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## Submission to the Inquiry into the Murray Darling Basin Plan

### The Murray-Darling Basin

As our “largest and most complex river system” with 23 major rivers, the Murray-Darling Basin is a significant source of water for Australia.<sup>1</sup> The water of the Murray-Darling Basin has many uses, including “agriculture, irrigation and food processing ... recreation, tourism, ecology and the environment.”<sup>2</sup> The water has a significance in many indigenous cultures as well.<sup>3</sup> The Murray-Darling is tied intrinsically to the economy of many rural communities, which supply much of the food for the broader Australian population.<sup>4</sup> It is critical that we manage our water resources fairly and efficiently to fulfil urban, agricultural and environmental needs.

Historically the Murray-Darling Basin was prone to overconsumption from urban and agricultural use, which had a noticeable impact on water flows and the environment.<sup>5</sup> This is to be expected, as any individual user would want to ensure that their water needs are being met. Moreover, any individual reducing their demand would not have an appreciable difference on the health of the Basin. Hence, there was a need for cooperation between the states and the Commonwealth. The Murray-Darling Basin Plan created a “whole-of-basin management” to impose “sustainable limits of water extractions” for all users.<sup>6</sup> The Basin Plan aims to share water between “communities, the environment, and industry” whilst ensuring that total water use is at a “sustainable level.”<sup>7</sup> Constitutionally, the responsibility for water lay with the states, with Commonwealth involvement limited to environmental issues of national significance.<sup>8</sup> The Commonwealth also has a role in financing the scheme, including for water buybacks from

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<sup>1</sup> *Issues Paper* 2019, vii, 1.

<sup>2</sup> *Refreshing the Plan* 2016, 101.

<sup>3</sup> *Refreshing the Plan* 2016; *Issues Paper* 2019, 59.

<sup>4</sup> *Refreshing the Plan* 2016, 5.

<sup>5</sup> *Refreshing the Plan* 2016, 11; *Garnaut Review* 2008, 377.

<sup>6</sup> *Refreshing the Plan* 2016, 11.

<sup>7</sup> *Issues Paper* 2019, viii.

<sup>8</sup> *Issues Paper* 2019, 6.

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farmers to restore water flows.<sup>9</sup>

## **Climate**

Water is a precious resource, particularly in an arid environment such as Australia. The occurrence of drought and other extreme weather events will place increasing pressure on our water resources. Rising temperatures under climate change will lead to droughts in Australia becoming "more regular, longer in duration, and broader in area."<sup>10</sup> This will require creative solutions to conserve our resources and reduce our demand. The incidence of drought can place great pressure on the river system, and reducing available water for urban and farming use. Australia is the "driest populated continent in the world" with a "highly variable climate, with a history of recurrent droughts and large floods."<sup>11</sup> This means we need to prepare for both wet and dry conditions.<sup>12</sup> The 2019-2020 Summer period, for example, has seen severe drought and devastating bushfires, followed quickly by torrential rain and flooding. There is need to plan for "dealing with drought and climate change" to ensure there is enough water to meet demand.<sup>13</sup> This requires further analysis about the impact of climate change on the health of the basin and available water flows.<sup>14</sup> The extent of global mitigation on climate change will have a significant impact on agricultural productivity in the Basin.<sup>15</sup>

## **Balancing needs**

The use of water needs to be balanced between environmental, social and economic demands. Firstly, water is essential for a healthy river environment. The Murray-Darling Basin is a beautiful part of the Australian landscape with "internationally significant wetlands and unique Australian wildlife."<sup>16</sup> The Murray-Darling Basin Plan was established on the basis that water needed to be recovered for the "health of the rivers, wetlands and groundwater systems across

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<sup>9</sup> *Refreshing the Plan* 2016, 22.

<sup>10</sup> *Coordinator-General* 2019, 3.

<sup>11</sup> *Issues Paper* 2019, 99.

<sup>12</sup> *Issues Paper* 2019, 99.

<sup>13</sup> *Issues Paper* 2019, 99.

<sup>14</sup> *Issues Paper* 2019, 105.

<sup>15</sup> *Garnaut Review* 2008, 127, 377.

By 2100, productivity in the Basin could decline by 92-97% in a no mitigation scenario, whereas effective mitigation would minimise productivity loss to between 6-20%.

<sup>16</sup> *Issues Paper* 2019, vii.

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the Basin.”<sup>17</sup> An “overallocation of water resources” was leading to a deterioration of the river’s ecosystem.<sup>18</sup> Environmental management is not limited to the flow of water. Other proposals to improve the Murray-Darling ecosystem include combating invasive species such as the European carp.<sup>19</sup> There is an intrinsic value to having a healthy water environment, as water in the lake is worth “frogs, fish, birds, waves, a reflection of a sunset.”<sup>20</sup> A healthy river environment can also be enjoyed and appreciated by humans, including recreational fishing, river cruises and swimming. This has clear benefits for the tourism industry in rural communities. We should ensure that the river system is managed properly and conserved going into the future. There have been many environmental benefits coming from the increased water flows under the Murray-Darling Basin Plan. This includes reducing salinity and support native freshwater flora and fauna.<sup>21</sup>

Secondly, there is urban household use. Public policy has a responsibility to meeting urban water use. Many communities have facing “critically low municipal water supplies” under the drought, with some running out of suitable, drinkable water.<sup>22</sup> The minimum water needs for human use are known as “Critical Human Water Needs (CHWN).” This includes water for drinking, food preparation and sanitation.<sup>23</sup> These issues are not limited to the Murray-Darling Basin, but are affecting communities across Australia. Having “secure urban water supply throughout Australia is of crucial importance.”<sup>24</sup> There needs to be considerable attention to developing new technology and building infrastructure to support urban water management.<sup>25</sup>

Thirdly, there is agricultural use. Water is often called the “lifeblood of agriculture.” Supporting the agricultural industry is vital for sustaining rural communities and upholding Australia’s food security. Water allocations for agricultural use may be reduced during periods of drought, when

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<sup>17</sup> *Issues Paper* 2019, 30.

<sup>18</sup> *Issues Paper* 2019, 39.

<sup>19</sup> *Refreshing the Plan* 2016, 110, 126.

<sup>20</sup> *Refreshing the Plan* 2016, 103.

<sup>21</sup> *Refreshing the Plan* 2016, 131-141; see *Garnaut Review* 2008, 374.

<sup>22</sup> *Issues Paper* 2019, vii.

<sup>23</sup> *Issues Paper* 2019, 101.

<sup>24</sup> *Refreshing the Plan* 2016, 51.

<sup>25</sup> *Issues Paper* 2019, 103.

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the amount of available water is lower. The cost of water dramatically increase production costs where there is no reliable, local source.<sup>26</sup> Some people need to truck in water and fodder to sustain their livestock. Farmers may understandably be frustrated or aggrieved by the restrictions on water extraction. Though keeping water use to a sustainable level could help agriculture in the long-term. According to the Department of Agriculture, the value of agricultural production has grown under the plan.<sup>27</sup>

However, there should not be a zero-sum game between a healthy river environment or meeting urban or agricultural demands. We should find ways to support urban communities and farmers without abdicating from the aim under the plan of using water responsibly and sustainably. Water efficiency from new technology or infrastructure can enable farmers to maximise the benefits from available water and reducing their water demand. There should be greater investment into research, infrastructure building and other programs to meet competing needs. Water efficiency enables water to be recovered for the environment or other uses by “reducing the volume of water required to deliver the same crop or product.”<sup>28</sup> This includes the National Water Initiative (NWI) and the Goulburn-Murray Water (GMW) Project modernising water infrastructure and improving water efficiency.<sup>29</sup> While metropolitan residents may not be directly exposed to the pressures from drought, I believe we also have an important role in supporting our rural counterparts. We should encourage increasing the farm gate price farmers receive for their produce, to compensate for rising production costs. A drought levy on farm products could be paid by consumers, for example, with the proceeds going directly to farmers. Some supermarkets have adopted a similar approach, with Coles selling “drought relief” milk.

## **Conclusion**

Mismanagement or overconsumption could lead deprive our descendants of enjoying a healthy environment and reliable, clean water. However, by coming together and properly managing our water resources, developing innovative solutions and making sacrifices where we need to, we could produce a strong future for Australian children. The Government should work to ensure

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<sup>26</sup> *Refreshing the Plan* 2016, 76.

<sup>27</sup> *Refreshing the Plan* 2016, 75-76.

<sup>28</sup> *Refreshing the Plan* 2016, 22; see also *Garnaut Review* 2008, 377.

<sup>29</sup> *Refreshing the Plan* 2016, 6, 44-45.

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that our water resources, such as the Murray-Darling Basin, are being managed effectively for both present and future uses. The Murray-Darling Basin Plan seems to provide a good framework through which to work through these issues. There may need to be some amendments to the plan, or additional investment and programs to help achieve the various aims. As an aside, effective global mitigation on climate change will be essential for the long-term health and use of the Basin past 2050. Overall, I believe the Murray-Darling Basin Plan provides a good basis for cooperation and management of our river water resources and adapting to future climatic challenges.

Thank you for considering my submission.

Kind Regards,

Benjamin Cronshaw.

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