Advocates for the Tongariro River – Feedback on 2023/24 Annual Works Programme

Firstly we would like to thank Grant Blackie and Russell Powell for meeting with representatives of our committee and providing a very informative background on the rationale for the proposed works programme and also an understanding of the constraining factors. In light of this we have no issue with the projects that have been prioritised for this year's programme. We do note however that the gravel removal on the island adjacent to Kohineheke reserve which was a priority in the 2021/22 works plan does not appear to have been carried out, and we are unsure if its absence from this plan is because the view on its importance has changed (in which case why?), or whether it is taken to be "work in progress" from the previous plan. We also note that the last cross-sectional survey of the river was carried out in 2016 and, for understandable reasons, is overdue for its five yearly refreshment. As this provides important data to help prioritise projects, it would be good to see a commitment to having it done as part of this annual works plan.

Our overarching concerns however are about what's missing from the plan, in particular the narrowness of scope with respect to vegetation management within the flood scheme and also with respect to issues upriver of the flood scheme which could impact its ability to cope. In May this year the Advocates for the Tongariro carried out an aerial video survey of the river from the delta to the Waikato Falls. The video highlights the extent of the spread of invasive woody vegetation especially Willow, Broom, and wilding Pine throughout the river and its margins. A copy of the video has been given to Grant Blackie, and we have also attached a number of still shots to this document, the first few within the flood scheme and then the rest up-river to illustrate the wilding and fallen pine issue. We acknowledge Grant's response to our concerns, and do understand the issues of staffing shortages and difficulty in getting approval from land owners for some of the necessary work. Nevertheless, the issues don't go away. We also agree that there needs to be greater clarity of the intended scope of the works to be covered under this and subsequent annual works programmes, and we make the following observations:

Vegetation management within the flood scheme:

From our discussion and from the content of the draft plan, it seems that the current focus on vegetation management is limited to managing vegetation which is contributing to the narrowing of critical river channels for example by encouraging gravel / silt build up on the edges of islands within the riverbed. This seems to be a departure from the much broader focus of previous plans from 2012 onwards which stress the importance of pre-emptive management of all invasive woody vegetation throughout the flood scheme on an annual basis. This is clearly illustrated by the following extracts from some of those plans:

2012:
"Recommended Trigger levels;
 Vegetation. Woody vegetation over 1.5 metres in height within the flood way will be regarded as an unwanted plant. Management of such vegetation will be carried out

on an annual basis through the stop banked river reach".

2013 & 2014:
"The bulk of this area has mostly been mechanically cleared with some of the smaller vegetation established in the last few years sprayed. For the continued elimination of willow and other larger woody species within the floodway further work will be required on an ongoing basis to keep these areas free of dense vegetation that impede flood flows".

2014, 2015, 2016:
"WRC will also be targeting any wilding pine appearing within the flood control scheme. These will be poisoned or felled, and in some cases mechanically chipped".

2015 & 2016:
"This vegetation cover requires continued vegetation management, to control and eliminate woody weed species such as willow, pine and broom. These denser plant varieties can threaten a flood scheme as they can restrict flood flows".

2018:
"Management of this vegetation is also necessary to ensure that high flow events do not result in large accumulations of woody debris in downstream reaches where they have the potential to significantly undermine the SH1 Bridge and the flood protection structures in and around Turangi Township".

2019:
"It is important that vegetation is managed annually to ensure invasive species do not become dominant and uncontrollable".

2021:
"Flood flows can dislodge mature trees and build up a debris barrier under SH1 Bridge. This situation occurred during 2004 flood causing the bridge to be closed due to risk of failure. It is recommended that mature vegetation is controlled through a staged management programme. And that juvenile vegetation is managed annually."

The associated works plans up until 2019 have covered virtually every riverbed island within the flood scheme – we have attached a copy of the 2019 plan as a good example. Some of them state that the work will be carried out over more than one year, which is understandable.

The point is that there is clear recognition in all these previous plans that invasive woody vegetation needs to be continuously controlled wherever in the flood scheme it appears, rather than waiting until it becomes a more immediate threat. This is consistent with one of the Objectives in the original 2012 plan: "Proactive operational river management to pre-empt large scale interventions." Unfortunately it appears that in more recent years the vegetation has reached a level where large scale interventions will indeed be required if action is not taken soon.

Issues up-river of the Flood Scheme

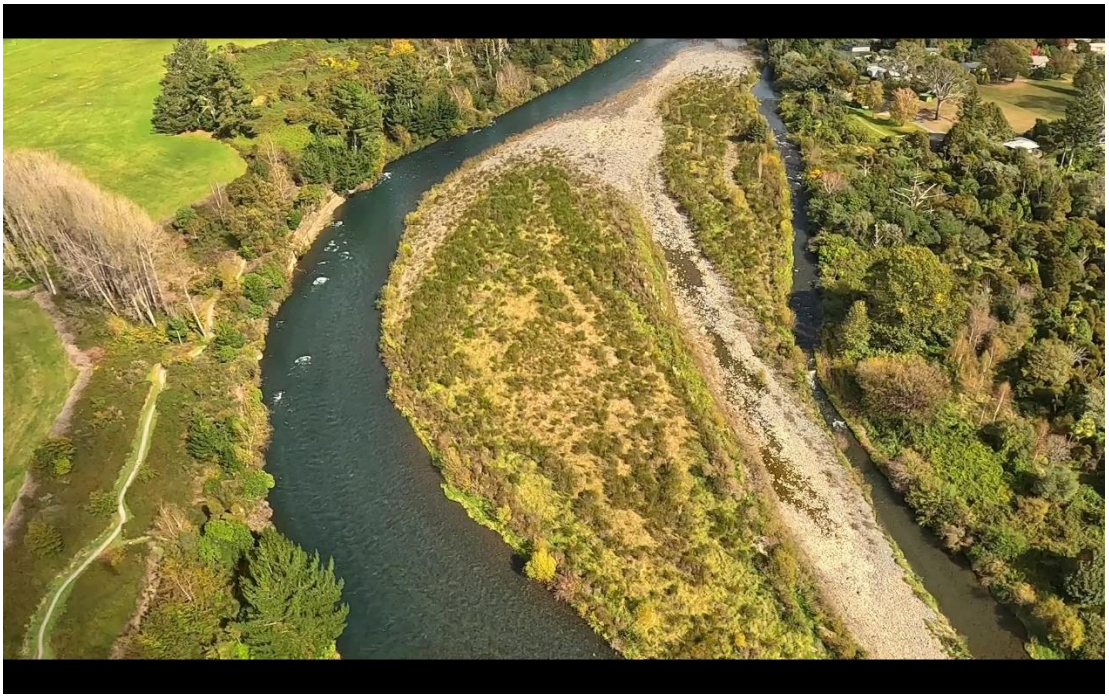
While the location of the flood scheme only extends up-river to the Hydro Pool, the intent of the flood scheme is to protect the township of Turangi from flooding in a 1% AEP event. Therefore if there are issues up-river that could impact the flood scheme's ability to cope, it seems to us that they should be within WRC's scope.

The most serious issue that our video highlights in the upper parts of the river and the adjacent land is wilding pine. Cyclone Gabrielle has resulted in a large number of these being uprooted and they are now lying in the riverbed or at least the flood path. If these were to form a natural dam (or an “unnatural dam” if they got as far as the SH1 bridge), the consequences could be severe. We appreciate that since seeing the video Grant has asked WRC’s hazard team to assess the risk, and we would be very interested to hear their opinion after doing this. What if anything can be done about the trees that have already fallen we can’t comment on, but regardless we think that what this clearly shows is the need for the pro-active management of wilding pine in the vicinity of the river. While this obviously requires the consent and cooperation of the respective land owners, it would seem that WRC is the natural leader for this project from an operational perspective, and that a “whole of council” approach could be beneficial (e.g. river management, hazard management, and biodiversity teams). As with the vegetation control within the flood scheme, the sooner that a start is made the better.

As always AFTR are keen to help in any practical way.

Woody Vegetation not addressed in 2023-24 Plan.

Juvenile Pine, Willow, and Broom below SH1 Bridge



Island Pool Broom Forest

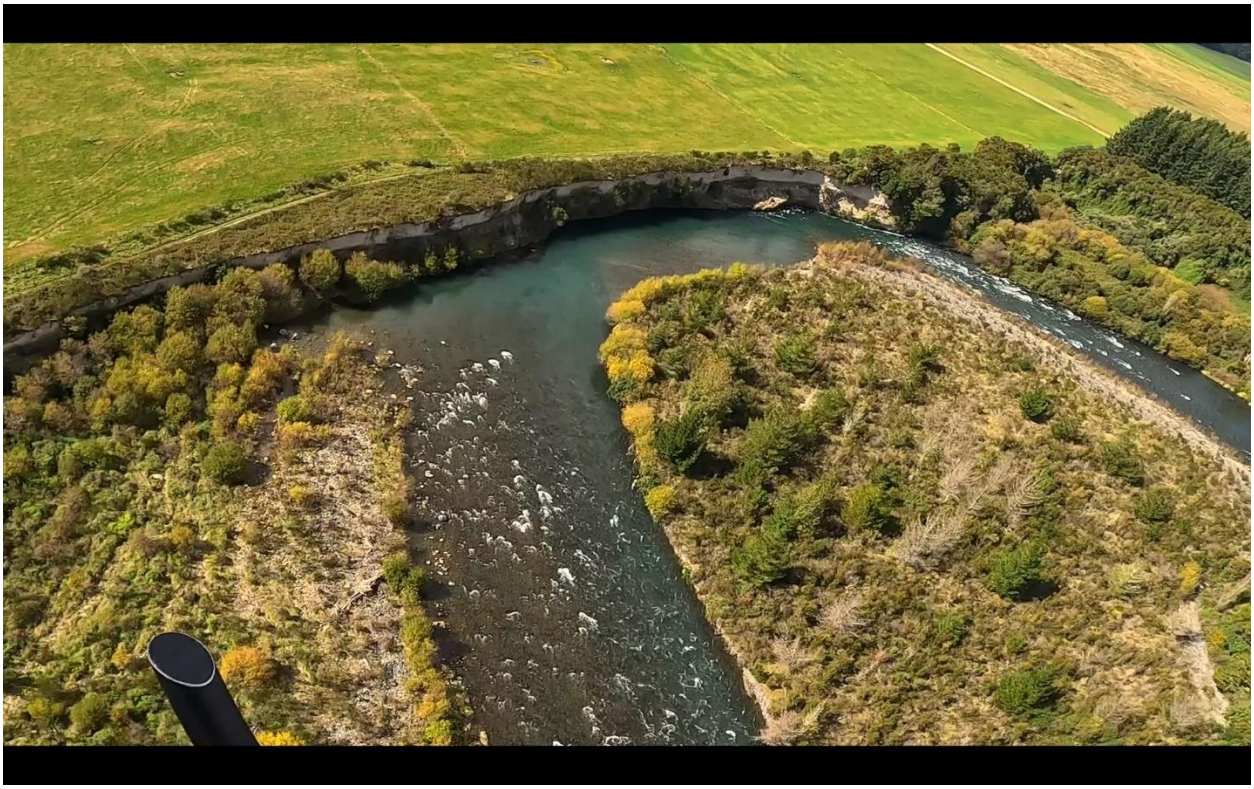
3M High Broom Jungle

5M High Willows

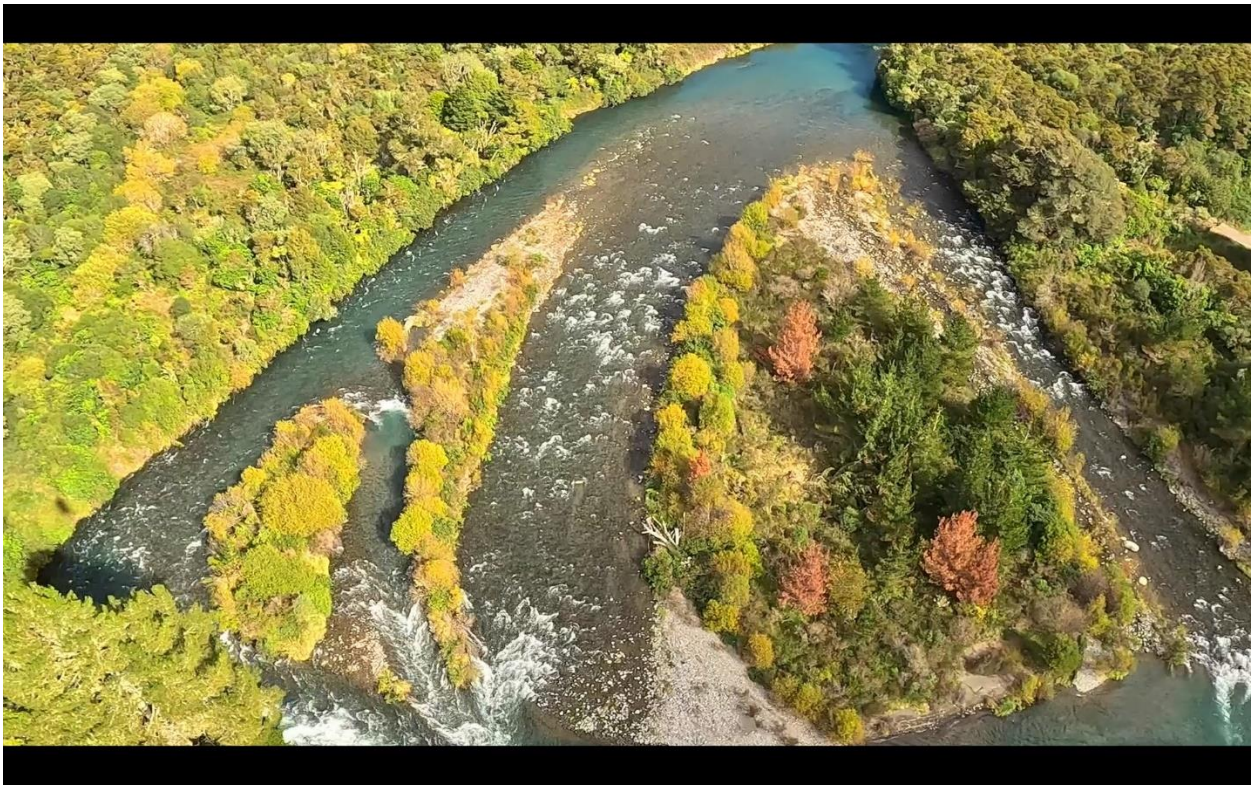
Wilding Pines toppling into river – Island Pool

Willow growth at Reed Pool

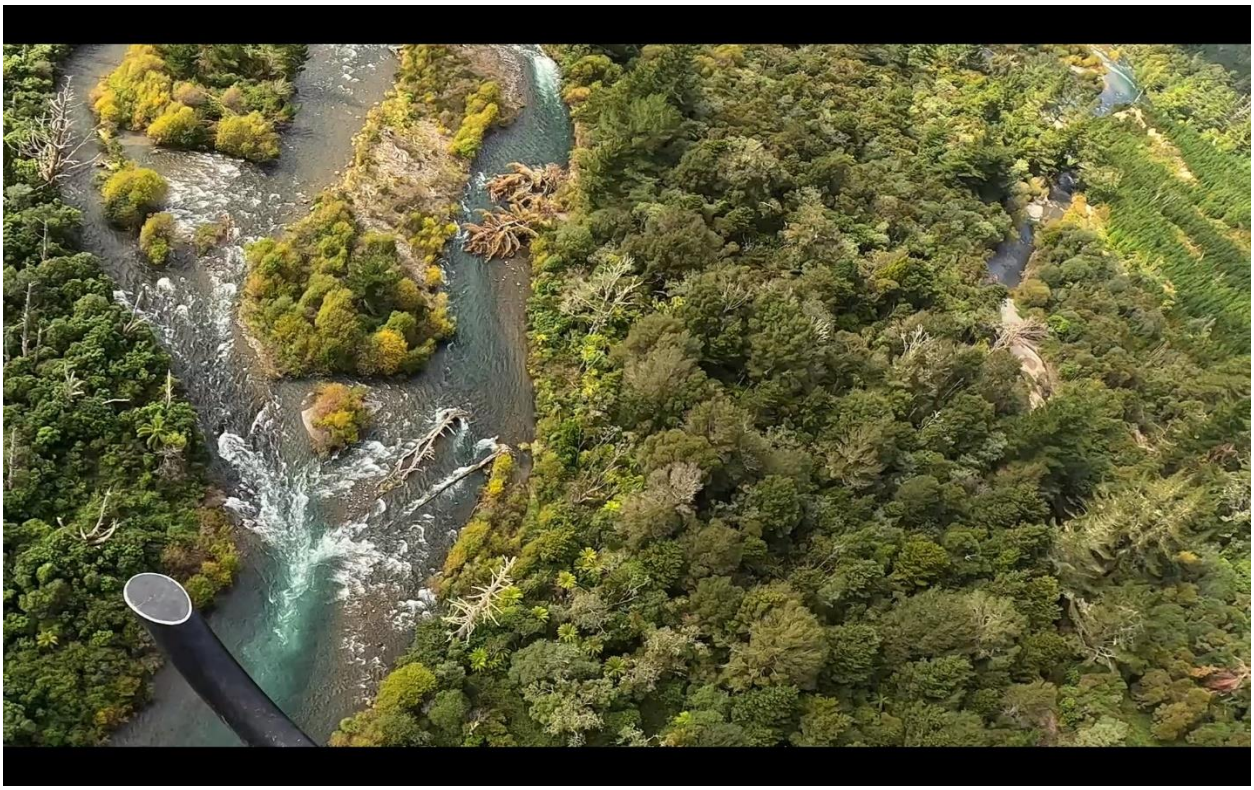
PROBLEMS TO COME FROM ABOVE THE FLOOD PLAN SCHEME



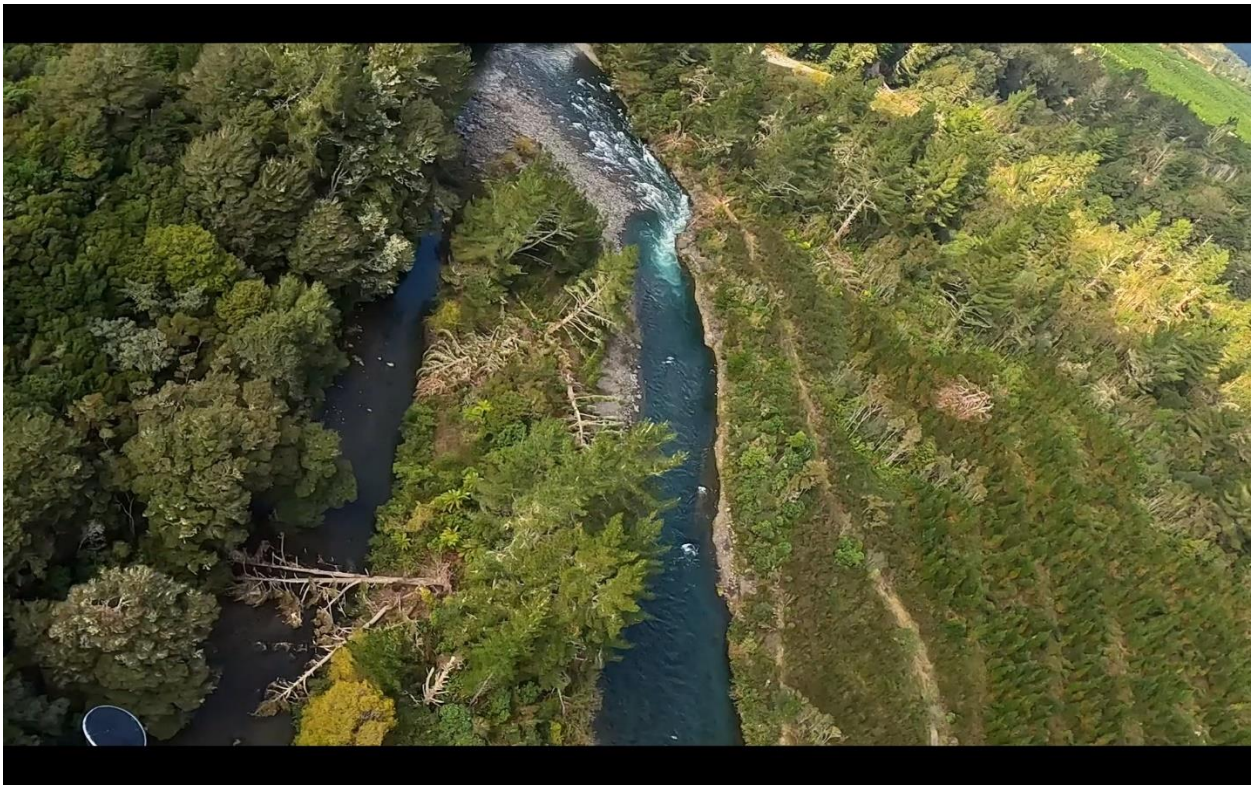
Wilding Pines above Admirals Pool in flood path.



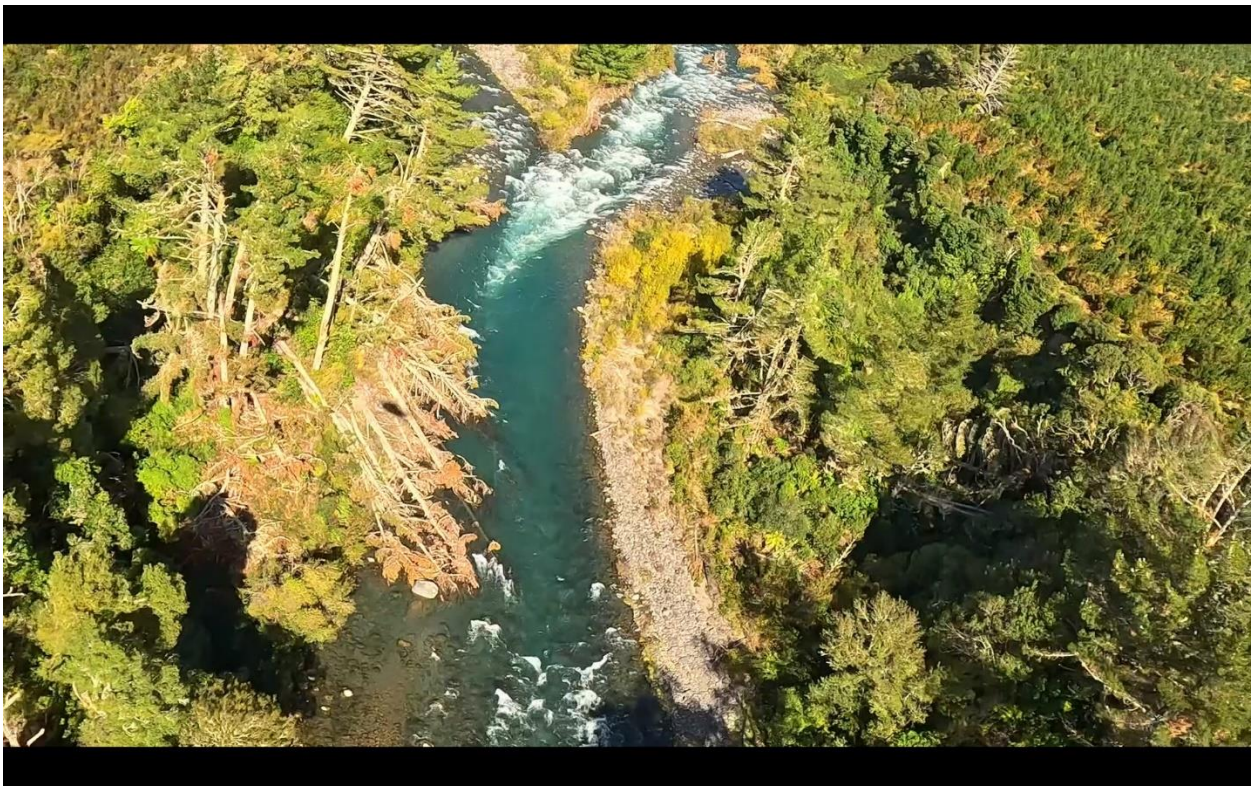
Wilding Pines on island above Duchess Pool



Fallen Pines above Poutu Pool



Fallen Pines Blue Pool to Fence Pool



Fallen Pines – Upper River