

Further information request – Western Rivers Aquatic ecology September 2017

	Details of further information required	Peer review memo(s)	Response to request
Hutt River			
a.	NRWQN macroinvertebrate data to be incorporated into the EMP alongside GWRC SOE data to provide some background/context to any future macroinvertebrate sampling undertaken.	James 2016 (p.2) James 2017 (Point 1.1)	
b.	More detailed information on bluegill bully in particular as this species is resident and abundant in habitats most impacted by flood protection activities. Please add bluegill bully spawning to the parameters that indicate high sensitivity to disturbance in the Site Specific Effects Management Scheme described in the Code of Practice and provide an updated copy (note other changes are also requested) or comment on why this is not included.	James 2016 (p.2) James 2017 (Point 1.1)	
c.	More information on recreational and commercial fishing needs to be provided.	James 2016 (point 1.2.3) James 2017 (Point 1.1)	
Otaki River			
d.	Estuary information – Previous query	James 2016 (p.4)	

	in the validity of 20+ year old vegetation data has not been addressed.	James 2017 (Point 2.1)	
e.	Freshwater mussels – There is still no information on whether freshwater mussels are present in the tributary waterways of the application area.	James 2016 (p.4) James 2017 (Point 2.1)	
f.	Trout drift dive data – There is still no drift dive data for the Otaki River.	James 2016 (p.4) James 2017 (Point 2.1)	
g.	Aquatic plants – Provision needs to be made in the COP for the protection of native macrophytes.	James 2015b James 2017 (point 2.1)	
	Please provide more information on the effects of the proposal on recreational and commercial fishing.	James 2017 (point 2.1)	
h.	Please provide further information on the effects of upstream activities (i.e. gravel extraction) on the wetland and lagoon system in the lower Otaki River estuary.	James 2017 (point 2.2.1) Submission by Department of Conservation	
i.	Please provide further information on hyporheic habitat.	James 2015b James 2017 (Point 2.2.4) Submission by Nga Hapu o Otaki	
Waikanae River			
j.	Estuary information – Previous query in the validity of 20+ year old vegetation data has not been addressed.	James 2016 James 2017 (Point 3.1)	
k.	More information on recreational and commercial fishing needs to be	James 2016 James 2017 (Point 3.1)	

	provided.		
l.	If you have a copy of the pre and post works monitoring undertaken by Te Ati awa ki Whakarongotai of gravel extraction and channel widening, please provide a copy of this.	James 2017 (point 3.2.4) TAKW submission	
Wainuiomata River			
m.	More information on recreational and commercial fishing needs to be provided.	James 2016 James 2017 (Point 4.1)	
Code of practice			
n.	Please update the COP with the more up to date spawning periods as set out in the PNRP and provide a copy of the updated code (note other updates are also requested) or comment on why these dates have not been included.	James 2017 (Point 2.1 and 5.1)	
o.	Please update the COP to expand the inanga spawning restriction area beyond the identified spawning areas to cover the whole zone of potential spawning habitat and provide an updated COP (note other updates have also been requested) or comment on why this has not been included.	James 2017 (Point 2.1 and 5.1)	
p.	Please provide a 'general activity constraints calendar' for the Waikanae River or comment on why	James 2017 (point 3.2.2)	

	this has not been included.		
q.	<p>Site specific effects management –</p> <ul style="list-style-type: none"> • Please address concerns about the magnitude of disturbance and sensitivity of the works site. • Please include the missing states in the habitat sensitivity-ranking scheme. • Please provide some scenarios of river works within the water bodies covered by the consent applications to show how the proposed scheme would work in practice. 	<p>James 2015e James 2017 (point 5.1)</p>	
r.	<p>Operation and maintenance of machinery</p> <ul style="list-style-type: none"> • Please update the COP to require a spill kit on site and provide an updated copy of the COP or comment on why it has not been included. • Please provide further information about flood protections wash bays, in particular, details of whether they drain to stormwater or wastewater. 	<p>James 2015e James 2017 (point 5.1)</p>	
s.	<p>Formation of access from the banks to the riverbed</p> <ul style="list-style-type: none"> • Please expand the action point “avoid vegetation clearance 	<p>James 2017 (point 5.1)</p>	

	adjacent to Key Native Ecosystems” to include ecologically significant vegetation as identified in District Plans and by the Department of Conservation and provide an updated copy of the COD or comment on why this has not been included.		
t.	<p>Maintenance and protection of ecological values.</p> <ul style="list-style-type: none"> • Please address the ambiguous language in section 7.3.11 of the COP and provide an updated copy of the COP or comment on why this request has not been addressed. • Please add the two additional actions in section 7.3.11 as suggested by Mr James and provide an updated copy of the COP or comment on why these actions have not been included. 	<p>James 2015e James 2017 (point 5.1)</p>	
u.	<p>Consideration of opportunities for environmental enhancement</p> <ul style="list-style-type: none"> • Please address the concerns raised by Mr James, specifically, that there is no clear, definitive direction or certainty around implementing environmental enhancement and 	<p>James 2015e James 2017 (point 5.1)</p>	

	the reliance on the person responsible for supervising on-site works to identify such opportunities.		
v.	Channel shaping - channel diversion cut and bed recontouring. <ul style="list-style-type: none"> Please address the additional adverse effects and mitigation actions regarding stranding and relocation of fish and megainvertebrates. 	James 2015e James 2017 (point 5.1)	
w.	Channel maintenance – Please address previous comments for the removal of flood debris, mechanical clearing of minor watercourses, Opahu Stream and Chrystalls Lagoon	James 2015e James 2017 (point 5.1)	
x.	River mouth cutting – please address previous review comments.	James 2015e James 2017 (point 5.1)	
y.	Restoration management plans – Please consider including the restoration management planning requirements of the pNRP in the COP for each activity. Please provide an updated copy of the COP or comment on why this has not been included.	James 2017 (point 5.2.1) Department of Conservation submission	
z.	Please add a statement of effects specifically relating to the hyporheic zone to the various sections of the COP.	James 2017 (point 5.2.2) Hutt Valley Angling Club submission	
	Please include the creation of additional instream structures (logs	James 2017 (point 5.2.2) Hutt Valley Angling Club	

	and boulders) to benefit invertebrates and fish as mitigation in the COP and provide an updated copy of the COP or comment on why this has not been included.	submission	
	<p>Site specific effects management</p> <ul style="list-style-type: none"> Mr James suggests that the site specific effects management could be replaced by a toolbox of remediation or migratory actions integrated into the COP. Please consider this suggestion. 	James 2017 (point 5.3)	We think it could be worthwhile workshopping this suggestion and other ways to make the overall framework less complex.
	Baseline monitoring triggers and responses. Mr James has raised concerns about determining a 'statistically significant' change. Please address the questions raised.	James 2017 (point 5.3)	
	<ul style="list-style-type: none"> The link on p.41 to the Waikato Regional Council document does not work. Table 12 appears to be a duplicate of table 11 and there is no specific table for the Waikanae River. 	James 2017 (point 5.3)	
Environmental Monitoring Plan			
	<p>Matters raised in previous reviews:</p> <ul style="list-style-type: none"> Please address the issues raised in previous reviews. Please provide a copy of the refined NCI method referred to. 	James 2015e James 2017 (point 6.1)	
	Please include the Wainuiomata River in the list of baseline monitoring sites	James 2017 (point 6.3)	

	in section 2.1 and fish monitoring sites in the Wainuiomata River in section 2.3.4.		
	Riparian vegetation <ul style="list-style-type: none"> • Please consider and provide comments on the alternative riparian vegetation monitoring proposed 	James 2017 (part 6.3)	
	Inanga spawning habitat <ul style="list-style-type: none"> • Please consider and provide comments on the frequency of the inanga spawning habitat monitoring suggested. 	James 2017 (part 6.3)	
	Please comment on why macroinvertebrates are not included in the proposed monitoring programme?	James 2017 (part 6.3)	
	Habitat assessment – Appendix A of EMP <ul style="list-style-type: none"> • Please address the concerns raised regarding the habitat assessment outlined in Appendix A of the EMP. 	James 2017 (part 7.2)	
Other			
	Please provide an assessment of the effects (including cumulative effects) of the gravel extraction in the four rivers on the estuaries and open coast beach system. Submitters have specifically noted this gap with respect to the Kapiti Coast but an assessment for all rivers needs to be	James 2017 (points 2.2.1, 3.2.1) Department of Conservation submission	We understand this is being undertaken as a separate assessment.

	provided.		
	<p>Environmental enhancement or restoration</p> <ul style="list-style-type: none"> • Please provide comments on the suggestion to develop activity specific mitigation methodologies for inclusion in the COP. 	James 2017 (point 7.3)	
	<p>Pest plants</p> <ul style="list-style-type: none"> • Please provide details of how flood protection managed pest plants in the riparian areas they manage. 	James 2017 (point 8.1) Department of Conservation submission	