

Tweed District Water Supply Augmentation Project
A report by the Community Working Group

SUMMARY
March 2010

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Introduction

The Water Supply Augmentation Project

Four short-listed options are being assessed to determine a preferred option to increase the future capacity of the Tweed's water supply. Council has invited the community and the Community Working Group to comment on the short-listed options, the proposed Multi-Criteria Analysis process, any deficiencies or consultation gaps, and help to identify the environmental, social and cultural impacts of each of the options and how each might be managed. The object of this phase is to determine a preferred option for adoption by Council in mid 2010.

The Community Working Group (CWG)

The Tweed Shire Water Supply Augmentation Community Working Group (Community Working Group, or CWG) was established by Tweed Shire Council. It consists of members of the Tweed Shire community and aims to be a representative cross-section of the Tweed Shire community.

CWG Members were selected from a large number of nominations received from residents of Tweed Shire. The members representing residents, environmental, business and catchment user groups were selected by an impartial selection panel from Southern Cross University (SCU) according to predetermined selection criteria. The remaining representatives were nominated directly by their stakeholder group.

The CWG's aim was to assist Council to select a preferred option from four shortlisted water supply augmentation options. The role of the group was to investigate the options in some detail, collect and disseminate information with stakeholders and the wider community, and to work with Council to identify the key environmental and social issues associated with each option. The CWG met to discuss and deliberate these issues during five meetings held between 1 December 2009 and 1 March 2010.

Drafting of this Report

This report for consideration by Council contains a summary of the group's recommendations together with the views, interests and issues of individual CWG members.

The drafting of this report has been undertaken by the CWG through the following process:

- Each CWG member identified significant issues and drafted comments accordingly
- All comments were grouped and listed under relevant subheadings
- Each CWG member was invited to nominate the most important comment or comments under each subheading by marking the comments with sticker dots
- Comments were ranked under each subheading according to the degree of support
- Generally the top three comments were retained within the "CWG Recommendations" section of this report. Other comments are listed in the "Additional Comments" section of the full report.
- Objections by CWG members who were not comfortable with one or more of the comments retained in the "CWG Recommendations" section of the report are listed within the relevant section.

CWG Recommendations

Options Assessment

The CWG has been asked to provide information on the environmental and social aspects which will assist Council compare the options using the Multi-Criteria Analysis (MCA) assessment tool.

For each of the short-listed options, the CWG members were asked “Can I live with this option?”. Council will use these responses to inform the process of determining MCA ratings for each of the options.

CWG members were also asked “Are environmental or social issues more significant?”. Council will use these responses to inform the process of determining MCA weightings for the social and environmental criteria.

Ratings

Assessment

CWG members compared the environmental impacts of the options by nominating whether or not “I can live with” each option and why. The table below summarises the results and the reasons for each member’s view. Members were not obliged to give their opinion.

Table 1: Environmental Impacts of the Options

OPTION	Raise Clarrie Hall Dam	New Byrrill Creek Dam	Pipeline to SEQ Water
I can live with this option because:	<p>(9 Total)</p> <p>CHD 2nd option</p> <p>Has further considerations to volume and water quality</p> <p>Tolerable with full EIS and mitigation options</p> <p>Least damaging</p> <p>Support, proviso – effective relocation of Aboriginal Cultural Heritage sites</p> <ul style="list-style-type: none"> - Wildlife corridors - In tandem with contingency options <p>Existing footprint – Still ecologically bad</p> <p>CHD 1st option</p> <p>CHD Environmental less damaging than other options</p> <p>Minimum impact - Maximum outcome</p> <p>Easiest less invasive \$8m on spillway not wasted even some positive</p>	<p>(2 Total)</p> <p>BCD 1st Option</p> <p>Byrrill Creek No 2 option</p>	<p>(1 Total)</p> <p>High greenhouse/carbon but minimum ecological</p>

OPTION	Raise Clarrie Hall Dam	New Byrrill Creek Dam	Pipeline to SEQ Water
I don't know / am not sure	(1 Total) CHD is a last dam option subject to Council reusing available water	(0 Total)	(6 Total) Not enough information - actual application seems unlikely under current political stands. Insufficient detail on options and environmental impacts No agreement yet with QLD government Piped water supply uncertain Waiting for qualifiers Could have Aboriginal Cultural Heritage impacts
I cannot live with this option because:	(1 Total) Too much habitat destruction – koala habitat, gullies and farmland	(8 Total) High conservation value Not sustainable - Old Practice - Illegal under Draft WSP Don't support Environmentally protected catchment - In prohibited dam area Death for the Valley Many species under threat and Greenhouse gas Too high environmental conservation status on vegetation and fauna Ecological significance Unacceptable loss of high environmental values	(3 Total) SEQ No Option Not an option due to ongoing costs and political Can't support GHG or marine destruction

CWG members compared the social impacts of the options by nominating whether or not “I can live with” each option and why. The table below summarises the results and the reasons for each member’s view. Members were not obliged to give their opinion.

Table 2: Social Impacts of the Options

OPTION	Raise Clarrie Hall Dam	New Byrrill Creek Dam	Pipeline to SEQ Water
I can live with this option because:	(6 Total) Minimal impact socially - intact landholders needs to be met. CHD already damaged Least affected willingness of locals for shire benefit Community understand and have made provisions for the impacts. Support CHD 2 nd Option More acceptable to increase dam wall height than a new dam at Byrrill Creek	(2 Total) Support BCD 1 st Option Number affected will benefit the whole shire with secure water supply	(1 Total) People will support it

OPTION	Raise Clarrie Hall Dam	New Byrrill Creek Dam	Pipeline to SEQ Water
I don't know / am not sure	<p>(2 Total)</p> <p>Don't believe we have adequately canvassed social impacts to distinguish between options</p> <p>Data about compensation</p>	<p>(1 Total)</p> <p>Don't believe we have adequately canvassed social impacts to distinguish between options</p>	<p>(5 Total)</p> <p>Piped water supply uncertain</p> <p>SEQ – Politically unacceptable</p> <p>Least social impact compared to Dams but environmentally unacceptable</p> <p>Blank sheet (no comment)</p> <p>Insufficient info on SEQ option</p>
I cannot live with this option because:	<p>(1 Total)</p> <p>Sacred sites flooded, farmers lose prime land or is cut up income lost</p>	<p>(6 Total)</p> <p>Valley people and accesses torn apart total decimation</p> <p>People will oppose it vehemently</p> <p>Don't support: High ecological area required for future generations</p> <p>BCD loss to future generations of a major ecological asset</p> <p>Sacred sites, too many homes lost main access lost.</p> <p>Too much dislocation of community.</p>	<p>(2 Total)</p> <p>Can't justify power use and marine loss</p> <p>Short sighted unsupported by other parties. Many residents will be affected through this development</p>

General Discussion

The group considered that these results showed:

- There's a trend
- More information is required to adequately assess the Pipeline to SEQ Water.
- The Clarrie Hall Dam is preferred over the Byrrill Creek Dam if one of these options proceeds
- Social impacts are not as big an issue as environmental impacts

We need to look at worst case scenarios and make the tough decisions required to ensure we plan for access to water for all.

Council's decision should emphasise the big picture and focus on the good of the entire Shire now and into the future.

I don't think any of these options are suitable & cannot be classified using an MCA.

Clarrie Hall Dam

It is better to impact on environmental and social values which have already been compromised, however being mindful of the people and environmental values which will be affected.

By raising Clarrie Hall dam, Byrill Creek will remain an environmental asset to the Shire.

Least impact option and takes care of the required spillway fix.

Byrill Creek Dam

Too high Social, Cultural Heritage & Environmental problems to be considered an option.

Byrill Creek is designated as being of high conservation value including high diversity of Schedule 1 & 2 wet fauna species and very high diversity of wet flora species by NPWS (DECC) in the Stressed Rivers Assessment Report. Conservation of Biological Integrity is about preserving natural areas of High Conservation Value for their intrinsic worth. Byrill Creek is one such area.

Pros

- Alternative catchment of rain
- Council owns most of the land
- Clean catchment, surrounded by State and National Parks
- Water supply security
- Reduced compensating costs
- Quality in sourced water

Cons

- Area is HCV
- Local lifestyle disturbances
- Best location for rehabilitation.
- New road alignments required.
- Rehabilitation works done.

Toughest choice, but in terms of long term water security this may be our best option.

Byrill Creek Dam is contrary to state policy of no more dams and every effort must be made to protect the environment. It is more expensive than CH Dam and will have a lower capacity.

If council approved the Byrill Creek dam option, a high conservation area would be lost to future Tweed generations, as a place of beauty and tourist destination for visitors.

Pipeline to SEQ Water Grid

Pipeline to SEQ very difficult politically and too many legislative problems. Plus large ongoing pumping cost, large carbon footprint, enviro problems (linked with Tugun Desal Plant) and Cultural Heritage problems.

Ratings for the pipeline options should reflect the whole water supply system enabled by the pipeline linkage, not just the pipeline itself. Eg the energy costs associated with the SEQ pipeline regardless of whether this is adequately reflected in any contractual arrangement.

SEQ will be dumping their waste (brine) on our doorstep. Desalination plants are a death sentence to marine life and power usage exacerbates the already fragile/unredeemable GHG situation

When SEQ water Grid Manager has not guaranteed supply of bulk water supply why does the WaterTweed project persist with failed Pipe options when other more suitable side options for water supply are available?

Contingency Option

Groundwater : Cultural Heritage problems , Enviro problems: impacts on greater water table unknown & Farmers don't want it. Rous Water doesn't have enough water for themselves let alone share it

When Rous Water has not guaranteed supply of bulk water supply why does the WaterTweed project persist with failed Pipe options when other more suitable side options for water supply are available?

The CWG cannot recommend this option as it is a contingency.

Weightings

Assessment

CWG members compared the environmental and social criteria and nominated which is most significant and why. The table below summarises the results and the reasons for each member's view.

Table 3: Are Social or Environmental Criteria more significant?

CRITERIA	RESPONSE
ENVIRONMENTAL	<p>(6 Total)</p> <p>80,000+ are coming here in future because of the environment. Concrete and highrise are not attractive</p> <p>ENV (5) > SOC (3) – it is finite irreplaceable resource</p> <p>Save the environment - secure the yield – its all important</p> <p>Blank sheet (no comment)</p> <p>Sacred site, 60,000years of history. Why do we all live here? – heritage site, a special beautiful environment</p> <p>Society is only a part of the environment</p>
BOTH	<p>(6 Total)</p> <p>Inter-related</p> <p>Environment equally important / Socials is important – to save more available water is good for the environment</p> <p>Both important – water most important</p> <p>Both related</p> <p>Environmental issues have given us the society we have today. To drastically alter the environment will impact on the society, creating extreme social unrest.</p> <p>I won't have the luxury of being single issue focussed. I started the argument for the sake of it. Truth is I cannot separate one from the other....I have so much more to uncover, investigate, learn and quite possibly have a ball over. However I am going to have to make a decision and I will, when I have all the info.</p>
SOCIAL	<p>(0 Total)</p>

Discussion

Within the CWG no one feels that the social criteria are more important than the environmental criteria. Six members feel environment should be weighted more heavily, while six members believe social and environmental issues should have equal weightings.

We live in an area which has world heritage status – The environmental significance is what drew people here in the first place (over millennia). We have a sacred mountain in the middle. We must preserve it – to destroy it is mindless.

If there is no environment – there is no society

Environment is the most important factor. We have got available water here now without a dam option. These aren't the only options. It is a complex problem. Social in terms of more people to the valley is highly critical decision – environmental are we going to destroy a pristine area. Both are exceedingly important.

General consensus: we can't have one without the other.

Process review and further work focus

Assumptions or givens

Population projections

The CWG is concerned that the water supply augmentation options process is premised on population growth predictions that the CWG is not able to assess the validity of.

Success of demand management

The CWG would like assurance that Tweed SC's demand management strategy is benchmarked against national and international standards, and undergoes independent assessment to demonstrate this, otherwise a needless Dam option could proceed.

Large scale Recycling, Storm Water Harvesting & Large Water tanks are the only environmentally & socially sustainable way forward for Tweed Shires Water Management

Better marketing of the TSC Integrated water management strategy as a holistic package, and reducing the dominance of technical literature, are required so the Tweed community better understand the steps being taken to conserve, protect and augment the future needs of the Shire.

Adequacy of the evidence base

From the evidence we have Byrill Creek must be removed from the list of viable options.*

Dams all have problems with water quality and emissions but we have not been given guidance on this.

The CWG has not seen any evidence of how Tweed SC has considered climate change scenarios and impacts in their decision-making process.

* one CWG member wished to register an objection to the inclusion of this statement

Scope and focus

Other options beside dam construction have been inadequately addressed and show a lack of willingness/innovation to adopt other water saving and storage issues (storm water retention, recycling).

There are no figures on environmental cost. The cost of water recycling and dam construction cannot be fairly compared until environmental costs are incorporated into the overall dam costs.

The Multi-Criteria Analysis (MCA)

The overall list of criteria seems reasonable. However the process does not seem to have adequately considered climate change adaptation and mitigation.

A replacement value and opportunity cost need to be factored in to better reflect the environmental value. Dollar values are a coarse measure of environmental worth but would assist in making a fairer assessment between options. Once true environmental costs have been assessed the planning process needs to revisit the coarse screening model and re-evaluate \$/ML

We as a group have learnt a huge amount from each other; some good (how hard working and honest the water dept guys are) and some bad (how politics plays more of a part in decision than does reason).

Community Consultation

Process and starting point

Full Environmental Impact Assessments needed to be carried out PRIOR to any decisions on the short-listed options to determine the preferred option.*

ALL OF THE NINE OPTIONS should have been part of the so called community consultation from the beginning.**

The CWG has felt constrained by the timing and time constraints, data limitations and focus of community input on ratings of 2 specific criteria (environmental and social) for 3 predetermined water supply options.***

* one CWG member wished to register objection to the inclusion of this statement; they believe correct approach was taken - not spending excessively by studying lots of options in depth with the preferred decision based on available information.

** three members wished to register objection to the inclusion of this statement; one felt there was already too much information to comprehend, one felt it is impossible to go to the public with more options, one believed it was a sensible place to start.

*** two CWG members wished to register objection to the inclusion of this statement; they did not feel constrained

Effectiveness, efficiency and appropriateness

I do not support any of the options without first demonstration by council of tangible benefits in water management and recycling.

Community consultation has not been properly achieved within the CWG : items many members wanted to discuss meaningfully were not allowed, or "that we would look at them later" (which didn't happen) & the "Agenda" took precedence

The purpose if the CWG is not to make a decision but to provide information to council to help *them* make a decision. It has been made clear that advice and information from members of the CWG is not relevant or difficult to incorporate into the decision making process.

Broader Community Input

The CWG fully supports Council's desire to engage the community in the Tweed Water Supply Augmentation decision-making process.

Joanna has done far more consultation with the broader community than TSC eg Survey, Uki Meetings, Byrrill Creek Meetings, Newsletters & 100's of emails

The process I feel has been tokenistic, due to the late involvement – and limited involvement, of the community

Appropriateness of Information supplied

Tweed SC has been very forthcoming in sharing data and information with the CWG.*

Council has provided as much data as it could have given the limited time.*

* one CWG member wished to register objection to the inclusion of these statements

Suggestions for future community engagement

Majority of Community only speak out when there is something to complain about - So just implement radical water saving devices in each new development and rebate incentives for retrofitters

Needed a mechanism to better engage the broader community who are generally complacent unless you discuss with them directly.

While the CWG has learnt a lot from the process adopted, the CWG felt uncomfortable speaking on behalf of the whole Tweed community, and encourages Council to seek additional ways to engage the whole community in this process in the future.*

* four members wished to register objection to the inclusion of this statement; they all felt comfortable representing their particular stakeholder groups.

Future work / Change of focus

Alternative water sources

Other bulk water supply options identified in the National Water Initiative (NWI) Australian Water Reform 2009 and not included in the coarse screening include: harvesting of bulk stormwater and maximised use of greywater systems and reuse of purified water

With all the advice that we are getting on global warming and consequent climate change we need a very open mind on recycling water, whilst bearing costs in mind.

Water Recycling before DAMS*

* one CWG member wished to register objection to the inclusion of this statement.

Qualifications

Planning for Water Supply

Contingency options should be reviewed every two years especially where new innovations in water recycling and use come on line and evidence that they are economically feasible to apply.

Management Plans

State and National water flow requirements will have to be adhered to, and adjusted accordingly.

At CHD the denudation of vegetation should be done by barge to reduce the need for further road infrastructure, which creates more environmental damage.

At CHD an emergency plan should be established for the village of Uki, and surrounding areas if the dam should fail; including during construction.

Environment

Unless water quality improves the Tweed River waterways will become 'terminally ill'. Improved environmental flows together with less contaminating water discharges to the River system are required to allow residents to enjoy a healthy Tweed River.

The Tweed community is concerned that council is taking too little action in the total water cycle of new satellite cities which are expected to accommodate a predicted 76198 persons by 2036.

There needs to be a more thorough investigation of the cost. Without that the initial coarse screening is biased. The current options of the dam, and their associated costs mean that the environment (and people's houses) are subsidising urban water use – and wastage.

Population Policy

Water and population need to be linked. Without considering population growth in the context of ultimate resource scarcity, that is acknowledging there is a finite limit of water available to be trapped in the system (which can support a fixed number of people).

Population growth at current levels is unsustainable. The current urban model is flawed.*

With controlled land release, money could be set aside for the best long term option rather than expediency.

* one CWG member wished to register objection to the inclusion of this statement; they believe it can be examined so as to be sustainable.

Town Planning

The best elements of urban planning need to be adopted by TSC (why can't TSC be leading edge?) in tandem with maintaining and enhancing the environmental values of the region.

Enlightened LEP addressing the future needs of community and the environment. The Tweed Shire LEP should address the issue of preserving why people live or would wish to live in the Tweed. This includes those values, both environmentally and socially, which will be destroyed for future generations through a develop or bust approach, filling the pockets of a parochial few at the detriment of the greater good to meet their demands.

Miscellaneous

The current ratepayers will be paying for the future water users. A separate charge should be imposed on the new developments for the additional costs involved with the upgrade of the water supply.

Concerns over compensation because the last time (at CHD) the council were, to say the least, economical with the truth.

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