Draft Ngaruroro River and Clive River Water Conservation Order

September 2018 – Version 3 in this colour
27 February 2019 – Version 4 in this colour

1. **Title**
   This order is the Water Conservation (Ngaruroro River and Clive River) Order 2015.

2. **Commencement**
   This order comes into force on the 28th day after the date of its notification in the New Zealand Gazette.

3. **Interpretation**
   In this order, unless the context otherwise requires:
   - **damming** means the impounding of all or part of the natural flow of any water that may involve an associated temporary or permanent structure, and includes any intake or deflection structure, structure in the river bed or modification of the river bed—\textit{that prevents the passage of any fish or any structure that prevents fish passage.}
   - **waters** means the rivers and tributaries identified in Schedules 1, 2 and 3—and any hydraulically connected groundwaters and wetlands.
   - **upper Ngaruroro waters** means the mainstem of the Ngaruroro River and all of its tributaries and contributing waters—\textit{(including hydraulically connected groundwaters and wetlands)—from its source in the Kaimanawa Ranges down to Whanawhana cableway (at or about NZTopo50 BK37:918-158) as identified in Schedule 1.}
   - **lower Ngaruroro River** means the mainstem of the Ngaruroro River from Whanawhana cableway (at or about NZTopo50 BK37:918-158) downstream to the inland limit of the coastal marine area (at or about NZTopo50 BK39:368-12864-127) as identified in Schedule 2.
   - **Clive River** means the mainstem of the Clive River from the Rauapare Stream confluence (at or about NZTopo50 BK39:327-093) downstream to the inland limit of the coastal marine area, at or about the State Highway 2 bridge, Clive (at or about map reference NZTopo50 BK39:367-1184-443) as identified in Schedule 2.
4. **Outstanding characteristics, features and values**

The waters identified in Schedules 1, 2 or 3 include or contribute to, to the extent specified in Schedules 1, 2 or 3, the following outstanding characteristics and features:

a. significance in accordance with tikanga Māori
b. cultural and spiritual purposes
c. habitat for rainbow trout
d. rainbow trout fishery
e. angling amenity and recreation
f. habitat for avifauna
g. habitat for native fish
h. whitewater kayaking and rafting amenity and recreation
i. jetboating amenity and recreation
j. wild, scenic and natural characteristics
k. scientific and ecological values

5. **Waters to be retained in natural state**

Because they are in their natural state, and because of the outstanding characteristics, features and values identified in Schedule 1, the waters specified in Schedule 1 are to be retained in their natural state, including but not limited to the quality, quantity, level and rate of flow of the waters, subject to clauses 12 and 13.

6. **Waters to be protected**

Because of the outstanding characteristics, features and values identified in Schedule 2 and the contribution made to waters supporting outstanding characteristics, features and values, the waters identified in Schedule 2 are to be protected in accordance with the relevant conditions in clauses 8, 9, 10 and 11, subject to clauses 12 and 13.

7. **Waters to be protected as contributing to outstanding characteristics**

Because of their contribution to outstanding characteristics, features and values identified in Schedules 1 and 2, the waters specified in Schedule 3 are to be protected in accordance with the relevant conditions in clauses 9, 10 and 11, subject to clauses 12 and 13.
8. **Restriction on damming of waters**

No resource consent may be granted or rule included in a regional plan authorising the damming of waters specified in Schedules 1 and 2.

9. **Restrictions on alterations of river flow and form**

No resource consent may be granted or rule included in a regional plan that either itself or in combination with existing consents or rules –

a. Will cause the material alteration of the channel cross-section, meandering pattern, mobile bed, and braided river channel characteristics of the Lower Ngaruroro River specified in Schedule 2;

b. Will reduce the width of the active floodplain of the Ngaruroro River between Whanawhana and Fernhill (NZTopo50 Bk38:230-114);

c. Will authorise the abstraction of water from any part of the Lower Ngaruroro River specified in Schedule 2 and the waters specified in Schedule 3 that will cause, either by itself or in combination with any other existing consents or rules:

i. Water to be abstracted when the Lower Ngaruroro River is below a minimum flow of 4200L/s at Fernhill. This clause applies to any resource consent that is not subject to the exclusion clause 12 (d); or

ii. Water to be abstracted in excess of an allocable instantaneous volume of 1581L/s at flows less than three times the naturalised median at Fernhill (70,986L/s). This clause applies to any resource consent that is not subject to the exclusion clause 12 (d); or

iii. A reduction in the magnitude and frequency of flows in excess of three times the naturalised median flow at Fernhill (70,986L/s);

iv. A reduction in flood flows sufficient to transport sediment;
a. Would allow a more than minor effect on the channel cross-section, longitudinal sections, gradient steps, meandering pattern, braided channel character, or gravel or sediment transport capacity of the Ngaruroro River mainstem between Whanawhana and Fernhill (NZTopo50 BK230-114).

b. Would allow surface water to be abstracted from the Lower Ngaruroro River and tributaries as identified in Schedules 2 and 3 when flows exceed 3 times the median flow at Fernhill.

c. Would allow water to be abstracted from the Lower Ngaruroro River, tributaries and hydraulically connected groundwater as identified in Schedules 2 and 3, unless:
   i. flow variability above the minimum flow is provided for, including flows that are between 1.5 and 3 times the median flow, to ensure that there is a no more than minor reduction in the ability of flows to scour and flush periphyton and cyanobacteria accumulations, mobilise and transport sediment and bed material, and trigger flow-dependent aquatic life-cycle processes such as fish migration; or
   ii. there is a no more than minor change to flows that are required for the outstanding recreational values and activities.

d. Would allow water to be abstracted from the Lower Ngaruroro River, tributaries and hydraulically connected groundwater as identified in Schedule 2 or 3, unless this is in accordance with a minimum flow or allocation regime that:
   i. would have a no more than minor effect on the braided river form or the outstanding characteristics identified in Schedules 2 or 3; and
   ii. includes a minimum flow of no less than 2400L/s at Fernhill.

e. Will authorise any additional abstraction of water from any part of the Clive River as specified in Schedule 2 not already authorised by a resource consent at the time this Order comes into force.

f. This clause does not restrict a regional plan from imposing rules that set higher minimum flows or that reduce the allocable volume for any of the waterbodies referred to in this Order.
10. Requirement for fish screens

No resource consent may be granted or rule included in a regional plan in respect of the taking or diversion of the waters specified in Schedules 2 and 3, or taking or diversion of the waters specified in Schedule 1 as exempted by clauses 12 and 13, unless all associated intakes are screened and maintained in accordance with the minimum standards for fish screens and intakes contained in Schedule 4.

11. Requirement to protect water quality

No resource consent may be granted or rule included in a regional plan authorising the discharge of contaminants onto land or into waters specified in Schedules 1, 2 or 3 that will cause, either by itself or in combination with any existing consents, activities or rules, the limits specified in Schedule 5 to be exceeded.

This clause does not restrict a regional plan from imposing water quality standards that set more conservative limits.

12. Scope of order

a. This order does not limit sections 14(3)(b) and (e) of the Act relating to the use of water for an individual's reasonable domestic needs, or for the reasonable needs of an individual's animals for drinking water, or taken or used for fire-fighting purposes, provided that all intakes (other than those for emergency fire-fighting) be screened and designed and maintained to comply with the minimum standards specified in Schedule 4, to prevent the entrapment or impingement of fish.

b. Subject to sub-clause (c), this Order does not restrict or prevent the grant of resource consents or inclusion of a rule in a regional plan for the purpose of:

i. research into, and protection or restoration, rehabilitation or enhancement of, water quality, cultural, spiritual and tikanga Māori values, fisheries and wildlife habitats; or

ii. the operation, removal, maintenance, or replacement of any network utility operation (as defined in section 166 of the Act); the operation, removal, or protection of any network utility operation (as defined in section 166 of the Act); temporary construction dewatering activities; or

the maintenance or operation of the Ngāruro Flood Protection and Drainage Scheme; or the protection of human or animal health; or
iii. Minor activities necessary for the management of land administered by the Department of Conservation.

c. No resource consent may be granted or rule included in a regional plan that would allow activities specified in sub-clause (b) if exercise of any such resource consent or rule would compromise the protection of the outstanding characteristics and features identified for the waters specified in the Schedules.

d. In respect of resource consents to take water held at the date this order comes into force (existing consents) this order does not prevent the granting of replacement further resource consents (replacement further resource consents) on the expiry or surrender of the existing consents, where for the same volumes, rate of take and minimum flow restrictions, on the expiry or surrender of the existing consents.

i. The holder(s) of the resource consent(s) applies for the replacement consent before the expiry or surrender of the existing consent; and

ii. The replacement resource consent is granted on conditions providing for the same or equivalent (or more stringent) volumes, rates of take and minimum flow restrictions as the existing consent or existing consents (where one or more existing consents are to be replaced by a single replacement resource consent); and

iii. Any change in the conditions relating to volumes, rate of take and minimum flow restrictions imposed on the replacement resource consent does not adversely affect the environment beyond the effects authorised by the existing consent(s) to be replaced.

This clause confirms that replacement resource consents are not prevented by this order, but does not guarantee grant of those consents. Applications will be assessed by the Regional Council in accordance with relevant statutory and regional plan requirements.

e. The same exclusion in clause 12(d) applies, with all necessary modifications, on the expiry or surrender of the replacement further resource consents, where a further replacement resource consent meets the requirements of 12(d)(i) – (iii), and shall continue to apply to successive replacement resource consents provided that the requirements of 12(d)(i) – (iii) are met.
13. Exemptions

Nothing in this Order prevents the grant of a resource consent that would otherwise contravene conditions set out in clauses 5, 6, 7, 8, 9, 10 and 11 if:

a. a consent authority is satisfied that:
   i. the consent is for a discharge that is of a temporary nature; and
   ii. the consent is for an activity that is associated with necessary removal, maintenance or replacement works for works and structures not otherwise prohibited by this Order; or
   iii. the consent is for discharge of herbicides for control of pest plants; and

b. the exercise of any such consent would not compromise the protection of the outstanding characteristics and features identified for the waters specified in the Schedules.

14. Existing consents

Nothing in this Order shall affect or restrict any resource consent granted prior to this Order coming into force in respect of the protected waters, until the expiry of that consent.
Schedule 1

Waters to be retained in Natural State

<table>
<thead>
<tr>
<th>Waters</th>
<th>Outstanding Characteristics or Features</th>
<th>Conditions to apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mainstem of the Ngaruroro River and all of its tributaries and</td>
<td>Amenity and intrinsic values afforded by natural state</td>
<td>Natural state</td>
</tr>
<tr>
<td>contributing waters, (including hydraulically connected</td>
<td>Significance in accordance with tikanga Māori</td>
<td>Prohibit damming (cl 8)</td>
</tr>
<tr>
<td>groundwaters, wetlands and the Kaweka Lakes), from its source in the</td>
<td>Cultural and spiritual purposes</td>
<td>No abstraction with the exception of cl 12</td>
</tr>
<tr>
<td>Kaimanawa Ranges down to Whanawhana cableway (at or about NZTopo50</td>
<td>Habitat for rainbow trout</td>
<td>Fish screens (cl 10)</td>
</tr>
<tr>
<td>BK37:918-158), &quot;upper Ngaruroro waters&quot;</td>
<td>Rainbow trout fishery</td>
<td>Water quality (cl 11)</td>
</tr>
<tr>
<td></td>
<td>Angling amenity and recreation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Whitewater rafting and kayaking amenity and recreation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Habitat for native fish</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Habitat for avifauna</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wild and scenic characteristic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural characteristics – water quality</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Scientific and ecological values – water quality, wetland ecological and botanical values</td>
<td></td>
</tr>
</tbody>
</table>
## Schedule 2

### Protected waters

<table>
<thead>
<tr>
<th>Waters</th>
<th>Outstanding Characteristics or Features and contribution to outstanding characteristics and features</th>
<th>Conditions to Apply</th>
</tr>
</thead>
</table>
| The mainstem of the Ngaruroro River from Whanawhana cableway (at or about NZTopo50 – BK37:918-158) downstream to the inland limit of the coastal marine area (at or about NZTopo50 BK39:368-12854-127), “lower Ngaruroro River”,. | Significance in accordance with tikanga Māori  
Cultural and spiritual purposes  
Habitat for avifauna  
Habitat for native fish  
Contribution to outstanding habitat for native fish in the Upper Ngaruroro Waters  
Jet boating amenity and recreation  
[Scientific and ecological values – water quality](#) | Prohibit damming (cl 8)  
Minimum flow and maximum abstraction (cl 9)  
Maintain river form (cl 9)  
Restrictions on alterations of river flow and form (cl 9)  
Fish screens (cl 10)  
Water quality (cl 11) |
| The mainstem of the Clive River from the Rauuapare Stream confluence (at or about NZTopo50 BK39:327-093) downstream to the inland limit of the coastal marine area, at or about the State Highway 2 bridge, Clive, approximate map reference NZTopo50 BK39:368-1184-143 “Clive River”. | Significance in accordance with tikanga Māori  
Cultural and spiritual purposes | Prohibit damming (cl 8)  
Maximum abstraction (cl 9)  
Restriction on alteration of river flow and form (cl 9)  
Fish screens (cl 10)  
Water quality (cl 11) |
## Schedule 3

**Waters to be protected for their contribution to outstanding characteristics**

<table>
<thead>
<tr>
<th>Waters</th>
<th>Contribution to Outstanding Characteristics or Features</th>
<th>Conditions to Apply</th>
</tr>
</thead>
</table>
| Tributaries to the Lower Ngaruroro River from Whanawhana cableway (at or about NZTopo50.—BK37:918-158) to the inland limit of the coastal marine area (at or about NZTopo50 BK39:368-12864-127). | Contribution to: significance in accordance with tikanga Māori cultural and spiritual purposes | Minimum flow (cl 9)  
Maximum abstraction (cl 9)  
River form (cl 9)  
Restriction on alteration of river flow and form (cl 9)  
F Requirement for fish screens (cl 10)  
Water quality (cl 11) |
| Hydraulically connected groundwater to the waters specified in Schedule 2 | Contribution to: significance in accordance with tikanga Māori cultural and spiritual purposes habitat for native fish habitat for avifauna jetboating amenity and recreation scientific and ecological values—water quality | Minimum flow (cl 9)  
Maximum abstraction (cl 9)  
Restriction on alteration of river flow and form (cl 9)  
Water quality (cl 11) |
Schedule 4
Minimum requirements for fish screens and intakes

<table>
<thead>
<tr>
<th>Feature</th>
<th>Minimum Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen location</td>
<td>At the point of water diversion from the river (or as close as practicable)</td>
</tr>
<tr>
<td>Screen size (aperture)</td>
<td>Aperture size not exceeding:</td>
</tr>
<tr>
<td></td>
<td>• 2 mm in diameter for profile bar screens</td>
</tr>
<tr>
<td></td>
<td>• 3 mm in diameter for woven mesh screens</td>
</tr>
<tr>
<td></td>
<td>• 3.2 mm in diameter for perforated plate screens (round opening)</td>
</tr>
<tr>
<td>Approach velocity</td>
<td>No greater than 0.12 metres per second</td>
</tr>
<tr>
<td>Sweep velocity (parallel to the face of the screen)</td>
<td>Equal to or greater than the approach velocity at all times</td>
</tr>
<tr>
<td>Return of fish to an active flowing channel of the water from which they were diverted</td>
<td>Effective bypass structure</td>
</tr>
<tr>
<td>Screen maintenance and operation</td>
<td>To ensure that the screen remains effective at all times</td>
</tr>
</tbody>
</table>
### Schedule 5
#### Water Quality Limits

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Upper Ngaruroro Waters upstream of Kuripapango</th>
<th>Upper Ngaruroro Waters upstream of Whanawhana</th>
<th>Lower Ngaruroro River at Chesterhope</th>
<th>Clive River</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissolved inorganic nitrogen (DIN) (Total oxidized nitrogen (nitrate + nitrite) + ammoniacal N)</td>
<td>5-year median concentration shall not exceed 0.01 mg/L</td>
<td>5-year median concentration shall not exceed 0.025 mg/L</td>
<td><strong>Annual average concentration shall not exceed 100 mg/m³</strong>&lt;br&gt;<strong>Annual median concentration shall not exceed 0.1 mg/L at all flows</strong></td>
<td><strong>Existing state</strong></td>
</tr>
<tr>
<td>Ammoniacal nitrogen (unadjusted for pH and temperature)</td>
<td>5-year maximum concentration shall not exceed 0.01107 mg/L</td>
<td>5-year maximum concentration shall not exceed 0.02146 mg/L</td>
<td>Shall not exceed 100 mg/m³</td>
<td><strong>Existing state</strong></td>
</tr>
<tr>
<td>Ammonia (adjusted for pH of 8 and temperature of 20°C)</td>
<td></td>
<td></td>
<td><strong>Annual median ≤ 0.03 mg/L, and Annual maximum shall be ≤ 0.05 mg/L</strong></td>
<td></td>
</tr>
<tr>
<td>Attribute State</td>
<td>Median Concentration</td>
<td>Annual Average Concentration</td>
<td>Existing State</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td><strong>Dissolved reactive phosphorus (DRP)</strong></td>
<td></td>
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</tr>
<tr>
<td>5-year median concentration shall not exceed 0.002 mg/L</td>
<td>5-year median concentration shall not exceed 0.004 mg/L</td>
<td><strong>Annual average concentration shall not exceed 0.008 mg/L at all flows</strong></td>
<td><strong>Existing state</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Escherichia coli (E. coli)</strong></td>
<td></td>
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</tr>
<tr>
<td>5-year median concentration shall not exceed 4 E. coli/100ml</td>
<td>5-year median concentration shall not exceed 4 E. coli/100ml</td>
<td><strong>E. coli shall not exceed 260/100ml when river flows are less than median or 650/100ml when flows are less than the 20th exceedance percentile.</strong> Shall be less than 5% over 540 cfu/100ml and shall be less than 20% over 260 cfu/100ml, and median ≤130 cfu/100ml, and 95th percentile less than 540 cfu/100ml.</td>
<td><strong>Existing state</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dissolved oxygen (DO)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily (24-hour) minimum DO shall not drop below 80% of saturation</td>
<td>Daily (24-hour) minimum DO shall not drop below 80% of saturation</td>
<td>Daily (24-hour) minimum DO shall not drop below 80% of saturation</td>
<td><strong>Existing state</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

1. Attribute state should be determined by using a minimum of 60 samples over a maximum of 5 years, collected on a regular basis regardless of weather and flow conditions. However, where a sample has been missed due to adverse weather or error, attribute state may be determined using samples over a longer timeframe.
2. Attribute state must be determined by satisfying all numeric attribute states.

Comment [Feb 20192]: Data on current state needed. May be better as a 5-year median, data review required to confirm.

1200434/3156685
<table>
<thead>
<tr>
<th>Dissolved oxygen (DO) concentration</th>
<th>7-day mean minimum(^2) (summer period: 1 November to 30 April) ≥ 8.0mg/L, and 1 day minimum(^3) (summer period: 1 November to 30 April) ≥ 7.5mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>5-year 95(^{th}) percentile of samples shall be less than 20(^\circ)C</td>
</tr>
<tr>
<td>Clarity (horizontal visibility of a black disc)</td>
<td>5-year median shall exceed 5 metres</td>
</tr>
<tr>
<td>Deposited fine sediment (%)</td>
<td>≤20 or within 10% of reference condition</td>
</tr>
<tr>
<td>Indicator</td>
<td>Threshold</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Macroinvertebrate Community Index (MCI)</td>
<td>Shall be ≥ 130</td>
</tr>
<tr>
<td>Periphyton weighted composite cover (perWCC%)</td>
<td>Shall be less than 20%</td>
</tr>
<tr>
<td>Periphyton biomass (chlorophyll-a: chla)</td>
<td></td>
</tr>
<tr>
<td>Cyanobacteria mat cover</td>
<td>Shall be less than 20%</td>
</tr>
</tbody>
</table>

Unless otherwise stated, compliance with the limit should be assessed from monthly data collected under all flow conditions.