# Review of the draft WaterNSW Operating Licence – NSW Government Submission

March 2017



### Introduction

The contemporary regulatory framework of the draft operating licences is consistent with the NSW Government's intention to create a modern and responsive service provider and a centre of excellence for bulk water management and catchment protection in NSW. IPART has achieved its intention to clarify WaterNSW's regulatory obligations and reduce any regulatory burden resulting from duplicative or conflicting obligations in the existing State Water and Sydney Catchment Authority operating licences.

The Department of Primary Industries-Water (DPI Water) acknowledges that IPART has addressed most of the comments in the NSW Government submission to IPART's review of the WaterNSW operating licences.

NSW Health is generally satisfied that the draft Operating Licence provides for adequate protection of public health.

Note. DPI Water is currently seeking the Governor's approval to amend the substitute WaterNSW operating licences to clarify the conferral of functions on WaterNSW and the agreed division of customers between DPI Water and WaterNSW as part of the Water Transformation Project. If these amendments are approved, then they should be translated to the draft IPART WaterNSW Operating Licence. IPART have been informed by Dol Legal and WaterNSW that these changes are being sought. Full details of the amendments will be provided to IPART on approval and therefore are not included as part of this submission.

The following comments were provided by DPI Water and NSW Health.

### **Department of Primary Industries-Water**

# Calculating water supply system yield and reviewing the model for water supply system yield

## The obligations relating to calculation of water supply system yield should be updated to take account of the 2017 Metropolitan Water Plan.

The Metropolitan Water Plan (MWP) is the NSW Government's plan to ensure sufficient water to meet the needs of the people and environment of the greater Sydney region now and for the future. For the Greater Sydney's water supply, the obligation to 'Calculate the Water Supply System Yield' of a Declared Catchment Area and the obligation to 'Reviewing the model for the Water Supply System Yield' should be updated to ensure that water supply system yield and reviews of the model for water supply system yield are carried out in accordance with the MWP.

## The MWP includes two calculations of water supply yield: one for 2017 MWP portfolio supply and one for maximum supply.

The first calculation is for the 2017 MWP portfolio of measures – also known as the 'target supply' – has been optimised to the forecast demand over the next five years. This optimisation of the portfolio saves on average \$ 20 million per year, and the 2017 MWP portfolio is expected to have a yield of between 565 GL and 585 GL per year. The second calculation – known as 'maximum supply' – looks to the longer term supply sufficiency and supply augmentation timing. This system capacity estimate uses the same measures as those in the 2017 portfolio but with the total-storage-trigger levels for these measures moved upwards. The raised storage trigger levels remain within the bounds that were considered acceptable by the community. This potential capacity estimate for the system is estimated at around 625 GL (+/-20 GL). Please see Section 4 of the 2017 MWP and Figure 6 in particular for more information on these concepts.

### As currently written, the clause 2.5 and 2.6 obligations will not provide an accurate indication of long-term supply sufficiency.

Under these clauses as drafted, it is likely that water supply system yield will be calculated and reported as the optimised yield under the MWP, i.e. currently 565-585 GL/year. The operating licence obligations are likely to give the false impression that Greater Sydney's supply capacity has reduced from the currently reported Water Supply System Yield of 615 GL/year. This may lead to the impression that there is now insufficienct supply and that supply augmentation is imminent when, in fact there has not been a material change in the capacity of the system to supply water at a level of 625 GL (+/-20 GL) if needed.

## Minor changes to clauses 2.5 and 2.6 will avoid significant confusion and provide significant benefits when WaterNSW reports on Water Supply System Yield.

To avoid confusion and provide the Minister and the public with an indicator of the longer term supply sufficiency of the supply system, the obligations under clauses 2.5 and 2.6 should be amended to provide for separate 'fixed' yield calculations for both the '2017 MWP portfolio' and the 'maximum supply', in line with the 2017 MWP. The benefits of two fixed yield calculations are that:

- 1. The operating licence will align with the NSW Government's policy for water supply and water security for Greater Sydney as set out in the 2017 MWP.
- 2. The operating licence avoids creating a situation of significant confusion in the reporting on Greater Sydney's water supply system yield and supply sufficiency
- 3. The calculated MWP portfolio yield estimate becomes a valuable indicator of the sufficiency of supply for the short to medium term (over the five-year life of the MWP)
- 4. The calculated 'maximum supply' yield estimate retains system yield as an indicator of long term planning supply sufficiency. Having such an indicator is consistent with the original

rationale for having a calculation of Water Supply System Yield requirement in the Sydney Catchment Authority's licence.

## Calculations for both '2017 MWP portfolio supply' and 'maximum supply' yield can be made and reported on without significant burden on WaterNSW.

The additional work required to calculate a second 'fixed' yield for the 'maximum supply' is minimal (in the order of a day's work or less for a modeller). This is because the 'maximum supply' is based on the same measures as the '2017 MWP portfolio' and the only changes are to percentages for the total-storage trigger levels. The requested change, reporting two fixed yield estimates, is quite different in scale to the option considered in IPART's report on the draft operating licence which was to develop a new form of analysis for estimating a 'time varying' yield.

#### The relevant clauses can be updated to align with the MWP with a minor drafting change.

A suggested approach to updating the licence obligations in clauses 2.5 and 2.6, so that these align with the NSW Governments 2017 MWP, is to change all references in clauses 2.5 and 2.6 from 'yield' to 'yields' and make reference to the reporting manual for how yields should be calculated. An additional paragraph could then be added in section 2.2.3 of the reporting manual referenced the NSW Governments MWP and the need for estimates two fixed yields, one for the MWP portfolio and second for MWP portfolio measures but with total-stage triggers raised but within acceptable upper bounds (the maximum supply yield).

#### Capture, store and release water

DPI Water considers that there is no duplication of the conditions of the water supply work approvals in the operating licence.

#### Supply water

The requirement for a certified Water Quality Management System for both Declared Catchments and Non-Declared Catchments is acknowledged.

#### Construct, operate and maintain water management works

DPI Water considers that there is no duplication of the conditions of the water supply work approvals. The requirement for a certified Asset Management System is acknowledged.

#### Flood mitigation and management

In relation to flood mitigation functions (3.5 of the draft operating licence), it is recommended that no change is made to the authorisations included in the existing WaterNSW licences at this time. Further consideration will need to be given to the terms and conditions needed to regulate this function as well as avoiding regulatory duplication.

#### **Environmental management**

DPI Water acknowledges the requirement for a certified Environmental Management System in the operating licence.

#### Area of operations

DPI Water's comment in relation to the Border Rivers weirs is not addressed in the draft operating licence. Under the Dumaresq-Barwon New South Wales-Queensland Border Rivers Act, WaterNSW acts as the water manager for the Border Rivers Commission (including the use of the

Border Rivers weirs in Queensland). In this respect, WaterNSW should be authorised to undertake its functions outside the state of NSW.

#### Roles and responsibilities protocol and memoranda of understanding

The Transformation Deed of Business 2016 between DPI Water and WaterNSW defines roles and responsibilities.

In line with the recently Administrative Arrangements (Administrative Changes – Public Service Agencies) Order 2017, the Metropolitan Water Directorate and the Metropolitan Water Planning role have moved from DPI Water to the Department of Planning and Environment. The draft WaterNSW operating licence should be updated to account for these changes. The reference to 'DPI Water' in sub-clause 6.16.1b should be changed to 'Metropolitan Water within the Department of Planning and Environment' and related references updated.

#### **Retail services**

DPI Water acknowledges that the requirements relating to customer service agreements in section 6.1 of the draft operating licence do not duplicate any of the conditions of the water supply work approvals.

#### **Reporting manual**

Section 2.1.3 of the draft reporting manual states the following:

"For 2017 and 2019, WaterNSW must also include in the Water Quality Monitoring Report, an analysis of trends in water quality over the previous 10 years: at the inflows to any (downstream) water filtration plants; within WaterNSW's water storages; and at other locations as specified by NSW Health and DPI Water (including inflows into WaterNSW's water storages)."

DPI Water requests that the reporting manual be amended to include the requirement for water quality monitoring downstream of all WaterNSW storages in relation to the assessment of improvements in catchment management, mitigation of cold water pollution and assessment of the potential for seeding with blue green algae.

### **NSW Health**

NSW Health is generally satisfied that the draft Operating Licence provides for adequate protection of public health.

**Clause 2.1**: NSW Health supports the requirements set out under clause 2.1, including the requirement for a water quality management system for all water supplied by WaterNSW (for both declared and non-declared catchment areas). These requirements are similar to the requirements for the former Sydney Catchment Authority. The Australian Drinking Water Guidelines note that catchment management and source water protection provide the first barrier for the protection of drinking water quality.

Given that clause 2.1.3 requires the water quality management system to be implemented to the satisfaction of NSW Health, IPART could consider deleting the draft clause 2.1.5. The consideration of any significant changes should form part of the implementation of the management system, which must be to the satisfaction of NSW Health. NSW Health understands that a similar amendment was proposed for the revised Hunter Water Corporation Operating Licence.

Clause 3.4: NSW Health generally supports the requirements set out under clause 3.4.

NSW Health considers that there may be some benefit in formalising Water NSW's responsibility to monitor and provide information on bulk water quality released to downstream water utilities, as noted in the NSW Government submission to the Operating Licence review (September 2016). There may be situations where water released from storages could adversely affect the water treatment process of a water utility and potentially affect public health (e.g. through the presence of potentially toxic cyanobacteria or a major change in physical characteristics such as temperature or turbidity). With appropriate monitoring and sufficient warning, downstream utilities can take action to control risks (e.g. not draw raw water, maximise storage of good quality treated water, commence activated carbon dosing).

NSW Health considers that the Operating Licence is the most appropriate place to set out requirements in relation to water quality for downstream utilities. The effective monitoring and communication of potential risks to public health is in the best interests of the community. The information that WaterNSW is best placed to collect (i.e. basic physical and chemical quality and cyanobacteria in storages), could usefully inform a local water utility's drinking water quality assurance program.

NSW Health acknowledges the potential ambiguity with the draft clauses 3.4.5 and 3.4.6, particularly in relation to audit, and would be willing to consider alternative words that support the outcome of monitoring and reporting of risks for downstream utilities. NSW Health is willing to work with IPART and WaterNSW to review these clauses. NSW Health does not expect there will be significant costs associated with the monitoring and reporting of basic water quality characteristics.

NSW Health recommends that clause 3.4.5 is amended to read 'By 31 December 2018, Water NSW must, in consultation with NSW Health, the Local Water Utility Customers on the LWU Register and its customer advisory groups established under clause 6.5, complete a review of its health related monitoring of water quality released to Local Water Utilities' (i.e. delete 'health related'). Any monitoring data collected by WaterNSW may be relevant to inform a utility's quality assurance program, not just health related data.

**Clause 4.2:** NSW Health notes that the *Water NSW Act 2014* requires the Operating Licence to include water quality performance standards. NSW Health considers that the Australian Drinking Water Guidelines provide comprehensive guidance on water quality management in relation to raw supplied for treatment.

Most importantly the Guidelines Framework for the Management of Drinking Water Quality must be implemented, and this is a requirement of clause 2.1 of the draft Licence. The Framework requires consideration and control of risks to water quality. In relation to raw water, this should include monitoring quality and managing the supply to provide the best quality water for treatment. The Framework also requires incident management, for example where incidents or events lead to poorer quality raw water being supplied for treatment, the downstream utility must be notified. NSW Health recommends that IPART considers the above in establishing water quality performance standards.

NSW Health notes the proposal to establish percentage compliance standards for 'bulk water' and 'health' characteristics. Some raw water quality characteristics are unlikely to change significantly through the water treatment process, while others can significantly impact the ability to treat water. These characteristics could be used to establish 'bulk water' standards, although WaterNSW's ability to influence water quality may be limited. NSW Health is willing to work with IPART, WaterNSW and Sydney Water Corporation to consider whether such standards are appropriate in the context of the Australian Drinking Water Guidelines.

**Clause 6.13:** NSW Health supports the requirements set out under clause 6.13. NSW Health places great value on the Memorandum of Understanding that forms the basis of the cooperative relationship between WaterNSW and NSW Health. NSW Health notes that the scope of the

Memorandum of Understanding would include both 'supply' and 'capture, store, release' functions as defined in the draft Operating Licence.