Wine Grapes Marketing Board.

Introduction

NSW Irrigators' Council (NSWIC) represents more than 12,000 irrigation farmers across NSW. These irrigators are on regulated, unregulated and groundwater systems. Our members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries.

This document represents the views of the members of NSWIC. However each member reserves the right to an independent view on issues that directly relate to their areas of operation, or expertise, or any other issues that they may deem relevant.

Executive Summary

This document sets out the consultation process that the irrigation industry expects from Government on policy matters affecting the industry.

Specifically, the industry expects that the contents of this document inform the consultation process with respect to preparation of the Basin Plan by the Murray Darling Basin Authority.

Background

Industry has been critical of consultation processes entered into by both State and Commonwealth Government entities in the change process with respect to water policy. Irrigators have significant sums invested in their businesses, all of which are underpinned by the value, security and reliability of their primary asset – water.

Irrigators recognise the imperatives for change and are content to provide advice on policy measures to ensure effective outcomes for all involved.

In light of these two factors, it is not unreasonable that irrigators request adequate consultation.

Recent consultation efforts have ranged from excellent to woeful¹. Irrigators believe that a method of consultation should be determined prior to the commencement of a policy change process. To that end, this document sets out the methods which we believe are acceptable and ought be adopted by Government both State and Commonwealth.

In particular, this document aims to inform the Murray Darling Basin Authority in its work developing the Basin Plan.

¹ See case studies later in this document.

Forms of Consultation

We consider two forms of consultation to be acceptable – Direct and Indirect. The preferred option will be dictated by circumstances.

Direct Consultation

This method involves engaging directly with affected parties, together with their representative organisations. As a default, it ought always be considered the preferred method of consultation.

Irrigators acknowledge that practical exigencies must be considered to determine if Direct Consultation is possible. Such considerations will include:

- The number of affected stakeholders (the smaller the number, the more ideal this method);
- The timeframe available for implementation (the longer the timeframe, the more ideal this method)²; and
- The geographical distribution of stakeholders (the closer the proximity, the more ideal this method).

Indirect (Peak Body) Consultation

This method involves engaging with bodies that represent affected parties. NSW Irrigators Council is the peak body representing irrigators in this state. The National Irrigators Council is the peak body in respect of Commonwealth issues.

Irrigators acknowledge that there will be occasions on which consultation with peak bodies is necessary for practical reasons. Such reasons may include:

- An overly large number of affected stakeholders;
- A short timeframe (not artificial) for implementation;
- A large geographic spread of stakeholders; and
- An issue technical in nature requiring specific policy expertise.

This form of consultation requires some specific considerations that must be addressed in order for it to be considered acceptable;

² Although note specifically that artificial timeframes, such as political necessity, will not be well received by irrigators.

- Timeframes

Indirect Consultation is, in essence, the devolution of activity to external bodies. That is, the task of engaging with affected stakeholders to assess their views and to gather their input is “outsourced” to a peak body. That peak body cannot operate in a vacuum and, as such, must seek the views of its members lest it become unrepresentative. Dependent on the nature of the issues and the stakeholders, this may take some time. It is vital that peak bodies be requested to provide advice on necessary timeframes prior to seeking to engage them in an Indirect Consultation model.

- Resource Constraints

Peak bodies do not possess the resources of government. In most instances – and certainly in the case of irrigation industry peak bodies – their resources are gathered directly from members and hence must be well accounted for.

Peak bodies engage in a significant range of issues and activities, many of which feature their own time constraints.

Prior to commencing the consultation process, discussions with peak bodies must be held to ensure that the needs of stakeholders with respect to resourcing and timeframes are respected. This may include ensuring that consultation does not occur during times of known peak demand; coordination with other government agencies to avoid multiple overlapping consultation processes; and coordination with peak bodies existing consultation mechanisms (for example, NSWIC meeting dates are set annually and publicly available. These are an ideal forum for discussion as they provides access to key stakeholders with no additional cost to stakeholders).

Stages of Consultation

Irrigators believe that a multi-stage consultative model, in either the Direct or Indirect applications, is necessary.

- (i) *Identification of problem and necessity for change*

Irrigators are wary of change for the sake of change. In order to engage industry in the process of change, an identification of its necessity is required. This should take the form of a published³ discussion paper as a minimum requirement.

³ We accept that “published” may mean via internet download, but require that hard copies be made available free of charge on request.

(ii) *Identification of solutions and method for implementation*

With a problem identified and described, a description of possible solutions together with a proposed method of implementation should be published.

It is imperative that the document clearly note that the proposed solutions are not exhaustive. The input of stakeholders in seeking solutions to an identified problem is a clear indicator of meaningful consultation.

It is likely, in practice, that steps (i) and (ii) will be carried out concurrently. This should take the form of a document seeking written submissions in response. The availability of the document must be widely publicised⁴. The method for doing so will vary depending on the method of consultation. As a threshold, at least 90% of affected stakeholders ought to be targeted to be reached by publicity.

(iii) *Summary of submissions, identification of preferred approach*

Subsequent to the closing date, a document ought to be published that summarises the submissions received in the various points covered. It must also append the full submissions.

Acknowledgement of a consideration of the weighting of submissions must be given. As an example, a submission from a recognised and well supported peak body (such as NSWIC) must be provided greater weight than a submission from a small body, an individual or a commercial body with potential commercial interests.

There are no circumstances in which submissions ought to be kept confidential. Whilst we recognise that identification of individuals might be restricted, any material on which a decision might be based must be available to all stakeholders.

The document must then identify a preferred approach, clearly stating the reasons why that approach is preferred and why alternate approaches have been rejected.

Where the need for change has been questioned by submissions, indicating that a case has not been made in the opinions of stakeholders, further discussion and justification of the necessity must be made in this document.

⁴ Regional newspapers, radio stations and the websites of representative groups and infrastructure operators are useful options in this respect.

(iv) Explanation of interim determination and final feedback

The document prepared in stage (iii) must now be taken directly to stakeholders via forums, hearings or public discussions. All stakeholders, whether a Direct or Indirect model is chosen, must have an opportunity to engage during this stage.

The aim of this direct stage is to explain the necessity for change, to explain the options, to identify the preferred option (together with an explanation as to why it is the preferred option) and to seek further input and feedback. Further change to a policy at this point should not, under any circumstances, be ruled out.

(v) Publication of final determination

Subsequent to stage (iv), a document must be published summarising the feedback received from that stage, identifying any further changes, identifying why any particular issues raised across various hearings at stage (iv) were not taken into account and providing a final version of the preferred solution.

What Consultation Is Not

“Briefings” after the fact are not consultation (although they may form part of the process). Stakeholders will not be well disposed to engagement where prior decisions have been made by parties unwilling to change them. Briefings in the absence of consultation will serve to alienate stakeholders.

Invitations to attend sessions with minimal notice (less than 10 days) is not consultation. Consideration must be given to the regional location of parties involved, together with the expenses and logistical issues of travel from those regions.

Case Study One

Australian Productivity Commission (Review of Drought Support)

Getting it Right

During 2008, the Australian Productivity Commission commenced a review of Government Drought Support for agriculture. The review commenced with the publication of a document to which submissions were sought. A significant period of time was allowed for submissions.

Subsequent to the close of submissions, a draft position was published which took into account written submissions that were received, identified issues raised in submissions and identified a number of changes considered subsequent to submissions.

The Commission then engaged in a large series of public hearings in areas where affected stakeholders were located. Parties were invited to provide presentations in support of their submissions. Parties who had not lodged written submissions were also welcome to seek leave to appear. The meetings were open to the public, who were also given the opportunity to address the hearing.

A series of “round tables” in regional areas was conducted with identified and self-disclosed stakeholders. These meetings gave those who were unable or unwilling to provide presentations in public the opportunity to have input. At the same time, no submissions were kept confidential, the Commission recognising that the basis for its determinations must be available to all.

Importantly, present at the hearing were three Commissioners. It is vital that the decision makers themselves are available to stakeholders, rather than engaging staff to undertake this task.

We understand that a final publication will be made available in 2009.

Case Study Two

CSIRO (Sustainable Yields Audit)

Getting it Wrong

In early December, CSIRO (in conjunction with a number of other Government entities) conducted a regional “consultation” series with respect to the Sustainable Yields Audit. The series was, in our opinion, ill-informed, poorly organised, poorly executed and poorly received.

In late November, CSIRO sought advice from NSWIC over the format and timing of the series. We provided advice that:

- The series did not cover sufficient regional centres to engage all stakeholders. In particular, Northern NSW had not been included;
- The series should not be by invitation, but should be open to all comers given the implications not only for irrigators but for the communities that they support;
- Ninety minutes was vastly insufficient to cover the depth and breadth of interest that would be raised by attendees; and
- That the timeframe between invitation and the event was insufficient.

None of that advice was adopted.

Invitations were sent to an undisclosed number of stakeholders who had been identified by an undisclosed method. In the short space of time available to advise attendance, CSIRO threatened to cancel a number of sessions on the basis of low responses. Given the limited notice and invitation list, NSWIC became aware of a number of stakeholders who wanted to attend but were unable to.

During the sessions, information was presented as a “briefing” despite being described as consultation. As such, extremely limited time was available was questions to be addressed – a key feature of consultation. Moreover, where information that was presented was questioned, a defensive stance was taken – a key feature of lack of willingness to engage stakeholders in a consultative fashion.

In particular, NSWIC is particularly concerned at the lack of willingness to engage on factual matters contained within the report. Where glaring inaccuracies were pointed out, defensiveness was again encountered. In several instances, inaccuracies that had been advised by stakeholders were perpetuated in later documents.

Further, several presenters were clearly not aware of the full range of detail surrounding the matters that they discussed. It is imperative that those seeking feedback on a subject understand that subject in depth prior to commencing consultation.