### 16 Schedule of permitted activity discharge thresholds for water quality

Schedule 16 describes the thresholds that apply to discharges permitted under Rule 12.C.1.1A in the catchments of each discharge threshold area. Discharge Threshold Areas 1 and 2 catchments are shown on the J-series Maps.

#### 16A Permitted activity discharge thresholds for water quality by discharge threshold area

<table>
<thead>
<tr>
<th>Discharge Threshold Area 1 Catchments</th>
<th>Nitrate-nitrite nitrogen</th>
<th>Dissolved reactive phosphorus</th>
<th>Ammoniacal nitrogen</th>
<th>Escherichia coli</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timeframe</strong></td>
<td>1 April 2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Catlins</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Careys Creek</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Kaikorai</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Leith</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mokoreta (within Otago)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Owaka</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pomahaka, downstream of Glenken</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Tahakopa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Tokomairiro</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Tuapeka</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Waitahuna</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Waitati</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Waiwhera</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Any unlisted tributary on the true right bank of the Clutha/Mata-Au, south of Judge Creek</td>
<td>3.6 mg/l</td>
<td>0.045 mg/l</td>
<td>0.2 mg/l</td>
<td>550 cfu/100 ml</td>
</tr>
<tr>
<td>• Any unlisted tributary on the true left bank of the Clutha/Mata-Au, south of the Tuapeka</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Any unlisted catchment that discharges to the coast, south of Taieri Mouth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Schedule 16: Discharge Thresholds**

<table>
<thead>
<tr>
<th>Discharge Threshold Area 2 Catchments</th>
<th>Nitrate-nitrite nitrogen</th>
<th>Dissolved reactive phosphorus</th>
<th>Ammoniacal nitrogen</th>
<th>Escherichia coli</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Cardrona</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Clutha/Mata-Au</em> (above Luggate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Clutha/Mata-Au</em> and any unlisted tributary (Luggate to mouth, including Lake Roxburgh, and excluding tributaries described in Discharge Threshold Catchment Area 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Fraser</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Kakanui</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Kawarau</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lake Dunstan</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lake Hayes</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lake Hawea</em> and any tributary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lake Johnson</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lake Onslow</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lake Tuakitoto</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lake Waipori &amp; Waihola</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lake Wakatipu</em> and any tributary</td>
<td>1.0 mg/l</td>
<td>0.035 mg/l</td>
<td>0.2 mg/l</td>
<td>550 cfu/100 ml</td>
</tr>
<tr>
<td><em>Lake Wanaka</em> and any tributary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Lindis</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Luggate</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Manuherikia</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Mill Creek</em> (tributary to Lake Hayes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Pomahaka</em>, upstream of Glenken</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Shag</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Shotover</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Taieri</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Trotters</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Waianakarua</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Waikouaiti</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Waipori</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Waitaki</em> tributaries within Otago</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Any unlisted catchment that discharges to the coast, north of Taiieri Mouth</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

mg/l = milligrams per litre  
cfu/100 ml = colony-forming units per 100 millilitres
16B Representative flow monitoring sites and reference flows

Map 16B  Representative flow monitoring sites for every part of Otago
Representative flow monitoring sites are shown on the Water Info website (http://water.orc.govt.nz/WaterInfo/Default.aspx).
### Table 16B  Reference flows at each representative flow monitoring site

Reference flows are fixed and have been calculated using median flow data from 01/01/2007 to 01/01/2013. River flows for Otago are available on the Water Info website ([http://water.orc.govt.nz/WaterInfo/Default.aspx](http://water.orc.govt.nz/WaterInfo/Default.aspx)).

<table>
<thead>
<tr>
<th>Monitoring Flow Site</th>
<th>Reference flow (cumecs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bengerburn at Booths</td>
<td>0.37</td>
</tr>
<tr>
<td>Cardrona at Mt Barker</td>
<td>1.95</td>
</tr>
<tr>
<td>Catlins at Houipapa</td>
<td>2.34</td>
</tr>
<tr>
<td>Dart at The Hillocks</td>
<td>51.49</td>
</tr>
<tr>
<td>Kakanui at Clifton Falls Bridge</td>
<td>1.29</td>
</tr>
<tr>
<td>Leith at University Foot Bridge</td>
<td>0.34</td>
</tr>
<tr>
<td>Lindis at Ardgour Road</td>
<td>3.50</td>
</tr>
<tr>
<td>Lindis at Lindis Peak</td>
<td>3.51</td>
</tr>
<tr>
<td>Lovells Creek at SH1</td>
<td>0.14</td>
</tr>
<tr>
<td>Manuherikia at Campground</td>
<td>11.60</td>
</tr>
<tr>
<td>Manuherikia at Ophir</td>
<td>8.01</td>
</tr>
<tr>
<td>Matukituki at West Wanaka</td>
<td>44.99</td>
</tr>
<tr>
<td>Mill Creek at Fish Trap</td>
<td>0.35</td>
</tr>
<tr>
<td>Nevis at Wentworth Station</td>
<td>7.25</td>
</tr>
<tr>
<td>Pomahaka at Burkes Ford</td>
<td>15.48</td>
</tr>
<tr>
<td>Pomahaka at Glenken</td>
<td>7.00</td>
</tr>
<tr>
<td>Shag at Craig Road</td>
<td>0.65</td>
</tr>
<tr>
<td>Shotover at Peats</td>
<td>18.12</td>
</tr>
<tr>
<td>Silverstream at Gordon Road</td>
<td>0.30</td>
</tr>
<tr>
<td>Taiieri at Canadian Flat</td>
<td>2.45</td>
</tr>
<tr>
<td>Taiieri at Outram</td>
<td>15.86</td>
</tr>
<tr>
<td>Taiieri at Sutton</td>
<td>10.52</td>
</tr>
<tr>
<td>Taiieri at Tiroiti</td>
<td>7.88</td>
</tr>
<tr>
<td>Taiieri at Waipiata</td>
<td>6.02</td>
</tr>
<tr>
<td>Tokomairiro at West Branch Bridge</td>
<td>0.44</td>
</tr>
<tr>
<td>Waianakarua at Browns</td>
<td>0.78</td>
</tr>
<tr>
<td>Waikouaiti at Confluence</td>
<td>1.34</td>
</tr>
<tr>
<td>Waitahuna at Tweeds Bridge</td>
<td>1.55</td>
</tr>
<tr>
<td>Waiwera at Maws Farm</td>
<td>1.58</td>
</tr>
</tbody>
</table>