- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
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- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

## **References and Notes**

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<htps://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater-drawdown>

Kind regards, Signature:

Date: 6/9/20

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Elisa	brownhull	
Address:	4		

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

## I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to *avoid* this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general
  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

## I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(6)</sup> <sup>(7)</sup>

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
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- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it . becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

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<https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater-drawdown>

Kind regards, Signature:

Date: 6 9/20

## Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Gillian	Kowing		 
Address:	1		 	 

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

## I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to **avoid** this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

## I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(6) (7)</sup>

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

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Kind regards, Signature:

Date: 6/9/20

## Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Timothy	Gowing	 
Address:	-		 

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

# I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
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  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
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  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

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Kind regards, Signature:

Date: 6/9/20

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:		John	TESSUA	
Address:	1			
	-			

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

# I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
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- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

# I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(6) (7)</sup>

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(#)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks):
   Water tanks on all new (and existing) developments. The Australian government advises that:
   "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
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Kind regards, Signature: \_

6/9/ 28 Date:

18.202

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From: Miler M Ma

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011). Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)
- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-theplan.<sup>(1)</sup>

- The entire modelling and the strategy recommendations were made pre-COVID19, and are
  no longer economically or demographically valid. COVID has also shown us we need to be able
  to pivot quickly and flexibly something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions. It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

#### I SUPPORT these alternatives:

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. We need to take action on a suite of smart water options and proven alternatives. This is 21st century thinking.

#### Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(3) (4)</sup>

Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience?* https://www.waterra.com.au/publications/document-search/?download=1806<sup>(5)</sup> Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology. <u>https://www.windoc.com.na/our-history</u><sup>(6)</sup>

Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience much needed as the example of the extreme bushfire season has shown up. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs.

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(9)</sup> https://www.yourhomc.gov.au/water/rainwater

Groundwater, where this is environmentally safe
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 Introst//www.environment.gov.au/water/publications/what-are-the-acological-impacts-of-groundwater

intus://www.environment.gov.au/water/publications/what-are-the-acological-impacts-of-groundwater/publications/whater/publications/

With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

#### **References and Notes**

(1) NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020,

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- (3) The Rous Regional Water Efficiency Program 1997, Final report of the Rous Regional Demand Management Strategy : preferred options, Rous County Council, Lismore.
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<https://www.environment.gov.au/water/publications/whal-are-the-acological-impacts-of-groundw ater-drawdown>

Extra notes/Comments:

Kind regards,

Signature:

Received over the counter 8 SEP 2020

Date: 918/2020.

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From:

Address:

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

Noela Vates

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011). Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)
- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

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Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(a)</sup> https://www.yourhome.gov.au/water/rainwater

# Groundwater, where this is environmentally safe The Australian government provides a lot of information on ecological impacts and groundwater usage.<sup>(9)</sup> Difference of the provided and the prov

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## Extra notes/Comments:

Kind regards,			
Signature:			Ť

## Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Ms.	Alison	ler held.	
Address:				

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- · The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent. (Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."(4) Rous is required to avoid this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, . visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720(5) between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

## I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.(6) (7)

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(9)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

#### **References and Notes**

- (1) Metropolitan Water Plan 2006, NSW Government. Exec Summary section of the doc https://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0
- (2) Ainsworth Heritage, Cultural Heritage Impact Assessment, 2011
- (3) SMEC Australia, Terrestrial Ecology Impact Assessment, 2011
- (4) NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020 < <u>https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the-plan</u> > , Direction 2: Enhance biodiversity coastal and aquatic habitats and water catchments.
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Kind regards, Signature: \_\_\_\_\_

Date: 23/8/20.

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

m:	Margar	set ser	-INI	 
dress:				
44695				

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(7)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
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Kind regards, Signature

Date: 2/9/2020

From:	dana paterson
То:	Records
Subject:	The dam
Date:	Tuesday, 8 September 2020 1:53:30 PM

CYBER SECURITY WARNING – This message is from an external sender – be cautious, particularly with hyperlinks and/or attachments.

I'm writing this email to let you know I strongly disagree with the proposed dam in the channon gorge. We need to be thinking forward not repeating the same over and over. let's slow the rapid demand by allowing every house to rent the garage, tent in the back, extra showers, the list goes on. it's time for the land that holds us so well even under great duress to get some love back. People are greedy and taking to much for themselves. You are the voice for the people, so you need to listen to what we are saying, as we obviously have to speek for the land we call home.

Dana

## Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From: L12 MAENI) Address: \_\_\_\_\_

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- (10) \$220 million dollars the estimated cost of the new dam could provide more than 73,000 rainwater tanks (22,700L) at \$3,000 each including installation. That is 1.66GL storage with no evaporation and much increased community resilience for future climate risks. This more than covers the 0.9GL extra water needed by the 12,720 new people predicted to come to our area based on 194L/person/day average water use (Rous).
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Kind regards, Signature: \_\_\_\_\_

Date: 28 8 20

### Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:

RONALD CURRAN Address:

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

#### I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an additional 950,000 people without a rise in consumption.(1)
- · The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent. (Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."(4) Rous is required to avoid this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

#### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.(6) (7)

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global
  research and experience exists regarding potable reuse of water.<sup>(#)</sup> Eg: The city of Windhoek in
  Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

#### **References and Notes**

- (1) Metropolitan Water Plan 2006, NSW Government. Exec Summary section of the doc https://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0
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Kind regards, Signature:

Date: 28/8/20,

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Brendan	Leite	
Address:	-		
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Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to **avoid** this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general
  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

#### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

• An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(6)</sup> <sup>(7)</sup>

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.(@ Eq: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): . Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."(10) Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.(11)
- . Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
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Date: 16/8/20

Kind regards, Signature:

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From: Address:

	Matilda	Johnson	 _
ss:	4		
	-		

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
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  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

#### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(6)</sup> <sup>(7)</sup>

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(9)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."(10) Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.(11)
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Kind regards, Signature

hat-are-the-ecological-impacts-of-groundwater-drawdown>

16/8/20

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

General Manager, Rous County Council To: PO Box 230, Lismore NSW 2480

eah Van Ewin From:

Address:

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost . opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup> •
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- The small population increase predicted for the four Rous-supplied councils of 12,720(5) between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.(5)

#### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.(6) (7) ----

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Date: 16/8/20

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From: Address:

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

Date:

I DO NOT support the proposed The Channon-Duncon Dam for these reasons:

Lisa Greenhill

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011). Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)
- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document: <a href="https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the-https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the-</a>

https://www.planning.risw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Denvertig-triaplan.<sup>(1)</sup>

- The entire modelling and the strategy recommendations were made pre-COVID19, and are
  no longer economically or demographically valid. COVID has also shown us we need to be able
  to pivot quickly and flexibly something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions. It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

## I SUPPORT these alternatives:

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. We need to take action on a suite of smart water options and proven alternatives. This is 21st century thinking.

#### Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>[2] (4]</sup>

#### Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience?* https://www.waterra.com.au/publications/document-search/?download=1806<sup>(5)</sup> Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology. https://www.wingoc.com.na/our-history/@

Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience much needed as the example of the extreme bushfire season has shown up. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs.

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(a)</sup> https://www.yourhome.gov.au/water/rainwater

# Groundwater, where this is environmentally safe The Australian government provides a lot of information on ecological impacts and groundwater usage.<sup>(9)</sup>

https://www.environment.gcv.au/water/publications/what-are-the-acological-impacts-of-groundwat er-drawdown

With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

#### **References and Notes**

>

(1) NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020,

<https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the -plan>

- (2) NSW Department of Planning, Industry and Environment 2019, 'NSW population projections', Sydney, viewed 03 August 2020, <a href="https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections">https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections</a> scroll down to "Local Government Factsheets".
- (3) The Rous Regional Water Efficiency Program 1997, Final report of the Rous Regional Demand Management Strategy : preferred options, Rous County Council, Lismore.
- (4) Watson R., Turner A and Fane S 2018, Water Efficiency and Demand Management Opportunities for Hunter Water, Institute for Sustainable Futures, Sydney.
- (5) Kahn, Stuart and Branch, Amos 2019, Potable water reuse: What can Australia learn from global experience?, Water Research Australia Limited, Adelaide.
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<a href="https://www.environmenl.gov.au/water/oublications/what-are-the-acological-impacts-of-groundw">https://www.environmenl.gov.au/water/oublications/what-are-the-acological-impacts-of-groundw</a> ater-drawdown>

Please respect the indigenous sacred sites. Extra notes/Comments: Please consider using recycled water For toilets, gardens etc. Please also consider the economic benefits of walking track to these natural beauty spots as is corrently being constructed re:\_\_\_\_\_\_ between Minyon Falls and Kind regards, Signature:

Received over the counter 8 SEP 2020

-1 1

To:	General Manager		Date: 10/08/20
	Rous County Council		
	PO Box 230		
	Lismore NSW 2480		
From:	MEGAN	BARNO	
Addres	<b>55</b> :		

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

2

54.

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural . Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011). Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)
- Industrial/construction zone for years for The Channon/Duncon community; noise pollution; . large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on unlocking the potential of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-theplan (1)

- The entire modelling and the strategy recommendations were made pre-COVID19, and are no longer economically or demographically valid. COVID has also shown us we need to be able to pivot quickly and flexibly - something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions. It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

## I SUPPORT these alternatives:

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. We need to take action on a suite of smart water options and proven alternatives. This is 21st century thinking.

### Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(3)</sup> <sup>(4)</sup>

Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience?* https://www.waterra.com.au/publications/document-search/?download=1806<sup>(5)</sup> Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology. https://www.wingoc.com.na/our-history<sup>(6)</sup>

Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience much needed as the example of the extreme bushfire season has shown up. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs.

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(a)</sup> https://www.yourhome.gov.au/water/rainwater

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https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater/publications/what-are-the-eco

With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

#### **References and Notes**

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<a href="https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the">https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the</a> -plan>

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#### Extra notes/Comments:

Kind regards,		
Signature:		

8 SEP 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Kylee	Rusan	
Address:			

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to avoid this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general
  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

#### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

#### **References and Notes**

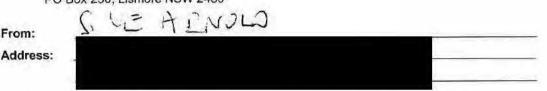
- (1) Metropolitan Water Plan 2006, NSW Government. Exec Summary section of the doc https://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0
- (2) Ainsworth Heritage, Cultural Heritage Impact Assessment, 2011
- (3) SMEC Australia, Terrestrial Ecology Impact Assessment, 2011
- (4) NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020 < https://www.planning.nsw.gov.au/Plans-for-vour-area/Regional-Plans/North-Coast/Delivering-the-plan > , Direction 2: Enhance biodiversity coastal and aquatic habitats and water catchments.
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Kind regards, Signature:

Date: 28 08 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480



Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
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  expensive 'white dinosaur' project.
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- Higher prices for consumers due to a 4x increase in the cost of water. Rous general
  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

## I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

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Date: 2818/20

Kind regards, Signat

8 SEP 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	ALITA	11A AN	ORIANAI	15	 -
Address:	_				 -
	-				 -

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

# I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
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  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

## I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
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Kind regards, Signature:

Date: 6/9/20

8 SEP 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	JULIN	Gumber	
Address:	-		

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to **avoid** this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
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  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

#### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(#)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(#)</sup>
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- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

#### References and Notes

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\_\_\_\_\_ Date: 29/8/20

Kind regards, Signature: \_

Received over the counter



## Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	PHONA	annow	
Address:			

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(7)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
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  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
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- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

#### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(#)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
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Kind regards, Signature:

Date: 25/5/2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To:	General Manager, Rous County Council	counted over the counter	
10.	PO Box 230, Lismore NSW 2480	8 SEP 2020	
From: Addre			

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

## I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to **avoid** this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general
  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

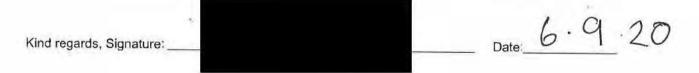
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We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
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Received over the counter

8 SEP 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

notion Berlyman From: Address:

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

## DO NOT support the proposed The Channon-Duncon Dam for these reasons:

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We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(#)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
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Kind regards, Signature: Date: 28 8

Received over the counter

8 SEP 2020

To:	General Manager	Date: 17-8-2020
	Rous County Council	
	PO Box 230	
	Lismore NSW 2480	
From: Addre		

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

x

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011). Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)
- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-theplan <sup>(1)</sup>

- The entire modelling and the strategy recommendations were made pre-COVID19, and are
  no longer economically or demographically valid. COVID has also shown us we need to be able
  to pivot quickly and flexibly something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions. It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.



### I SUPPORT these alternatives:

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. We need to take action on a suite of smart water options and proven alternatives. This is 21st century thinking.

### Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(3) (4)</sup>

Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience*? https://www.waterre.com.au/publications/document-search/?download=1806/9 Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology. https://www.wingoc.com.na/our-history/<sup>69</sup>

Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience much needed as the example of the extreme bushfire season has shown up. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs.

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(8)</sup> https://www.yourhome.gov.au/water/rainwater

Groundwater, where this is environmentally safe
 The Australian government provides a lot of information on ecological impacts and groundwater usage.<sup>(9)</sup>

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With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

#### **References and Notes**

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#### Extra notes/Comments:

Kind regards,		
Signature:	-	 

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Kaomerine	Mard	
Address:			

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to **avoid** this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general
  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

# I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global
  research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in
  Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks):
   Water tanks on all new (and existing) developments. The Australian government advises that:
   "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

### **References and Notes**

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Kind regards, Signature: \_\_\_\_

Date: 16/8/20

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Pran	Alertole	
Address:	-		
	-		

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

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  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
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- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

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# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

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From: Address:

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I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

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Kind regards, Signature:

Date: 23/08/2020

# 8 SEP 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From: Reple Lee

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Date: 5-9-20.

Kind regards, Signa

<https://www.

8 SEP 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Louise Schnitzhefer
Address:	

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

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www.010id.ch - technology.

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Kind regards, Signature:

Date: 28/8/20

Received over the counter 8 SEP 2020

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From:	Aluria	William	
Address:			
Date:	9-8.	-20.	

Re: the proposed Channon/Dunoon Dam within the Future Water Project 2060.

# I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011).

Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)

- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher if dam budget blows out) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/ Delivering-the-plan<sup>(1)</sup>

· Continued focus on old strategies to solve water security & economic needs.

- The entire modelling and the strategy recommendations were made pre-COVID19, and are no longer economically or demographically valid. COVID has also shown us we need to be able to pivot quickly and flexibly - something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions.
- It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

# I SUPPORT these alternatives:

I believe we need to take action on a suite of smart water options and proven alternatives.

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. This is 21st century thinking.

# Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(3) (4)</sup>

# Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience?* 

https://www.waterra.com.au/publications/document-search/?download=1806 (5)

Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology.

https://www.wingoc.com.na/our-history (6)

Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience
 much needed as the example of the extreme bushfire season has shown up.

The Australian government advises that:

Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help:

- \* reduce the need for new dams or desalination plants
- \* protect remaining environmental flows in rivers
- \* reduce infrastructure operating costs.

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(8)</sup> <u>https://www.yourhome.gov.au/water/rainwater</u>

Groundwater, where this is environmentally safe

The Australian government provides a lot of information on ecological impacts and groundwater usage.<sup>(9)</sup>

https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-ofgroundwater-drawdown

With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

# **References and Notes**

- NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020, <<u>https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/</u> Delivering-the-plan>
- NSW Department of Planning, Industry and Environment 2019, 'NSW population projections ', Sydney, viewed 03 August 2020, <<u>https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections</u>> scroll down to "Local Government Factsheets".
- 3. The Rous Regional Water Efficiency Program 1997, *Final report of the Rous Regional Demand Management Strategy : preferred options*, Rous County Council, Lismore.
- 4. Watson R., Turner A and Fane S 2018, Water Efficiency and Demand Management Opportunities for Hunter Water, Institute for Sustainable Futures, Sydney.
- 5. Kahn, Stuart and Branch, Amos 2019, *Potable water reuse: What can Australia learn from global experience?*, Water Research Australia Limited, Adelaide.
- Windhoek Goreangab Operating Company (Pty) Ltd 2020, Our history | Wingoc, Veolia Environment, Windhoek, viewed 3 August 2020, <<u>https://www.wingoc.com.na/</u>>
- 7. \$220 million dollars the estimated cost of the new dam could provide more than 73,000 rainwater tanks (22,700L) at \$3,000 each including installation. That is 1.66GL storage with no evaporation and much increased community resilience for future climate risks. This more than covers the 0.9GL extra water needed by the 12,720 new people predicted to come to our area based on the 194L/person/day average water use (Rous).
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- 9. Department of Agriculture, Water and the Environment 2018, What are the ecological impacts of groundwater drawdown? | Department of Agriculture, Water and the Environment, Canberra, viewed 6 August 2020,

<https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-

groundwater-d

Kind Regards,

Received over the counter 8 SEP 2020

To:	General Manager	Date: 9.08.2020
	Rous County Council	
	PO Box 230	
	Lismore NSW 2480	
From:	Sunita Gersther	
Addre	ss:	

# Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011). Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)
- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

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- The entire modelling and the strategy recommendations were made pre-COVID19, and are
  no longer economically or demographically valid. COVID has also shown us we need to be able
  to pivot quickly and flexibly something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions. It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

### I SUPPORT these alternatives:

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. We need to take action on a suite of smart water options and proven alternatives. This is 21st century thinking.

### Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(3) (4)</sup>

Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience*? https://www.waterra.com.au/publications/document-search/?download=1806<sup>(6)</sup> Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology. https://www.wingoc.com.na/our-history<sup>(6)</sup>

Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience much needed as the example of the extreme bushfire season has shown up. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs.

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Groundwater, where this is environmentally safe
 The Australian government provides a lot of information on ecological impacts and groundwater usage.<sup>(9)</sup>

https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater/publications/whater/publications/whater/publications/whater/publications/whater/publications/whater/publications/whater/publications/whater/publications/

With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

#### **References and Notes**

(1) NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020,

<<u>https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/Nerth-Coast/Delivering-the-plans</u>

- (2) NSW Department of Planning, Industry and Environment 2019, 'NSW population projections', Sydney, viewed 03 August 2020,
   <a href="https://www.planning.nsw.gov.au/Research-and-Damography/Population-projections/Projections">https://www.planning.nsw.gov.au/Research-and-Damography/Population-projections/Projections</a> > scroll down to "Local Government Factsheets".
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<https://www.environment.gov.au/water/publications/what-are-the-acological-impacts-of-groundw ater-drawdown>

#### Extra notes/Comments:

Kind regards,			
Signature:		 -	

8 SEP 2020

## Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From: VIVIENNE WINSTON.

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to **avoid** this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general
  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

## I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.(8) Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."(10) Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.(11)
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.(12)

#### **References and Notes**

- (1) Metropolitan Water Plan 2006, NSW Government. Exec Summary section of the doc https://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0
- (2) Ainsworth Heritage, Cultural Heritage Impact Assessment, 2011
- (3) SMEC Australia, Terrestrial Ecology Impact Assessment, 2011
- (4) NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020 < https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-the-plan > , Direction 2: Enhance biodiversity coastal and aquatic habitats and water catchments.
- (5) NSW Department of Planning, Industry and Environment 2019, 'NSW population projections', Sydney, viewed 03 August. 2020, <https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections> Scroll down to "Local Government Factsheets".
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Kind regards, Signature:

Date 23-8-2020.

## Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

Cadeu

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

hereo

From:

Address:

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to *avoid* this destruction because there are economically viable and more effective solutions.
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- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

## I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(a)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

With scalable supply alternatives in place, the existing supply from Rocky Ck Dam will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized and unnecessary dam.

#### **References and Notes**

- (1) Metropolitan Water Plan 2006, NSW Government. Exec Summary section of the doc https://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0
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Kind regards,

Date: 23/8/20

8 SEP 2020

## Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

Melian Fertl

From: Address:

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(7)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
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- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

• An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(6) (7)</sup>

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(0)</sup> Eq: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
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- (3) SMEC Australia, Terrestrial Ecology Impact Assessment, 2011
- (4) NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020 < https://www.planning.nsw.gov.au/Plans-for-vour-area/Regional-Plans/North-Coast/Delivering-the-plan > , Direction 2: Enhance biodiversity coastal and aquatic habitats and water catchments.
- (5) NSW Department of Planning, Industry and Environment 2019, 'NSW population projections', Sydney, viewed 03 August 2020, <https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections> Scroll down to "Local Government Factsheets".
- (6) The Rous Regional Water Efficiency Program 1997, Final report of the Rous Regional Demand Management Strategy : preferred options, Rous County Council, Lismore,
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- (11) Australian Government Department of Industry 2013, Science, Energy and Resources, Rainwater | Your home, Canberra, viewed 3 August 2020, <https://www.yourhome.gov.au/water/rainwater>
- (12) Department of Agriculture, Water and the Environment 2018, What are the ecological impacts of groundwater drawdown? | Department of Agriculture, Water and the Environment, Canberra, viewed 6 August 2020, <a href="https://www.environment.gcv.au/water/publications/what-are-the-ecological-Impacts-of-groundwater-drawdown">https://www.environment.gcv.au/water/publications/what-are-the-ecological-Impacts-of-groundwater-drawdown</a>

Kind regards, Signature:

Date: 23-8-20

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From:	Ceder leeberry
Address:	
Date:	09/08/20

Re: the proposed Channon/Dunoon Dam within the Future Water Project 2060.

# I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011).

Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)

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- Water prices will increase by 4x current cost (or higher if dam budget blows out) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/ Delivering-the-plan<sup>(1)</sup>

· Continued focus on old strategies to solve water security & economic needs.

- The entire modelling and the strategy recommendations were made pre-COVID19, and are no longer economically or demographically valid. COVID has also shown us we need to be able to pivot quickly and flexibly - something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions.
- It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

# I SUPPORT these alternatives:

I believe we need to take action on a suite of smart water options and proven alternatives.

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. This is 21st century thinking.

# Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(3) (4)</sup>

### Purified Recycled Water

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Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology.

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Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience
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The Australian government advises that:

Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help:

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Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(8)</sup> <u>https://www.yourhome.gov.au/water/rainwater</u>

· Groundwater, where this is environmentally safe

The Australian government provides a lot of information on ecological impacts and groundwater usage.<sup>(9)</sup>

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With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

# **References and Notes**

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Kind Regards,

Received over the counter 8 SEP 2020

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From:	Marker Zie	
Address:		
Date:	9/8/2020	

Re: the proposed Channon/Dunoon Dam within the Future Water Project 2060.

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Kind Regards,

Received over the counter 8 SEP 2020

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From: Address:

Date: 1/8/26

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

Herrice Regton

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
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Tel

#### I SUPPORT these alternatives:

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Extra notes/Comments:

Kind regards,	
Signature:	
	2

Received over the counter

8 SEP 2020

To: General Manager **Rous County Council** PO Box 230 Lismore NSW 2480 107 From: Address:

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

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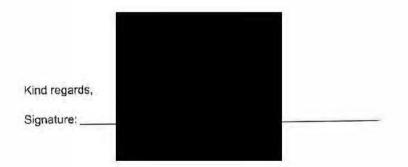
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### Extra notes/Comments:



Received over the counter 8 SEP 2020

1

To:	General Manager	Date: 8 3 20
	Rous County Council	1 1
	PO Box 230	
	Lismore NSW 2480	
From		
Addre	Julian	Crow

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011). Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)
- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

https://www.planning.asw.gov.au/Plans-for-your-arga/Regional-Plans/North-Coast/Delivering-theplan (1)

- The entire modelling and the strategy recommendations were made pre-COVID19, and are
  no longer economically or demographically valid. COVID has also shown us we need to be able
  to pivot quickly and flexibly something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions. It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

A.

#### I SUPPORT these alternatives:

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. We need to take action on a suite of smart water options and proven alternatives. This is 21st century thinking.

#### Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(3)</sup> <sup>(4)</sup>

Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience?* https://www.waterra.com.au/publications/document-search/?download=1806/9 Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology. https://www.wingoc.com.na/our-history/9

 Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience much needed as the example of the extreme bushfire season has shown up. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs.

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(6)</sup> https://www.youthomo.gov.au/water/rainwater

Groundwater, where this is environmentally safe
 The Australian government provides a lot of information on ecological impacts and groundwater usage.<sup>(9)</sup>

https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater-drawdown

With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

#### **References and Notes**

(1) NSW Department of Planning, Industry and Environment 2019, 'Delivering the plan', Sydney, viewed 03 August 2020,

<a href="https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-fine-olan-olan-colan-

- (2) NSW Department of Planning, Industry and Environment 2019, 'NSW population projections', Sydney, viewed 03 August 2020,
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- (3) The Rous Regional Water Efficiency Program 1997, Final report of the Rous Regional Demand Management Strategy : preferred options, Rous County Council, Lismore.
- (4) Watson R., Turner A and Fane S 2018, Water Efficiency and Demand Management Opportunities for Hunter Water, Institute for Sustainable Futures, Sydney.
- (5) Kahn, Stuart and Branch, Amos 2019, Potable water reuse: What can Australia learn from global experience?, Water Research Australia Limited, Adelaide.
- (6) Windhoek Goreangab Operating Company (Pty) Ltd 2020, Our history | Wingoc, Veolia Environment, Windhoek, viewed 3 August 2020, <a href="https://www.wingoc.com.na/">https://www.wingoc.com.na/</a>>
- (7) \$220 million dollars the estimated cost of the new dam could provide more than 73,000 rainwater tanks (22,700L) at \$3,000 each including installation. That is 1.66GL storage with no evaporation and much increased community resilience for future climate risks. This more than covers the 0.9GL extra water needed by the 12,720 new people predicted to come to our area based on the 194L/person/day average water use (Rous).
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### Extra notes/Comments:

10.1		
Kind regards,		
Signature:		

Received over the counter

8 SEP 2020

Date: 9.8-

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From: Address:

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

Blossom Foenander

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#### Extra notes/Comments:

Kind regard		
Signature:		

# 8 SEP 2020

### Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	COREY	SPITERI	
Address:	-		

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

### I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to **avoid** this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

• An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(6) (7)</sup>

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
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- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage. (12)

With scalable supply alternatives in place, the existing supply from Rocky Ck Dam will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized and unnecessary dam.

#### References and Notes

- (1) Metropolitan Water Plan 2006, NSW Government. Exec Summary section of the doc https://www.dropbox.com/s/pu9898cq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0
- (2) Ainsworth Heritage, Cultural Heritage Impact Assessment, 2011
- (3) SMEC Australia, Terrestrial Ecology Impact Assessment, 2011
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Kind regards, Signature: \_

Date: 6-9-20

### Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

8 SEP 2020

From:	Aula	Perrin	 	 	_
Address:					_

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

### I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

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With scalable supply alternatives in place, the existing supply from Rocky Ck Dam will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized and unnecessary dam.

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Kind regards, Signature:

Date: 06/09/20

# 8 SEP 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Leah	Ivng	
Address:			-

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

# DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

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Kind regards, Signature:

Date: 6/9/20

# 8 SEP 2020

# Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:	Thomas	Mitchell	
Address:			

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

# I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest
  way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an
  additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- The 21st century is about a suite of smart water options. This dam would be a lost
  opportunity to make our system fit for the 21st century by swallowing all resources in one big
  expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent.(Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."<sup>(4)</sup> Rous is required to **avoid** this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general
  manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold
  increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

# I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

• An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(6) (7)</sup>

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(8)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."(10) Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.(11)
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of • information on the ecological impacts and groundwater usage.<sup>(12)</sup>

With scalable supply alternatives in place, the existing supply from Rocky Ck Dam will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized and unnecessary dam.

### **References and Notes**

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Kind regards, Signature:

5/9/20 Date:

8 SEP 2020

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General Manager, Rous County Council To: PO Box 230, Lismore NSW 2480

Cart Philamin From: Address:

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Date: Da g. 20

8 SEP 2020

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To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

Goodie

From: Address:

Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

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Missiler

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Kind regards, Signature:

Date: 06.3.20

Received over the counter

8 SEP 2020

### Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

Kouw en berg

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

ashna

From:

Address:

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Date: 23/8/20

Kind regards, Signature:

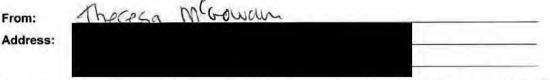
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8 SEP 2020

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From:



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- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup>. . between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

### SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

 An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.(6) (7)

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global research and experience exists regarding potable reuse of water.<sup>(#)</sup> Eg: The city of Windhoek in Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

With scalable supply alternatives in place, the existing supply from Rocky Ck Dam will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized and unnecessary dam.

#### **References and Notes**

- (1) Metropolitan Water Plan 2006, NSW Government. Exec Summary section of the doc https://www.dropbox.com/s/pu9898oq6kocrph/NSW%20Govt%202006%20MWP%20summary.pdf?dl=0
- (2) Ainsworth Heritage, Cultural Heritage Impact Assessment, 2011
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- (8) Kahn, Stuart and Branch, Amos 2019, Potable water reuse: What can Australia learn from global experience?, Water Research Australia Limited, Adelaide.
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- (12) Department of Agriculture, Water and the Environment 2018, What are the ecological impacts of groundwater drawdown? | Department of Agriculture, Water and the Environment, Canberra, viewed 6 August 2020, <a href="https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater-drawdown">https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-of-groundwater-drawdown</a>>

Kind regards, Signature:

Date: 23-8-20

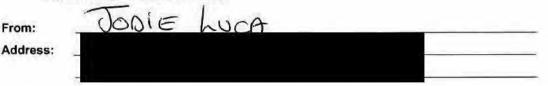
# Received over the counter



### Feedback Submission Re: Proposed Dunoon Dam within the Future Water Project 2060

To: General Manager, Rous County Council PO Box 230, Lismore NSW 2480

From:



Firstly, the community appreciates the submission extension. We also acknowledge the complexity of the work Rous does to provide water for our region.

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Lost opportunity to invest in system-wide water efficiency. This is the cheapest & fastest way to ensure supply-demand balance. By focussing on system efficiency, Sydney added an additional 950,000 people without a rise in consumption.<sup>(1)</sup>
- · The 21st century is about a suite of smart water options. This dam would be a lost opportunity to make our system fit for the 21st century by swallowing all resources in one big expensive 'white dinosaur' project.
- The dam would encourage continued inefficient and wasteful water management by local governments. They would have no incentive to do things differently.
- Destruction of important Indigenous cultural heritage, including burial sites.<sup>(2)</sup>
- Destruction of The Channon Gorge and its endangered ecological community of lowland rainforest, threatened flora and fauna species.<sup>(3)</sup> Rous's plan to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone is problematic as the type of vegetation offered as recompense is not equivalent. (Nan Nicholson, botanist) Councils are required under State planning regulations to: "Focus development to areas of least biodiversity sensitivity in the region and implement the 'avoid, minimise, offset' hierarchy to biodiversity, including areas of high environmental value."(4) Rous is required to avoid this destruction because there are economically viable and more effective solutions.
- Industrial/construction zone for The Channon/Dunoon community; noise, machinery, trucks, visual impact. Ongoing sound impact from pump house etc.
- Higher prices for consumers due to a 4x increase in the cost of water. Rous general manager, in response to a question from councillor Vanessa Ekins, said he expected a fourfold increase in the cost of supplying water if the dam is built.
- The small population increase predicted for the four Rous-supplied councils of 12,720<sup>(5)</sup> between 2020-2060 does not justify such a large and destructive dam. The dam risks diverting expenditure away from more sustainable, flexible and effective solutions.<sup>(5)</sup>

#### I SUPPORT these alternatives:

We need a suite of smart water options and proven alternatives, not a huge new dam. The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too.

 An investment in system-wide water efficiency and strong demand management. Analysed, costed and deployed, creating jobs. (We understand Rous has not costed this in creating their future water plan) Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.(6)(7)

- Water re-use in various ways, including Purified Recycled Potable water. A wealth of global
  research and experience exists regarding potable reuse of water.<sup>(#)</sup> Eg: The city of Windhoek in
  Namibia has been using purified recycled water for 30 years using advanced technology.<sup>(9)</sup>
- Water harvesting (urban runoff; rain tanks): Water tanks on all new (and existing) developments. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs."<sup>(10)</sup> Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(11)</sup>
- Contingency planning would enable Rous to be ready to rapidly implement supply measures if it becomes necessary in times of drought.
- Groundwater, where this is environmentally safe. The Australian government provides a lot of information on the ecological impacts and groundwater usage.<sup>(12)</sup>

With scalable supply alternatives in place, the existing supply from Rocky Ck Dam will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized and unnecessary dam.

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Kind regards, Signature

Date: 23/8

Received over the counter 8 SEP 2020

Date: 9/03/2020

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

1.68

From: Address:

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

Cubis

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011). Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)
- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/Delivering-theplan <sup>(1)</sup>

- The entire modelling and the strategy recommendations were made pre-COVID19, and are
  no longer economically or demographically valid. COVID has also shown us we need to be able
  to pivot quickly and flexibly something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions. It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

#### I SUPPORT these alternatives:

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. We need to take action on a suite of smart water options and proven alternatives. This is 21st century thinking.

### Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(9)</sup>

#### Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience?* https://www.waterra.com.au/publications/document-search/?download=1806<sup>(6)</sup> Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology. https://www.wingoc.com.na/our-bistory<sup>(6)</sup>

Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience much needed as the example of the extreme bushfire season has shown up. The Australian government advises that: "Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help: reduce the need for new dams or desalination plants; protect remaining environmental flows in rivers; reduce infrastructure operating costs.

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.<sup>(8)</sup> https://www.yourhome.gov.au/water/rainwater

Groundwater, where this is environmentally safe
 The Australian government provides a lot of information on ecological impacts and groundwater
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https://www.environment.gov.au/water/oublications/what-ane-the-ecological-impacts-of-groundwater-drawdown

With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

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<https://www.environment.gov.au/water/publications/what-are-the-acological-impacts-of-groundw ater-drawdown>

Extra notes/Comments:

DE Past employed	
Kind regards,	
Signature:	

		Received over the cou .
		8 SEP 2020
To:	General Manager	
	Rous County Council PO Box 230 Lismore NSW 2480	- <sup>1</sup>
Fror	m: Frank Lucas	
Add	ress:	
Date	e: <u>9.8.20</u> 20	

Re: the proposed Channon/Dunoon Dam within the Future Water Project 2060.

# I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
- Destruction of The Channon Gorge and its Endangered Ecological Community of Lowland Rainforest (including the regionally rare warm temperate rainforest on sandstone), and its threatened species of flora and fauna. (Terrestrial Ecology Impact Assessment, 2011).

Rous is planning to offset the loss of rainforest on sandstone with regeneration of degraded land in the buffer zone. Offsetting is a worthless exercise because the type of vegetation offered as recompense is never equivalent. This is worse than most. (Nan Nicholson, botanist)

- Industrial/construction zone for years for The Channon/Dunoon community; noise pollution; large trucks/machinery on our roads; visual impact. Ongoing sound impact from pump house etc.
- Water prices will increase by 4x current cost (or higher if dam budget blows out) (Rous)
- Promotes accelerated population growth in the Northern Rivers. I'm concerned the Dam is being framed as 'water security' to the local population, yet to further afield it is being framed as a development plan for acceleration of growth. I'm concerned the model that predicted the population did not take into account the actual dam's effect on growth. This framing is concerning to me: "Everyone needs to understand this Regional development plan which is "focused on *unlocking the potential* of one of Australia's most beautiful places. The North Coast will become the best region in Australia to live, work and play". From planning document:

https://www.planning.nsw.gov.au/Plans-for-your-area/Regional-Plans/North-Coast/ Delivering-the-plan<sup>(1)</sup>

· Continued focus on old strategies to solve water security & economic needs.

- The entire modelling and the strategy recommendations were made pre-COVID19, and are no longer economically or demographically valid. COVID has also shown us we need to be able to pivot quickly and flexibly - something this massive 'single solution' won't do.
- The tiny population increase for the four Rous supplied councils of only 12,720<sup>(2)</sup> people between 2020-2060 does not justify such a large and destructive dam. It risks being an expensive white elephant, diverting money away from more needed and effective solutions.
- It is likely to create division and conflict within our communities after suffering flood, drought and an extreme fire season. What we need are resilience and community building solutions.

# I SUPPORT these alternatives:

I believe we need to take action on a suite of smart water options and proven alternatives.

The tide is turning on renewable and sustainable power. It is time for the tide to turn on how we meet our water needs too. This is 21st century thinking.

# Strong Demand Management

Existing research over the past decade consistently finds that the best 'bang-for-buck' investment in water supply comes from demand management and identifying savings within the existing supply.<sup>(3) (4)</sup>

# Purified Recycled Water

A wealth of global research and experience already exists regarding potable reuse of water as set out in the Australian report, *Potable Water Reuse: What can Australia learn from global experience?* 

https://www.waterra.com.au/publications/document-search/?download=1806 (5)

Example: The city of Windhoek has been using Purified Recycled Water for 30yrs using advanced technology.

https://www.wingoc.com.na/our-history (6)

Water tanks on all new (and existing) developments<sup>(7)</sup> This builds community resilience
 much needed as the example of the extreme bushfire season has shown up.

The Australian government advises that:

Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help:

- \* reduce the need for new dams or desalination plants
- \* protect remaining environmental flows in rivers

\* reduce infrastructure operating costs.

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Groundwater, where this is environmentally safe

The Australian government provides a lot of information on ecological impacts and groundwater usage.<sup>(9)</sup>

https://www.environment.gov.au/water/publications/what-are-the-ecological-impacts-ofgroundwater-drawdown

With scalable alternatives in place for supply, the existing Rocky Ck Dam supply component will be made resilient to anticipated times of drought and projected population growth, without the environmental destruction, social costs, and the over-capitalisation risk of an outsized dam.

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Kind Regards,

Received over the counter 8 SEP 2020

8

To: General Manager Rous County Council PO Box 230 Lismore NSW 2480

From: Address:

Re: The proposed Channon/Dunoon Dam within the Future Water Project 2060

I DO NOT support the proposed The Channon-Dunoon Dam for these reasons:

JOHN ARKAN,

- Destruction of important Indigenous Cultural Heritage, including burial sites (Cultural Heritage Impact Assessment, 2011). Ongoing disregard for First Nations sacred sites and culture.
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