Thank you for the opportunity to provide feedback on the Issues Paper that summarises WaterNSW's proposed costs and prices for the 2021 Rural Bulk Water determination period.

The Department of Primary Industries (DPI Fisheries) is responsible for the sustainable management of native fish species, including listed threatened fish species, populations and ecological communities and their associated habitats throughout NSW. This outcome is partially achieved by ensuring developments and activities within NSW are consistent with the objectives and requirements of the Fisheries Management Act 1994 (FM Act) and associated regulations.

As the major bulk water provider across NSW, the activities and operations of WaterNSW intersect with the FM Act on a regular basis. This includes, but is not limited to, the provisions under Parts 7 and 7A of the FM Act relating to the protection and restoration of fish habitats, the provision of adequate fish passage throughout the state's waterways and the recovery of threatened fish species, populations and ecological communities.

There is heightened concern about the recovery of native fish species following the recent severe drought.

I note IPART's Issues Paper that summarises WaterNSW's proposed costs and prices for the 2021 Rural Bulk Water determination period; and identifies, analyses and seeks stakeholder feedback on key issues for their review. I am pleased to provide DPI Fisheries' response to relevant specified questions in the Issues Paper (Attachment A).

If you require a meeting to discuss our response or require further information, please contact Sarah Fairfull, Director Aboriginal Fishing and Marine and Coastal Environments,

Yours Sincerely

Sean Sloan Deputy Director General DPI Fisheries



OUT20/11726

Dr Paul Paterson Chair Review of WaterNSW's Rural Bulk Water Prices Independent Pricing and Regulatory Tribunal PO Box K35 Haymarket Post Shop SYDNEY NSW 1240

Dear Dr Paterson

Review of WaterNSW's Rural Bulk Water Pricing Submission and IPART Issues Paper

Thank you for the opportunity to provide feedback on the Issues Paper that summarises WaterNSW's proposed costs and prices for the 2021 Rural Bulk Water determination period.

The Department of Primary Industries (DPI Fisheries) is responsible for the sustainable management of native fish species, including listed threatened fish species, populations and ecological communities and their associated habitats throughout NSW. This outcome is partially achieved by ensuring developments and activities within NSW are consistent with the objectives and requirements of the *Fisheries Management Act 1994* (FM Act) and associated regulations.

As the major bulk water provider across NSW, the activities and operations of WaterNSW intersect with the FM Act on a regular basis. This includes, but is not limited to, the provisions under Parts 7 and 7A of the FM Act relating to the protection and restoration of fish habitats, the provision of adequate fish passage throughout the state's waterways and the recovery of threatened fish species, populations and ecological communities. There is heightened concern about the recovery of native fish species following the recent severe drought.

The Independent Pricing and Regulatory Tribunal (IPART) is presently reviewing prices that customers pay for rural bulk water services delivered by WaterNSW in the 2021 determination period. DPI Fisheries has routinely provided advice direct to WaterNSW and IPART with respect to the regulatory requirements of WaterNSW activities. These requirements ensure that WaterNSW operations are undertaken in a sustainable manner and are consistent with the requirements of the FM Act and regulations.

I note IPART's Issues Paper that summarises WaterNSW's proposed costs and prices for the 2021 Rural Bulk Water determination period; and identifies, analyses and seeks stakeholder feedback on key issues for their review. I am pleased to provide DPI Fisheries response to relevant specified questions in the Issues Paper (Attachment A).

If you require a meeting to discuss our response or require further information, please contact Sarah Fairfull, Director Aboriginal Fishing and Marine and Coastal Environments, on

Yours sincerely



Sean Sloan Deputy Director General DPI Fisheries

Date: 16 October 2020

Enc

Attachment A – DPI Fisheries response to questions in IPART's Issues Paper

What are your views about WaterNSW's overall level of core capital expenditure over the 2021 determination period?

Over the next four years, WaterNSW forecasts it will spend \$227 million for core capital expenditure projects, with asset renewals and replacement representing the largest expenditure item. WaterNSW's Renewals and Replacement Program aims to maintain waterway infrastructure reliability and capability for assets that collect, store and deliver raw water to customers in line with current service and expenditure levels. The proposed capital expenditure requirements are based on the strategic directions in WaterNSW's long term capital investment plan.

DPI Fisheries notes that WaterNSW is seeking approval for the overall capital expenditure program and not for individual projects. As individual projects are not listed in WaterNSW's IPART submission, DPI Fisheries requests IPART give proper consideration to the regulatory costs that would be incurred by WaterNSW to meet its regulatory obligations under Part 7 and 7A of the *Fisheries Management Act 1994* (FM Act), in particular Section 218 (Fishways to be provided in construction of dams and weirs). Allocation of suitable capital cost estimates by WaterNSW is required to avoid priority capital projects being delayed to a subsequent Determination Period.

How should WaterNSW most efficiently meet its requirements for fish passageways?

Native fish populations, and in particular threatened fish species, populations and endangered ecological communities, in the Murray Darling Basin have experienced unprecedented pressures in the past two years from prolonged drought, extensive fish kills in multiple valleys, bushfires and water quality impacts following rainfall and associated runoff from fire-affected landscapes. Commonwealth and state inquiries and responses to these events have all included recommendations to boost efforts to restore native fish populations and their resilience to extreme climatic events, including the need for greater river connectivity through restoration of fish passage¹²³.

WaterNSW forecasts that environmental expenditure will increase significantly from \$3 million in the previous Determination Period to \$72 million over the next four years, which is largely driven by statutory environmental requirements related to the Dam Safety Upgrade (DSU) Fishway Offsets Programs (the Program) in the Gwydir, Namoi, Macquarie and Lachlan valleys.

Over the past decade, WaterNSW has undertaken significant DSU works at five major dams - Copeton, Keepit, Split Rock, Burrendong, and Wyangala. The DSU works invoked provisions under S218(5) of the FM Act whereby Water NSW was required to construct fishways at the five dams at a cost estimate of \$285 million (in 2009). Noting the high costs, DPI Fisheries and WaterNSW collaboratively agreed to the DSU Fishway Offsets Program, whereby WaterNSW would forego installing fishways at the five (5) dams, and instead construct thirteen (13) fishways at smaller weirs located lower in the catchment at a cost estimate of \$60 million (2009). Eleven fishways are still outstanding and remain a legislative requirement for WaterNSW to deliver.

In the 2017 Determination period, WaterNSW initiated the Strategic Fishway Implementation Program (SFIP) to meet the 'prudent and efficient' test as part of addressing regulatory

¹ <u>https://www.mdba.gov.au/issues-murray-darling-basin/fish-deaths/key-recommendations-independent-assessment</u>

² https://www.mdba.gov.au/issues-murray-darling-basin/fish-deaths/native-fish-recovery-strategy

³ https://www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills

requirements. A key focus of the SFIP assessment was the development of cost-effective fishway designs for the DSU Fishway Offsets Program in preparation for the 2021 IPART Determination Period. The SFIP was completed in May 2020, with a final report issued by WaterNSW.

The test of prudency for the DSU Fishway Offsets Program has been met as the fishways are a legislative requirement under S218(5) of the FM Act. Additionally, since 2013, DPI Fisheries has worked collaboratively with WaterNSW to determine the lowest whole-of-life approach to construct fishways in NSW via the SFIP and related programs. Delivery of the DSU Fishway Offsets Program in the 2021 Determination Period is consistent with the objectives of the NSW Fish Passage Strategy and have been demonstrated to be cost beneficial to NSW through the 2015 Macquarie River Fishways Cost Benefit Analysis.

WaterNSW has advised DPI Fisheries (letter dated 7 Sep 2020) of the following delivery schedule for the DSU Fishway Offsets Program:

- Concept and detailed designs: 2020/21 to 2021/22 FY
- Construction of two pilot fishways for proof of concept 2022/23 FY at Gunidgera Weir and Tyreel Weir
- Progression of remaining offsets dates not specified

Given the elapsed time since the 2009 agreement, DPI Fisheries expects the DSU Fishway Offsets Program to be completed in the 2021 Determination Period (assuming a four-year determination period) to deliver upon this existing legislative requirement.

Do you agree with the cost share ratios set in our cost share review? If not, for which activities should IPART modify the cost share ratio? Please specify an updated cost share ratio and explain why it is appropriate.

In 2018, IPART reviewed how future operating and capital expenditure is shared between rural water users (via Water NSW's bulk water prices) and the NSW Government. Based on this cost share review (and a subsequent review in 2019), IPART adopted the 'impactor pays' principle to allocate the efficient costs of rural bulk water services between water customers and the NSW Government. That is, those that create the need to incur the costs should pay the costs.

For *Environmental Planning and Protection* activities (which includes fishway construction), the cost share for water customers increased from 50 percent in 2009 (when WaterNSW initially agreed to the DSU Fishway Offsets Program) to 80 percent in 2018. DPI Fisheries notes that changes to the cost share ratios will financially impact water customers for the delivery of the DSU Fishway Offsets Program. It is also noted that benefits to water customers will be achieved through the WaterNSW SFIP process via a reduced whole-of-life cost for fishways.

Over what determination period should IPART set prices?

WaterNSW proposes a one-year determination period, from 1 July 2021 to 30 June 2022, in order to provide temporary relief for customers in drought-affected NSW. IPART's preliminary preference is for a standard four-year determination period.

With respect to the upcoming determination period, DPI Fisheries requests that IPART give proper consideration to WaterNSW developing and submitting suitable costings that cover statutory requirements (e.g. fish passage) under the FM Act for capital and operating projects proposed for the 2021 determination period, particularly for the delivery of the DSU

Fishway Offsets Program to meet community and government expectations of action to recover native fish stocks and build greater resilience into the system to support fish passage, following unprecedented drought conditions and mass fish deaths.

Do you have any comments on WaterNSW's operating activities and associated operating costs?

In the rural area of operation covered by this pricing proposal, WaterNSW owns and operates 20 dams and more than 280 weirs and regulators to deliver bulk water. WaterNSW undertakes ongoing maintenance activities to arrest the onset of asset deterioration in order to optimise life-cycle costs. "Routine Weir Maintenance" generally does not enact S218 (Fishways) provisions of the FM Act; however, "Renewal and Replacement" activities are likely to require S218 (Fishways) assessment by DPI Fisheries. DPI Fisheries notes that WaterNSW is seeking approval for the overall operating expenditure program and not for individual projects. As individual projects are not listed in WaterNSW's IPART submission, DPI Fisheries requests that IPART give proper consideration to the regulatory costs that have been incurred under the FM Act, in particular for S218 requirements (Fishways), in the operating cost estimates provided by WaterNSW, to avoid priority projects being further delayed to a subsequent Determination Period.

With respect to existing WaterNSW fishways, S218(2) of the FM Act requires WaterNSW to carry out repairs and maintenance in order to keep fishways operating as per the original design criteria. While maintenance is generally not onerous, it is essential that it is regular and ongoing to ensure that issues that may affect fishway performance are not allowed to progress to the point of impeding fish passage or affecting the structural integrity of the fishway. Additionally, how the fishway is operated can determine whether the fishway enables effective passage of native fish. DPI Fisheries requests that IPART give proper consideration to the fishway operating and maintenance costs in the 2021 Determination, including the development and implementation of Operating and Maintenance Planning for all fishways within WaterNSW's asset registry.

WaterNSW owns and operates several Multi-Level Offtakes (MLO) at their large storage dams. MLOs allow WaterNSW to draw water from multiple locations within the water column depending upon the reservoir storage level. One benefit of MLOs is the ability to target water withdrawn from the warmer surface waters in order to avoid the release of cold water from the bottom of the storage. Cold water pollution (CWP) has significant deleterious impacts upon the biology and ecology of downstream receiving waterways, while also having negative social impacts due to cold water temperatures limiting recreational activities during summer. Most WaterNSW MLOs do not have current Operational Plans for CWP mitigation. Funding is required to allow WaterNSW, in collaboration with DPI Fisheries, to develop and implement suitable Operation and Maintenance Planning for CWP mitigation at all MLOs within the WaterNSW asset registry.



OUT20/2516

Mr Andrew George A/Chief Executive Officer WaterNSW PO Box 398 Parramatta NSW 2124

Dear Mr George

WaterNSW Dam Safety Upgrade Fishway Offsets Program

I am writing to you to seek further agreement on the Dam Safety Upgrade (DSU) Fishway Offsets Program to ensure clarity on this matter for our agencies and stakeholders.

By way of background, in 2009, DPI Fisheries and WaterNSW (formerly State Water) collaboratively agreed to the DSU Fishway Offsets Program (the Program), whereby WaterNSW would forego installing fishways at five (5) dams, and instead construct thirteen (13) fishways at priority weirs located lower in the catchment.

I am advised that eleven (11) of the Program sites are still outstanding. I am also aware that since 2014, the Program has been on hold while WaterNSW and DPI Fisheries investigated measures to achieve the lowest whole-of-life costs for fishway construction and operation.

In 2014, DPI Fisheries identified the potential for changing the agreed Program sites as one option to achieve potential cost savings. More recently, this option has been developed through the Ministerial Taskforce on Fish Passage as part of the NSW Fish Passage Strategy, and also via the WaterNSW Strategic Fishway Implementation Program (SFIP).

The proposed changes to the Program that have been discussed and developed with WaterNSW are outlined in Attachment A. DPI Fisheries expects sizeable cost savings from these variations. As such, I am writing to formally agree to the proposed changes to the Program.

Given the pending conclusion of the WaterNSW SFIP, which aims to identify lowest wholeof-life fishway costs, I also request a meeting between DPI Fisheries and WaterNSW to discuss Program funding options and timeframes to progress this matter to completion and to assist with delivery of the NSW Fish Passage Strategy.

Sarah Fairfull, Director Aquatic Environment, can assist with arranging this meeting and can be contacted on

I look forward to working collaboratively with WaterNSW on the delivery of this Program and the NSW Fish Passage Strategy.

Yours sincerely

Sean Sloan Deputy Director General DPI Fisheries Date: 5 May 2020

ATTACHMENT A

DSU FISHWAY OFFSET SITES (2009)

DAM SITE	FISHWAY OFFSET SITES
Copeton Dam	Tyreel Weir, Tyreel Regulator, Boolooroo Weir, Tareelaroi Weir
Keepit & Split Rock Dams	Mollee Weir*, Weeta Weir*, Gunidgera Weir
Burrendong Dam	Gin Gin Weir, Marebone Break Weir, Gunningbar Regulator
Wyangala Dam	Lake Brewster Diversion Weir, Jemalong Weir, Condobolin Weir

* Fishway / fish passage remediation completed

DSU FISHWAY OFFSET SITES INCORPORATING REVISED OPTIONS (2020)

DAM SITE	FISHWAY OFFSET SITES
Copeton Dam	Tyreel Weir, Tyreel Regulator, Boolooroo Weir, Tareelaroi Weir
Keepit & Split Rock Dams	Gunidgera Weir
Burrendong Dam	Gin Gin Weir, Marebone Break Weir, Dubbo North Weir**
Wyangala Dam	Lake Brewster Diversion Weir, Booberoi Weir**, Lake Cargelligo Outlet Regulator**

** Revised DSU Fishway Offset sites

7 September 2020



Sean Slone Deputy Director General DPI Fisheries NSW Department of Primary Industries, Fisheries

Dear Sean,

Re: WaterNSW Dam Safety Upgrade Fishway Offsets Program

In response to your correspondence of 5 May 2020 I would like to assure DPI Fisheries that WaterNSW is committed to fulfil obligations set out under the s218 of the Fisheries Management Act for the Dam Safety Upgrade (DSU) Offsets Program.

WaterNSW have reviewed the proposed 11 program sites specified in your letter dated 5th May 2020 (reference:OUT20/2516) and concur with the proposed changes, namely:

- 1. Burrendong Dam DSU to replace previously agreed offset at Gunnigbar Regulator with Dubbo North Weir and
- 2. Wyangala Dam DSU to replace previously agreed offsets at Jemalong Weir and Condobolin Weir with Booberoi Weir and Lake Cargelligo Outlet Regulator.

The WaterNSW Strategic Fishway Implementation Program (SFIP) was finalised in May 2020. Project deliverables included the development of concept designs for eight DSU Offsets. Preliminary designs for these eight sites, and concept designs for the remaining four DSU offset sites, will be developed in FY21 and FY22.

Once designs have been finalised, it is proposed that construction will proceed at two pilot sites to prove the concept for the novel construction methodologies at:

- Gunidgera Weir Fishway (New Concept for In-gate Fish Lock)
- Tyreel Weir (New Concept for Gravity channel type fishway with variable baffles)

Upon achievement of proof of concept for these sites, WaterNSW plans to progress to delivery of the remaining offsets.

Yours sincerely,

Andrew George CEO

WaterNSW ABN 21 147 934 787 169 Macquarie Street Parramatta NSW 2150 PO Box 398, Parramatta NSW 2124