Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Canterbury Water

Healthy Catchments Project

In-Zone Gains and New Water Scenarios

Brought to you by Environment Canterbury working with

Mackenzie District Council · Waimate District Council · Timaru District Council

Environment Canterbury Regional Council
Kaunihera Taiao ki Waitaha

How tonight will run..

Time (pm)	Activity	Session Lead
6.30-7.00	Sign in and plot where you are from	
7.00-7.15	Intro Project timeline Recap on what scenarios are + key messages to date	John + ECan staff
7.15-8.00	An evaluation of In-zone Gains scenario	Dan Clark/ Rūnanga Rep
8.00-8.15	Facilitated group session	Nic Newman
8.15-9.00	An evaluation of the New Water scenario	Dan Clark/ Rūnanga Rep
9.00-9.15	Facilitated group session	Nic Newman
9.15-9.30	Review of Feedback + present key points	Nic Newman
	Next steps	Lex Foster-Bohm
	Close	

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Some questions to think about…

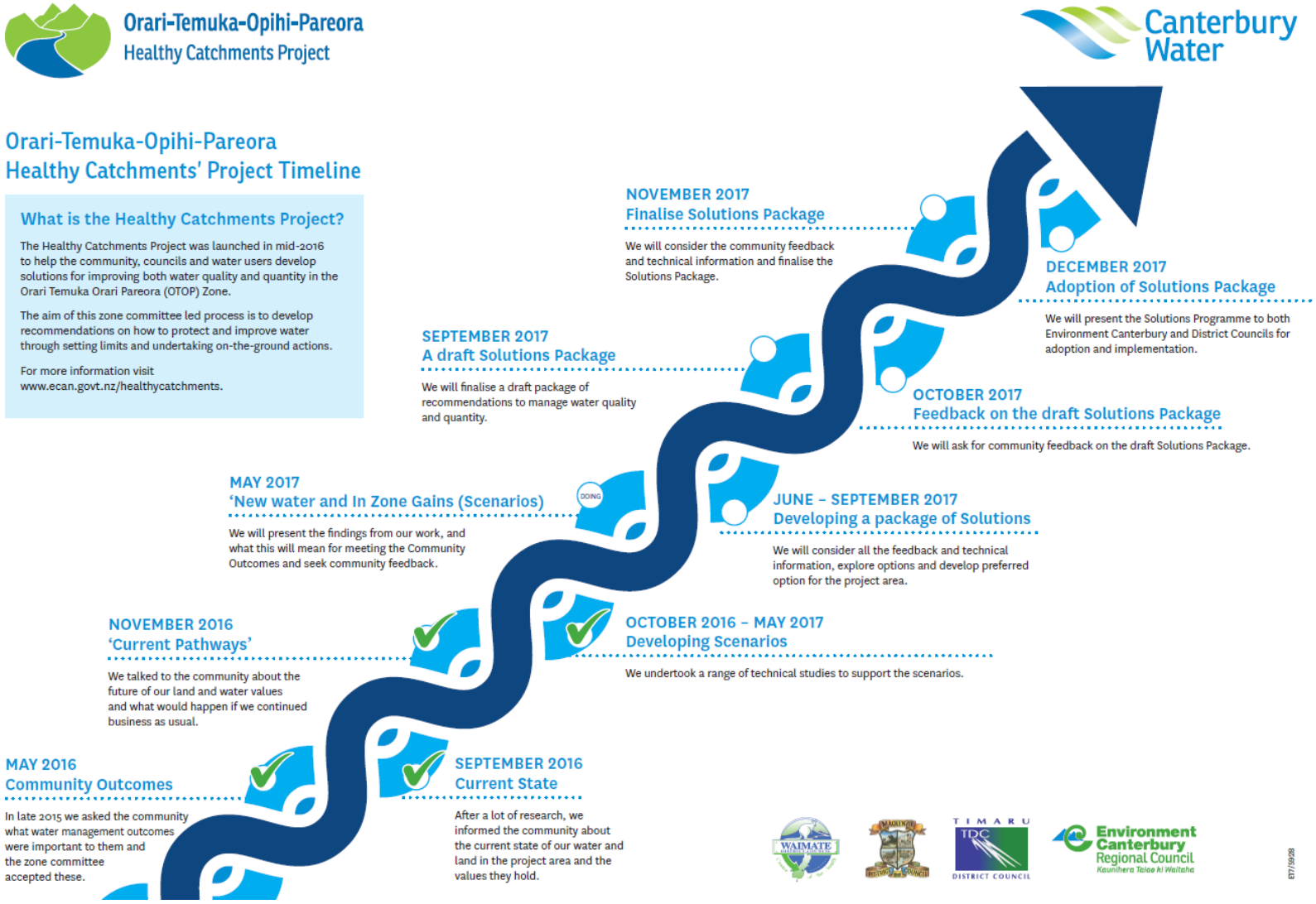
- Based on what you have heard tonight

  What would you like the Zone Committee to consider as part of the package of solutions for each of the catchments outlined below?

  – Orari
  – Temuka
  – Opihi
  – Timaru
  – Pareora

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Where are we now in accordance with the project timeline?



A reminder of the scenarios

- **Current State** - What have we observed so far?
- **Current Pathway** - What will happen if we continue with implementation of current plans and on the ground actions?
- **In-Zone Gains** - How can we manage what we have better?
- **New Water** - What could we do if there was more water?

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Key Messages from Current State

- Lowland streams have high nitrates, particularly in the lower Orari area
- Phormidium issues around the zone affects recreational uses
- Over-allocation of groundwater (Rangitata-Orton, Pareora)
- Low flows in rivers affects recreational, cultural and ecological values
- High nitrates in groundwater in some areas (Ashwick Flat, Lower Orari, Levels Plains)

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Key messages from Current Pathway

- The Current Pathway maintains water quality in areas where it is currently good and provides some improvement at some sites that are poor
- Reliability of supply reduces in the Orari and Pareora with the introduction of higher minimum flows
- Groundwater levels and stream flows are likely to continue to reduce in areas which remain over-allocated
- The Current Pathways do not bring all allocations down to the limits which have been set
- Areas of irrigation and land use activities remain unchanged
- Local on-the-ground actions have the opportunity to provide some improvement in water quality

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Issues identified in previous assessments

- Continued over-allocation of groundwater
- Lowland steams in Orari area do not meet NPS bottom line for Nitrate
- High groundwater nitrate in Ashwick Flat, Levels Plains and lower Orari
- Continued low flows
- Decreased reliability of supply for abstractions
- Phormidium
- Waitarakao/Washdyke Lagoon does not meet NPS bottom lines for nitrogen, phosphorus and E. coli

In-Zone gains

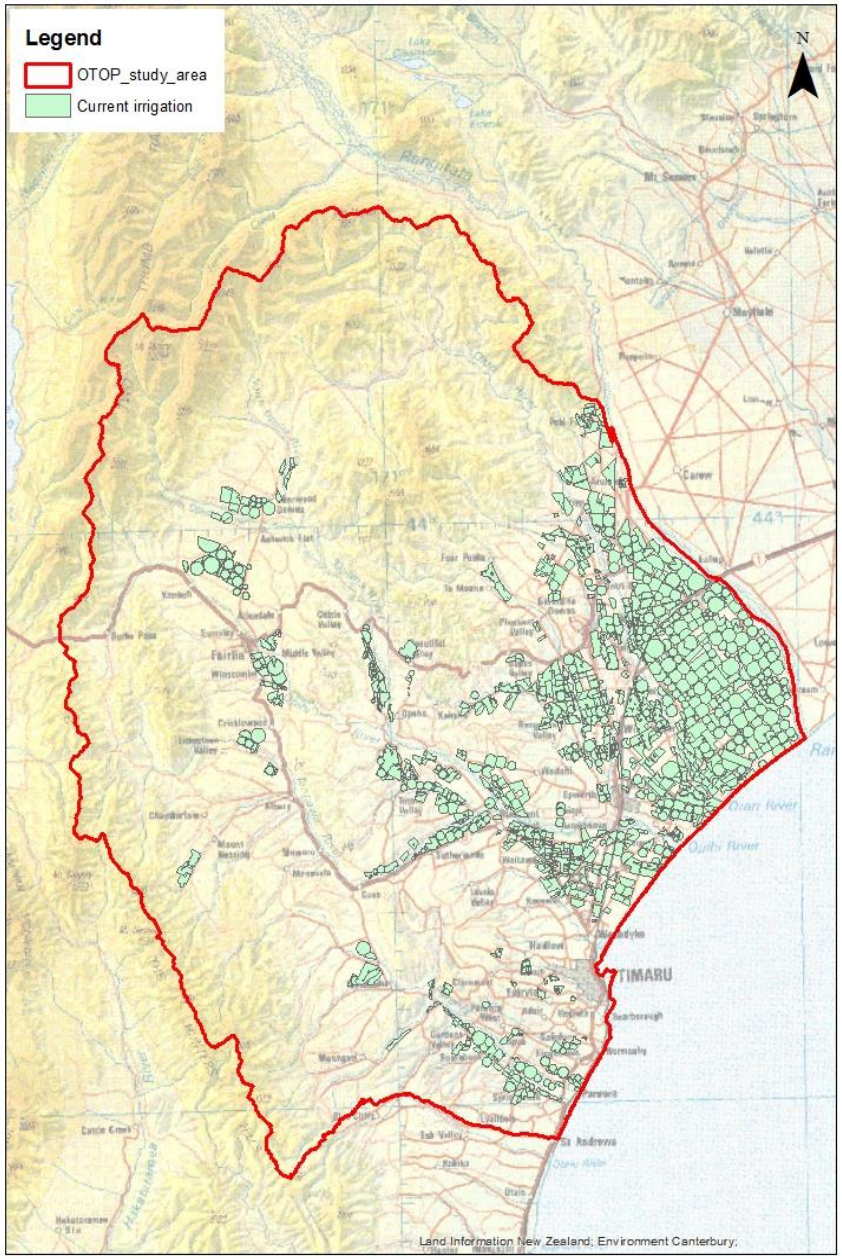
How can we manage what we have better?

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

In-zone gains technical assumptions

- Improved irrigation efficiency ~90%
- Reduce race losses from irrigation schemes to improve reliability
- Rangitata South providing high reliability water, allowing groundwater and surface water abstractions to reduce within the command area
- Areas where nitrates breach NPSFM bottom line, management beyond GMP is required
- N-loss reduction to protect drinking water (Rangitata-Orton 53%, Opihi 32%, Ashwick Flat 9%)
- Opihi catchment groundwater abstractions assessed against 150 day stream depletion assessment

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project



In-zone gains

Irrigation area
-as per current
pathway

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

OEFRAG Flow Regime

	Proposed OEFRAG		
	Lake level >385m	Lake level 380m-385m	Lake level <380m
	min	min	min
Jan	3.50	3.40	3.40
Feb	3.50	3.40	3.40
Mar	7.50	6.40	5.40
Apr	8.00	8.00	5.60
May	4.50	4.50	3.90
Jun	4.00	4.00	3.60
Jul	4.00	4.00	3.60
Aug	4.50	4.50	3.90
Sep	6.00	5.30	4.60
Oct	8.50	7.20	5.90
Nov	7.00	6.10	5.10
Dec	6.00	5.30	4.60

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

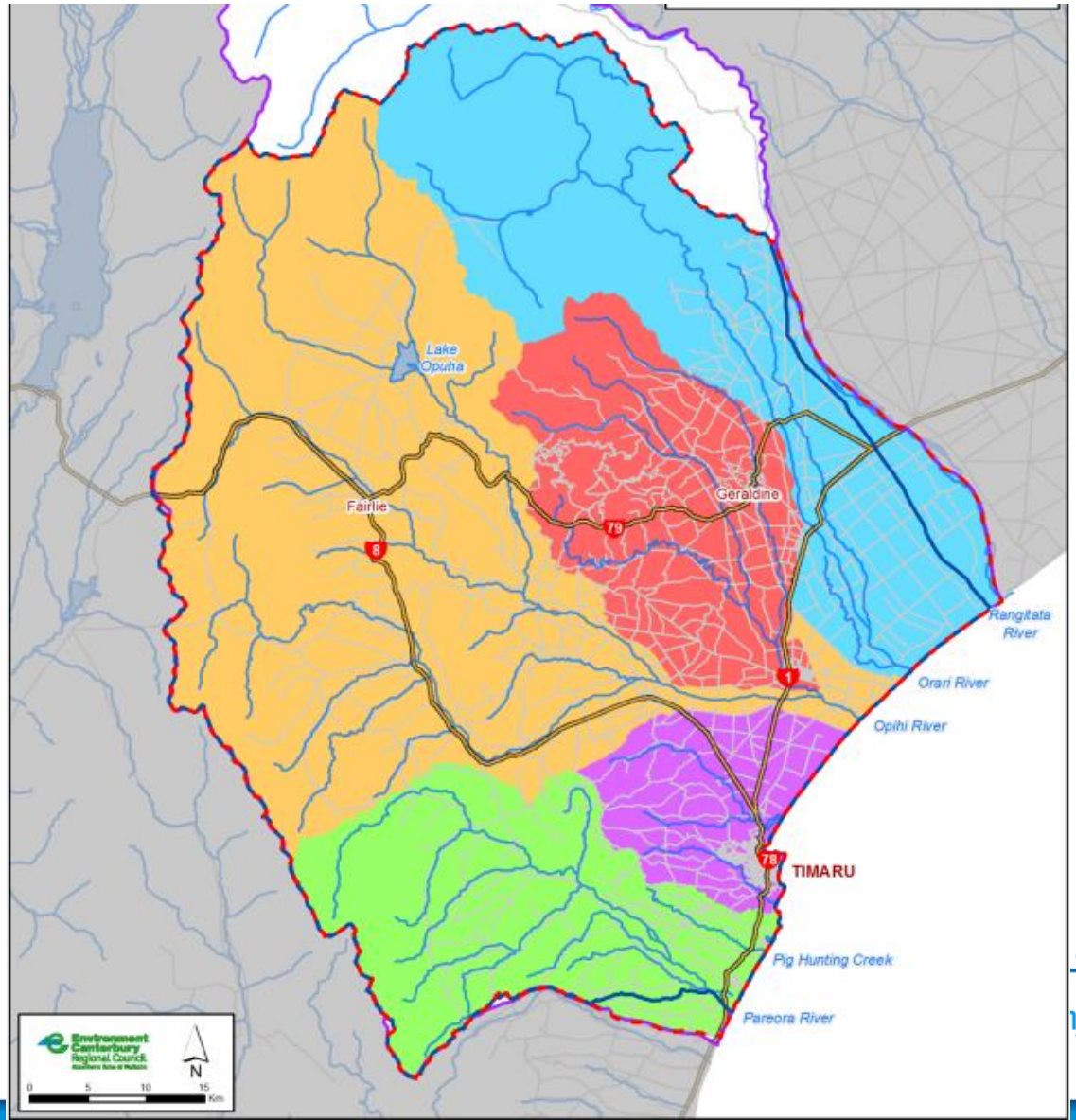
Key messages from in-zone gains

- N-loss reductions beyond GMP improves average nitrate levels in groundwater
- Nitrate hot spots remain in lower Orari and Ashwick Flat
- To remedy existing high nitrate hot spot areas, more targeted mitigations are required
- Changing the flow regime for the Opihi River increases restrictions
- Increased efficiency reduces abstraction
- New stream depletion rules slightly improves low flows but reduce reliability

Cultural Assessment of In-Zone Gains

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Catchments



-Temuka-Opihi-Pareora

y Catchments Project

Opihi Catchment

- OEFRAG flow regime results in lower flows in the Opihi River but higher lake levels

- Minimum flows on stream depleting groundwater protects low flows
  - Increased restrictions on irrigation

- Farming beyond GMP (32% in Lower Opihi zone; 9% in Ashwick Flat) results in
  - Improvement in groundwater nitrates (achieve average half MAV)
  - local hotspots remain (levels Plain and Ashwick)
  - Phormidium concerns remain for contact recreation

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Opihi Catchment

Assessment against outcomes

Outcome	Current Pathway	In-zone gains
All surface waterbodies safe for recreation and gathering mahinga kai.	+	
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.		
Safe and reliable drinking water for community and domestic supplies both now and in the future.		+
Increase the reliability of current irrigation in the zone.		
Increase the area of land irrigated in the zone.		
Achieve ecosystem health and natural river mouth dynamics.		-
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.		-
Rectify loss and improve opportunities for mahinga kai gathering in the zone.		-
Protect and enhance sites of cultural significance.		
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.		-
Maintain and improve economic value in the zone and provide for community wellbeing		

Likelyhood of meeting outcome	Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Pareora Catchment

- Flows remain similar to Current Pathway, continued low flows and dry reaches
- Groundwater quality remains good
- Surface water quality remains generally good
- Phormidium concerns remain for contact recreation
- Reliability remains as Current Pathways
- Farming at GMP is sufficient to maintain water quality

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Pareora Catchment

Assessment against outcomes

Outcome	Current Pathway	In-zone gains
All surface waterbodies safe for recreation and gathering mahinga kai.		
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.		+
Safe and reliable drinking water for community and domestic supplies both now and in the future.	+	
Increase the reliability of current irrigation in the zone.		
Increase the area of land irrigated in the zone.		
Achieve ecosystem health and natural river mouth dynamics.		
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.		
Rectify loss and improve opportunities for mahinga kai gathering in the zone.	+	
Protect and enhance sites of cultural significance.		
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.	+	
Maintain and improve economic value in the zone and provide for community wellbeing		

Likelyhood of meeting outcome	Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Orari Catchment

- Flows remain similar to Current Pathway, continued low flows and dry reaches
- All farming in Rangitata-Orton zone at beyond GMP (53%) results in average of half MAV
- Local nitrate hotspots remain in the lower catchment
- Improved surface water nitrates but still unlikely to meet community outcomes (recreation, mahinga kai) due to E.Coli
- Increased efficiency leads to small improvement to reliability
- Upper catchment water quality and quantity remain good

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Orari Catchment

Assessment against outcomes

Outcome	Current Pathway	In-zone gains
All surface waterbodies safe for recreation and gathering mahinga kai.	+	+
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.		
Safe and reliable drinking water for community and domestic supplies both now and in the future.		
Increase the reliability of current irrigation in the zone.		
Increase the area of land irrigated in the zone.		
Achieve ecosystem health and natural river mouth dynamics.	+	+
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.		
Rectify loss and improve opportunities for mahinga kai gathering in the zone.	+	
Protect and enhance sites of cultural significance.		
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.	+	
Maintain and improve economic value in the zone and provide for community wellbeing		

Likelyhood of meeting outcome	Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Temuka Catchment

- Minimum flows on stream depleting groundwater protects low flows
- Increased restrictions on irrigation
- Farming at GMP is sufficient to maintain water quality
- Groundwater generally remains low in nitrate
- Surface water remains low risk for nitrate toxicity and suitable for secondary contact (E.Coli)
- Gorges remains suitable for swimming
- Phormidium concerns remain for contact recreation

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Temuka Catchment

Assessment against outcomes

Outcome	Current Pathway	In-zone gains
All surface waterbodies safe for recreation and gathering mahinga kai.		
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.		
Safe and reliable drinking water for community and domestic supplies both now and in the future.		
Increase the reliability of current irrigation in the zone.		
Increase the area of land irrigated in the zone.		
Achieve ecosystem health and natural river mouth dynamics.	+	+
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.		+
Rectify loss and improve opportunities for mahinga kai gathering in the zone.		
Protect and enhance sites of cultural significance.		
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.		+
Maintain and improve economic value in the zone and provide for community wellbeing		

Likelyhood of meeting outcome	Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Timaru Catchments

- Urban streams have similar flows and water quality as Current Pathway
- Farming beyond GMP (32% in Lower Opihi) results in
  - Improved groundwater nitrate in Levels Plains
  - Washdyke Lagoon continues to not meet the NPSFM bottom line for nitrogen, phosphorus and E.coli
- Reduced recharge leads to decreased groundwater levels in Levels Plains
- Minimum flows on stream depleting groundwater protects low flows
  - Increased restrictions on irrigation

Timaru Catchments

Assessment against outcomes

Outcome	Current Pathway	In-zone gains
All surface waterbodies safe for recreation and gathering mahinga kai.	+	+
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.	+	
Safe and reliable drinking water for community and domestic supplies both now and in the future.	+	
Increase the reliability of current irrigation in the zone.		
Increase the area of land irrigated in the zone.		
Achieve ecosystem health and natural river mouth dynamics.		+
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.		+
Rectify loss and improve opportunities for mahinga kai gathering in the zone.		+
Protect and enhance sites of cultural significance.		
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.	No braided rivers	
Maintain and improve economic value in the zone and provide for community wellbeing		

Likelyhood of meeting outcome	Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Zone-wide social impacts

- Pressure to improve beyond GMP – additional costs
- Potential for water quality issues to increase polarisation of views, and increase conflict within and among groups
- Improved water quality and recreation opportunities may provide community wellbeing
- Potential increase in debt levels for new infrastructure

Key messages from in-zone gains

- N-loss reductions beyond GMP improves average nitrate levels in groundwater
- Nitrate hot spots remain in lower Orari and Ashwick Flat
- To remedy existing high nitrate hot spot areas, more targeted mitigations are required
- Changing the flow regime for the Opihi River increases restrictions
- Increased efficiency reduces abstraction
- New stream depletion rules slightly improves low flows but reduce reliability

Discussion Time (15 minutes)

- Based on what you have heard tonight so far..

  What would you like the Zone Committee to consider as part of the package of solutions for each of the catchments outlined below?

  – Orari
  – Temuka
  – Opihi
  – Timaru
  – Pareora

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

New Water

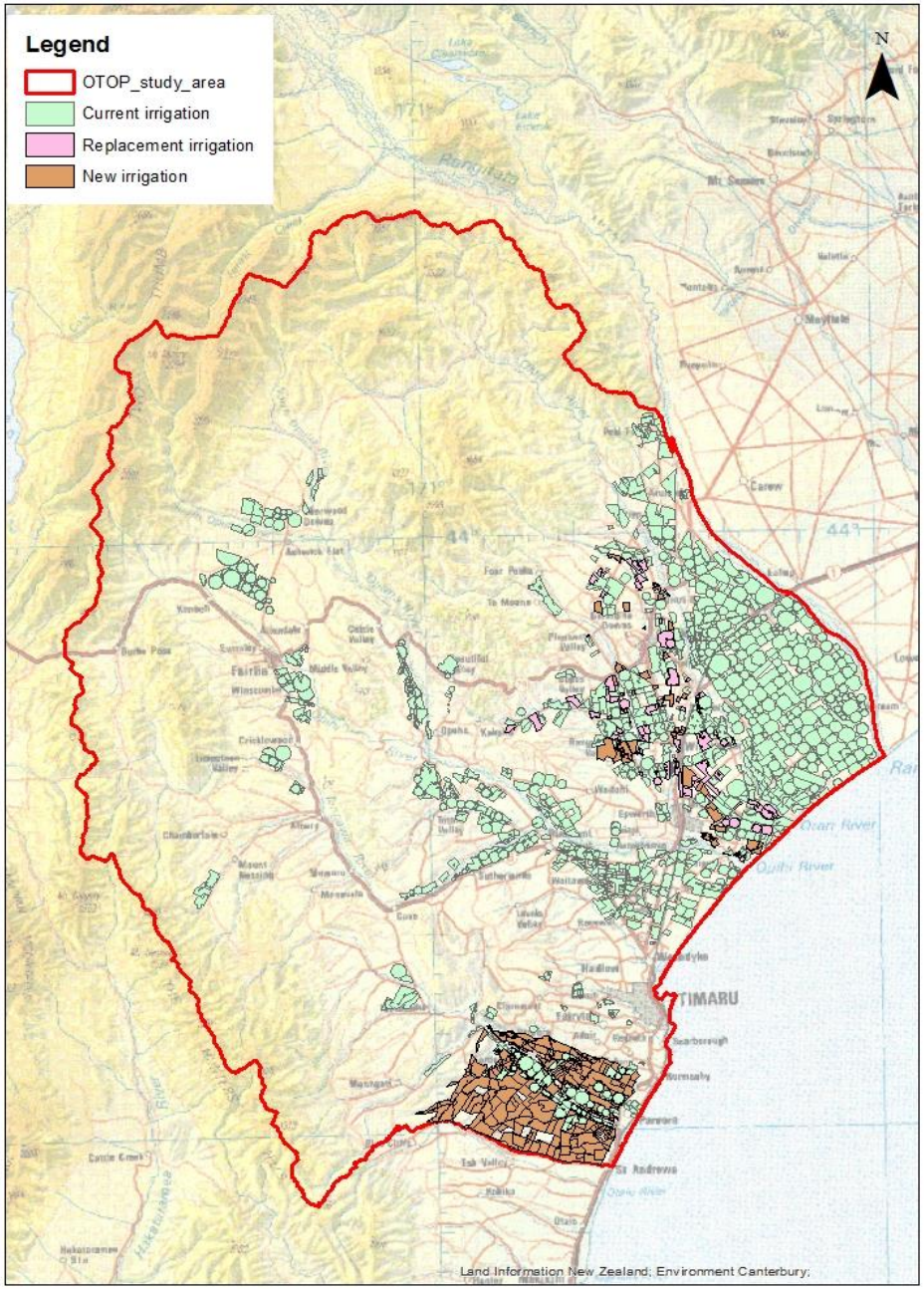
What could we do if there was more water?

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

New water, small scale

- Build on In-zone gains
- Land use at GMP
- Existing consented schemes source new water from Rangitata River water and Waitaki rivers
  - Hunter Downs scheme ~8300 ha in the Pareora and ~2060 ha in the Otipua catchments
  - Supply of already consented Rangitata River water results in 5680 ha of top-up irrigation, supplanting 50% reliability of supply, modelled as 2840 ha of groundwater being replaced by high reliability alpine water to the south of the Orari and Temuka catchments
  - Additional irrigation of approx. 1700 ha in South of the Orari and Temuka Catchments

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project



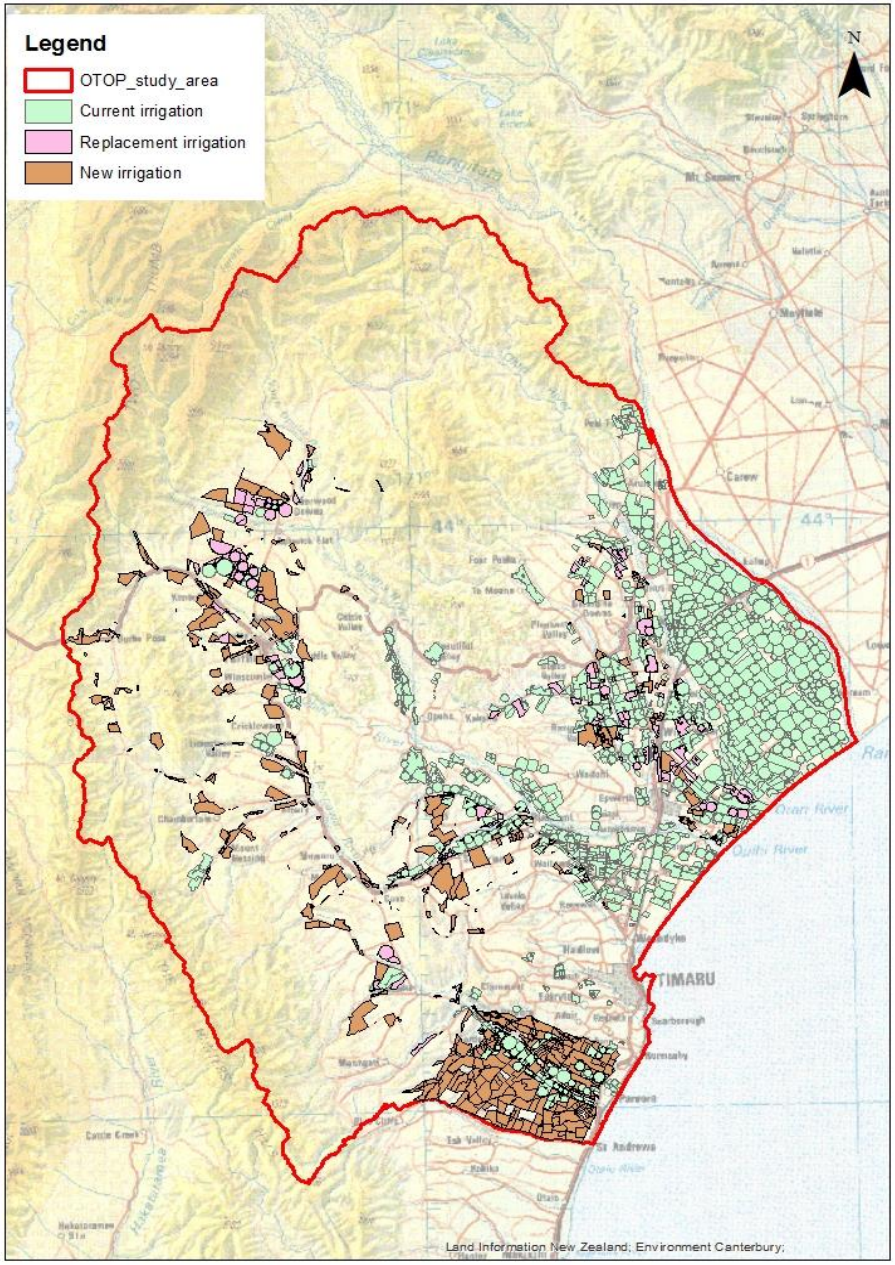
New water, small scale

New irrigation areas and replacement areas have been assigned randomly to irrigable land parcels within scheme command areas. **These do not necessarily reflect individual landowners' intentions**

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

New water, large scale

- Builds on New water, small scale
- New water supplied from alpine rivers to providing water for approx. 15010 ha of irrigation, this is split between 11710 ha of new irrigation area and 3300 ha of replacement irrigation. This water is not currently consented and the source is not considered in this assessment.
- Land use at GMP



New water, large scale

- New irrigation areas and replacement areas have been assigned randomly to irrigable land parcels within scheme command areas. **These do not necessarily reflect individual landowners' intentions**

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Key messages New water

- Replacing existing surface and groundwater fed irrigation should provide environmental benefits
- Additional irrigation areas may provide small benefit to water quantity, but increases the risk to water quality
- Increased irrigation provides economic benefit within the zone, including areas outside of the catchment receiving water
- New irrigation is usually accompanied by a shift to more intensive land use
- Increased social and environmental costs

Cultural Assessment of New Water

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Opihi Catchment

- New water
- drives increases intensification
  - increased risk of Phormidium
  - Increased nitrate in surface water and groundwater increases and risk of not meeting MAV
- Increases reliability of supply
- No major change to surface flows or groundwater level
- Reduces impact of stream depletion rules on users
- Economic benefits

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Opihi Catchment

Assessment against outcomes

Outcome	Current Pathway	In-zone gains	New water, small scale	New water large scale
All surface waterbodies safe for recreation and gathering mahinga kai.	+			-
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.				+
Safe and reliable drinking water for community and domestic supplies both now and in the future.		+		-
Increase the reliability of current irrigation in the zone.				
Increase the area of land irrigated in the zone.				+
Achieve ecosystem health and natural river mouth dynamics.		-	+	+
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.		-		
Rectify loss and improve opportunities for mahinga kai gathering in the zone.		-		
Protect and enhance sites of cultural significance.				
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.		-		
Maintain and improve economic value in the zone and provide for community wellbeing				

Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Pareora Catchment

- New water drives increases intensification
  - increased risk of Phormidium
  - Increased nitrate in surface water and groundwater
  - Increased flows and groundwater levels
  - Reliability of supply and irrigated areas increase
  - Economic benefits

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Pareora Catchment

Assessment against outcomes

Outcome	Current Pathway	In-zone gains	New water, small scale	New water large scale
All surface waterbodies safe for recreation and gathering mahinga kai.				-
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.		+		
Safe and reliable drinking water for community and domestic supplies both now and in the future.	+			
Increase the reliability of current irrigation in the zone.				
Increase the area of land irrigated in the zone.				+
Achieve ecosystem health and natural river mouth dynamics.				
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.				
Rectify loss and improve opportunities for mahinga kai gathering in the zone.	+		-	-
Protect and enhance sites of cultural significance.				
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.	+		+	+
Maintain and improve economic value in the zone and provide for community wellbeing				+

Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Orari Catchment

- No new irrigation areas because high irrigation uptake has already occurred
- No major changes in the flow regime
- High nitrates in groundwater in lower parts of the catchment
- Lowland stream likely to continue to not meet the NPSFM Bottom line for nitrate
- New water provided ‘top up’ reliability to the south of the Orari

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Orari Catchment

Assessment Against outcomes

Outcome	Current Pathway	In-zone gains	New water, small scale	New water large scale
All surface waterbodies safe for recreation and gathering mahinga kai.	+	+		
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.				
Safe and reliable drinking water for community and domestic supplies both now and in the future.				
Increase the reliability of current irrigation in the zone.				
Increase the area of land irrigated in the zone.				
Achieve ecosystem health and natural river mouth dynamics.	+	+		
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.				
Rectify loss and improve opportunities for mahinga kai gathering in the zone.	+			
Protect and enhance sites of cultural significance.				
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.	+			
Maintain and improve economic value in the zone and provide for community wellbeing			+	+

Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Temuka Catchment

- New water provides ‘top up’ reliability of supply and some additional irrigation area
- Stream depleting groundwater restrictions improves low flows
- Reduces impact of stream depletion rules on users
- Additional irrigation increases nitrogen load in catchment
- Gorges remains suitable for swimming

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Temuka Catchment

Assessment against outcomes

All surface waterbodies safe for recreation and gathering mahinga kai.			-	-
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.				
Safe and reliable drinking water for community and domestic supplies both now and in the future.			-	-
Increase the reliability of current irrigation in the zone.				
Increase the area of land irrigated in the zone.				
Achieve ecosystem health and natural river mouth dynamics.	+	+		
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.		+		
Rectify loss and improve opportunities for mahinga kai gathering in the zone.				
Protect and enhance sites of cultural significance.				
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.		+		
Maintain and improve economic value in the zone and provide for community wellbeing				

Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Timaru Catchments

- No new water into this catchment
  - Risk to drinking water sourced from other catchments
  - Risks to recreational opportunities
  - Washdyke Lagoon continues to not meet the NPSFM bottom line for nitrogen, phosphorus and E.coli
  - No change in urban stream flows
  - Increased economic value, particularly secondary industries

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Timaru Catchments

Assessment against outcomes

Outcome	Current Pathway	In-zone gains	New water, small scale	New water large scale
All surface waterbodies safe for recreation and gathering mahinga kai.	+	+		
Increase recreational opportunities in the zone by ensuring appropriate management of river flows.	+			
Safe and reliable drinking water for community and domestic supplies both now and in the future.	+			
Increase the reliability of current irrigation in the zone.				
Increase the area of land irrigated in the zone.				
Achieve ecosystem health and natural river mouth dynamics.		+		
Protect and enhance indigenous biodiversity Ki uta Ki Tai, particularly high naturalness areas, coastal lagoons, and wetlands and springs in the upper parts of catchments.		+		
Rectify loss and improve opportunities for mahinga kai gathering in the zone.		+		
Protect and enhance sites of cultural significance.				
Protect and enhance the natural character of the zone's braided rivers whilst providing a sufficient level of flood protection.	No braided rivers			
Maintain and improve economic value in the zone and provide for community wellbeing				+

Probably	Possibly	Unlikely	Highly unlikely

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Zone-wide social impacts

- Increased water availability will drive economic growth, especially in dairy and horticulture
- Tourism may be negatively impacted through reduction in environmental quality
- Investment in infrastructure may reduce economic diversity/create path dependencies
- Competition for land may increase
- Decrease in water quality is likely to have a negative impact on social capital

Key messages New Water

- Replacing existing surface and groundwater fed irrigation should provide environmental benefits
- Additional irrigation areas may provide small benefit to water quantity, but increases the risk to water quality
- Increased irrigation provides economic benefit within the zone, including areas outside of the catchment receiving water
- New irrigation is usually accompanied by a shift to more intensive land use
- Increased social and environmental costs

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Discussion Time..

- Based on what you have heard tonight in relation to the New Water Scenario

  What would you like the Zone Committee to consider as part of the package of solutions for each of the catchments outlined below?

  – Orari
  – Temuka
  – Opihi
  – Timaru
  – Pareora

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Review of Feedback

- What is the most important message that you want to convey back to the wider group?

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Next Steps

- The Zone Committee will begin to shape up a package of solutions based on:
  - technical information
  - community feedback to date
- You will have the opportunity to provide feedback on the draft solutions package later this year

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Where can I find out more?

- Technical reports, overview summaries and maps are available on our storymaps website. More information will become available after

www.ecan.govt.nz/healthycatchments

Check out our Facebook page by searching OTOP Healthy Catchments Project

Contact Details:
Alexia Foster-Bohm
Community Lead
alexia.foster-bohm@ecan.govt.nz
027 537 9278

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project

Catchment Group Contacts + meeting details

Catchment Group	Next meeting	Facilitator	Contact details
Orari	Tues 13th June 7pm Waihi Lodge Geraldine	Rhys Taylor	Rhys.taylor@ecan.govt.nz
Opuha/ Upper Opihi	TBC	Julia Crossman	Julia@opuha.co.nz
Waihi/ Temuka	Week of 19th June TBC	Rhys Taylor	Rhys.taylor@ecan.govt.nz
Kakahu River	TBC	Marty O'Connor	moc@ravensdown.co.nz
Lower Opihi	TBC	Nicki Pridham	nicki.Pridham@Rabobank.com
Tengawai River	Monday 26 June 7pm Albury Inn	Rhys Taylor	Rhys.taylor@ecan.govt.nz
Pareora	TBC	Angela Darke	Angela.darke@balance.co.nz

Orari-Temuka-Opihi-Pareora
Healthy Catchments Project