



SUBMISSION: Next Steps for Fresh Water

Date: 22/04/16
Name of Submitter: Irrigation New Zealand Incorporated
Postal Address: Lincoln Research Centre
PO Box 69119
Lincoln 7640
Telephone: 03 341 2225
Mobile: 027 4966 314
E-mail: acurtis@irrigationnz.co.nz

A handwritten signature in black ink, appearing to read "Andrew Curtis".

(Andrew Curtis, CEO IrrigationNZ)

IrrigationNZ is keen to further engage with the ministry over the points made in this submission.

OVERVIEW

1. IrrigationNZ (INZ) is a national body that promotes excellence in irrigation. INZ represents the interests of over 3,600 irrigators (irrigation schemes and individual irrigators totaling over 360,000ha of irrigation (over 50% of NZ's irrigated area). It also represents the interests of the majority of irrigation service providers (over 150 manufacturers, distributors, design and install companies and consultancies).
2. An irrigators business is founded on certainty. This includes access to a reliable water supply for irrigation and the ability to dynamically farm their land. It is this certainty that enables investment and continuous improvement in resource use efficiency and thus good environmental performance. Without certainty they and the considerable flow-on benefits to the regional economy are severely impacted. The national economy would also be impacted upon given NZ is predominantly an agricultural export based economy.

Submission

| Issue | Relief Sought |
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| <p>1. Maintain and improve applies to a Freshwater Management Unit (FMU)</p> <p><i>This is a logical approach and is supported.</i></p> | <p><i>Support</i></p> |
| <p>2. Maintain and improve means attributes must remain within an attribute band</p> <p><i>Successful freshwater management requires an outcome focused approach. The freshwater objectives for each FMU, set through a community value judgement process, are the outcome – they are what must be maintained or worked towards (improved). In contrast the attributes contained within the National Objectives Framework (NOF) are presently biophysical indicators that help to ensure an objective is being maintained or worked towards over time. There are multiple ways of achieving a freshwater objective through different combinations of different attributes and they can be ‘traded-off’ against one another to achieve a freshwater objective. Phosphate, nitrate, sediment, pathogens, flow, water temperature, riparian and aquatic habitat restoration can all be used in differing combinations (the limits set for them) to achieve a common freshwater objective. It would therefore be limiting to the growth of NZ’s primary industry driven economy to restrict all attributes to remain within their attribute band. The NOF needs to provide a framework that allows for future development whilst also maintaining the overarching freshwater objective.</i></p> | <p><i>Oppose</i></p> |
| <p>3. Addition of MCI as a measure of water quality</p> <p><i>MCI is a very good indicator of aquatic health. However, if it is to be introduced into the NOF as an attribute greater granularity is required, for example gravel bottom, muddy bottom and ephemeral streams each have a very different MCI score ranges due to the aquatic life that is naturally present within them. Support for the inclusion of MCI within the NOF is therefore conditional on the use of different river / stream classes.</i></p> | <p><i>Conditional Support</i></p> <p><i>MCI attribute has a range of stream / river classes</i></p> |
| <p>4. Exemptions for Significant Infrastructure</p> <p><i>Exemptions only for significant infrastructure are opposed. Lowland NZ has been subject to much anthropogenic influence. Infrastructure of various scales is common place, flood and drainage schemes, dams, and storm water networks for examples. ‘Get out of jail free’ cards should not be provided to those that own and operate significant infrastructure. If exemptions are to be provided for then they should be available to infrastructure of any scale. Alternatively, a better solution may be the application of appropriate transition times (relating to the degree of anthropogenic change) over which a freshwater objective is to be achieved.</i></p> | <p><i>Oppose</i></p> |

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| <p>5. Coastal lakes and lagoons</p> <p><i>This provides clarity for coastal lakes and lagoons and is supported</i></p> | <p><i>Support</i></p> |
| <p>6. Stock Exclusion</p> <p><i>The concept of a national regulation for stock exclusion and defined timeframes to achieve these within is sound. However, there needs to be a mechanism to allow for exemptions. For some scenarios (high country stations for example) it is impractical and cost prohibitive to place blanket expectations for certain slope classes and farm types upon them. An exemptions pathway that allows for a Farm Environment Plan approach to assess risk and apply stock exclusion accordingly provides a practical solution to this.</i></p> | <p><i>Conditional Support</i></p> <p><i>Provide farm plan exemption pathway</i></p> |
| <p>7. Technical Efficiency Standards</p> <p><i>Technical efficiency standards should apply everywhere and to all users of water regardless of a catchment / zones allocation status. This will drive investment in the efficient use of water, minimise nutrient losses to the environment, avoid costly future claw-back processes (human capital and financial), and help ensure the wider community derives the best value from the use of the water resource.</i></p> <p><i>There needs to be a multi-stakeholder approach to the development of technical efficiency standards to ensure there is equity between different users and that any standards developed are practical and achievable.</i></p> <p><i>IrrigationNZ with support from MPI SFF has produced a detailed report in 2012 explaining irrigation efficiency. This is available on the IrrigationNZ website:</i></p> <p>http://irrigationnz.co.nz/wp-content/uploads/Irrigation_efficiency_final-23-May-2012.pdf</p> <p><i>Technical efficiency standards need to consider both irrigation system efficiency and where scheme infrastructure is involved in providing water to the farm gate, conveyance efficiency. Improvements in conveyance efficiency are often complex multi-million dollar infrastructure projects, any technical efficiency expectations that relate to conveyance efficiency must therefore have realistic timeframes set around them. Importantly for some scenarios there are limitations as to the conveyance efficiency that can be achieved. When moving large volumes of water open-channels are the only feasible option, the Rangitata Diversion Race for example, and for scenarios such as in Central Otago where small head races run around hillsides for tens of kilometres collecting run-off from multiple streams again open channels are the only feasible option.</i></p> | <p><i>Conditional Support</i></p> <p><i>Standards apply everywhere and to all users (rural and urban)</i></p> <p><i>Stakeholder grouping to develop standards</i></p> <p><i>For irrigation standards need to consider irrigation system, conveyance and reliability</i></p> |

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| <p><i>For irrigation the other component that needs consideration alongside technical efficiency is reliability of supply. Reliability of supply greatly impacts upon the ability to invest in and apply technical efficiency, both infrastructure and practices. For example, due to the poor reliability of supply in some parts of Central Otago highly efficient spray irrigation systems are now commonly seen in tandem with less efficient flood systems on the same farm. Spray being used to irrigate the area for which there is a reliable allocation and flood being used for the unreliable.</i></p> | |
| <p>8. Good Management Practice Standards</p> <p><i>Good Management Practice standards should apply everywhere and to all land uses / discharges (rural and urban alike) regardless of a catchment / zones water quality status. This will drive investment in appropriate technologies and practices, minimise nutrient losses to the environment, avoid costly future claw-back processes (human capital and financial) occurring, and help ensure the wider community derives the greatest value from the use of its natural resources.</i></p> <p><i>There needs to be a multi-stakeholder approach to the development of good management practice standards to ensure there is equity between different users and that any standards developed are practical and achievable.</i></p> | <p><i>Conditional Support</i></p> <p><i>Standards apply everywhere and to all users</i></p> <p><i>Stakeholder grouping to develop standards</i></p> |
| <p>9. Require Councils to apply standards at defined times</p> <p><i>A technical efficiency standard only needs to be applied to a consent once during its term, preferably upon its issue. This needs to be made clear to avoid making the current administrative allocation system even more clunky and bureaucratic.</i></p> | <p><i>Conditional Support</i></p> <p><i>Standard to be applied once during the consent term</i></p> |
| <p>10. Better Enabling Transfer</p> <p><i>For irrigation better enabling water transfer is important if the highest value is to be gained from the use of water over time. Despite this there is much public concern over transfer. Should a person be allowed to 'transfer their consent to another' or should the consent be 'given back to the pot' if it is not being utilised? It is INZ's view that if a 'technical efficiency standard has been applied' and the consent has been 'given effect to' then the answer should be yes it should be transferrable. Such an approach removes financial windfalls from speculative behaviour – this is where the public concern lies. To resolve this issue further there needs to be national clarification on what defines 'given effect to'.</i></p> | <p><i>Conditional Support</i></p> <p><i>Better define 'given effect to'</i></p> <p><i>Differentiate between permanent and temporary transfer recognised and provided for</i></p> |

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| <p><i>For irrigation permanent transfer is limited in NZ due to; the lack of storage and distribution infrastructure; the high capital cost of entry (required investment in abstraction and application equipment with its accompanying technical efficiency standards); the resulting loss in capital and land value if water is permanently transferred to another land parcel. As a result, permanent transfer of water predominantly occurs through land sales that may then result in land use change to a new more profitable enterprise.</i></p> <p><i>Temporary transfer is where the value currently lies to NZ. This was well demonstrated in Canterbury during the drought season of 2014-15. During the drought some consent holders fully exercised their seasonal volumes but others had not. The resulting process for temporary transfer was clunky and slow and resulted in an unnecessary loss of production which in turn impacted upon local communities. Standardised consents and model plan provisions would help avoid such scenarios repeating themselves.</i></p> <p><i>Due to the current clunky consent transfer process, irrigator user groups /collectives have instead evolved to better enable temporary water transfer. Irrigation schemes have also begun to explore how transfer is better enabled between their shareholders. Both scenario reflect the co-operative nature of NZ farming. There would be benefit in collating the diverse range of solutions adopted to date and providing this as guidance to both councils and irrigators. There would also be benefit in understanding the issues and barriers encountered and exploring if these could be resolved through future legislative change or other interventions.</i></p> <p><i>The fresh steps document proposes greater Information availability through public registers of consents and water use. INZ is unsure as to how this would better enable transfer given that it is temporary transfer where the gains lie for NZ. Transparent real-time data is the enabler for temporary transfer. However, this is best left to user groups or irrigation schemes to work through in conjunction with commercial service providers. Any central and local governments intervention would be to incentivise such initiatives. If information on water allocations and use is to be provided to the general public, it needs to be accompanied by a ‘how it is allocated in that particular region’ along with ‘the range of expected water use for that season’. Otherwise the register becomes a source of misinformation for those parties with ulterior motives.</i></p> | <p><i>Provide guidance around the implementation of water user groups</i></p> <p><i>Qualify any registers of consent allocations and water use</i></p> |
| <p>11. Guidance to Least Cost Approaches to Over Allocation</p> <p>It is unclear what this guidance will entail and what will be the process for developing it. Until this is provided the proposal cannot be supported.</p> | <p><i>Further Detail Required</i></p> |

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| <p>12. Increase Ability for Councils to Recover Costs</p> <p><i>No detail is provided as to the mechanism for cost recovery and how the cost is to be derived, it is therefore difficult to comment, and the increased ability for Councils to recover costs is opposed.</i></p> <p><i>The use of cost recovery mechanisms, such as s36 charges for consent holders, is becoming commonplace. However, if individuals are being charged directly for Council monitoring and research programmes there needs to be much greater engagement and accountability than currently occurs. This is mainly due to the Local Government Act process (Annual Plan) through which charges are set involving minimal engagement with stakeholders.</i></p> <p><i>There are also issues with consent holders ‘doubling-up’ on monitoring costs that must be resolved. Many consent holders are required to undertake monitoring as part of consent their conditions. Frequently this monitoring is being repeated through the Council monitoring programmes due to perceived ‘data quality issues’ or the science arm of a Council having no understanding of the data the compliance arm collects. To resolve this there is the need for Councils to be compelled to better align compliance monitoring with their general monitoring programmes and for a fast track pathway to help more easily rationalise consent conditions.</i></p> <p><i>If the decision is made to go ahead with this proposal, there needs to be engagement with stakeholders to develop the detail around the mechanism for applying, and process for setting the cost.</i></p> | <p><i>Oppose</i></p> |
| <p>13. Clarification of Te mana o te Wai</p> <p><i>There is a need to provide greater clarification around Te Mana o te Wai so this is supported</i></p> | <p><i>Support</i></p> |
| <p>14. Iwi and hapu Relationships with Freshwater Recognised</p> <p><i>Iwi and hapu values should be recognised and considered when deriving Freshwater objectives for an FMU, however these should sit alongside the range of other values as recognised in the NOF. This means no priority should be given to them. The only exception to this is if Crown-iwi settlements state otherwise.</i></p> | <p><i>Conditional Support</i></p> <p><i>Iwi values must be considered alongside other values</i></p> |

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| <p>15. Iwi Participation in Decision Making</p> <p><i>As per INZ's RLA Bill submission there needs to be a clear line drawn between iwi involvement in the development phase of a draft plan (whether through collaboration or consultation pathways) and once a plan has then entered into the formal Schedule 1 hearings process. This is to ensure conflicts of interest are managed. This is important as a growing number of iwi have significant commercial interests.</i></p> <p><i>INZ does not agree with iwi direct involvement in the consent or enforcement process. For example, the plan process needs to clearly outline the consenting requirements if Cultural Impact Assessments are required, including; timeframes; cost; what matters need to be considered. Consent applicants must not be left to the whim of local iwi as is presently occurring in some regions. Such an approach will prevent inappropriate behaviour and clearly delineate governance from management.</i></p> <p><i>INZ does not agree with the 'rohe agreement' role reversal between iwi and Councils from the RLA Bill. Council's must take the lead on drawing up agreements not iwi. However, INZ does agree with the need for such agreements, clearly setting out how Councils and iwi will work together and including clear timeframes around processes.</i></p> | <p><i>Oppose</i></p> |
| <p>16. Water Conservation Orders</p> <p><i>Water Conservation Orders are an outmoded means of managing NZ's freshwater resources. At the very least they need to be integrated into the collaborative community limit setting processes under the Freshwater Management NPS. This will avoid the inefficiency and tension associated with re-litigation and incompatible outcomes from the two processes.</i></p> | <p><i>Support</i></p> |
| <p>17. Implementation Support for iwi</p> <p><i>The principle that should be applied to implementation support is it is either made available to all stakeholders or not at all. There is considerable time and resources required in the numerous limit setting processes happening throughout NZ. Government seriously needs to consider its package of support for all stakeholders, particularly if the resource hungry collaborative processes are to remain successful.</i></p> | <p><i>Conditional Support</i></p> <p><i>Implementation support is widened to all stakeholders</i></p> |
| <p>18. Safe Drinking Water for Marae's</p> <p><i>Funding should be means tested. For pre-settlement iwi in areas of socio-economic deprivation this is an appropriate policy. For post-settlement iwi with considerable asset bases this is not.</i></p> | <p><i>Conditional Support</i></p> <p><i>Means testing required</i></p> |

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| <p>19. Freshwater Improvement Fund</p> <p>It is important that the criteria for the Freshwater Improvement Fund are broadened to allow for environmental infrastructure solutions. The 4th LAWF report clearly recognised the importance of catchment scale interventions for providing solutions to over-allocated or degraded catchments. These included water storage, groundwater recharge and stream augmentation. The challenge is how such infrastructure is paid for?</p> <p>To date the expectation has been the new economic users of the resource, whether they be irrigators, industrial, stock or domestic, pick up the cost. They finance the new infrastructure that provides for their needs but also provide the wider catchment with a solution to its legacy environmental issues. The consequence of this often results in proposals not stacking up financially. When broken down into a cost-benefit analysis of who pays and who benefits from the environmental restoration component, questions are raised as to the appropriateness of such an approach given the wider community (local and national) is effectively getting a free-ride.</p> <p>An example of this would be the Hunter Downs irrigation scheme proposal where there is an expectation it will provide an augmentation solution that resolves environmental legacy issues in the Wainono Lagoon. The cost of building and operating infrastructure to augment the Wainono Lagoon with 1 cumec of low nutrient alpine water from the Waitaki river and in addition providing spring flushing flows for up to 5 days of 4 cumecs, is approximately 10% of the total Hunter Downs irrigation scheme cost. As stated above augmentation is required to resolve the environment issues currently facing the lagoon. It will also offset the impacts of further intensification in the catchment and importantly allow existing land users to only have to improve to good management practice standards. In turn this will minimise the socio-economic impact of restoring a degraded environment and placing new environmental limits upon the wider community. However, this additional cost will push the price of Hunter Downs water supply for new users to the margins of affordability or alternatively it will result in a reduced level of service. Both create much risk to new users from a resilience perspective, from market shocks or climatic events for examples. If a cost-benefit analysis is undertaken of the augmentation component of the infrastructure development, it would clearly show the environmental gains and wider socio-economic benefits from the augmentation component are community wide and should therefore be apportioned accordingly, through a combination of differential targeted rates and a contribution from the crown.</p> <p>http://www.hunterdowns.co.nz/</p> | <p><i>Support</i></p> |
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Another example is the proposed Klondyke storage ponds off the Rangitata Diversion Race, where approximately 20% of the proposed 50 million m³ storage capacity will be used for Managed Aquifer Recharge in the Hinds and Valletta ground water zones. This will alleviate a groundwater nitrate legacy issue whilst provide a catchment wide solution to enable farming to meet the new environmental limits without significant economic impacts individually and therefore upon the local community. Again, if a cost-benefit analysis is undertaken of the recharge water storage component of the infrastructure development, it would clearly show the environmental gains and wider socio-economic benefits are community wide and should therefore be apportioned accordingly, through a combination of differential targeted rates and a contribution from the crown.

http://www.rdrml.co.nz/images/documents/Klondyke_Info_Pack_April_2016.pdf

A final example would be the Waimea Dam where a community water storage project is proposed to allow the minimum flows on the Waimea to be raised in-line with community values for recreation and freshwater. This resolves the legacy issue of over-allocation. It will also provide existing high-value horticultural irrigators with a reliable water supply and future proof the municipal water supplies of Richmond and Nelson. An economic assessment of the costs and benefits of the Waimea dam clearly demonstrate that if the new limits are put in place without the dam the regional community is significantly impacted. There is also an impact nationally if the dam does not proceed. This again demonstrates that there should be a contribution to the infrastructure development from local rates and the crown.

<http://www.eda.co.nz/edanew/wp-content/uploads/2014/10/NZIER-Waimea-Dam-Economic-Assessment-Report-21-October-2014.pdf>