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Submission on Draft North Coast Regional Water Strategy

The Clarence Valley Conservation Coalition (CVCC) is a community group based in the Clarence Valley. Formed in 1988, the CVCC has been involved with environmental issues – both locally and beyond – since that time. It has had a long-term interest in water and its management and the maintenance of river health in our local area and further afield.

INTRODUCTION

The CVCC commends the NSW Government for its decision to undertake planning for the water needs of the future in both our region and throughout the state. This is particularly important given the challenges that will be faced in the future because of the impacts climate change will have on our river systems – systems which are vitally important to both humans and all other species who live in these river catchments.

While the CVCC appreciates that a broad range of matters associated with water have been considered in the strategy, it has major concerns about some of the options listed.

In Section 1 this submission discusses the options which are of major concern to the CVCC while Section 2 outlines the options which are broadly supported.

Section 1 - MAJOR CONCERNS

1) Expand the Clarence-Coffs Harbour Regional Water Scheme (RWS) to connect to Bellingen and Nambucca water supplies (Option 1).

(a) The arguments in favour of this in the Long List of Options make no reference at all to what should be the major consideration of those proposing this – whether inter-catchment water diversions are appropriate and in the interests of protecting river health as well the necessity (long-ignored by many engineers, bureaucrats and politicians) of humanity accepting that it must manage its water needs according to what is locally available – that is, in the local catchment.

The fact that modern technology has enabled movement of water beyond local catchments has resulted in widespread acceptance that big engineering solutions are justified. As a result, the many disastrous cumulative effects of these "solutions" on the natural world have either received limited mitigation attention or have been regarded as inevitable collateral damage.

Lessons are still not being learned about the folly of this approach in Australia and in many overseas countries. What has happened in the Murray-Darling Basin leading to degradation of an important river system should have provided a wake-up call. Fixing the inevitable problems after the damage has happened is obviously very expensive and is fought tooth and nail by the vested interests who fail to understand that, as the damage to their river system increases, there will be less water available for them and the water quality will deteriorate.

(b) Option 1 is proposing a diversion of water from one catchment to two others. While it may not involve the removal of the huge volumes of water that western irrigators want diverted over the ranges to provide additional water to irrigate their crops, there are the same basic problems with it. It is ecologically unsustainable and will have a detrimental effect on the Nymboida River below the offtake point and in both the Mann and Clarence rivers further downstream. As well as impacting river health and the biodiversity which relies on a healthy system, it will threaten the viability of downstream industries which also depend on the river.

(c) Climate change is likely to affect the flows in all rivers in the region - threatening the health of those rivers and the supply security of water drawn from them for local urban centres. What is being proposed here is minimizing health impacts on two rivers while increasing it on one (the Clarence) in another catchment.

(d) It was suggested by one of the presenters at the Grafton information session on April 21 that this option could just be used in emergencies. While that may appear reasonable, once the infrastructure was built, it would be used – and not just for an emergency. The expense of the infrastructure would be used to justify its regular use.

(e) Desalination is an alternative option which could enable Bellingen and Nambucca Councils to meet their water requirements within their own catchments. Option 2 suggests portable units which could be moved around the region. However, a fixed unit could be a better option if the water supply shortfall was likely to be more permanent. If desalination was to be adopted, it should be powered by renewable energy with battery backup.

(f) There are other options listed in the draft strategy which, either as stand-alone supplementary sources or as a combination of several sources, could also serve to enable these councils to meet their requirements within their own catchments. (For example: Options 12, 13 and 21).

(g) The CVCC notes that Nambucca Council has a 5GL off-stream storage[1] (Bowra Dam completed in 2014) which according to Mayor Rhonda Hoban gives the Council the capacity to deal with a prolonged drought.[2] Presumably this will provide security for many years and will give the council the time to move to other in-catchment options (for example: desalination, wastewater or stormwater re-use).

(h) Perhaps there is the possibility for off-stream storage in the Bellinger Valley as a similar insurance policy to the Nambucca one.

The CVCC is opposed to Option 1 and urges that it be dropped from the final option list.

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[1] It is surprising that the Bowra Dam, which is not much smaller than the Karangi Dam, was not listed with the other three dams in the Snapshot on p. 8 of the Draft Strategy.

[2] "The 5,000ML of Bowra Dam is ample given the Nambucca Valley's yearly consumption is around 1,500ML – we are fortunate in having considerable capacity to deal with a prolonged drought." *Macleay Argus*, September 17, 2019. https://www.macleayargus.com.au/story/6389706/bowra-dam-is-at-capacity-and-ready-for-use-if-needed/

2) Inland diversions from the Clarence Catchment
While these are not listed as options in the North Coast Draft Water Strategy, the strategy notes that they are included as options in both the Border Rivers Draft Strategy (Options 7 & 8) and the Namoi Draft Strategy (Option 1).

(a) It should be obvious from what is written in 1) above that the CVCC considers any move to divert water from the Clarence catchment to the west totally unacceptable.

(b) Calls for the western diversion of coastal rivers like the Clarence are based on the insatiable desire of irrigators for more water – often for crops which have very high water requirements. These irrigators have over the years extracted far too much water from their own catchments (with the complicity of politicians and bureaucrats) to the detriment of local riverine health. While they sometimes pay lip-service to the need to protect river health, they lobby strongly against any effective measures to restore health to the waterways in their area, and all the time clamour for yet more water for irrigation.

Quite naturally many people in coastal catchments like the Clarence are outraged that these water users, having wrecked their own rivers, think they should be able to access relatively healthy coastal rivers and, as a result, imperil their health.

(c) There is very strong local opposition to any plan to divert water from the Clarence River system. These diversion calls (mostly from the west but in 2007 from SE Queensland) come up on a regular basis and always meet with fierce resistance from the local community including from environment groups like the CVCC. Clarence Valley Council has reflected the general community view by consistently opposing diversions, as was pointed out in the General Manager's recent submission to the draft strategy.

The CVCC is opposed to the diversion options in the Border Rivers and Namoi Strategies and urges that they be dropped from the final option lists in each case.

3) Augmenting Shannon Creek Dam from its current capacity of 30 GL to its designed maximum capacity of 75 GL (Option 4)

(a) When Shannon Creek Dam was built, there was considerable biodiversity loss in the general area of the dam as well as the inundation area. There was significant loss of native vegetation as well as fauna. There was a serious decline in two important species in the dam area - Brush-tailed Rock-wallabies (listed as endangered in NSW) and Koalas (listed as vulnerable in NSW).

Enlarging the dam will result in further biodiversity loss. Any development having a significant impact on biodiversity should be subject to much greater scrutiny now than in the past because of the biodiversity crisis we are now experiencing and the mounting problem of the cumulative effects that multiple damaging developments have on biodiversity. (The latter is sometimes referred to as "Death by a thousand cuts".)

(b) The dam capacity is currently more than adequate for supporting the areas it was designed to support. Presumably it will remain adequate for many years to come as an insurance policy even if river flows are reduced as a result of climate change.

(c) There is, however, currently a major problem with filling the dam to capacity despite the continuing good flows in the Nymboida River. The dam has been around 20% below maximum capacity for months because of turbidity in the Nymboida which has severely restricted pumping into the dam because the turbidity is likely to cause algal blooms there.

(d) Obviously there is a need to address this problem. Whether upgrading water treatment facilities, as suggested in the discussion of Option 4, may mean pumping can continue when flows are turbid, the root cause of the turbidity problem needs to be addressed.

The root cause lies in catchment conditions. Vegetation buffers along the rivers and their tributaries have been destroyed or damaged by fire, trampling by livestock and agricultural and forestry operations

leading to increased erosion and sedimentation which has been exacerbated by heavy rainfall and floods. Some of this degradation has been fuelled by climate change but much of it stems from poor land management practices which should be addressed as a matter of urgency.

While land management practices need to be improved across the landscape generally, it is vital that they are improved in water catchments like that of the Nymboida River upstream of the weir. The CVCC believes this should be dealt with in the Regional Water Strategy.

e) Protection of the Nymboida Catchment
A key problem is the lack of guidance and control of what is happening in the Nymboida's catchment above the weir. The only restriction appears to be a ban on swimming downstream from Cartmill Park (i.e. the bridge crossing at Armidale Rd).

In contrast, Sydney's drinking water catchment is protected via a State Environmental Planning Policy (SEPP), namely the State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 - NSW Legislation.

The aims of that policy are:
(a) to provide for healthy water catchments that will deliver high quality water while permitting development that is compatible with that goal, and
(b) to provide that a consent authority must not grant consent to a proposed development unless it is satisfied that the proposed development will have a neutral or beneficial effect on water quality, and
(c) to support the maintenance or achievement of the water quality objectives for the Sydney drinking water catchment.

It is understood that similar protections exist for water supply catchments and borefields managed by Hunter Water under the Hunter Water Act 1991.

The NSW Government has an obligation to protect drinking water catchments for all of NSW - not just Newcastle, Sydney and Wollongong: For the Nymboida, this can only be achieved through greater controls on forestry and agricultural clearing in the Nymboida's catchment as well as development controls similar to the tests of 'neutral or beneficial' impact that exists under the Sydney Drinking Water SEPP.

Protection of vital vegetation in filter strips along all watercourses is an important element. This would require fencing out of cattle, requirements for effective and enforced sediment and erosion control on all cropping activities in the Dorrigo Plateau, and a widening of the filter buffers on first and second order streams that were part of the original integrated forestry operations approval.

The CVCC is aware of interest in both gold and antimony mining in the catchment (e.g. Blicks River and Wild Cattle Creek). We call on the NSW Government to cancel any associated licences or leases to ensure that polluting mining activities never again occur in our drinking catchment.

The CVCC is opposed to the augmentation of Shannon Creek Dam and urges that this option be dropped from the Strategy's final option list.

The CVCC urges the water planners involved with this strategy to ensure that protection of drinking water catchments (and specifically the Nymboida catchment above the weir) is included in the final options list as a matter of priority.

4) Concerns about water for rural industries (Options 6, 8, 14, 15)
This draft strategy gives a great deal of consideration particularly to the water requirements of rural industries and particularly intensive horticulture.

(a) Intensive horticulture, a relatively new industry in this area, has grown rapidly in recent years. Of major concern has been the blueberry industry because of its water and chemical use and its flouting of the limited regulations which are supposed to protect stream flows. Of course, part of the reason for the problem has been the appalling record of the government in failing to prevent the abuse - despite the many complaints made by members of the community and the Clarence Environment Centre. The CVCC is pleased that the sustained campaign for action finally resulted in the responsible NSW Government entity taking action on this matter.

(b) New industry and rural licence category within major council storages (Option 8).
This option suggests those responsible for this strategy are hankering after introducing a kind of water allocation in our region similar to what exists in western NSW where large dams were built basically for the benefit of irrigators. Of course, it is not on the same scale, but this option suggests that agricultural water needs should be considered either equivalent to or nearly equivalent to human water needs.

The statement in "Challenges addressed" (Option 8): "Industry demands for water are shifting away from predominantly rain-fed crops" is, in our view, not a justification for this proposed new licence category. If an industry requires access to irrigation on a permanent basis and that is not available, quite obviously the crop in question is not suitable for the area. There always have been, and always will be, limits on how much water will be available for irrigation in our region as elsewhere. And this is not simply a question of whether there is enough water in a storage. It is also a matter of maintaining the health of our catchments – something which sadly has been neglected in western NSW.

(c) Increased harvestable rights (Option 14)
This is another option focussing on the needs of intensive horticulture. Comments in (b) above about limits on water available for irrigation apply to this option as well. There are major concerns about this proposal and the proposal to allow dams on third order streams because of the likely impacts on downstream water users and river health. There are also concerns about how effective the government's monitoring of such a scheme would be as well as the effectiveness of its compliance procedures.

(d) Increased on-farm water storage (Option 15)
It is difficult with the information provided to understand the specific differences between Options 14 and 15.

(e) Repurpose existing assets to provide emergency storages for local industries (Option 6)
Although this sounds reasonable, it is difficult to be sure because of the lack of information on exactly what these storages are and where they are situated.

The CVCC is opposed to Options 6, 8, 14 and 15 and urges that they be dropped from the Strategy's final option list.

5) Lack of adequate baseline data

Adequate baseline data is required in order to do a scientifically rigorous water management strategy.

Option 16 – Establish sustainable extraction limits for North Coast surface water and groundwater sources - cannot be achieved without more information. There appears to be no accurate information on how much water is being extracted from both rivers/streams and groundwater or how much is being stored in dams other than the major council storages.

Option 18 – Long-term water plans to support healthy coastal waterways is another option which requires adequate baseline data.
The CVCC is also rather curious about the intention to "build on the experience and learnings of the NSW inland long-term water plans" in developing these plans. We wonder about the relevance of the western plans to our region given the very different situation there including the massive western dams, extensive large-scale irrigation practice and often poor environmental outcomes for river health.

While many of the strategy's options indicate the need for more baseline information there are a few which specifically outline this need and the measures that should be taken to provide the required information. They are: Characterising coastal groundwater resources (Option 19); Planning for climate change impacts on coastal groundwater resources (Option 27) and Improved data collection on water use and patterns (Option 29).

The CVCC urges the water planners involved with this water strategy to make the collection of baseline data a priority.

6) Water Markets (Option 30)

The CVCC does not support this option and urges that it be dropped from the final list of options.

7) Coastal, regional focused water reference groups (Option 26)

While the CVCC is broadly in favour of community involvement in advisory bodies with many of our members having involvement in local advisory bodies over the years, we do not support the establishment of this region-wide body. We believe there is little to be gained from such a body because of the differences in situation across the region.

The CVCC does not support this option and urges that it be dropped from the final list of options.

8) Regionalisation (Options 32 to 36)

The CVCC is concerned that these options suggest a very heavy-handed top-down approach to local water management and are taking away from local decision-making. It may be that some councils do require assistance from the state government on some matters relating to water management while others will have all the appropriate measures in place. Local decision making is important. Imposition of requirements by the state government is not likely to be appreciated by either local communities or their councils.

The CVCC does not support these options and urge that they be dropped from the final list of options.

Section 2 – OPTIONS BROADLY SUPPORTED

1) Desalination (Option 2)

Investigation of both portable desalination (Option 2) and fixed desalination are supported. Fixed desalination may be a better option if the water supply shortfall was likely to be more permanent. The investigation should also consider issues around disposal of produced brine. If desalination was to be adopted, it should be powered by renewable energy with battery backup. Supported

2) Upgrade major town water treatment facilities (Option 5)

This option is supported. However, more is required than upgrading water treatment if the problem of turbid water is to be fixed. Land management practices need to be improved in order to protect water catchments. [See Section 1, 3) (c),(d) and (e) above]
There is an important role for government in ensuring adequate regulations are in place and that there is effective monitoring and compliance undertaken.

3) Re-use of wastewater and stormwater (Options 10, 11, 12, 13 and 21)

(a) As using recycled wastewater has enormous potential for improving the resilience of urban water supplies when the supply of water for urban use is under stress, a general investigation of the advantages, impediments and costs (Option 10) makes sense. Supported.

(b) While increased use of recycled wastewater for intensive horticulture sounds a good idea (Option 11), there are concerns about the likelihood of elevated phosphorus levels downstream. Given the poor record of this industry in complying with best practice as well as regulation in the past and the Government's failure in ensuring compliance in this industry in the past, the CVCC is doubtful about the wisdom of this option.
Furthermore, there is the matter of the unwanted volumes or treated water that would need to be disposed of during extended periods of wet weather. Supported with reservations.

(c) Even though community support for re-use has improved, there will need to be a lengthy and carefully designed education campaign to gain support for potable re-use (Options 12 and 13) to ensure broad community acceptance. Gaining community acceptance for direct potable re-use is likely to be very challenging. Supported

(d) The CVCC supports improved stormwater management (Option 21). In the urban landscape there is considerable potential for this improvement in commercial and industrial areas (particularly in relation to car parks and roof run-off) as well as in new residential developments. Supported

4) Protection of natural systems

The CVCC supports the need for a range of measures to ensure that the natural systems are protected and enhanced so that our waterways can remain healthy.

(a) Long-term water plans to support healthy coastal waterways (Option 18) What exactly is meant by "long-term"? If long-term means for a very long time there would need to be mechanisms to update the plan in the event of serious circumstances that were unforeseen when it was formulated.
This option would need to be based on much better baseline data than is currently available. [This has already been referred to in Section 1 (5)] Supported

(b) Protecting ecosystems that depend on coastal groundwater resources (Option 20) Supported

(c) Bringing back riverine and estuarine habitats and threatened species (Option 22) Supported

(d) Fish-friendly water extraction (Option 23) Supported

(e) Improve fish passage in the North Coast region (Option 24) Supported
A fish ladder on the Nymboida Weir was one of the licence conditions of the Clarence-Coffs Harbour Regional Water Supply. This condition has not been fulfilled.

(f) River recovery program for the North Coast (Option 28) Supported with reservations

5) Information Gathering

These options will provide important baseline data which will be needed in order to develop a scientifically rigorous regional water strategy.

(a) Characterising coastal groundwater resources (Option 19) Supported

(b) Planning for climate change impacts on coastal groundwater resources (Option 27) Supported

(c) Improved data collection on water use and patterns (Option 29) Supported

The Clarence Valley Conservation Coalition looks forward to considering the final list of options for the Regional Water Strategy when it is made public.

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