Designation - Draft Conditions

Note: these proposed conditions are duplicated from Attachment 3 to the NoR and are included here for completeness. All conditions are subject to further refinement.

DEFINITIONS

“District Council” means the Western Bay District Council’s Chief Executive Officer or nominee

“Requiring Authority” means the Bay of Plenty Regional Council

“RMA” means Resource Management Act 1991

“Project” means the Kaituna River Re-Diversion and Ongatoro/Maketu Estuary Enhancement Project and associated activities

“Works” means the construction works required to give effect to the Project

GENERAL CONDITIONS

1. The Requiring Authority shall submit an Outline Plan of Works (OPW) for the Project in accordance with section 176A of the RMA, unless the District Council has waived the requirement for an OPW under section 176A(2)(c) of the RMA.

2. The District Council shall be notified in writing of the intention to commence construction work at least two months prior to the start of any construction activities on site.

3. Prior to commencement of works the Requiring Authority or their agent shall arrange and conduct a pre-construction site meeting between the District Council and all relevant parties, including the primary contractor. At a minimum, the following shall be covered at the meeting:
   a) Scheduling and staging of the works
   b) Responsibilities of all relevant parties
   c) Contact details for all relevant parties
   d) Expectations regarding communication between all relevant parties
   e) Procedures for implementing any amendments to the management plans submitted
   f) Site inspection
   g) Confirmation that all relevant parties have copies of the contents of this consent document and all associated erosion and sediment control plans and methodology.

4. All operational personnel involved with the construction of the Project shall be made aware of, and have access to, all designation documents, conditions and schedules applicable to the construction of the Project.

COMPLAINTS

5. The Requiring Authority upon receipt of any complaint in relation to construction shall promptly investigate the complaint, where appropriate remedy or mitigate the cause of the complaint and inform Bay of Plenty Regional Council as soon as practicable, but no later than 48 hours of receiving the complaint, of the details of the complaint and the action taken.

6. The Requiring Authority shall maintain and keep a complaint register for all aspects of operations in relation to construction activities. The register shall record the date, time and type of complaint, cause of the complaint, the action taken by the Requiring Authority in
response to the complaint and steps to prevent a reoccurrence. The register shall be available to the District Council at all times.

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

7. At least one month prior to the commencement of construction activities the Requiring Authority shall submit to the District Council the Construction Environmental Management Plan (CEMP) outlining the construction activities and all practices and procedures to be adopted in the construction of the Project.

8. The objectives of the Construction Environmental Management Plan (CEMP) shall be:
   a) To ensure that construction activities achieve compliance with conditions for these activities.
   b) To minimise the environmental nuisance effects of construction activities.
   c) To ensure that disturbance is limited to that necessary to undertake the construction works.
   d) To minimise the release of sediment during disturbance to the bed of any waterway.
   e) How the disturbance of the beds and margins of the coastal marine area and waterways will be limited to the extent necessary to undertake construction works, and avoid or mitigate adverse effects on the quality and passage of coastal and surface water and aquatic habitat.
   f) To ensure that disturbance does not cause flooding or erosion.

9. The CEMP will address, as a minimum, the following aspects of the works:
   a) Timing of construction works
   b) Working hours
   c) Restrictions on public access

10. The following Supplementary Management Plans shall form subsets of the main CEMP:
    a) Erosion, Sediment & Dust Control Plan
    b) Construction Traffic Management Plan
    c) Commissioning Plan

11. In the event of any conflict between resource consent conditions and CEMP practices and procedures, the resource consent conditions shall be complied with.

12. The CEMP may be amended at any time provided that any amendments made maintain or enhance the degree and / or extent to which adverse environmental effects attributable to the construction, maintenance or operation of the Project are avoided or mitigated; and those amendments do not result in non-compliance with any resource consent condition.

   Note: For clarity, the plans in conditions 10(a) and (c) relate to matters within the functions of Bay of Plenty Regional Council and not those of Western Bay of Plenty District Council.

COMPLIANCE WITH CEMP

13. The Requiring Authority shall implement and comply with the CEMP and the Supplementary Management Plans set out in Conditions 7 to 12 inclusive.

TRAFFIC MANAGEMENT

14. The Requiring Authority shall submit a Construction Traffic Management Plan (CTMP) to the Road Asset Manager for certification at least 15 Working Days prior to commencement of the
works. The purpose of the CTMP is to outline the proposed procedures, requirements and standards necessary for managing the traffic effects of the works to achieve the outcomes and standards contained in Conditions 15 to 19 inclusive.

15. Construction shall not commence until the Requiring Authority has received the Road Asset Manager’s written certification of the CTMP.

16. In managing traffic during the works, the Requiring Authority shall achieve the following outcomes
   
a) Minimise the disruption to users of local travel routes; and
b) Maintain a safe passage for all travel routes, including road, river and footpath users affected by the Work.

17. The CTMP shall be consistent with the version of the New Zealand Transport Agency Code of Practice for Temporary Traffic Management (COPTTM) which applies at the time the CTMP is prepared. Where it is not possible to adhere to this standard, the COPTTM’s prescribed Engineering Exception Decision (EED) process will be followed, which will include appropriate mitigation measures agreed with the Road Asset Manager.

18. The CTMP shall, as a minimum, address the following aspects of construction traffic:
   
a) Construction sequence and methodology for all traffic activity associated with the Project.
b) Hours of operation, including times and days when traffic-generating activities would occur.
c) Description of the types of vehicles that will be used on public roads.
d) Details and locations of where works will occur within the road reserve and the method of traffic management control to be used.
e) Management strategies where full compliance with safety standards may not be achieved, including active control of traffic at locations where full safe stopping distances cannot be achieved for the temporary traffic volumes expected.
f) Description of routes for haulage of materials on public roads, and measures for ensuring the road network is maintained in a satisfactory condition.
g) How provision will be made for access to affected properties during construction.
h) Temporary work-site access arrangements.
i) Procedures for liaison between the community, the Requiring Authority, the contractor and the relevant road controlling authorities about traffic related matters.
j) Monitoring of road closures and deviations to ensure that excessive disruption or traffic hazards are not created.
k) Monitoring of hazardous traffic conditions arising from dust on public roads.
l) On-going monitoring of traffic conditions to ensure road safety is maintained.

19. The Requiring Authority shall take the best practicable option to avoid the deposit of debris onto public roads during the construction period. Any facilities required to achieve this outcome shall be installed prior to works commencing.

CONSTRUCTION NOISE

20. The Requiring Authority shall ensure that all works shall be designed and carried out to ensure that the noise from the work complies with the New Zealand Construction Standard NZS6803:1999 “Acoustics - Construction Noise” at all times at 1 metre from the most exposed façade of any existing occupied dwelling.
EROSION, SEDIMENT AND DUST CONTROL

21. The works shall not cause noxious, offensive or objectionable levels of dust beyond the designation boundaries.

22. An Erosion, Sediment and Dust Control Management Plan (ESDCP) will be prepared as part of the CEMP in accordance with Bay of Plenty Regional Council Guideline No. 2010/01 - “Erosion and Sediment Control for Land Disturbing Activities” and shall give effect to:
   a) Best practicable methods for controlling dust emissions during construction;
   b) Procedures for monitoring the effectiveness of the controls;
   c) A complaints procedure; and
   d) Inspection and auditing procedures and contingency plans for if controls fail.

ACCIDENTAL DISCOVERY PROTOCOL

23. In the event of any archaeological site or koiwi being uncovered during the exercise of this consent, activities in the vicinity of the discovery shall cease. The Requiring Authority shall:
   a) notify the District Council
   b) consult with the relevant iwi and where appropriate ensure procedures are undertaken in accordance with:
      (i) Ngati Rangiwehe kiwi and accidental discovery protocol
      (ii) Waitaha Raupatu Trust, Ngati Makino Heritage Trust, Komiti o Ngati Pikao (Ki Maketu), Ngati Tunohopu Accidental Discovery Protocols
      (iii) Te Taonga Tuturu Act - immediate notification of Tapuika representatives in the event that a site or objects of significance is discovered during works.

WETLAND PLAN

24. A Wetland Plan shall be prepared and submitted to the District Council at least two months prior to the first planting season.

25. The objective of the Wetland Plan shall be to demonstrate how works will be undertaken such that the land available results in a state where there is a sustainable cover of indigenous plants that is as close to the original natural species diversity that can be achieved taking into consideration the substantial and irreversible human-induced changes that have occurred to the landscape surrounding the estuary.

26. The Wetland Plan shall provide details of how the above objective is to be achieved, including:
   a) A map showing the locations of the proposed work;
   b) Identification of the personnel or organisations that would carry out the work;
   c) The timescale of activities;
   d) Initial monitoring of site growing conditions (especially soil salinity, soil saturation, tidal induced sediment erosion and deposition) after re-diversion;
   e) Creation of a planting zone plan based on site growing conditions and species tolerances;
   f) Trial planting of plant species especially in areas where growing conditions are likely to be challenging (e.g. areas exposed to open tidal water and those with higher salinity);
   g) Details of mass planting once species can be matched to site conditions with high confidence of success;
h) Restoration planting plan produced that details the planting zones, species mixes, plant grades, site preparation and post-planting maintenance requirements;

i) Monitoring plan to objectively measure plant and species performance; and

j) Weed and pest control for each area and

27. The Requiring Authority may amend the Plan from time to time provided that the amendments have been made to improve wetland creation works or to reduce adverse environmental effects. Any updates to the Plan will be submitted to the District Council in advance of the relevant works commencing.

28. The Requiring Authority shall undertake all wetland works and weed and pest control in accordance with the Wetland Plan.

Advice Note: The Requiring Authority will be seeking an archaeological authority from Heritage New Zealand under section 12 of the Historic Places Act 1993, prior to the commencement of construction. The authority may include requirements for detailed investigations and monitoring effects and are also likely to require the preparation of a Heritage Management Plan (or an Archaeological Management Plan).

A lapse period of 10 years is sought.
Resource Consents - Draft Conditions

Note: the draft conditions are subject to further refinement.

Definitions

“District Council” means the Western Bay District Council’s Chief Executive Officer or nominee

“Consent Holder” means the Bay of Plenty Regional Council’s Natural Resource Operations Group or nominee

“Regional Council” means the Bay of Plenty Regional Council’s Chief Executive Officer or nominee

“RMA” means Resource Management Act 1991

“Project” means the Kaituna River Re-Diversion and Ongatoro/Maketu Estuary Enhancement Project and associated activities

“Works” means the construction works required to give effect to the Project

SCHEDULE 1: GENERAL CONDITIONS - ALL CONSENTS

PRE-CONSTRUCTION

1. The Regional Council shall be notified in writing of the intention to commence construction work at least two months prior to the start of any construction activities on site.

2. Prior to commencement of works the Consent Holder or their agent shall arrange and conduct a pre-construction site meeting between the Regional Council and all relevant parties, including the primary contractor. At a minimum, the following shall be covered at the meeting:
   a) Scheduling and staging of the works
   b) Responsibilities of all relevant parties
   c) Contact details for all relevant parties
   d) Expectations regarding communication between all relevant parties
   e) Procedures for implementing any amendments to the management plans submitted
   f) Site inspection
   g) Confirmation that all relevant parties have copies of the contents of this consent document and all associated erosion and sediment control plans and methodology.

3. All operational personnel involved with the construction of the Project shall be made aware of, and have access to, all consent documents, conditions and schedules applicable to the construction of the Project.

COMPLAINTS

4. The Consent Holder upon receipt of any complaint in relation to construction shall promptly investigate the complaint, where appropriate remedy or mitigate the cause of the complaint and inform the Regional Council as soon as practicable, but no later than 48 hours of receiving the complaint, of the details of the complaint and the action taken.

5. The Consent Holder shall maintain and keep a complaint register for all aspects of operations in relation to construction activities. The register shall record the date, time and type of complaint, cause of the complaint, the action taken by the Consent Holder in response to the
complaint and steps to prevent a reoccurrence. The register shall be available to the Regional Council at all times.

ACCIDENTAL DISCOVERY PROTOCOL

6. In the event of any archaeological site or koiwi being uncovered during the exercise of this consent, activities in the vicinity of the discovery shall cease. The Requiring Authority shall:
   a) notify the Bay of Plenty Regional Council
   b) consult with the relevant iwi and where appropriate ensure procedures are undertaken in accordance with:
      i) Ngati Rangiwewehi koiwi and accidental discovery protocol
      ii) Waitaha Raupatu Trust, Ngati Makino Heritage Trust, Komiti o Ngati Pikao (Ki Maketu), Ngati Tunohopu Accidental Discovery Protocols
      iii) Te Taonga Tuturu Act - immediate notification of Tapuika representatives in the event that a site or objects of significance is discovered during works.

REVIEW

7. The Bay of Plenty Regional Council may, once in any year, on the five last working days of [specify month], serve notice of its intention to review the conditions of these consents under section 128 of the Resource Management Act 1991 for the purpose of:
   a) Dealing with any adverse effect on the environment which may arise from the exercise of the consents and which it is appropriate to deal with at a later stage; or
   b) Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; or
   c) Requiring the Consent Holder to carry out monitoring in addition to or instead of that required by the consents

HAZARDOUS SUBSTANCES/SPILL CONTINGENCY

8. No maintenance of vehicles or temporary fuel storage shall take place in or within 20 metres of open excavations, exposed groundwater or any waterway.

9. The Consent Holder shall maintain on site at all times measures to prevent spills of hazardous substances entering land or water. These measures shall include but not be limited to:
   a) The equipment, systems and procedures to be used to minimise the risk of spills or leaks of hazardous substances
   b) The spill management and containment equipment to be maintained at all times on site, and its location
   c) Procedures for containing, managing, cleaning and disposing of any spill or leak, or contaminated material to be removed from the site as a result of a spill or leak
   d) Procedures to notify and report to the Consent Holder and the Bay of Plenty Regional Council within 24 hours of a spill or leak occurring, including a maintained schedule of emergency contact names and numbers
   e) An inspection schedule for all storage containers, refuelling areas, and plant
   f) Procedures to be followed to identify causes of spills or leaks

10. In the event of a spill of hazardous substances on the site, the Consent Holder shall record and provide to the Bay of Plenty Regional Council within 24 hours of the spill:
   a) The date, time and volume of the spill
   b) The substance spilt
c) Measures taken to contain and absorb the spilt substance

d) The cause of the spill, and the measures taken since to prevent a repeat of the incident

**MANAGEMENT PLANS**

**Construction Environmental Management Plan**

11. At least one month prior to the commencement of construction activities the Consent Holder shall submit to the Regional Council the Construction Environmental Management Plan (CEMP) outlining the construction activities and all practices and procedures to be adopted in the construction of the Project.

12. The objectives of the Construction Environmental Management Plan (CEMP) shall be:

   e) To ensure that construction activities achieve compliance with conditions for these activities.
   
   f) To minimise the environmental nuisance effects of construction activities.
   
   g) To ensure that disturbance is limited to that necessary to undertake the construction works.
   
   h) To minimise the release of sediment during disturbance to the bed of any waterway.
   
   i) How the disturbance of the beds and margins of the coastal marine area and waterways will be limited to the extent necessary to undertake construction works, and avoid or mitigate adverse effects on the quality and passage of coastal and surface water and aquatic habitat.
   
   j) To ensure that disturbance does not cause flooding or erosion.

13. The CEMP will address, as a minimum, the following aspects of the works:

   k) Timing of construction works
   
   l) Working hours
   
   m) Restrictions on public access

14. The following supplementary management plans shall form subsets of the main CEMP:

   a) Erosion, Sediment & Dust Control Plan
   
   b) Construction Traffic Management Plan
   
   c) Commissioning Plan

15. In the event of any conflict between resource consent conditions and CEMP practices and procedures, the resource consent conditions shall be complied with.

16. The CEMP may be amended at any time provided that any amendments made maintain or enhance the degree and/or extent to which adverse environmental effects attributable to the construction, maintenance or operation of the Project are avoided or mitigated; and those amendments do not result in non-compliance with any resource consent Condition.

*Note: For clarity, the plan in condition 14(b) relate to matters within the functions of Western Bay of Plenty District Council and not those of Bay of Plenty Regional Council.*

**Erosion, Sediment and Dust Control Plan**

17. The objectives of the Earthworks, Sediment and Dust Control Plan shall be:

   a) To ensure construction activities achieve compliance with the conditions of consent for these activities.
   
   b) To ensure that the effects of erosion on water quality are minimised
c) To ensure consistency with Bay of Plenty Regional Council Guideline No. 2010/01 - “Erosion and Sediment Control for Land Disturbing Activities”

18. The Erosion, Sediment & Dust Control Plan (ESDCP) shall be prepared in general accordance with Bay of Plenty Regional Council Guideline No. 2010/01 - “Erosion and Sediment Control for Land Disturbing Activities” and shall clearly define the sediment and erosion control measures and dust control measures to be implemented for each stage of the works authorised by this consent. The Plan shall include, but not be limited to:

a) A locality map detailing as a minimum the location of roads, property boundaries, surface waterways and crossings, the direction of stormwater flows, and the erosion, sediment and dust control devices

b) A site description, including land type, climate, topography, vegetation soils, and water bodies

c) A detailed programme of works identifying:
   i) each stage of construction
   ii) an estimate of the maximum area of bare ground (cumulative total) exposed at each stage of construction
   iii) an estimate of the total length of exposed roads, trenches and tracks
   iv) the volume of earthworks proposed.

d) Contour information at suitable intervals to show the contour of the land within and around the motorway alignment;

e) Detailed drawings and specifications of all designated erosion and sediment control measures selected from the Erosion and Sediment Control Guidelines, including contingency measures, on-site catchment boundaries, measures to be taken at the temporary construction management areas and off-site sources of runoff with supporting calculations, including all key design parameters. The measures may consist of but not be limited to the following:
   i) clean water diversion channels
   ii) decanting earth bunds or sediment ponds
   iii) on-site silt trapping devices, such as hay bales, silt fences, filter cloth barriers and rock filters
   iv) soakage pits, infiltration basins and / or swales
   v) design information as is necessary to demonstrate that run-on water is controlled, “clean” and “dirty” water is separated where possible, land surface is protected from erosion, and sediment is managed.

f) A description of the mitigation and rehabilitation measures proposed.

g) A programme for managing exposed areas including progressive stabilisation and minimising exposed areas by:
   i) ensuring that any earthworks and/or vegetation clearance should where practicable, be limited to the footprint of the works
   ii) staging of the construction
   iii) providing best practice measures, vegetative or structural, to protect exposed soil from erosion.

h) Measures to ensure that the tracking of mud or earth onto the existing road network is reduced to the practicable minimum;

i) A schedule outlining the frequency and methods of inspection, monitoring and maintenance of all erosion, sediment control and dust control measures as may be
necessary to achieve compliance with the conditions of any consents subject to this Schedule.

j) Details of any proposed monitoring to demonstrate the effectiveness of the proposed measures.

k) Include emergency procedures that set out measures that will be implemented if there is a significant sediment discharge to surface water.

19. The Consent Holder shall carry out inspections, at a minimum frequency of weekly, of all working areas of the site in order to ensure they are well maintained and that erosion and sediment control devices remain effective.

Commissioning Plan

20. The Consent Holder shall submit to the Bay of Plenty Regional Council, Attention: XX a detailed commissioning plan at least one month prior to commissioning of the diversion culverts. The Commissioning plan shall as a minimum address discharge quality and procedures for the management of any floods.

Compliance with CEMP

21. The Consent Holder shall implement and comply with the CEMP and the Supplementary Management Plans set out in conditions 11 to 20 inclusive.

OPERATION AND MAINTENANCE MANUAL

22. The consent shall be exercised in accordance with an Operation and Maintenance Manual prepared by the Consent Holder. The purpose of the Manual is to detail those procedures to be adopted by the Consent Holder, or parties under its control with respect to the Project, to ensure compliance with consent conditions of these resource consents relating to the flow regime.

23. The objectives of the Operational and Maintenance Manual shall be:

a) To ensure that procedures are in place to operate the diversion in accordance with consent conditions in relation to flow regime and discharges.

b) To specify how erosion control works will be maintained.

c) To specify how the culverts are to be controlled to provide security from flood events of up to the 1% AEP event where the Project changes the flood risk from acceptable to unacceptable (i.e. overtopping of Maketu Road), and provide satisfactory drainage for the Kaituna Basin.

24. The Operation and Maintenance Manual shall address the following matters:

a) The flow regime operating rules for the diversion including identification of the triggers and responses to manage flood events in accordance with the conditions of this consent.

b) Operational procedures for the culvert gates.

c) Procedures for the maintenance and removal of debris at the culverts.

d) Procedures for inspecting and maintaining erosion protection works.

25. The Manual shall be provided to the Bay of Plenty Regional Council, Attention: XX at least one month prior to the commissioning of the diversion culverts. The Manual shall be prepared by a suitably qualified person and shall detail as how the effects of the flow regime and diversion are minimised and managed.
26. The Consent Holder shall implement and comply with the Operation and Maintenance Manual set out in conditions 22 to 26 inclusive.

DRAINAGE REPORT

27. The Consent Holder shall prepare a Drainage Report to further investigate and quantify the effects of the re-diversion on the operation of the Kaituna Catchment Control Scheme, and the supply of water to the Lower Kaituna Wildlife Management Reserve. The Report shall be prepared by a suitably qualified person, and shall include details of the following mitigation measures:
   a) Financial contribution to provide compensation for the increased running costs at the Ford Road, Singleton’s, and Dean’s pump station as a result of the re-diversion, payable to the Kaituna Catchment Control Scheme.
   b) Financial contribution to the planned upgrade of the culverts draining into the Kaituna River from the Ford Road drain, payable to the Kaituna Catchment Control Scheme.
   c) Financial contribution to the design and construction of additional culverts draining into the estuary between Ford’s Cut and Singleton’s pump station, payable to the Kaituna Catchment Control Scheme.
   d) Design and construction of a new culvert to provide an additional water supply intake to the Lower Kaituna Wildlife Management Reserve.

28. The amount of the financial contributions required under Condition 27(a), 27(b), and 27(c) above shall be determined in consultation with the manager of the Kaituna Catchment Control Scheme and the Natural Hazards Group of the Bay of Plenty Regional Council.

29. The design and construction of the new culvert for the Lower Kaituna Wildlife Management Reserve required under Condition 27(d) above shall be developed in consultation with the Regional Council, Fish and Game, the Department of Conservation, and Te Maru o Kaituna River Authority.

30. The Drainage Report required by Condition 27, together with evidence of consultation required by Conditions 28 and 18, shall be provided to the Regional Council at least one month prior to the commissioning of the re-diversion culverts.

31. The new culvert for the Lower Kaituna Wildlife Management Reserve shall be constructed and commissioned, in accordance with the design and construction methodology under Condition 27(d), at least one month prior to the commissioning of the re-diversion culverts.

WETLAND PLAN

32. A Wetland Plan shall be prepared and submitted to Consents Manager at least two months prior to the first planting season.

33. The objective of the Wetland Plan shall be to demonstrate how works will be undertaken such that the land available results in a state where there is a sustainable cover of indigenous plants that is as close to the original natural species diversity that can be achieved taking into consideration the substantial and irreversible human-induced changes that have occurred to the landscape surrounding the estuary.

34. The Wetland Plan shall provide details of how the above objective is to be achieved, including:
   a) A map showing the locations of the proposed work;
   b) Identification of the personnel or organisations that would carry out the work;
   c) The timescale of activities;
d) Initial monitoring of site growing conditions (especially soil salinity, soil saturation, tidal induced sediment erosion and deposition) after re-diversion;

e) Creation of a planting zone plan based on site growing conditions and species tolerances;

f) Trial planting of plant species especially in areas where growing conditions are likely to be challenging (e.g. areas exposed to open tidal water and those with higher salinity);

g) Details of mass planting once species can be matched to site conditions with high confidence of success;

h) Restoration planting plan produced that details the planting zones, species mixes, plant grades, site preparation and post-planting maintenance requirements;

i) Monitoring plan to subjectively measure plant and species performance; and

j) Weed and pest control for each area.

35. The Consent Holder may amend the Plan from time to time provided that the amendments have been made to improve wetland creation works or to reduce adverse environmental effects. The Consent Holder shall provide a copy of the amended Plan to XX prior to its implementation.

36. The Consent Holder shall undertake all wetland works and weed and pest control in accordance with the Wetland Creation Strategy and Plan.

MONITORING AND SAMPLING PROGRAMMES AND REPORTING OF RESULTS

Monitoring Programme

37. The Consent Holder shall prepare an Environmental Monitoring Programme that details the monitoring required under Resource Consents XX and XX. The Programme shall be submitted to the Regional Council [specify timeframe] and:

a) Be carried out by suitably experienced and qualified specialists.

b) Be designed and carried out using scientifically accepted methods which shall aim to obtain results with a high level of confidence.

b) Be designed so as to be capable of testing and verifying the performance measures listed in these consent conditions.

d) Be consistent with all conditions of these consents and the Consent Holder shall undertake all sampling, monitoring and reporting in accordance with the Programme.

e) Include a description of the method(s) and frequency to be used for monitoring, including that undertaken for internal/management purposes.

f) Include a map and if appropriate photos of all sampling sites.

g) Specify the name of any laboratory and method of analysis of all samples collected.

h) Detail the operation and maintenance of any automatic sampling or monitoring equipment.

Reporting

38. For each of the [annual/etc.] surveys, the Consent Holder shall by 1 August provide a written monitoring report outlining the results of that survey, and an interpretation of those results, to the Consents Manager of the Bay of Plenty Regional Council. This report shall cover the period to the end of the April preceding the July reporting date.

39. The report referred to in Condition X shall also include an assessment of the effectiveness of the adaptive management regime for the staged re-diversion and operation of the culverts.
undertaken in accordance with Resource Consent [section 14 water permit to divert] Condition X.

40. The monitoring parameters, site locations and frequency of sampling outlined in the Environmental Monitoring Programme and any other alterations may be reviewed as part of the each monitoring report.

Advice Note: For clarification, the CEMP prepared in relation to the Bay of Plenty Regional Council resource consents will be the same CEMP as that prepared in relation to the designation submitted to Western Bay of Plenty District Council.
Consent 1: Land Use Consent (s9 RMA)

- Earthworks to create the proposed channel, widening of Ford’s Cut, realignment of the stopbank, removal of existing stopbanks, works to create wetland areas, realignment of Ford Road, filling of land, vegetation clearance as part of earthworks, enhancement of wetlands and vegetation clearance associated with construction of the proposed diversion channel

Duration: 35 years
Lapse Period: 10 years

GENERAL

1. This consent shall be exercised in accordance with the conditions specified in Schedule 1: General Conditions - All Consents.

DESCRIPTION

2. The works shall be limited to the following:
   a) Channel construction
   b) Stopbank realignment
   c) Realignment of Ford Road and car parking facilities
   d) Widening of Ford’s cut
   e) Filling of land
   f) Wetland creation works
   g) Vegetation clearance

   As shown on the Construction Plans (Drawing No. 2-1542-115-6235, Sheets 1 to 20) which form part of this consent.

3. There shall be no storage of fuel or lubricants, refuelling, or lubrication of vehicles or machinery within 20 metres of the Kaituna River, Ford’s Cut or Maketu Estuary.

4. Along the alignment of the proposed channel full flood protection shall be maintained by the existing stopbank except for when the tie-ins are made at each end. The period under which the tie-ins shall be agreed with the Bay of Plenty Regional Council Natural Hazards Group prior to the works being undertaken.
Consent 2: Coastal Permit (s12 RMA)

- Erection and placement of structures; works associated constructing structures - deposition on and disturbance of the foreshore or seabed for that purpose; removal, damage, modification or destruction of indigenous vegetation; removal of causeways; channel invert works; any disturbance of, deposition on, dredging of, or removal of sand, shingle and shell from the foreshore or seabed

- To take, divert and dam coastal water

- To occupy the coastal marine area with structures

Duration: 35 years
Lapse Period: 10 years

GENERAL

1. This consent shall be exercised in accordance with the conditions specified in Schedule 1: General Conditions - All Consents.

DESCRIPTION

2. The construction of structures shall be limited to the following:
   a) 21 box culverts and associated concrete aprons
   b) rip-rap lining of channel edges
   c) public boat ramp and temporary mooring jetty
   d) two wooden jetties and gangways
   e) wooden pole breakwater
   f) salinity block rock protection and southern toe rock and ramp
   g) footbridge

As shown on the Construction Plans (Drawing No. 2-1542-115-6235, Sheets 1 to 20) which form part of this consent.

3. The taking, diverting and damming of coastal water shall be limited to the following:
   a) to divert water to enable construction
   b) to take water in order to dewater during installation of the culverts
   c) the damming of coastal water or open coastal water for construction purposes (sheet piles)
   d) Dredging of channel to provide adequate depth for the 2 moorings

4. The occupation of space by structures shall be limited to the following:
   a) 21 box culverts and associated concrete aprons
   b) rip-rap lining of channel edges
   c) public boat ramp and temporary mooring jetty
   d) two wooden jetties and gangways
   e) wooden pole breakwater
   f) salinity block rock and southern toe rock and ramp
   g) footbridge

5. Any scour or erosion of the Coastal Marine Area at the entrance or exit points of the culverts, shall be effectively stabilised, to the satisfaction of the Chief Executive of the Regional Council or delegate
Consent 3: Coastal Permit (s12 RMA)

- Reclamation of foreshore and seabed in the coastal marine area

Duration: No term required
Lapse Period: 10 years

GENERAL

1. This consent shall be exercised in accordance with the conditions specified in Schedule 1: General Conditions - All Consents.

DESCRIPTION

2. The reclamation of foreshore and seabed in the coastal marine area shall be limited to the following:
   a) placement of fill to form the salinity block between Ford Road and Ford Island

As shown on the Construction Plans (Drawing No. 2-1542-115-6235, Sheets 1 to 20) which form part of this consent.
Consent 4: Land Use Consent (s13 RMA)

- Rock protection works along proposed channel and disturbance associated with constructing the opening of the channel where it is in the bed of the river
- Installation of a culvert at the Lower Kaituna Wildlife Management Reserve

Duration: 35 years
Lapse Period: 10 years

GENERAL

1. This consent shall be exercised in accordance with the conditions specified in Schedule 1: General Conditions - All Consents.

DESCRIPTION

2. The construction of structures shall be limited to the following:
   a) Rock protection works along the proposed channel;
   b) A culvert at Lower Kaituna Wildlife Management Reserve

   As shown on the Construction Plans (Drawing No. 2-1542-115-6235, Sheets 1 to 20) which form part of this consent.

3. The channel inlet construction shall not occur during whitebait fishing season (15 August - 30 November).

4. The Consent Holder shall use natural rock and soil material, where practicable. All fill material shall be placed and compacted so as to minimise any erosion and/or instability.
Consent 5: Water Permit (s14 RMA)

- To divert water from the Kaituna River down the new diversion channel (the point of diversion is above the CMA boundary)

Duration: 35 years
Lapse Period: 10 years

GENERAL

1. The culverts shall be commissioned in accordance with the Commissioning Plan and staged re-diversion trigger of:
   a) Stage 1: Increase the re-diverted flow from 150,000 to ~400,000 m³ per mean tidal cycle
   b) Stage 2: Increase the re-diverted flow to ~600,000 m³ after a period of one year, subject to monitoring the effects of stage 1

2. The culverts shall be operated in a manner that does not change the existing flood risk at Maketu township

3. Provision shall be made to ensure that the passage of fish through the structure is unimpeded at all times that the gates are open.

4. The top level of the diversion control structure shall not be less than 2.20m (Moturiki Datum).

MONITORING

5. The following monitoring shall be undertaken:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>What and where</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>Operation and Maintenance Manual that includes:</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>- Staging of re-diversion flow</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The flow regime operating rules for the diversion including identification of the triggers and responses to manage flood events in accordance with the conditions of this consent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Operational procedures for the culvert gates.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Procedures for the maintenance and removal of debris at the culverts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Procedures for inspecting and maintaining erosion protection works.</td>
<td></td>
</tr>
<tr>
<td>Water level/flows</td>
<td>- Installation of a telemetered water level recording device in the estuary near Maketu township.</td>
<td>Single investigation within 18 months of commissioning. Assessment of flow to occur when river is at about mean flow and include at least once on mean tide and spring tide.</td>
</tr>
</tbody>
</table>
- Receipt of the continuous record of sea level from the NIWA gauge at Tauranga (Moturiki).
- Installation of devices on the new culverts that allow practical and reliable reduction of flow into the estuary.

**Erosion**

- Papahikahawai Island - Establishment of permanent markers (including coastal profiles from RL 2m down to MHWS, plus RTK GPS shoreline survey) from which to measure any erosion or accretion of the island. Minimum of four sites to the west and south of the island - each extending at least 50 m offshore to pick up changes in near shore depths over time.
- Permanent transects to be measured annually up to diversion and then twice a year for first three years. Thereafter, monitoring frequency to be assessed by review but continued for at least 10 years after completion of diversion.

- Maketu Spit - RTK GPS shoreline survey and several coastal profiles from RL 2m down to MHWS
- 1 month before diversion and thereafter annually for 5 years, then as required.

- Maketu township and Beach Road shoreline - RTK GPS survey (dune toe or seaward edge vegetation) where relevant and cross-sections (minimum of 6 sites in total - 2 along Beach Road and 4 distributed around township from Park Road foreshore to marae; each section extending to at least 50 m offshore)
- 1 month before diversion and thereafter annually for 5 years, then as required.

- Aerial photo analysis
- As collected by BOPRC

**Water Quality**

- Salinity, nutrient and bacterial monitoring at three sites (Ford’s cut, mid estuary, Maketu boat ramp)
- 3x year in summer at high and low tide

**Shellfish**

- Bacteria testing of shellfish at 3 sites (lower-mid estuary)
- 3x year in summer (same day as water sampling)

- Density and size assessment at three sites in the mid estuary area
- Annual for the first five years

**Ecology (fauna)**

- Algae distribution and species
- Algae - broad scale mapping twice a year for the first five years then review further need.

- Distribution of benthic macrofauna across estuary
- Once within first five years.

**Ecology (flora)**

- Wetland west of Ford Island - fixed permanent plots to assess species composition. The focus will be on the wetland margin where changes in salinity are expected to occur. Note that a permanent transect (Opus transect 7) has already been established to provide a pre-diversion baseline.
- Annually for first five years
<table>
<thead>
<tr>
<th><strong>Wetland Creation</strong></th>
<th>- Paired, marked plots of vegetation on land north of Ford’s Cut to assess the success of restoration planting</th>
<th>In years 2, 5 and 10 after initial planting</th>
</tr>
</thead>
</table>
| **Sediment**         | - Sediment particle size distribution in top 2cm.  
- Locate sites at Papahikahawai Creek and several sites near end of Ford’s cut.  To include TP, TN, TOC, algae cover and anoxic depth (plus any changes in extent of anoxia).  
- Where appropriate this should be integrated with macrofauna sampling | Annual for first 5 years |
| **Cultural**         | - Cultural monitor - via Te Maru o Kaituna (Kaituna River Authority), or direct back to iwi we have consulted with  
- Involvement of tangata whenua in restoration planning and implementation.  Maximise opportunities to improve tangata whenua capability by offering training in monitoring techniques and procuring monitoring services locally where this is possible (i.e. within competence range, suitably independent and consistent with contract/procurement policies/law | Depends on location, scale of works, and level of interest and capacity from the iwi with mana whenua, but seek to maximise involvement and capacity |
| **Reporting**        | Report in August each year monitoring results | Annual |
Consent 6: Discharge permit (s15 RMA)

- The discharge of dewatering water, stormwater and water and contaminants to land, water and air from construction activities

Duration: 35 years
Lapse Period: 10 years

GENERAL

1. This consent shall be exercised in accordance with the conditions specified in Schedule 1: General Conditions - All Consents.

MONITORING

2. Visual inspection shall be undertaken on a daily basis during the construction phase at the inlet of the proposed channel (when works are being undertaken in this area), the estuary end of Ford’s Cut, and Papahikahawai Creek to assess whether there is any visible plume as a result of the work. If extending more than [x] metres then a photo will be taken and a water sample collected to measure settable solids.