

TKURFMP-Floodplain Sub Committee Option Development: Waingawa River - Reaches 14 to 17**Workshop Tuesday 15 March 2016**

Site Visits**CDC Water Race (ID#6)*****Issues discussed:***

- River bed lowering is causing issues with water levels required to operate water race intake.
- Boulders used to ensure water level high enough to feed water race. This requires ongoing work by CDC to maintain this situation undertaken on the advice of GWRC.
- The continued reliance on maintaining stable piles of rock in a dynamic river environment needs to be questioned.
- Increasing in deposit of material on true right bank, shifts flow of river towards the true left bank and threatens erosion in the vicinity of the MDC Water Supply Pipe Line.
- Water race provides habitat for native fish.
- Pool, run, riffle count important for fish migration up stream.



Figure 1: CDC Taratahi Water Race

South Masterton Stopbank Upgrade (ID#31)

Issues discussed:

- Stop bank located very close to river adjoining willow established along the river corridor.
- Unsure what material was used to build the stop bank and considered unlikely to be in good condition.
- Were this stopbank breached this would cause flooding across a limited area of industrial zones land within the identified floodplain.
- Intended to rebuild the stopbank further from the river corridor and provide more space for the river corridor. This would extend along the rear part of the industrial area by approximately 20 metres.



Figure 2: Stopbank on True Left Bank between SH2 and Railway Bridge

Contractors Yard (ID#29)

Issues discussed:

- Historic gravel extraction resulted in the level of the river being reduced lower than ideal. This resulted in a moratorium of gravel extraction in this area.
- Key work done along this reach is removing islands of tree lucerne established in the river which will establish into more permanent vegetated barriers if left to establish.
- Some localised extraction has occurred as part of training the course of the river away from erodible banks.
- Most of the work occurs in the river channel to avoid changes along the margins of the river.
- Existing industrial use provides high level of modification visible from bridge which reduces scenic value.

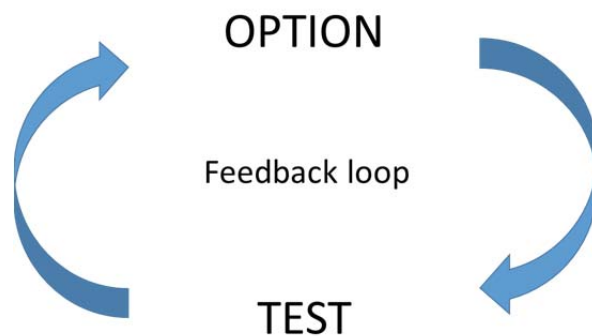


Figure 3: View of SH@ Bridge from Fulton Hogan Site

MCA Workshop

MCA approach developed at previous workshop on 20th October 2015. This enables options to be considered against the overarching aims developed as part of the FMP.

MCA used as a feedback option to test whether options developed for each reach.



MCA applies traffic light system as follows:

- Potential flaws.
- Undecided or Localised Issues
- Achieves Criteria

MCA was applied for each reach of the Waingawa based on testing an understanding of values, issues and options against the overarching aims. Following this the common the workshop started to employ MCA on Common Tools. The criteria used to test the overarching aims during the workshop have been drawn from the overarching aims and are set out below:

- **Economic**
 - Affordable (now and into the future)
 - Protect private property, business, agriculture
 - Enhances wider economic opportunities
- **Resilient Communities**
 - Remains adaptable to change
 - Protect essential public infrastructure
 - Protects the health and safety of the community
- **Cultural**
 - Recognises cultural values
 - Recognises interconnectedness of natural systems
- **Natural Spaces / Processes**
 - Improves natural values / character
 - Improves natural processes / ecology
- **Community Needs / Amenity**
 - Improves river access
 - Improves recreation safety
 - Respond to community aspirations

Reach 14: Waingawa Headwaters

- This reach is located within Tararua Forest Park.
- Values recognise low levels of modification with high scenic values and wilderness recreation opportunities.
- No issues or active management options identified or developed by GWRC.
- The need to understand the stability of ravines and damage resulting from natural disasters was noted.
- The MCA was not applied on this Reach - no further reach specific issues were identified.

Reach 15: Upper Waingawa

- This reach extends from the Tararua Forest Park to the confluence with the Atiwhakatu Stream.

General Option Discussion

- No work is currently carried in this reach along which natural processes are allowed to occur.
- The only work done is protect the MDC water supply.
- Table 1: Captures MCA Evaluation recorded during the workshop with identified issues summarised below.

Potential Flaws

Erosion Protection of Private Property

- Landowners adjoining this reach are not included in the current scheme and therefore do not have no erosion protection at the moment.
- Need to understand whether land owners which to be in the scheme and pay rates for erosion protection? Answer appears to be no.

Undecided or Localised Issues

Understanding Economic Value and Affordability

- Question why economic value has not been identified for each reach to help inform this decision. E.g. who is this affordable to?

Masterton Water Supply

- Water supply has 3 days reserve. Mitigation in place however there is some uncertainty in extreme situation.
- 20 day storage in future to provide opportunity to fix damage - some uncertainty around time frame.
- Provision for ongoing management is critical.

MDC Water Supply Pipe Line

- Current pipe line is erosion risk
- There is some uncertainty around replacement.

Recreation Access

- Recreation Access also brings maintenance responsibility.

Wider Community Values

- Values of wider community need to be considered. This should align with work undertaken by Whaitua Committee.

Reach 16: Upper Plains

- This reach extends from the confluence with Atiwhakatu Stream to the SH2 Road Bridge.
- This encompasses the upper part of the current Waingawa scheme boundary.

General Option Discussion

- Major Project Response in relation to CDC Water Race is not yet certain. The security of the water race is being worked through with CDC and yet to make a decision.
- The use of buffer strips is a major consideration for the sub-committee along this river. Direction on this will frame the discussion between river management and land owners in the future.
- Skeets Road Stop Bank in good condition and provides good potential recreation opportunities.
- Table 2: Captures MCA Evaluation recorded during the workshop with identified issues summarised below.

Undecided or Localised Issues

Buffer Establishment

- A wide buffer gives further options within flood prone land along the river.
- Using land within the buffer for floodplain management protects the rest of the land asset.
- There are land owners who see the value of this area of their properties differently.
- This represents a policy shift in how the river is managed.

Rubbish Buried in Site

- Rubbish to be removed as part of project work.

Recreation Safety

- Continued management of railway irons presents on going safety risk.

Reach 17: South Masterton

- Extends from the SH2 Road Bridge to the confluence with the Ruamahanga River.
- Identified as having moderate-high modification with moderate scenic value.

General Option Discussion

- Cross blading in river has some impact on ecology of river corridor.
- Issue of buffer strips equally apply in this reach.
- Concept of *te mana o te wai*. It is important to recognise and protect the character of the while river for the benefit of the community. This is particularly important in this area given the role of the Waingawa as a gateway to Masterton and the presence of the confluence with the Ruamahanga. This also extends beyond just cultural recognition of Maori.
- Table 3: Captures MCA Evaluation recorded during the workshop with identified issues summarised below.

Undecided or Localised Issues

Aerodrome Rock Work

- Uncertainty around cost of protection hood aerodrome

Buffer Establishment

- Similar benefits and issues with Reach 16: Upper Plains., i.e. using land within the buffer for floodplain management protects the rest of the land asset, however there are land owners who see the value of this differently.
- Land Retirement Agreement provides mechanism to enforce buffer streams on private land.
- Question relationship between land retirement agreement and buffer strips.
- Different mechanisms available to implement buffers including zoning, owning and encouraging alternate land uses.

Visibility from SH2

- River has high visibility from State Highway 2 from which high modification is apparent.
- Need to identify response which addresses improvements to important gateway context.

Contamination from Industrial Sites

- There is a need to address potential issues of contamination associated with adjoining industrial sites.

Common Tools

Setting Limits on types of work in response to Environmental Constraints

- This was seen as missing from the set of Common Tools.
- Choose the most environmentally sensitive tools, e.g. differences between greywacke and mudstone and use of cross blading.

Environmental Strategy – See Table 4

- Benefit for economics and seeking outcomes for building resilient communities.
- Requires place specific responses which informs beneficial outcomes, e.g. wetland creation in western rivers.
- Who is going to pay for implementation?

Pool, Riffle, Run Envelope – See Table 5

- Fits well with fish and game objective.
- Can rely on science which encompasses both geomorphology and ecology measures.

Concluding Comments on Workshop Progress

- It would be more useful to have the values, issues and options together in one document.
- It was felt the overarching aims could be grouped together to clarify how these works.
- There may be benefit in workshoping each reach as small groups and then testing the findings with the larger group.
- Progress generally seemed slow, but was felt this may provide a good basis through which future progress could be made.

Table 1: Reach 15: Upper Waingawa

Waingawa		MCA Evaluation	Notes
Economic	Affordable (now and into the future)		Q. who this is affordable to? A. Rate payers. Water supply. 3 days supply currently. Mitigation in place. Uncertainty there is some risk in extreme situation. 20 day storage in future to provide opportunity to fix. Ongoing management critical.
	Protect private property, business, agriculture		Land owners not paying rates at moment. Not part of the current scheme. Not a lot proposed for erosion protection. Let natural processes occur. Do land owners want to be in scheme? Answer seems to be no.
	Enhance wider economic opportunities		Protecting water intake is providing for Masterton's future. – Some uncertainty around timeframe.
Resilient Communities	Remain adaptable to change		
	Protect essential public infrastructure		Recognises need to protect water supply.
	Ensure the health and safety of the community is protected		No river management proposed. Pipe line is erosion risk.
Cultural	Recognises cultural values		No sites of significant cultural values identified.
	Recognises interconnectedness of natural systems		
Natural Spaces / Process	Improves natural values / character		Recreation access positive.
	Improves natural processes / ecology		
Community Needs	Improves river access		Recreation access also brings maintenance responsibility. Increase in illegal dumping.
	Improves recreation safety		Iron stakes on private land owners can cause problems. FMP – seeks to remove this.
	Respond to community aspirations		Only work done is to protect water supply. Wider community to be considered. Waitua committee?

Table 2 Reach 16: Upper Plains

Waingawa		MCA Evaluation	Notes
Economic	Affordable (now and into the future)		A wide buffer gives us options. Less active management generally required in river.
	Protect private property, business, agriculture		Land within buffer used for floodplain management. This protects the rest of the land asset. There are other land owners who might see this differently.
	Enhance wider economic opportunities		Provide confidence that land beyond buffers as more secure.
Resilient Communities	Remain adaptable to change		Buffers increase options.
	Protect essential public infrastructure		Skeets Road Stop Bank in good condition.
	Ensure the health and safety of the community is protected		Rubbish buried in sites
Cultural	Recognises cultural values		
	Recognises interconnectedness of natural systems		
Natural Spaces / Processes	Improves natural values / character		Improving buffers and planting
	Improves natural processes / ecology		
Community Needs	Improves river access		Masterton Gateway access. Skeets Road has huge potential access.
	Improves recreation safety		Continued management of railway irons. Rubbish to be removed as part of project work.
	Respond to community aspirations		Improved look of river on Gateway from access to Masterton.

Table 3: Reach 17: South Masterton

Waingawa		MCA Evaluation	Notes
Economic	Affordable (now and into the future)		Unsure around cost of rock protection of hood aerodrome?
	Protect private property, business, agriculture		Lifestyle blocks and consideration of land retirement agreement?
	Enhance wider economic opportunities		
Resilient Communities	Remain adaptable to change		
	Protect essential public infrastructure		Pylons flagged as having risk, no protection offered.
	Ensure the health and safety of the community is protected		
Cultural	Recognises cultural values		Recognise the character of the river is important to community. This is not an isolated cultural issues and takes into account meaning of place that the community have.
	Recognises interconnectedness of natural systems		Seeing river is whole entity.
Natural Spaces / Processes	Improves natural values / character		High visibility from SH2 and can provides an important gateway that needs to be addressed.
	Improves natural processes / ecology		Minimising risk of contamination from industrial sites.
Community Needs	Improves river access		Improve access, particularly to confluence.
	Improves recreation safety		
	Respond to community aspirations		

Table 4: Environmental Strategy

		MCA Evaluation	Notes
Economic	Affordable (now and into the future)		Who might pay for implementation?
	Protect private property, business, agriculture		
	Enhance wider economic opportunities		Benefit for future economics
Resilient Communities	Remain adaptable to change		Broder context of resilient communities.
	Protect essential public infrastructure		
	Ensure the health and safety of the community is protected		
Cultural	Recognises cultural values		Recognises differences and responses. Place specific.
	Recognises interconnectedness of natural systems		
Natural Spaces / Processes	Improves natural values / character		Recognises that works in greywacke and mudstone will result in different effects. No cross blading done in eastern rivers.
	Improves natural processes / ecology		e.g identify opportunities for wetlands, Identify areas of benefit.
Community Needs	Improves river access		Responds and enables this.
	Improves recreation safety		
	Respond to community aspirations		

Table 5: Pool, riffle, run envelope

		MCA Evaluation	Notes
Economic	Affordable (now and into the future)		
	Protect private property, business, agriculture		
	Enhance wider economic opportunities		
Resilient Communities	Remain adaptable to change		
	Protect essential public infrastructure		
	Ensure the health and safety of the community is protected		
Cultural	Recognises cultural values		
	Recognises interconnectedness of natural systems		
Natural Spaces / Processes	Improves natural values / character		No objections. Fish and Game happy. Can rely on science behind it. Left from geomorphological measure to habitat measure.
	Improves natural processes / ecology		
Community Needs	Improves river access		
	Improves recreation safety		
	Respond to community aspirations		

