
CHAPTER 5 - KURANDA WEIR

109. Application of Chapter 5

This Chapter applies to the water licence holder for Kuranda Weir¹⁸ and all associated infrastructure as described in Attachment 4.

110. Compatibility with water supply scheme operations

The water licence holder must pass water for downstream purposes as required by the resource operations licence holder for the Mareeba Dimbulah Water Supply Scheme.

111. Storage releases to Barron River Falls

The water licence holder must ensure that no less than 70 ML of water flows from Kuranda Weir over the Barron River Falls over a weekly period.

112. Water licence to interfere with flow

The chief executive must amend water licence number 00432K to include—

- (a) the requirements of Section 110 and Section 111 as conditions; and
- (b) a condition or conditions under which, the licensee must carry out monitoring and reporting in accordance with the provisions in Chapter 10 of this plan.

113 to 123 Section numbers not used¹⁹

¹⁸ Licence number 00432K

¹⁹ Refer to footnote for Section 1.

CHAPTER 6 – COPPERLODE DAM

124. Application of Chapter 6

This Chapter applies to the water licence holder for Copperlode Dam and all associated infrastructure as detailed in Attachment 5.

125. Rates of release

- (1) Water may be released from Copperlode Dam up to the maximum *discharge* rate of its outlet works.
- (2) Any change in the rate of a release must occur incrementally, to minimise the occurrence of adverse environmental impacts (such as *fish stranding* and bank slumping etc.).

126. Minimum flows in Freshwater Creek

- (1) The water licence holder must ensure that the minimum flows specified in Table 14 are maintained in Freshwater Creek immediately downstream of the town water supply diversion works.
- (2) The water licence holder may achieve the minimum flows specified in Table 14 by a combination of—
 - (a) natural flows; and
 - (b) releases from Copperlode Dam.
- (3) The water licence holder may submit to the chief executive for approval, alternative operational arrangements for minimum flows for periods of *critical water shortage*.
- (4) The chief executive, in assessing the submission may either—
 - (a) request further information;
 - (b) approve the alternative operational arrangements with or without conditions; or
 - (c) refuse the alternative operational arrangements.

TABLE 14: MINIMUM FLOWS MAINTAINED IN FRESHWATER CREEK IMMEDIATELY DOWNSTREAM OF THE TOWN WATER SUPPLY DIVERSION WORKS

Minimum daily flows			
Storage volume Copperlode Dam	January to April	May to August	September to December
Greater than or equal to 9091 ML	20 ML/day	16 ML/day	15 ML/day

127. Quality of water released from Copperlode Dam

When making a release from Copperlode Dam, the water licence holder must draw water from the *inlet* level that maximises the quality of water released.

128. Use of watercourses for distribution of water

The water licence holder may use Freshwater Creek for the purpose of distribution of water from Copperlode Dam to the town water supply diversion works.

129 to 139 Section numbers not used²⁰

²⁰ Refer to footnote for Section 1.

CHAPTER 7— UNSUPPLEMENTED WATER

PART 1— GRANTING AND AMENDING WATER LICENCES

140. Water licences granted to owners of specified land

- (1) The chief executive must grant a water licence for the take of water to owners of the following land—
 - (a) Lot 2 on RP737781;
 - (b) Lot 138 on HG615;
 - (c) Lot 3 on RP737780; and
 - (d) Lot 1 on RP737780, Lot 2 on RP737780, Lot 3 on RP737780, Lot 124 on DA287 and Lot 57 on SP127216l.
- (2) The water licences granted under Subsection 1 must be granted in accordance with Attachment 7 and must include conditions that—
 - (a) water can only be taken under the water licence after water has been released to the watercourse by the water licence holder; and
 - (b) the amount of water taken under the water licence must not exceed the volume of water released to the watercourse by the water licence holder.

141. Amendment of water licences 07898WK and 12325K

- (1) The chief executive must amend the following water licences in accordance with Attachment 7 and Subsection 2—
 - (a) 07898WK; and
 - (b) 12325K.
- (2) The water licences in Subsection 1 must include as conditions that—
 - (a) water can only be taken under the water licence after water has been released by the water licence holder; and
 - (b) the amount of water taken under the water licence must not exceed the volume of water released by the water licence holder.

PART 2 – DEALING WITH WATER LICENCE APPLICATIONS

142. Water licence applications to which Part 1 applies

- (1) This Part deals with applications for water licences for water from a watercourse, lake or spring.
- (2) This Part applies to applications for a water licence made under Section 206 of the *Water Act 2000* if granting the applications would have one or more of the following effects within the plan area—
 - (a) increase the amount of water that may be taken;
 - (b) change the location from which water may be taken;
 - (c) increase the rate at which water may be taken;
 - (d) change the flow conditions under which water can be interfered with or taken; or
 - (e) increase the interference with water.
- (3) This Part applies even if the applications were made before the commencement of this plan.
- (4) This Part does not apply to applications made under Section 221 and Section 229 of the *Water Act 2000*.

143. Applications to be refused

The chief executive must refuse an application to which this Part applies unless this Part explicitly provides for accepting or dealing with the application.

144. Applications for subcatchment area C of the *Water Resource (Barron) Plan 2002*²¹

Applications for water licences in subcatchment area C and to which this Part applies, must be accepted but must not be dealt with until water entitlement conversion and water sharing rules for subcatchment area C are implemented through an amendment to this plan.

145. Previous water licences

- (1) This Section applies where—
 - (a) a water licence has expired; and
 - (b) the owner of land to which the expired water licence applied has made an application for the replacement or reinstatement of the expired water licence after the specified time in the *Water Act 2000*.
- (2) The chief executive must refuse the application unless the applicant can demonstrate—
 - (a) the works associated with the expired water licence were installed at the time the water licence expired; and
 - (b) there has been continuing use of water associated with the expired water licence.
- (3) For deciding the application, Section 220(4) to Section 220(8) of the *Water Act 2000* apply.

146. Applications to interfere with the flow of water

- (1) This Section applies to an application to increase the interference with water.
- (2) The chief executive must accept and deal with the application if the purpose of the proposed interference is to—
 - (a) store water for stock or domestic supplies;
 - (b) provide a pumping pool to enable the taking of water under a water entitlement; or
 - (c) store water for purposes not associated with the taking of water under a water entitlement.
- (3) The chief executive may approve the application if—
 - (a) the chief executive is satisfied that the interference is necessary for the purposes stated in Subsection 2; and
 - (b) the proposed storage capacity is not greater than—
 - (i) 20 ML to store water for stock and domestic purposes in subcatchment areas A or B of the *Water Resource (Barron) Plan 2002*;
 - (ii) 200 ML to store water for stock and domestic purposes in subcatchment areas D, E, F or G of the *Water Resource (Barron) Plan 2002*;
 - (iii) 2 ML to provide a pumping pool; or
 - (iv) 20 ML for purposes not associated with the take of water under a water entitlement.

²¹ Schedule 3, *Water Resource (Barron) Plan 2002*

147. Applications to increase the maximum rate of take

- (1) This Section applies to an application to amend an existing water licence to increase the maximum rate of take of water.
- (2) The chief executive must accept and deal with the application if there is a development permit, including a deemed development permit, associated with the existing water licence and —
 - (a) the maximum rate of take specified on the existing water licence is less than the rate stated in Schedule 8 of the *Water Resource (Barron) Plan 2002* for a pump of the size and type authorised under the development permit; or
 - (b) where Schedule 8 of the *Water Resource (Barron) Plan 2002* does not apply, the works associated with an existing development permit have the capacity to take water at a rate greater than the maximum rate of take specified on the existing water licence.
- (3) The chief executive may approve the application only if the maximum rate of take proposed does not exceed —
 - (a) that detailed in Schedule 8 of the *Water Resource (Barron) Plan 2002* for a pump of the size authorised under the existing development permit; or
 - (b) the maximum rate at which the works associated with an existing development permit are capable of taking water.

148. Application to change flow conditions

- (1) This Section applies where an application is to amend an existing water licence to change the flow conditions under which water can be interfered with or taken.
- (2) The chief executive must accept and deal with the application only if the applicant has demonstrated to the chief executive that the proposed change is in accordance with the water allocation security objectives and environmental flow objectives in the *Water Resource (Barron) Plan 2002*.

149 to 159 Section numbers not used²²

²² Refer to footnote for Section 1.

CHAPTER 8 – PERFORMANCE ASSESSMENT

160. Water monitoring

- (1) The chief executive must—
 - (a) measure or collect; and
 - (b) keep publicly available, records of—
 - (i) water quantity;
 - (ii) water taken;
 - (iii) prices for water permanently traded;
 - (iv) the number of permanent trades and seasonal assignments; and
 - (v) nominal volume of water permanently traded and seasonally assigned.
- (2) The chief executive must collect and record publicly available information on—
 - (a) future consumptive demands for water; and
 - (b) *water use* efficiency.

161. Natural ecosystems monitoring and assessment

- (1) The chief executive must collect and record information, including information on—
 - (a) *ecological assets* that are linked to the ecological outcomes of the *Water Resource (Barron) Plan 2002*; and
 - (b) the critical water requirements of biological indicators of the *ecological assets*.

162. Assessment

- (1) The chief executive must make ongoing assessments of whether the trends in data measured, collected and recorded under Section 160 and Section 161 of this plan indicate that outcomes specified in the *Water Resource (Barron) Plan 2002* are being achieved.
- (2) The chief executive's assessments may be used to assist the Minister in preparing a report under Section 63 of the *Water Resource (Barron) Plan 2002*.

163 to 173 Section numbers not used²³

²³ Refer to footnote for Section 1.

CHAPTER 9 – RESOURCE OPERATIONS LICENCE HOLDER MONITORING

174. Scope of Chapter 9

This Chapter sets out the monitoring and reporting requirements that apply to—

- (a) the resource operations licence holder for the Mareeba Dimbulah Water Supply Scheme; and
- (b) all water allocations associated with the Mareeba Dimbulah Water Supply Scheme.

Division 1—Water quantity

175. Stream flow and storage water level data

- (1) The resource operations licence holder must—
 - (a) measure and record storage water level data at the following locations—
 - (i) Tinaroo Falls Dam Storage; and
 - (ii) Collins Weir Storage;
 - (b) measure and record flow data at the following locations—
 - (i) Tinaroo Falls Dam outflow; and
 - (ii) Subject to Subsection 2, the Barron River at downstream control of Lake Placid, up to a rate of 2 000 ML/day; and
 - (c) collect and record flow data at the following locations—
 - (i) Node 4 – Barron River at Mareeba (AMTD 70.2km); and
 - (ii) Node 2 – Barron River at Myola (AMTD 27.1km).
- (2) Subsection 1(b)(ii) applies only if the total of all water allocations supplied in zone C by the resource operations licence holder exceeds 1000ML.

176. Maximum supplementation rates in watercourses

The resource operations licence holder must measure and record the daily volumes released into the supplemented streams listed in Chapter 4, Part 1, Table 2 of this plan.

177. Releases from Tinaroo Falls Dam

The resource operations licence holder must—

- (a) measure and record for each outlet from Tinaroo Falls Dam—
 - (i) the daily volume released; and
 - (ii) the release rate, and for each change in release rate—
 - (A) the rate of change to the release rate;
 - (B) the date and time of the change; and
 - (C) the new release rate;
- (b) record for each outlet from Tinaroo Falls Dam the reason for each release and the component volumes for each release.

178. Announced allocations

The resource operations licence holder must record details of *announced allocation* determinations including—

- (a) the *announced allocation* for medium and high priority allocations;
- (b) the date *announced allocations* are determined; and
- (c) the value of each parameter applied for calculating the *announced allocation*.

179. Water taken by water users

The resource operations licence holder must measure and record the volume of water taken by each water user as follows—

- (a) the total volume of water taken each *quarter* for each zone;
- (b) the total volume of water entitled to be taken at any time for each zone; and
- (c) the basis for determining the total volume of water entitled to be taken at any time.

180. Water taken for distribution losses

The resource operations licence holder must measure and record the total volume of water taken for *distribution loss* each *water year*.

181. Seasonal water assignment of water allocations

The resource operations licence holder must record details of seasonal water assignment arrangements including—

- (a) the name and *location* of *assignees* and *assignors*; and
- (b) the volume of water that has been seasonally assigned to an *assignee*.

182. Critical water supply arrangements

The resource operations licence holder must record details of any restrictions on the supply of high priority water referred to in Section 82 including—

- (a) the dates of restrictions;
- (b) the nature of restrictions; and
- (c) the basis for determining restrictions, including—
 - (i) the minimum allocation for high priority urban users; and
 - (ii) the critical levels for high priority reserves.

Division 2—Impact of storage operation on aquatic ecosystems**183. Water quality**

- (1) The resource operations licence holder must measure and record water quality parameters in accordance with Table 15 at—
 - (a) Tinaroo Falls Dam storage pond;
 - (b) Collins Weir storage pond; and
 - (c) the Barron River directly below the *compensation outlet*.
- (2) Measurements and samples must be taken each calendar month and no less than three weeks apart.
- (3) Storage inflow, storage pond and storage outflow measurements and samples must be taken on the same day.
- (4) Water quality measurements and samples at storages are to be representative of the quality of the water entering, stored in, and leaving the storage.

TABLE 15: WATER QUALITY PARAMETERS

Parameter	Collection method	Storage inflow	Storage pond	Barron River directly below the compensation outlet
Temperature	Field	✓	Profile	✓
Dissolved oxygen	Field	✓	Profile	✓
pH	Field	✓	Profile	✓
Electrical conductivity	Field	✓	Profile	✓
Total nitrogen	Laboratory	✓	✓	✓
Total phosphorus	Laboratory	✓	✓	✓
Total sulphide	Laboratory	Not required	Not required	✓

184. Cyanobacteria (blue-green algae)

The resource operations licence holder must monitor cyanobacteria populations in Tinaroo Falls Dam and Collins Weir.

185. Bank condition

The resource operations licence holder must record and assess reported instances of bank slumping or bank erosion in watercourses and ponded areas associated with the operation of infrastructure of the resource operations licence holder as listed in Attachment 3 to determine if any instance is associated with the operation of that infrastructure.

186. Fish stranding

The resource operations licence holder must record and assess reported instances of fish stranding in watercourses and ponded areas associated with the operation of infrastructure of the resource operations licence holder as listed in Attachment 3 to determine if any instance is associated with the operation of that infrastructure.

Division 3—Data transfer**187. Quarterly data transfer**

The resource operations licence holder must transfer the following data to the chief executive after the end of each *quarter*—

- (a) stream flow and storage water level—all records referred to in Section 175;
- (b) maximum supplementation rates—all records referred to in Section 176;
- (c) releases from Tinaroo Falls Dam—the daily volumes released referred to in Section 177;
- (d) the total volume of water for each *quarter*—
 - (i) taken for each zone; and
 - (ii) entitled to be taken for each zone; and
- (e) water quality—all records referred to in Section 183; and
- (f) cyanobacteria—all records referred to in Section 184.

188. Monitoring data must be made available

The resource operations licence holder must transfer any monitoring data required under this Chapter to the chief executive upon request, and within the time requested.

Division 4—Reporting

Sub-division 1—Annual report

189. Annual report

- (1) The resource operations licence holder must submit an annual report to the chief executive after the end of each *water year*.
- (2) The annual report must include a summary of—
 - (a) *announced allocation* determinations, including—
 - (i) an evaluation of the *announced allocation* procedures and outcomes; and
 - (ii) the date and value for the initial *announced allocation* and for each change made to an *announced allocation*;
 - (b) instances where *critical water supply arrangements* have been implemented, including—
 - (i) an evaluation of the effectiveness of the arrangements and outcomes; and
 - (ii) the commencement date/s and time period/s for which the arrangements were in effect;
 - (c) the total volumes of water taken under entitlements, specified by each zone;
 - (d) the total volume of seasonal water assignments into each zone and out of each zone;
 - (e) the total volume of water allowed to be taken under the *announced allocation*; and
 - (f) the total volume of water taken for *distribution loss* for the *water year*.
- (3) The annual report must include—
 - (a) all details of changes to storages and delivery infrastructure, or the operation of storages and delivery infrastructure that may impact on compliance with rules and requirements in this plan;
 - (b) details of any new monitoring devices used such as equipment to measure stream flow;
 - (c) details of any investigations of bank slumping or bank erosion identified in ponded areas and downstream of storages and any mitigation measures implemented in relation to these investigations;
 - (d) results of any investigations of *fish stranding* downstream of storages;
 - (e) any variation made to the change in rates of release from storages, for the purpose of minimising the occurrence of bank slumping, bank erosion or *fish stranding*; and
 - (f) a discussion and assessment of the following water quality issues—
 - (i) thermal and chemical stratification in each storage;
 - (ii) the impact of the storage and its management on the quality of water released; and
 - (iii) cyanobacteria population changes, particularly in response to stratification in each storage.
- (4) The annual report must include a discussion on any issues that arose as a result of the implementation and application of the rules and requirements in this plan.

Sub-division 2—Operational reporting

190. Operational reporting

- (1) The resource operations licence holder must transfer information on the approval of any seasonal assignment to the chief executive, including—
 - (a) the name and *location* of *assignees* and *assignors*; and
 - (b) the zone or zones where water is being seasonally assigned to and from.
- (2) The resource operations licence holder must notify the chief executive—
 - (a) upon making a decision relating to—
 - (i) an initial *announced allocation* and/or its recalculation; or
 - (ii) any restrictions on the taking of high priority water.
 - (b) upon activating the *critical water supply arrangements*; or
 - (c) with details of any arrangements for addressing circumstances where they are unable to supply water allocations.
- (3) The resource operations licence holder must transfer to the chief executive, relevant supporting information used in making a decision relating to—
 - (a) an initial *announced allocation* and/or its recalculation; and
 - (b) any restrictions on the taking of high priority water.
- (4) The resource operations licence holder must notify the chief executive upon becoming aware of the following operational incidents—
 - (i) non-compliance by the resource operations licence holder with the rules and requirements in this plan; or
 - (ii) instances of *fish stranding* and bank slumping within supplemented watercourses of the Mareeba Dimbulah Water Supply Scheme; and
- (5) The resource operations licence holder must provide a report to the chief executive of the occurrence of any of the operational incidents discussed in Subsection 4. The report must include details of the incident, conditions under which the incident occurred and any responses or activities carried out as a result of the incident.

Sub-division 3—Emergency reporting

191. Emergency reporting²⁴

For any *emergency*, the resource operations licence holder must—

- (a) notify the chief executive upon discovery of the *emergency*; and
- (b) provide a report to the chief executive including—
 - (i) details of the *emergency*;
 - (ii) conditions under which the *emergency* occurred;
 - (iii) any responses or activities carried out as a result of the *emergency*; and
 - (iv) any rules and requirements specified in this plan that the resource operations licence holder is either permanently or temporarily unable to comply with due to the *emergency*.

192 to 202 Section numbers not used²⁵

²⁴ Does not preclude requirements for dam safety under the *Water Act 2000* and any other applicable legislation

²⁵ Refer to footnote for Section 1.

CHAPTER 10 – WATER LICENCE HOLDER FOR KURANDA WEIR MONITORING

203. Scope of Chapter 10

This Chapter sets out the monitoring and reporting requirements that apply to the water licence holder for Kuranda Weir.

Division 1—Water quantity

204. Stream flow

The water licence holder must measure and record the daily volume of water released from Kuranda Weir to the Barron River Falls under the requirements of Section 111.

205. Water taken from Kuranda Weir

The water licence holder must measure and record—

- (a) the daily volume of water taken for hydroelectric power generation; and
- (b) the maximum rate at which water is taken for hydroelectric power generation.

Division 2— Impact of storage operation on aquatic ecosystems

206. Water quality

- (1) The water licence holder must measure and record water quality in accordance with Table 16 at—
 - (a) Kuranda Weir; and
 - (b) the power station outflow.
- (2) Storage inflow, storage pond and storage outflow measurements and samples must be taken on the same day.
- (3) Measurements and samples must be taken each calendar month and no less than three weeks apart.
- (4) Water quality measurements and samples at storages are to be representative of the quality of the water entering, stored in, and leaving the storage.

TABLE 16: WATER QUALITY PARAMETERS THAT MUST BE RECORDED BY THE WATER LICENCE HOLDER.

Parameter	Collection method	Storage inflow	Storage pond	Storage outflow	Power station outflow
Temperature	Field	✓	Profile	✓	•
Dissolved oxygen	Field	✓	Profile	✓	•
pH	Field	✓	Profile	✓	Not required
Electrical conductivity	Field	✓	Profile	✓	Not required
Total nitrogen	Laboratory	✓	✓	✓	Not required
Total phosphorus	Laboratory	✓	✓	✓	Not required
Total sulphide	Laboratory	Not required	Not required	✓	Not required

207. Cyanobacteria (blue-green algae)

The water licence holder must monitor cyanobacteria populations in Kuranda Weir.

208. Barron River Falls

- (1) The water licence holder must, within 6 months of commencement of this plan, prepare and submit a program to the chief executive for monitoring and assessing flows for the Barron River Falls between Kuranda Weir and the point at which water is released to the Barron River from the hydro-electric power station.
- (2) The monitoring and assessment program must identify indicators for assessment of the adequacy of flows over the Barron River Falls for achieving the following *Water Resource (Barron) Plan 2002* objectives—
 - (a) connectivity through the watercourse network; and
 - (b) aquatic habitats and ecosystem food chains.
- (3) The chief executive, in assessing or determining the program, may either—
 - (a) request further information;
 - (b) approve the monitoring and assessment program with or without conditions; or
 - (c) require the water licence holder to submit a proposal for a revised monitoring and assessment program.
- (4) The water licence holder must implement a program submitted under this Section immediately upon approval by the chief executive under Subsection 3(b).

Division 3—Data transfer**209. Quarterly data transfer**

The water licence holder must transfer the following data to the chief executive after the end of each *quarter*—

- (a) stream flow data—all records referred to in Section 204;
- (b) diversions from Kuranda Weir—the daily volumes taken referred to in Section 205;
- (c) water quality—all records referred to in Section 206; and
- (d) cyanobacteria—all records referred to in Section 207.

210. Data retention

The water licence holder must transfer any monitoring data required to be recorded under this Chapter to the chief executive upon request, and in the time requested.

Division 4—Reporting***Sub-division 1—Annual report*****211. Annual report**

- (1) The water licence holder must submit an annual report to the chief executive after the end of each *water year*.
- (2) The annual report must include a summary of the implementation of the rules for releases from Kuranda Weir.

- (3) The water licence holder must transfer all details of changes to storage and diversion infrastructure or the operation of the storage and infrastructure that may impact on compliance with rules and requirements in this plan.
- (4) The annual report must include a discussion and assessment of the following water quality issues—
 - (a) thermal and chemical stratification in the storage;
 - (b) the impact of the storage and its management on the quality of water released; and
 - (c) cyanobacteria population changes, particularly in response to stratification in the storage.
- (5) The annual report must include—
 - (a) discussion and assessment of the findings and results of a monitoring and assessment program approved under Section 208;
 - (b) discussion and assessment of the adequacy of flows released under Section 111 in meeting objectives of the *Water Resource (Barron) Plan 2002* as specified in Section 208(2); and
 - (c) recommendations for alternative operating arrangements for release of flows from Kuranda Weir, over the Barron River Falls.

Sub-division 2—Operational reporting

212. Operational reporting

- (1) The water licence holder must notify the chief executive upon becoming aware of operational incidents causing non-compliance with the rules and requirements in this plan.
- (2) The water licence holder must provide a report to the chief executive if unable to comply with any rule or requirement set out in this plan. The report must include details of the incident, conditions under which the incident occurred and any responses or activities carried out as a result of the incident.

Sub-division 3—Emergency reporting

213. Emergency reporting²⁶

For any *emergency* the water licence holder must—

- (a) notify the chief executive upon discovery of the *emergency*; and
- (b) provide a report to the chief executive including;
 - (i) details of the *emergency*;
 - (ii) conditions under which the *emergency* occurred;
 - (iii) any responses or activities carried out as a result of the *emergency*; and
 - (iv) any rules and requirements specified in this plan that the water licence holder is either permanently or temporarily unable to comply with due to the *emergency*.

214 to 224 Section numbers not used²⁷

²⁶ This provision does not preclude requirements for dam safety under the *Water Act 2000* and any other applicable legislation.

²⁷ Refer to footnote for Section 1.

CHAPTER 11 – WATER LICENCE HOLDER FOR COPPERLODE DAM MONITORING

225. Application of Chapter 11

This Chapter sets out the monitoring and reporting requirements that apply to the water licence holder for Copperlode Dam.

Division 1—Water quantity

226. Stream flow and water take

The water licence holder must measure and record—

- (a) the daily volume of water taken from Freshwater Creek; and
- (b) the daily flow volume passing the Freshwater Creek Town Water Supply Diversion Works.

227. Releases from Copperlode Dam

The water licence holder must—

- (a) measure and record for the outlet from Copperlode Dam—
 - (i) the daily volume released; and
 - (ii) the release rate, and for each change in release rate—
 - (A) the rate of change to the release rate;
 - (B) the date and time of the change; and
 - (C) the new release rate;
- (b) measure and record the water level of the multi-level intake from which the release was made; and
- (c) record for releases made from Copperlode Dam—
 - (i) the reason for each release; and
 - (ii) the inlet level used and basis for deciding to release from that particular inlet level.

Division 2—Impact of storage operation on aquatic ecosystems

228. Water quality

- (1) The water licence holder must measure, collect and record water quality in accordance with Table 17 at Copperlode Dam.
- (2) Measurements and samples must be taken each calendar month and no less than three weeks apart.
- (3) Storage pond and storage outflow measurements and samples must be taken on the same day.
- (4) Water quality measurements and samples at storages are to be representative of the quality of the water entering, stored in, and leaving the storage.

TABLE 17: WATER QUALITY PARAMETERS

Parameter	Collection method	Storage pond	Storage outflow
Temperature	Field	Profile	✓
Dissolved oxygen	Field	Profile	✓
pH	Field	Profile	✓
Electrical conductivity	Field	Profile	✓
Total nitrogen	Laboratory	✓	✓
Total phosphorus	Laboratory	✓	✓
Total sulphide	Laboratory	Not required	✓

229. Cyanobacteria (blue-green algae)

The water licence holder must monitor cyanobacteria populations in Copperlode Dam.

Division 3—Data transfer

230. Quarterly data transfer

The water licence holder must transfer the following data to the chief executive after the end of each *quarter*—

- (a) stream flow and water take data—all records referred to in Section 226;
- (b) releases from Copperlode Dam—the daily volumes released referred to in Section 227;
- (c) water quality—all records referred to in Section 228; and
- (d) cyanobacteria—all records referred to in Section 229.

231. Data retention

The water licence holder must transfer any monitoring data required to be recorded under this Chapter to the chief executive upon request, and within the time requested.

Division 4—Reporting

Sub-division 1—Annual report

232. Annual report

- (1) The water licence holder must submit an annual report to the chief executive after the end of each *water year*.
- (2) The annual report must include a summary of—
 - (a) the implementation of the rules for releases from Copperlode Dam; and
 - (b) monthly volumes of water taken from Freshwater Creek.

- (3) The annual report must include—
 - (a) all details of changes to the storage and delivery infrastructure or the operation of infrastructure and the storage that may impact on compliance with rules and requirements in this plan;
 - (b) details of any new monitoring devices used, such as equipment to measure stream flow;
 - (c) any variation made to the change in rates of release from storages, for the purpose of minimising the occurrence of bank slumping, bank or *fish stranding*; and
 - (d) a discussion and assessment of the following water quality issues—
 - (i) thermal and chemical stratification in the storage;
 - (ii) the impact of the storage and its management on the quality of water released; and
 - (iii) cyanobacteria population changes, particularly in response to stratification in the storage.
- (4) The annual report must include a discussion on any issues that arose as a result of the application of the rules and requirements in this plan.

Sub-division 2—Operational reporting

233. Operational reporting

- (1) The water licence holder must notify the chief executive upon becoming aware of operational incidents causing non-compliance with the rules and requirements in this plan.
- (2) The water licence holder must provide a report to the chief executive if unable to comply with any rule or requirement set out in this plan. The report must include details of the incident, conditions under which the incident occurred and any responses or activities carried out as a result of the incident.

Sub-division 3—Emergency reporting

234. Emergency reporting²⁸

For any *emergency* the water licence holder must—

- (a) immediately notify the chief executive upon discovery of the *emergency*; and
- (b) provide a report to the chief executive including—
 - (i) details of the *emergency*;
 - (ii) conditions under which the *emergency* occurred;
 - (iii) any responses or activities carried out as a result of the *emergency*; and
 - (iv) any rules and requirements specified in this plan that the water licence holder is either permanently or temporarily unable to comply with due to the *emergency*.

235 to 245 Section numbers not used²⁹

²⁸ This provision does not preclude requirements for dam safety under the *Water Act 2000* and any other applicable legislation.

²⁹ Refer to footnote for Section 1.

CHAPTER 12 – AMENDMENTS TO THE RESOURCE OPERATIONS PLAN

PART 1 – AMENDMENTS NOT REQUIRING PUBLIC NOTIFICATION

246. Application of Chapter 12

This Part describes those amendments that may be made to this plan under Section 106(b) of the *Water Act 2000*.

247. Amendment necessary to implement an amendment to the *Water Resource (Barron) Plan 2002*

An amendment that is necessary to implement an amendment to the *Water Resource (Barron) Plan 2002* made under Section 57(b) of the *Water Act 2000* may be made to this plan.

248. Amendment to monitoring requirements

- (1) An amendment that provides for improved or more efficient monitoring for assessing the *Water Resource (Barron) Plan 2002* outcomes may be made to this plan.
- (2) Such amendments may include, but are not limited to, the following—
 - (a) changing indicators for water quality monitoring;
 - (b) an increase or addition to monitoring requirements, if further information is required; and
 - (c) a reduction or removal of State, resource operations licence holder or water licence holder monitoring requirements, if the chief executive is satisfied that no further information or benefit is to be gained from the continuation of the monitoring requirements.

249. Amendment to infrastructure details

An amendment may be made to the infrastructure details in Attachments 3, 4, and 5 of this plan, provided the amendment does not adversely impact on the achievement of the *Water Resource (Barron) Plan 2002* outcomes and is—

- (a) an amendment to correct an error in the details shown in Attachments 3, 4, and 5 (e.g. revision of storage volume, spillway and/or outlet *discharge* relationships);
- (b) an amendment to facilitate the installation of a fish transfer system on any of the infrastructure detailed; or
- (c) an amendment to facilitate the installation of, or modification to, *multi-level inlet* works on any of the infrastructure detailed.

250. Amendment to Chapter 6

An amendment may be made to Chapter 6 of this plan, where that amendment is necessary to implement or amend alternative operating arrangements for minimum flows for periods of *critical water shortage* for Copperlode Dam.

251. Amendment to Chapter 4

The following amendments may be made to Chapter 4 of this plan—

- (a) A change to the operational rules in Part 1 and Part 2 of Chapter 4 that are necessary to implement or amend *critical water supply arrangements* under Section 84; or
- (b) a change to Table 1 when that change is necessary to allow for changes to distribution works on a supplemented watercourse.

252. Amendment to trading and seasonal assignment of ‘distribution loss’ water allocations

The following amendments may be made to the rules of this plan relating to water allocations with a purpose of ‘distribution loss’—

- (a) a change to Section 90, to permit a change to the purpose of a water allocation from ‘distribution loss’ to ‘rural’ or ‘any’, where the resource operations licence holder has demonstrated to the satisfaction of the chief executive that the proposed amendment—
 - (i) meets *Water Resource (Barron) Plan 2002* objectives; and
 - (ii) is supported by the majority of water allocation holders for the Mareeba Dimbulah Water Supply Scheme; or
- (b) a change to Section 95, to permit the approval of a seasonal assignment of a water allocation where the purpose is ‘distribution loss’ and where the resource operations licence holder has demonstrated to the satisfaction of the chief executive that the proposed amendment—
 - (i) meets *Water Resource (Barron) Plan 2002* objectives; and
 - (ii) is supported by the majority of water allocation holders for the Mareeba Dimbulah Water Supply Scheme.

253. Amendment to specification of water year

- (1) An amendment may be made to the specification of a water year where the resource operations licence holder has demonstrated to the satisfaction of the chief executive that the proposed amendment —
 - (a) meets *Water Resource (Barron) Plan 2002* objectives;
 - (b) is supported by the majority of water allocation holders for the Mareeba Dimbulah Water Supply Scheme; and
 - (c) is reasonable and has long-term merit.
- (2) Where an amendment is made under Subsection 1, an amendment may also be made to the following—
 - (a) Table 3;
 - (b) Table 4;
 - (c) Table 5;
 - (d) Table 8;
 - (e) Table 9;
 - (f) Table 10;
 - (g) Table 11; and
 - (h) any rules or requirements of this plan relating to the specification of a water year.

PART 2 – AMENDMENTS REQUIRING PUBLIC NOTIFICATION**254. Amendments under the *Water Act 2000***

- (1) The chief executive may amend this plan under Section 105(5) of the *Water Act 2000* to include additional requirements for water management.
- (2) Examples of amendments that may occur under Section 105(5) of the *Water Act 2000* include, but are not limited to—
 - (a) changes to water sharing rules, where the resource operations licence holder has demonstrated to the satisfaction of the chief executive that the proposed water sharing rules meet the *Water Resource (Barron) Plan 2002* objectives and outcomes; or
 - (b) environmental management rules, water sharing rules, seasonal assignment rules and water allocation change rules for subcatchment area C.

DICTIONARY

TERM	DEFINITION
AHD	The Australian height datum, which references to a level or height to a standard base level.
Announced allocation	For a water allocation managed under a water resource operations licence means a number, expressed as a percentage, which is used to determine the maximum volume of water that may be taken in a water year under the authority of a water allocation.
Assignee	The person or entity to whom an interest or right to water is being transferred (e.g. seasonally assigned).
Assignor	The person or entity who transfers an interest or right in water to an assignee (e.g. a seasonal assignment).
Compensation outlet	Outlet works that enable water to be discharged into the Barron River from the irrigation channel.
Critical water shortage	When it is anticipated that storage levels in Tinaroo Falls Dam and/or Copperlode Dam will fall below minimum operating levels within 12 months.
Critical water supply arrangements	During periods of critical water shortage the critical water supply arrangements set out the operating rules by which water will be shared.
Dead storage	For a dam or weir, is the volume of water within the ponded area of the storage that cannot be released or used from the storage under normal operating conditions.
Discharge	Discharge is the rate at which a volume of water passes a point in a stream or pipeline per unit of time. This could be measured in litres per second (L/s), cubic metres per second (cumecs m ³ /s) or in megalitres per day (ML/day).
Distribution loss water	Water that is 'lost' when delivering water for water allocations via constructed water delivery infrastructure, such as pipelines and open channels, through such processes as evaporation, seepage, pipeline leakage, accidental loss through temporary pipe failure (breaks), loss through pressure relief systems, scouring, pigging, etc. Distribution loss water is not included in, or part of, Transmission operation allowance (TOA as defined in Table 7).
Ecological asset	An ecological asset can be a species, group of species, a biological function or particular ecosystem or place of value for which water is critical.
EL	Elevation.
Emergency	An emergency includes an occurrence that, by the nature of its severity, extent or timing might be regarded as an emergency (for example contamination of water supply, structural damage to infrastructure or a danger to human health).
Existing water authorisation	For Chapter 3, Part 3 of this plan, means a water licence, interim water allocation or other authority to take water that has effect immediately prior to the commencement of this plan.
Fish stranding	Fish stranding means when fish are stranded or left out of water on the bed or banks of a watercourse, on infrastructure such as spillways and causeways or left isolated in small and/or shallow pools, from which they cannot return to deeper water. This also applies to other aquatic species such as platypus, turtles and any rare or threatened species.
Inlet	Infrastructure comprised of an entrance channel, intake structure, and gate or valve, which allow for water to be taken from the storage and discharged into the watercourse downstream of the storage.
Location	For a water allocation, means the zone from which water under the water authorisation can be taken.
Megalitre (ML)	One million litres.
Multi-level inlet	An inlet arrangement on a dam or weir that allows stored water to be released downstream from selected levels below the stored water surface.

TERM	DEFINITION
Publish	Publish means: <ul style="list-style-type: none"> <li data-bbox="496 282 1353 342">(a) if the provision states the way the notice must be published—in the way stated in the provision; or <li data-bbox="496 369 1353 430">(b) if the provision does not state the way the notice must be published—in a newspaper circulating generally throughout the area for which the notice is published.
Quarter or quarterly	Three monthly intervals commencing at the start of the water year
Resource operations plan zone	A geographic location defined by a reach of a watercourse. Resource operations plan zones define the location of a water allocation and operational arrangements under this plan.
Valid change certificates	A certificate issued under Section 129 of the <i>Water Act 2000</i> .
Water use	Refers to actual consumption of water.
Water year	The period from 1 July to 30 June in the following year.

ATTACHMENT 2 – LINKS BETWEEN THIS PLAN AND THE OUTCOMES OF THE WATER RESOURCE (BARRON) PLAN 2002

TABLE 1: LINKAGES BETWEEN THIS PLAN AND OUTCOMES OF THE *WATER RESOURCE (BARRON) PLAN 2002*

General Outcomes of the <i>Water Resource (Barron) Plan 2002</i> (Section 11)	Resource operations plan rules
<i>11(1) Surface water is to be allocated and managed in a way that seeks to achieve a balance on the following outcomes—</i>	
11(1)(a)—to ensure reliable and secure supply of water from the plan area during the time this plan is in force	<ul style="list-style-type: none"> • water allocation change rules (e.g. trading and seasonal assignment) • water sharing rules (e.g. announced allocations) • dealing with water licences • dealing with unallocated water
11(1)(b)—to protect the probability of being able to obtain water under a water allocation	<ul style="list-style-type: none"> • resource operations licence holder and water licence holders for Kuranda Weir and Copperlode Dam water quantity monitoring • reporting of resource operations licence holder • operating and environmental management rules (e.g. Critical Water Supply Arrangements) • metering • dealing with water licences
11(1)(c)—to allow water to be used for hydroelectric power generation	<ul style="list-style-type: none"> • operating and environmental management rules (e.g. right to release water from Tinaroo Falls Dam) • granting and conversion of authorisations (e.g. water licence granted to Stanwell Corporation)
<i>11(2) both surface water and subartesian water are to be allocated and managed in a way that seeks to achieve a balance in the following outcomes—</i>	
11(2)(a)—to allow water to be used for the following (i) agriculture; (ii) aquaculture; (iii) industrial needs; (iv) small scale uses; (v) stock and domestic purposes; (vi) tourism and recreational uses; (vii) urban needs	<ul style="list-style-type: none"> • granting and converting authorisations • water allocation change rules (trading and seasonal assignment) • purpose of a water allocation (preliminary)
11(2)(b)—to provide for the continued use of all water entitlements and other authorisations to take or interfere with water	<ul style="list-style-type: none"> • granting and converting authorisations

11(2)(c)—to encourage the efficient use of water	<ul style="list-style-type: none"> • metering • operating and environmental management rules • water sharing rules • water allocation change rules (trading and seasonal assignment) • monitoring of water take by water service provider
11(2)(d)—to maintain areas of significant tourism and recreational value, including Barron Falls, Barron Gorge and Tinaroo Falls Dam	<ul style="list-style-type: none"> • operating and environmental management rules (e.g. waterhole management, releases from Kuranda Weir for flow over the Barron Falls, and maintenance of low flow outcomes in the Barron River)
11(2)(e)—to allow cultural use by Aboriginal and Torres Strait Islander communities	<ul style="list-style-type: none"> • operating and environmental management rules (e.g. waterhole management)
11(2)(f)—to provide water to support natural ecosystems	<ul style="list-style-type: none"> • operating and environmental management rules (e.g. seasonal low flow objectives, waterhole management)
General Ecological Outcomes of the <i>Water Resource (Barron) Plan 2002</i> (Section 12)	Resource operations plan rules
<i>12 Surface water is to be allocated and managed in a way that seeks to achieve a balance in the following outcomes while recognising the natural state of watercourses, lakes and springs has changes because of water infrastructure, flow supplementation and the taking of water—</i>	
<p>12(a)—to maintain habitats of native plants and animals in watercourses, lakes and springs</p> <p>12(b)—to maintain riparian systems and their functions influencing the riverine ecosystems</p> <p>12(c)—to maintain and favour native plants and animals associated with watercourses, lakes and springs and riparian zones</p> <p>12(d)—to provide wet season flow to benefit native plants and animals in estuaries</p> <p>12(e)—to maintain long-term water quality suitable for riverine and estuarine ecosystems</p> <p>12(f)—to maintain existing geomorphic features and processes</p> <p>12(g)—to maintain the capability of one part of the river system to be connected to another through the flow of water;</p> <p>(i) throughout the watercourse network</p> <p>(ii) within the riparian zone, floodplain and watercourses, lakes and springs</p> <p>12(h)—to maintain ecosystem food chains, their balance and the movement of carbon energy</p> <p>12(2) Subartesian water is to be allocated and managed to maintain subartesian water contributions to the flow of water in watercourses, lakes and springs and to groundwater-dependent ecosystems</p>	<ul style="list-style-type: none"> • resource operations licence holder and water licence holders for Kuranda Weir and Copperlode Dam water quality monitoring and reporting • resource operations licence holder and water licence holders for Kuranda Weir and Copperlode Dam fish stranding and bank slumping monitoring and reporting • chief executive data collection and assessment • operating and environmental management rules (e.g. diversion limit, change in rates of release, maintenance of low flow outcomes in the Barron River and waterhole management) • monitoring by resource operations licence holder and water licence holders for Kuranda Weir and Copperlode Dam • metering • use of performance indicators for monitoring by chief executive

ATTACHMENT 3 - INFRASTRUCTURE DETAILS MAREEBA DIMBULAH WATER SUPPLY SCHEME

TABLE 1: TINAROO FALLS DAM—BARRON RIVER

Description of water infrastructure	
Description	Mass concrete gravity dam with central ogee spillway
Full supply level	EL 670.42 m AHD
Minimum operating level	EL 637.68 m AHD
Saddle dam(s)	1 (Drawing no: M11748)
Storage capacity	
Full supply volume	438 920 ML
Dead storage level	EL 637.68 m AHD (1,300 ML)
Storage curves	Drawing no: 106350A, 109535
Spillway arrangement	
Description of works	A central ogee crest spillway
Spillway level	EL 670.42 m AHD
Spillway width	76.2 m
Discharge characteristics	Drawing no: 13672
River inlet/outlet works	
Discharge characteristics	The estimated maximum discharge capacity of the river outlet is 1 750 ML/day. Estimated maximum additional discharge capacity through the siphon spillway and compensation outlet is 1 200 ML/d.

TABLE 2: DULBIL WEIR—TINAROO CREEK

Description of water infrastructure	
Description	Mass concrete gravity weir with centre and right bank ogee spillways
Full supply level	EL 408.72 m AHD
Minimum operating level	EL 408.72 m AHD
Storage capacity	
Full supply volume	271 ML
Dead storage level	EL 401.79 m AHD (0 ML)
Storage curves	Drawing no: 214383
Spillway arrangement	
Description of works	Central and right bank ogee spillway
Levels	Crest EL 408.72 m AHD
Spillway width	Centre: 9.14 m Right bank: 34.85 m (Drawing no: 8709)
River inlet/outlet works	
Description of works	Outlet works consist of a 225 mm diameter gate valve
Multi-level inlet	Single level intake

TABLE 3: GRANITE CREEK WEIR—GRANITE CREEK

Description of water infrastructure	
Description	Mass concrete gravity weir with centre, right and left ogee spillways
Full supply level	EL 421.83 m AHD
Minimum operating level	EL 421.83 m AHD
Storage capacity	
Full supply volume	244 ML
Dead storage level	EL 417.03 m AHD (0 ML)
Storage curves	Drawing no: F42644
Spillway arrangement	
Description of works	Centre, right bank and left bank ogee spillways
Levels	EL 421.83 m AHD.
Spillway width	Centre: 27.13 m Right bank: 19.81 m Left bank: 23.16 m (Drawing no: 6864)
River inlet/outlet works	
Description of works	Outlet works consist of a 225 mm diameter gate valve
Multi-level inlet	Single level intake

TABLE 4: COLLINS WEIR—WALSH RIVER

Description of water infrastructure	
Description	Mass concrete gravity weir with central ogee spillway
Full supply level	EL 545.07 m AHD
Minimum operating level	EL 536.68 m AHD
Storage capacity	
Full supply volume	600 ML
Dead storage level	EL 536.68 m AHD
Storage curves	Drawing no: 209867
Spillway arrangement	
Description of works	Central ogee spillway
Levels	Crest EL 545.07 m AHD
Spillway width	62.18 (Drawing no: 10926)
River inlet/outlet works	
Discharge characteristics	The estimated maximum discharge capacity of the river outlet is 27 ML/day

TABLE 5: BRUCE WEIR —WALSH RIVER

Description of water infrastructure	
Description	Mass concrete gravity weir with central ogee spillway
Full supply level	EL 454.32 m AHD
Minimum operating level	EL 453.14 m AHD
Storage capacity	
Full supply volume	970 ML
Dead storage level	EL 453.14 m AHD (500 ML)
Storage curves	Drawing no: F36469
Spillway arrangement	
Description of works	Central ogee spillway
Levels	EL 454.32 m AHD
Spillway width	145 m
River inlet/outlet works	
Discharge characteristics	Sluice gate maximum discharge capacity of 40 ML/day

TABLE 6: LEAFGOLD WEIR—WALSH RIVER

Description of water infrastructure	
Description	Mass concrete gravity weir with central ogee spillway
Full supply level	EL 435.67 m AHD
Minimum operating level	EL 434.37 m AHD
Storage capacity	
Full supply volume	260 ML
Dead storage level	EL 434.37 m AHD (93 ML)
Storage curves	Drawing no: 214384
Spillway arrangement	
Description of works	Central ogee spillway
Levels	EL 435.67 m AHD.
Spillway width	129.54 m (Drawing no: 10859)
River inlet/outlet works	
Discharge characteristics	Sluice gate maximum discharge capacity of 40 ML/day

TABLE 7: SOLANUM WEIR—EUREKA CREEK

Description of water infrastructure	
Description	Mass concrete gravity weir with central ogee spillway.
Full supply level	EL 462.82 m AHD
Minimum operating level	EL 461.68 m AHD
Storage capacity	
Full supply volume	345 ML
Dead storage level	EL 461.68 m AHD (10 ML)
Storage curves	Drawing no: F42645
Spillway arrangement	
Description of works	Central ogee spillway.
Levels	EL 462.98 m AHD
Spillway width	76.2 m (Drawing no: 8902)
River inlet/outlet works	
Discharge characteristics	Sluice gate maximum discharge capacity of 25 ML/day

ATTACHMENT 4 - INFRASTRUCTURE DETAILS KURANDA WEIR

TABLE 1: KURANDA WEIR—BARRON RIVER

Description of water infrastructure	
Description	Mass concrete gravity weir with right abutment consisting of an earth and rock fill embankment
Full supply level	<i>EL 318.52 m AHD</i>
Storage volume and surface area	
Full supply volume	1 617 ML
Dead storage level	<i>EL 313.0 m AHD (23 ML)</i>
Spillway arrangement	
Spillway level	<i>EL 318.52 m AHD</i>
Spillway width	176.8 m
River inlet/outlet works	
Discharge rate	Gatehouse sector gate maximum discharge rate of 2937.6 ML/day Undersluice sector gate maximum discharge rate of 2419.2 ML/day

ATTACHMENT 5 - INFRASTRUCTURE DETAILS COPPERLODE DAM

TABLE 1: COPPERLODE DAM—FRESHWATER CREEK

Description of water infrastructure	
Description	Zone earth rock fill dam with an impervious clay core and concrete gravity spillway
Full supply level	EL 397.732 m AHD
Storage capacity	
Full supply volume	45 460 ML
Dead storage level	0 ML
Storage curves	Refer to Figure 1.2 of the Cairns Water Copperlode Dam Data Book
Spillway arrangement	
Description of works	The concrete gravity ogee spillway is on the right bank of the dam and incorporates an approach channel, chute, flip bucket and downstream channel
Levels	EL 397.73 m AHD
Spillway width	24.28 m
River inlet works	
Multi-level inlet	Multi-level intake tower
Discharge rate	123 ML/day

TABLE 2: WEIR AT TOWN WATER SUPPLY INTAKE—FRESHWATER CREEK

Description of water infrastructure	
Description	Mass concrete overshot weir 25 m wide with an average depth of 1 metre
Full supply level	EL 202.08 m AHD
Storage volume	
Full storage volume	10 ML
Dead storage volume	0 ML
Spillway arrangement	
Description	Central rectangular notch 410 mm deep
Spillway width	4 m
River inlet/outlet works	
Description	Water for town water supplies is diverted via a gravity pipeline and selected flows are diverted through trash racks and a mechanical screen
Discharge rate	The maximum discharge rate is 123 ML/day

ATTACHMENT 6(a) - LICENCES GRANTED TO ATHERTON SHIRE COUNCIL¹

TABLE 1: WATER LICENCE TO TAKE WATER FROM SCRUBBY CREEK

Licence details Reference: 179305	
Licensee	Atherton Shire Council
Expiry Date	5 years from issue
Activity	The taking of water from Scrubby Creek on or adjoining land described as 194/FTY1776
Description of Land	Water under this licence is not attached to land
Nominal Entitlement	635 megalitres per water year
Maximum instantaneous extraction rate	30 litres per second
Purpose	Town Water Supply

TABLE 2: WATER LICENCE TO TAKE WATER FROM THE BARRON RIVER

Licence details Reference: 179306	
Licensee	Atherton Shire Council
Expiry Date	5 years from issue
Activity	The taking of water from the Barron River on or adjoining land described as 145/NPW684
Description of Land	Water under this licence is not attached to land
Nominal Entitlement	1150 megalitres per water year
Maximum instantaneous extraction rate	55 litres per second
Purpose	Town Water Supply

TABLE 3: WATER LICENCE TO TAKE WATER FROM THE BARRON RIVER

Licence details Reference: 179307	
Licensee	Atherton Shire Council
Expiry Date	5 years from issue
Activity	The taking of water from the Barron River on or adjoining land described as 104/NR1507
Description of Land	Water under this licence is not attached to land
Nominal Entitlement	2000 megalitres per water year
Maximum instantaneous extraction rate	101 litres per second
Purpose	Town Water Supply

¹ Additional conditions may be specified on the issued water licence

ATTACHMENT 6(b) - LICENCE GRANTED TO STANWELL CORPORATION²

TABLE 1: WATER LICENCE TO TAKE WATER FROM THE BARRON RIVER

Licence details Reference: 179308	
Licensee	Stanwell Corporation
Expiry Date	5 years from issue
Activity	The taking of water from the Barron River on or adjoining land described as 150/NR4991
Description of Land	Water under this licence is not attached to land
Maximum instantaneous extraction rate	25 500 litres per second
Purpose	Electricity generation
Conditions	<p>The licensee must comply with all the provisions contained in Chapter 4, Part 5 of the Barron Resource Operations Plan for taking water from the Barron River.</p> <p>Water taken other than water lost during electricity generation must be returned to the Barron River immediately downstream of the power station.</p> <p>The licensee must comply with all the monitoring and reporting requirements contained in Chapter 10 of the Barron Resource Operations Plan.</p>

² Additional conditions may be specified on the issued water licence

ATTACHMENT 6(c) - LICENCES GRANTED TO CAIRNS CITY COUNCIL³

TABLE 1: WATER LICENCE TO INTERFERE WITH FLOW OF WATER FOR COPPERLODE DAM

Licence details Reference: 179309	
Licensee	Cairns City Council
Expiry Date	5 years from issue
Activity	Interfere with flow of water in Freshwater Creek. Maximum volume of water stored at full supply level not to exceed 45 455 megalitres. Maximum height of impounded water at full supply level not to exceed 45 metres above the natural bed level at the downstream limit of the impoundment
Description of Land	On or adjoining land described as 50/NR6547
Purpose	Conserve water, Town Water Supply
Conditions	The licensee must comply with all the provisions contained in Chapter 6 of the Barron Resource Operations Plan for the operation of Copperlode Dam. The licensee must comply with all the provisions contained in Chapter 11 of the Barron Resource Operations Plan for monitoring and reporting of water quantity and water quality associated with Copperlode Dam and Freshwater Creek.

TABLE 2: WATER LICENCE TO INTERFERE WITH FLOW OF WATER IN FRESHWATER CREEK

Licence details Reference: 179310	
Licensee	Cairns City Council
Expiry Date	5 years from issue
Activity	Interfere with the flow of water in Freshwater Creek. Maximum volume of water stored at full supply level not to exceed 10 megalitres
Description of Land	On or adjoining land described as 50/NR6547
Purpose	Conserve water, Town Water Supply
Conditions	The licensee must comply with all the provisions contained in Chapter 6 of the Barron Resource Operations Plan for interfering with flow in Freshwater Creek. The licensee must comply with all the provisions contained in Chapter 11 of the Barron Resource Operations Plan for monitoring and reporting of water quantity and water quality for Freshwater Creek.

³ Additional conditions may be specified on the issued water licence

TABLE 3: WATER LICENCE TO TAKE WATER FROM FRESHWATER CREEK

Licence Details Reference: 179311	
Licensee	Cairns City Council
Expiry Date	5 years
Activity	The taking of water from Freshwater Creek on or adjoining land described as 50/ NR6547
Description of Land	Water under this licence is not attached to land
Nominal Entitlement	30 625 megalitres per water year
Maximum instantaneous extraction rate	Maximum instantaneous extraction rate is not to exceed 1419 litres/sec
Purpose	Town Water Supply
Conditions	<p>The licensee must comply with all the provisions contained in Chapter 6 of the Barron Resource Operations Plan for the taking of water from Freshwater Creek.</p> <p>The licensee must comply with all the provisions contained in Chapter 11 of the Barron Resource Operations Plan for monitoring and reporting of water quantity and water quality for Freshwater Creek.</p>

ATTACHMENT 7 – WATER LICENCES GRANTED TO UNSUPPLEMENTED WATER USERS⁴

TABLE1: WATER LICENCES TO TAKE WATER GRANTED TO SPECIFIED LAND OWNERS

Description of Land	Lot 2 on RP737781	Lot 138 on HG615	Lot 3 on RP737780	Lot 1 on RP737780, Lot 2 on RP737780, Lot 3 on RP737780, Lot 124 on DA287, and Lot 57 on SP127216,
Action	existing water licence amended	existing water licence amended	single water licence granted	single water licence granted
Activity	The taking of water from Two Mile Creek on or adjoining land described as Lot 2 on RP737781	The taking of water from Two Mile Creek on or adjoining land described as Lot 138 on HG615	The taking of water from Boyle Creek on or adjoining land described as Lot 3 on RP737780	The taking of water from Sandy Creek on or adjoining land described as Lot 2 on RP737780
Water licence number	07898WK	12325K	yet to be determined	yet to be determined
Specific Conditions	the volume of water taken under this licence must not exceed 95ML/year	the volume of water taken under this licence must not exceed 41ML/year	the volume of water taken under this licence must not exceed 10ML/year	the volume of water taken under this licence must not exceed 170ML/year
General Conditions	<p>The licensee must comply with requirements of Chapter 7 of the Barron ROP.</p> <p>Water must not be taken under this licence until a meter is installed of a type approved by the chief executive, to record the volume of water taken under this licence.</p> <p>Water can only be taken under this water licence following release of water under another entitlement into the (insert applicable watercourse) AND</p> <p>the amount of water taken under this water licence must not exceed the volume of water released by the water licence holder under the other entitlement.</p>			

⁴ Additional conditions may be specified on the issued water licence