

17 February 2011

Lyall Hinrichsen
Acting General Manager
Water Allocation and Planning
Department of Environment and Resource Management
GPO Box 2454
BRISBANE QLD 4001

Dear Mr Hinrichsen,

Revised Interim Program ~ Moreton Resource Operations Plan

Seqwater notes that the Minister for Natural Resources, Mines and Energy and Minister for Trade announced on 13 February 2011 that, in order to temporarily increase the flood mitigation capacity of Wivenhoe Dam, the water storage level in the dam was to be reduced to and held at 75% of its Full Supply Level (FSL) until the end of the wet season on 31 March 2011.

The announcement followed advice from the SEQ Water Grid Manager on 9 February 2011 that the Grid Manager had no objection to Wivenhoe Dam being drawn down to 75% of its FSL from a water security perspective, and that the temporary draw down is unlikely to impact the Grid Manager's ability to comply with its obligations under the *South East Queensland System Operating Plan* or Grid Contracts.

In light of the Grid Manager's advice, the extreme nature of the January 2011 flood event and Seqwater's modelling, Seqwater recommended to DERM that Wivenhoe Dam's storage level be temporarily reduced to 75% of its FSL to temporarily increase its flood mitigation capacity.

We note the Director-General of DERM agreed to implement the above reduction in the water storage level, in the manner stated in his letter dated 11 February 2011.

On 14 February 2011, the Moreton Resource Operations Plan was amended as contemplated in the Director-General's letter of 11 February 2011, to include a new Section 13(6A) permitting a Resource Operations Licence holder with an approved Interim program to submit a revised program to the chief executive for approval.

Seqwater is a Resource Operations Licence holder under the Moreton Resource Operations Plan with an approved Interim program, and hereby submits a Revised Interim Program for the approval of the chief executive under Section 13(7) of the Moreton Resource Operations Plan.

The Revised Interim Program, if approved, would authorise releases:

- to effect the initial reduction in the water storage level of Wivenhoe Dam to an 'Interim Security Supply Level' being 75% of its FSL, from 20 February 2011; and
- thereafter, until 31 March 2011, to bring Wivenhoe Dam back to the Interim Security Supply Level where inflows occur after the initial reduction.

In connection with the above releases:

- a duty engineer will be monitoring rainfall as currently occurs in respect of operational releases; and
- Seqwater will provide information regarding release volume and timing to:
 - Somerset Regional Council, Ipswich City Council and Brisbane City Council; and
 - the mid-Brisbane River irrigator community.
- The same information will also be provided to the communication managers of Somerset Regional Council, Ipswich City Council and Brisbane City Council via the Water Grid and will be included on the Water Grid manager and Seqwater websites. Additionally, the



Water Grid Manager will include release information as part of its daily communication updates and such information will be included in the Water Grid 1800 updates.

Should chief executive approval be given in respect of the Revised Interim Program, Seqwater's releases pursuant to that approved program would not commence until after Seqwater had provided notifications to third parties (including Councils) and the finalization of the other actions referred to in the letter from your Director-General to Seqwater, dated 11 February 2011.

Yours sincerely,

Peter Borrows
Chief Executive Officer

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Seqwater Interim Program – Moreton Resource Operations Plan
(Revised 17 February 2011)

The Moreton Resource Operations Plan (the ROP) commenced on 7 December 2009. The Queensland Bulk Water Supply Authority (trading as Seqwater) is the Resource Operations Licence Holder under the ROP for the following Water Supply Schemes:

- Central Brisbane River Water Supply Scheme;
- Pine Valleys Water Supply Scheme; and
- Stanley River Water Supply Scheme.

Where Seqwater, as the ROL holder, is unable to meet requirements of the ROP on its commencement, a structured process is available whereby a statement of programs currently in existence can be prepared and submitted to the Department of Environment and Resource Management (DERM), to be followed by an Interim Program. The box below sets out the relevant provisions under the ROP.

Relevant ROP Requirement

Interim Program

- s13(1) The chief executive and the resource operations licence holder must implement requirements of this plan as soon as is practical within the timeframes stated below.
- s13(2) Subsections 3 to 11 apply where a resource operations licence holder is unable to meet the requirements of this plan on the day this plan commences.
- s13(3) The resource operations licence holder must –
- (a) within 2 months of commencement of this plan, submit a statement of programs currently in existence, to the chief executive for approval; and
 - (b) within 6 months of commencement of this plan, submit a program for meeting the requirements of this plan to the chief executive for approval, including a timetable and interim methods to be used.
- s13(4) The resource operations licence holder may, where an emergency or operational incident results in an inability to comply with any rules or requirements of this plan, submit an interim program for meeting the requirements of this plan to the chief executive for approval, including timetable and interim methods to be used.
- s13(5) Where the submitted program relates to the Water Monitoring Data Collection Standards, the program must include the accuracy of methods currently used.
- s13(6) The chief executive, in considering any submitted program, may request additional information.
- s13(6A) Despite anything in subsections 2, 3 or 4, a resource operations licence holder with an approved interim program may submit to the chief executive a revised program for consideration under subsection 7.
- s13(7) The chief executive, in considering any submitted program, may either –
- (a) approve the program with or without conditions;
 - (b) amend and approve the amended program; or
 - (c) require the resource operations licence holder to submit a revised program.
- s13(8) Within 10 business days of making a decision on a program submitted under this section the chief executive must notify the resource operations licence holder of the decision.
- s13(9) Following approval of the program by the chief executive, the resource operations licence holder must –
- (a) implement and operate in accordance with the approved program; and
 - (b) make public details of the approved program on their Internet site.
- s13(10) Where there is conflict between the provisions of this plan and the provisions of an approved program, the approved program prevails for the time that the approved program is in place.
- s13(11) Where this section applies, the resource operations licence holder may continue to operate under the existing program until the program submitted under this section is approved.

Seqwater submitted a Statement of Current Programs to DERM on 5 February 2010, in accordance with Section 13 of the ROP.

Seqwater submitted an Interim Program for the Moreton ROP to DERM in May 2010, as required under s13 of the ROP. After consultation with and at the request of DERM, an amended Interim Program was submitted to DERM on 27 August 2010. A delegate of the Chief Executive approved Seqwater's 27 August 2010 Interim Program on 3 December 2010.

On 14 February 2011, the ROP was amended to permit a Resource Operations Licence Holder to submit a revised program.

Under Section 6A of the ROP, this Revised Interim Program is now submitted to DERM for approval to facilitate the temporary reduction of the water storage level at Wivenhoe Dam to temporarily increase the flood mitigation capacity of the dam.

Seawater Interim Program – Moreton Resource Operations Plan

Current as at 17 February 2011

Relevant ROP Requirement	Programs Currently In Existence (as submitted to DER in February 2010 and confirmed in 2010 Approved Interim Program)	Interim Program, including Methodology	Timetable
Departmental water monitoring data collection standards 11(1) Where this plan required monitoring by a resource operations licence holder, including measurement, collection, analysis and storage of data, the resource operations licence holder must ensure the monitoring is consistent with the Water Monitoring Data Collection Standards.	Refer ss151-160.	There is currently limited monitoring of listed infrastructure under the ROP; however, a review will be undertaken (due to a staged compilation, with final stage completed by 1 March 2012) to ensure monitoring is consistent with the Queensland Government Water Monitoring Data Collection Standards. The following sets out the timeline for the review: North Pine Dam: Review 1 July 2010; Implementation 1 September 2010 Sedding Creek Dam: Review 1 July 2010; Implementation 1 September 2010 Wivenhoe Dam: Review 1 October 2010; Implementation 1 January 2011 Somerset Dam: Review 1 October 2010; Implementation 1 January 2011 Eungella Dam: Review 1 October 2011; Implementation 1 January 2012 Gold Creek Dam: Review 1 October 2011; Implementation 1 January 2012 Capobiture River: Review 1 January 2012; Implementation 1 March 2012	1 September 2010 - 1 March 2012.
Departmental water monitoring data reporting standards 12(1) Where this plan requires transfer of data or reporting by a resource operations licence holder, the resource operations licence holder must ensure the transfer or reporting is consistent with the Water Monitoring Data Collection Standards.	Refer ss161-167.	Seawater applies the Queensland Government Water Monitoring Data Reporting Standards (Feb 2007) to its current reporting procedures. A. Seawater will continue to make releases from infrastructure – 1. for consumption; 2. pursuant to the Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam; 3. for operational maintenance of dam infrastructure; 4. where B does not apply, to operationally maintain storage levels, in the absence of a flood event, at or close to FSL; and 5. for fish recovery.	Refer ss161-167.
Central Brisbane River and Stanley River Water Supply Schemes – Operating levels for infrastructure 72(3) The resource operations licence holder must not release water from any infrastructure unless the release is necessary to— (a) meet minimum flow rates in section 75; or (b) supply downstream demand.	Not compliant with ROP (releases made for operational purposes and water quality and ecosystem health including fish management)	B. Seawater will, between 20 February and 31 March 2011 ("2011 Summer Season") and subject to the operational constraints specified below, make the following releases from infrastructure – (i) the volume necessary to initially reduce Wivenhoe Dam to the Interim Supply Security Level; and (ii) volumes necessary to reduce back to the Interim Supply Security Level, where inflows occur during the 2011 Summer Season that take the Wivenhoe Dam level to between the Interim Supply Security Level and the Full Supply Level. The releases specified in (a) and (b) will only be made where releases can be undertaken at a rate such that Burtons Bridge remains trafficable. If, after releases specified in (a) or (b) have commenced, a flood event is declared, the dam will be operated in accordance with the Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam. Once the flood event has ended and the dam level is brought back to the Full Supply Level, the releases specified in (a) and (b) will be recommenced. For the purpose of the above, "Interim Supply Security Level" means 64.0 m AHD.	Part A: Ongoing Part B: 20 February 2011 – 31 March 2011
Central Brisbane River and Stanley River Water Supply Schemes – Streamflow Requirement 75 When critical water sharing arrangements are not in force, the resource operations licence holder must release a minimum flow of 8.54ML/day from Mount Crosby Weir.	No operational outlet works at Mt Crosby Weir, therefore no managed releases made.	As there are no operable outlet works at Mt Crosby Weir (and cannot be implemented without significant investment, including possible reconstruction of the weir), overflows are dependent upon releases from Wivenhoe and protected water supply demands and local inflows, the latter two components being outside Seawater control. As a result, Seawater has very limited control over releases from Mt Crosby Weir on a daily basis. As such, it is proposed that this requirement be deemed as satisfied if a minimum average flow of 8.54ML/day (for any given month) flows over Mt Crosby Weir, rather than a minimum flow of 8.54ML/day (for any given day).	Seawater would be compliant with a requirement for a minimum average flow of 8.54ML/day for any given month from 1 July 2010. Compliance is not able to be achieved for a minimum flow of 8.54ML/day for any given day.

Relevant ROP Requirement	Programs Currently In Existence [as submitted to DERIN in February 2010 and confirmed in 2010 Approved Interim Program]	Interim Program, including Methodology Timetable
Central Brisbane River and Stanley River Water Supply Schemes – Announced Allocations 76 The resource operations licence holder must— (a) calculate an announced allocation for each priority group for use in defining the share of water available to be taken under water allocations in that priority group; (b) use the water sharing rules specified in this part to calculate announced allocations throughout the water year; (c) calculate and set the announced allocation for each priority group to take effect on the first day of each water year; (d) following the commencement of a water year— (i) recalculate the announced allocation to take effect no later than 5 business days following the first day of the month; (ii) reset the announced allocation if a reconciliation indicates that the recalculated announced allocation would— (A) for medium priority water allocations increase by 10 or more percentage points; or (B) for high priority water allocations increase by 5 or more percentage points; or (C) increase to 100 per cent. (e) within 5 business days of setting an announced allocation under subsection 1(c) or the first calendar day of every month when receiving the announced allocation under subsection 1(d)— (i) publish details of the announced allocations and make public details of the announced allocation, including parameters for determining the announced allocation, on the resource operators licence holder's internet site; (f) not reduce the announced allocation during a water year; (g) round the announced allocation to the nearest whole percentage point; (h) not set an announced allocation that is greater than 100 per cent.	Not compliant with ROP [no programs currently in existence – MP customers transferred to Seqwater on ROP gazette]	New Medium Priority and High Priority Announced Allocation processes and procedures will be in place by the commencement of the 2010/2011 Water Year (i.e. from 1 July 2010).
Central Brisbane River and Stanley River Water Supply Schemes – Announced Allocations 77(1) The announced allocation for medium priority water allocations in the Central Brisbane River Water Supply Scheme is the announced allocation combined percentage of useable volume in storage of Wilwerhoe and Somerset dams stated in Attachment 5, Table 5, column 1. 77(2) The combined percentage of useable volume in storage of Wilwerhoe and Somerset dams must be calculated using the following formula— $SPV = ((UV_{Wilwerhoe} + UV_{Somerset}) / CUSV) \times 100$ 77(3) The parameters used in the formula for combined percentage of volume in storage are defined in Attachment 5, Table 6.	Not compliant with ROP [no programs currently in existence – MP customers transferred to Seqwater on ROP gazette] Please note: the volume stored in Split Yard Creek Dam may influence the Announced Allocation.	New Medium Priority Announced Allocation processes and procedures will be in place by the commencement of the 10/2010/2011 Water Year (i.e. from 1 July 2010).
Central Brisbane River and Stanley River Water Supply Schemes – Announced Allocations for High Priority A Water Allocations 78(1) The announced allocation for 'High Priority A' water allocations within the Central Brisbane River Water Supply Scheme must be as follows— (a) 100 per cent when the combined percentage of useable volume in storage of Wilwerhoe and Somerset dams is greater than or equal to 25 per cent or (b) when the combined percentage of useable volume in storage of Wilwerhoe and Somerset dams is less than 25 per cent, the announced allocation percentage for 'High Priority A' water allocations must be calculated using the following formula— $AHPA = ((UV_{Wilwerhoe} \times MPA) + (UV_{Somerset} \times MPA)) / (UV_{Wilwerhoe} + UV_{Somerset}) \times 100$ 78(2) The parameters used in the formula for announced allocation are defined in Attachment 5, Table 4. 78(3) For subsection 1 the combined percentage of useable volume in storage	Not compliant with ROP [no programs currently in existence]	New High Priority Announced Allocation processes and procedures will be in place by the commencement of the 2010/2011 Water Year (i.e. from 1 July 2010).

Relevant ROP Requirement	Programs Currently In Existence [as submitted to DERM in February 2010 and confirmed in 2010 Approved Interim Program)	Interim Program, including Methodology	Timetable
Central Brisbane River and Stanley River Water Supply Schemes – Critical Water Sharing Arrangements	<p>80(1) Critical water sharing arrangements are in force when the combined percentage of the volume of water in storage in Wivenhoe and Somerset Dams is less than 15 percent.</p> <p>(2) During times when critical water sharing arrangements are in force the resource operations licence holder must—</p> <ul style="list-style-type: none"> (a) cease making releases from Mount Crosby Weir under section 75 of this plan; (b) when at the start of the water year the combined percentage of useable volume in storage of Wivenhoe and Somerset dams is less than 15 per cent, set the announced allocation for medium priority water allocations in the Central Brisbane River Water Supply Scheme to zero per cent; and <p>80(3) For subsection 1 the combined percentage of volume of water in storage for Wivenhoe and Somerset Dams must be calculated using the formula in section 77(2) of this plan.</p>	<p>New Critical Water Sharing Arrangements processes and procedures will be in place by the commencement of the 2010/2011 Water Year (i.e. from 1 July 2010).</p> <p>(b) set the announced allocation for medium priority water allocations in the Central Brisbane River Water Supply Scheme to zero per cent; and</p>	1 July 2010.
Central Brisbane River and Stanley River Water Supply Schemes – Seasonal water assignment rules	<p>88(1) The resource operations licence holder may approve a seasonal assignment of a volume of water provided that the total volume of water use in a water year for each zone will not exceed the maximum allowable water use volume in Attachment 5, Table 9 for each zone.</p> <p>(2) The resource operations licence holder is responsible for dealing with applications for seasonal water assignment where the resource operations licence holder distributes water to the licensee.</p>	<p>Not compliant with ROP [no programs currently in existence]</p>	
Pine Valley's Water Supply Schemes – Operating Levels for Infrastructure Supply Scheme	<p>97(1) The operating levels for the infrastructure in the Pine Valley's Water Supply Scheme are specified in Attachment 6, Table 1.</p> <p>(2) The resource operations licence holder must not release or supply water from any infrastructure when the water level in that infrastructure is at or below its minimum operating level.</p> <p>(3) The resource operations licence holder must not release water from any infrastructure unless the release is necessary to supply downstream demand and is made in accordance with this plan.</p>	<p>Not compliant with ROP [releases made for operational purposes and for water quality and ecosystem health including fish management]</p>	
Pine Valley's Water Supply Schemes – Announced Allocations	<p>100 The resource operations licence holder must—</p> <ul style="list-style-type: none"> (a) calculate an announced allocation for each priority group for use in defining the share of water available to be taken under water allocations in that priority group; (b) use the water sharing rules specified in this part to calculate announced allocations throughout the water year; (c) calculate and set the announced allocation for each priority group to take effect on the first day of each water year; (d) following the commencement of a water year— <ul style="list-style-type: none"> (i) recalculate the announced allocation to take effect no later than 5 business days following the first day of the month; (ii) reset the announced allocation if a recalculation indicates that the recalculated announced allocation would— <ul style="list-style-type: none"> (A) for high priority water allocations increase by 5 or more percentage points; or 	<p>Not compliant with ROP [no programs currently in existence]</p>	1 July 2010.
New Medium Priority and High Priority Announced Allocation processes and procedures			New Medium Priority and High Priority Announced Allocation processes and procedures will be in place by the commencement of the 2010/2011 Water Year (i.e. from 1 July 2010).

Relevant ROP Requirement	Programs Currently In Existence (as submitted to DERM in February 2010 and confirmed in 2010 Approved Interim Program)	Interim Program, Including Methodology
Timetable		
<p>(b) Increase to 100 per cent</p> <p>(e) within 5 business days of setting an announced allocation under subsection 1-(c) or the first calendar day of every month when resetting the announced allocation under subsection 1(d) make public details of the announced allocation, including parameters for determining the announced allocation, on the resource operations licence holder's internet site for the Pine Valley Water Supply Scheme;</p> <p>(f) not reduce the announced allocation during a water year;</p> <p>(g) round the announced allocation to the nearest whole percentage point; and</p> <p>(h) not set an announced allocation that is greater than 100 per cent.</p> <p>101(1) The announced allocation for 'High Priority A' water allocations in the Pine Valley Water Supply Scheme must be as follows—</p> <p>(a) 100 per cent when the level of water in storage in North Pine Dam is greater than E.L. 29.3m AHD; and</p> <p>(b) When the water level of water in storage in North Pine Dam is equal to or less than E.L. 29.3m AHD the announced allocation percentage for high priority water allocations must be calculated using the following formula—</p> $\text{AHPA} = (\text{UV-DVPA}) / \text{HPAA} * 100$ <p>101(2) The parameters used in the formula for announced allocations are defined in Attachment 6, Table 2.</p> <p>102 The total volume of water taken under a water allocation in a water year must not exceed the nominal volume of the water allocation multiplied by the announced allocation and divided by 100.</p> <p>103(1) Critical water sharing arrangements are in force which the water level in North Pine Dam is equal to or less than E.L. 29.3m AHD.</p> <p>103(2) During times when critical water sharing arrangements are in force the resource operations licence holder must calculate the announced allocation for high priority water allocations in accordance with section 101(1)(b) of this plan.</p> <p>Pine Valley Water Supply Schemes – Critical Water Sharing Arrangements</p> <p>110(1) The resource operations licence holder may approve a seasonal assignment of a volume of water provided that the total volume of water use in a water year for each zone will not exceed the maximum allowable water use volume in Attachment 6, Table 3 for each zone.</p> <p>110(2) The resource operations licence holder is responsible for dealing with applications for seasonal water assignments where the resource operations licence holder distributes water to the assignee.</p> <p>Resource operations licence holder monitoring and reporting – Monitoring data must be made available</p> <p>115(1) The resource operations licence holder must provide any monitoring data required under this chapter to the chief executive upon request and within the time required.</p> <p>Monitoring requirements – Streamflow and infrastructure water level</p> <p>115(2) The resource operations licence holder must record water level and volume and stream flow data in accordance with Attachment 9, Table 1.</p> <p>115(2) Infrastructure inflows may be determined based upon an infrastructure inflow derivation technique supplied by the chief executive, operations licence holder and approved by the chief executive.</p>	<p>101(1) The announced allocation for 'High Priority A' water allocations in the Pine Valley Water Supply Scheme must be as follows—</p> <p>(a) 100 per cent when the level of water in storage in North Pine Dam is greater than E.L. 29.3m AHD; and</p> <p>(b) When the water level of water in storage in North Pine Dam is equal to or less than E.L. 29.3m AHD the announced allocation percentage for high priority water allocations must be calculated using the following formula—</p> $\text{AHPA} = (\text{UV-DVPA}) / \text{HPAA} * 100$ <p>101(2) The parameters used in the formula for announced allocations are defined in Attachment 6, Table 2.</p> <p>102 The total volume of water taken under a water allocation in a water year must not exceed the nominal volume of the water allocation multiplied by the announced allocation and divided by 100.</p> <p>103(1) Critical water sharing arrangements are in force which the water level in North Pine Dam is equal to or less than E.L. 29.3m AHD.</p> <p>103(2) During times when critical water sharing arrangements are in force the resource operations licence holder must calculate the announced allocation for high priority water allocations in accordance with section 101(1)(b) of this plan.</p> <p>Pine Valley Water Supply Schemes – Seasonal Water Assignment Rules</p> <p>110(1) The resource operations licence holder may approve a seasonal assignment of a volume of water provided that the total volume of water use in a water year for each zone will not exceed the maximum allowable water use volume in Attachment 6, Table 3 for each zone.</p> <p>110(2) The resource operations licence holder is responsible for dealing with applications for seasonal water assignments where the resource operations licence holder distributes water to the assignee.</p> <p>Resource operations licence holder monitoring and reporting – Monitoring data must be made available</p> <p>115(1) The resource operations licence holder must provide any monitoring data required under this chapter to the chief executive upon request and within the time required.</p> <p>Monitoring requirements – Streamflow and infrastructure water level</p> <p>115(2) The resource operations licence holder must record water level and volume and stream flow data in accordance with Attachment 9, Table 1.</p> <p>115(2) Infrastructure inflows may be determined based upon an infrastructure inflow derivation technique supplied by the chief executive, operations licence holder and approved by the chief executive.</p>	<p>101(1) The announced allocation for 'High Priority A' water allocations in the Pine Valley Water Supply Scheme must be as follows—</p> <p>(a) 100 per cent when the level of water in storage in North Pine Dam is greater than E.L. 29.3m AHD; and</p> <p>(b) When the water level of water in storage in North Pine Dam is equal to or less than E.L. 29.3m AHD the announced allocation percentage for high priority water allocations must be calculated using the following formula—</p> $\text{AHPA} = (\text{UV-DVPA}) / \text{HPAA} * 100$ <p>101(2) The parameters used in the formula for announced allocations are defined in Attachment 6, Table 2.</p> <p>102 The total volume of water taken under a water allocation in a water year must not exceed the nominal volume of the water allocation multiplied by the announced allocation and divided by 100.</p> <p>103(1) Critical water sharing arrangements are in force which the water level in North Pine Dam is equal to or less than E.L. 29.3m AHD.</p> <p>103(2) During times when critical water sharing arrangements are in force the resource operations licence holder must calculate the announced allocation for high priority water allocations in accordance with section 101(1)(b) of this plan.</p> <p>Pine Valley Water Supply Schemes – Seasonal Water Assignment Rules</p> <p>110(1) The resource operations licence holder may approve a seasonal assignment of a volume of water provided that the total volume of water use in a water year for each zone will not exceed the maximum allowable water use volume in Attachment 6, Table 3 for each zone.</p> <p>110(2) The resource operations licence holder is responsible for dealing with applications for seasonal water assignments where the resource operations licence holder distributes water to the assignee.</p> <p>Resource operations licence holder monitoring and reporting – Monitoring data must be made available</p> <p>115(1) The resource operations licence holder must provide any monitoring data required under this chapter to the chief executive upon request and within the time required.</p> <p>Monitoring requirements – Streamflow and infrastructure water level</p> <p>115(2) The resource operations licence holder must record water level and volume and stream flow data in accordance with Attachment 9, Table 1.</p> <p>115(2) Infrastructure inflows may be determined based upon an infrastructure inflow derivation technique supplied by the chief executive, operations licence holder and approved by the chief executive.</p>
		<p>115(2) Consistent inflow derivation methodology will be developed by July 2011 for all storages. In the interim, existing methodology inherited from previous users owners will be used where in existence. Please refer to Attachment 9, Table 1 at end of document.</p>

Relevant ROP Requirement	Programs Currently In Existence [as submitted to DER in February 2010 and confirmed in 2010 Approved Interim Program]	Interim Program, including Methodology	Timetable
Monitoring requirements – Releases from Infrastructure 153(1) This section applies to the following infrastructure— (a) Cressbrook Dam; (b) Mount Crosby Weir; (c) North Pine Dam; (d) Perseverance Dam; (e) Somerset Dam; and (f) Wheehoe Dam.	153(1)(b) No measured releases made 153(1)(c) Operational Log ex SunWater system 153(1)(e) Operational Log ex SunWater system 153(1)(f) Operational Log ex SunWater system 153(2) Data is recorded in Operational Log 153(3) Data is recorded in Operational Log	153(1)(b); No operable outlet works exist at Mount Crosby Weir and cannot be implemented without significant investment. Releases are not made – only overflows, which are monitored and recorded. As such, it is proposed Seawater report the overflows in compliance with ss153(2) and 153(3) instead of releases since none are made.	1 July 2010 [notes: overflows and not releases will be reported for Mt Crosby Weir].
Monitoring requirements – Announced allocations 154 The resource operations licence holder must record details of announced allocation determinations including— (a) the announced allocations for medium and high priority water allocations; (b) the date announced allocations are determined; and (c) the value of each parameter applied for calculating the announced allocation.	Not compliant with ROP (no programs currently in existence)	New Medium Priority and High Priority Announced Allocation Processes and procedures will be in place by the commencement of the 2010/2011 Water Year [i.e. from 1 July 2010].	1 July 2010.
Monitoring requirements – Water taken by water users 155 The resource operations licence holder must record the total volume of water taken, by each water user for each zone as follows— (a) the total volume of water entitled to be taken at any time; and (b) the basis for determining the total volume of water entitlement to be taken at any time.	Monitoring requirements – Water assignment of water allocations including— (a) the name of the assignee, volume and location of water that has been seasonally assigned to an assignee; or (b) the name of the assignor, volume and location of the water that has been seasonally assigned to an assignee; and (c) the effective date of seasonal water assignments.	Full compliance with these requirements for the Central Brisbane River Water Supply Scheme is dependent on the development and implementation of a metering program within the Scheme (anticipated to be an ongoing program which will need to be implemented in close consultation with the Mid-Brisbane Irrigators, and will likely take until December 2012). All other schemes will be compliant from 1 July 2010. In the interim water estimations will consist of a quarterly mailout of recording sheets, specifying the requirement for recording volumes of water taken, plus supporting information, with submission of the recording sheets on a quarterly basis. The quarterly mailout will be a prompt for customers to submit their records. Advice will also be given of the Seqwater position that where records are not received that it will be assumed that 25% of the customer's water entitlement has been used for that quarter, and that this will be recorded as such.	1 July 2010 for all schemes except Central Brisbane River Water Supply Scheme (anticipated to take until December 2012, with log sheets to be distributed in the first quarter after approval of the interim program).
Monitoring requirements – Critical water sharing arrangements 157 The resource operations licence holder must record details of critical water sharing arrangements including— (a) the commencement date(s) and effective period of critical water sharing arrangements; and (b) the effectiveness of the critical water sharing arrangements.	Not compliant with ROP (no programs currently in existence)	New Critical Water Sharing Arrangements processes and procedures will be in place by the commencement of the 2010/2011 Water Year [i.e. from 1 July 2010].	1 July 2010.
Monitoring requirements – Water Quality 158 The resource operations licence holder must monitor and record water inflow;	Somerset Dam: Inflow;	Seqwater is currently compliant with the monitoring requirements for Wivenhoe Dam and Mt Crosby Weir (with the exception of tailwater monitoring since the downstream area is estuarine) and will be reported from 1 July 2011.	1 January 2011.

Relevant ROP Requirement	Programs Currently In Existence (as submitted to DERIM in February 2010 and confirmed in 2010 Approved Interim Program)	Interim Program, including Methodology	Timetable
quality data in relation to relevant infrastructure listed in Attachments 5, 6 and 7.	<p>None. Quality monitoring and recording is event-related only. Water quality meters are DERM infrastructure.</p> <p>Headwater: Real-time telemetered VPS pH, Cond., Turb., Chl, BGA, DO, Fortnightly - Total Phyto, EC, TC, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO;</p> <p>Monthly (SB) - Total Phyto, EC, TC, Chl a, Fe, Mn, true colour, TSS, H2S, DOC, TOC, NH4+, NOX, FRP, TN, TP, silica, Chl a, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO.</p> <p>Tailwater:</p> <p>Fortnightly - Total Cyan, EC, TC, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO</p> <p>Monthly - Total Phyto, EC, TC, Chl a, Fe, Mn, true colour, TSS, DOC, TOC, NH4+, NOX, FRP, TN, TP, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO.</p> <p>Wivenhoe Dam:</p> <p>Inflow - (Cabinet only): Fortnightly - Total Cyanobacteria, EC, TC, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO.</p> <p>Monthly (SB) - Total Cyanobacteria, EC, TC, Chl a, Fe, Mn, true colour, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO.</p> <p>Headwater: Real-time telemetered VPS pH, Cond., Turb., Temp., Chl, BGA, DO Fortnightly - Total Phyto, EC, TC, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO</p> <p>Monthly (SB) - Total Phyto, EC, TC, Chl a, Fe, Mn, true colour, TSS, H2S, DOC, TOC, NH4+, NOX, FRP, TN, TP, silica, Chl a, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO.</p> <p>North Pine Dam:</p> <p>Inflow: None. Quality monitoring and recording is event-related only.</p> <p>Headwater: Real-time telemetered VPS pH, Cond., Turb., Temp., Chl, BGA, DO Fortnightly - Total Phyto, EC, TC, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO</p>	<p>2010. North Pine Dam requires some parameter additions to the inflow site on the North Pine River and the addition of a tailwater site to be compliant with the ROP requirements. Sedwater is currently reviewing the North Pine Monitoring Program which will include the requirements under the ROP (scheduled for completion by 1 July 2010) and will be implemented by 1 September 2010 (including training, reporting and scheduling). In the interim, additional parameters will be added to the existing gauging and water quality site on the North Pine River to be sampled on a monthly basis as follows:</p> <ul style="list-style-type: none"> • Inflow: electrical conductivity, temperature, dissolved oxygen, pH, turbidity, total nutrients, dissolved nutrients, total sulphides • Tailwater: electrical conductivity, temperature, dissolved oxygen, pH, turbidity, total nutrients, dissolved nutrients, total sulphides <p>Somerset Dam requires the addition of an inflow site on the Stanley River. The Somerset Dam Monitoring Program Review is scheduled for completion on 1 October 2010, with implementation (including training, reporting and scheduling) by 1 January 2011.</p> <p>Mt Crosby Weir requires the addition of a tailwater site on the Brisbane River. The Mt Wivenhoe Dam Monitoring Program Review is scheduled for completion on 1 October 2010, with implementation (including training, reporting and scheduling) by 1 January 2011.</p>	

Relevant ROP Requirement	<p>Programs Currently in Existence (as submitted to DERM in February 2010 and confirmed in 2010 Approved Interim Program)</p> <p>Monthly (S8) – Total Phyto, EC, TC, Chl a, Fe, Mn, true colour, TSS, H2S, DOC, TOC, NH4, NOX, FRP, TN, TP, silica, Chl z, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO.</p> <p>Tailwater: None.</p> <p>Mt Crosby Weir [also TS sampling] Inflow: kholo: Fortnightly – total phytoplankton, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO.</p> <p>Headwater: Fortnightly – Total Cyano, EC, TC, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO Monthly – Total Cyano, EC, TC, Chl a, Fe, Mn, true colour, TSS, DOC, TOC, NH4, NOX, FRP, TN, TP, depth probe pH, Cond., Turb., Temp., Chl, BGA, DO.</p> <p>Tailwater: None, estuarine</p>	<p>Interim Program, Including Methodology</p> <p>Ponded area bank inspections for erosion are currently being undertaken on a weekly basis. Seqwater will add interim downstream visual bank inspections to weekly surveillance inspections with results collated quarterly and reported (commencing 1 July 2010 and implemented by September 2010). These interim downstream visual inspections will allow the distance of influence of infrastructure for each storage to be determined and an appropriate monitoring and inspection program to be implemented (commencing December 2010 and fully implemented by December 2011).</p>	<p>Not compliant with ROP (inspections undertaken for ponded areas but not stream bank or downstream) No reporting or monitoring currently undertaken for ROP purposes however Dam Safety monitor dam wall and embankments directly surrounding dam storage.</p>	<p>Not compliant with ROP. No reporting.</p>	<p>Refer ss162-167.</p> <p>Seqwater applies the Queensland Government Water Monitoring Data Reporting Standards (Feb 2007) to its current reporting procedures. Commencing 1 July 2010 the following will be implemented:</p> <ul style="list-style-type: none"> • ROP datasets will be supplied quarterly, as required under the ROP. • ROP Compliance Report will be submitted with the quarterly reporting process, including exceptions to ROP requirements and an update on the interim program, as required under the ROP. <p>Results of weekly bank condition monitoring will be collated quarterly and reported, with progressive implementation commencing 1 July 2010 and fully implemented by December 2011.</p> <p>Collation of data for required reporting is dependent upon the implementation of relevant interim programs for various requirements as specified under the ROP. Refer to ss152, 153 and 159 for further details.</p>	<p>Not compliant with ROP. No reporting.</p> <p>Seqwater will submit an annual report as required, commencing for the 2010/2011 water year. Collation of data for required reporting is dependent upon the implementation of relevant interim programs for various requirements as specified under the ROP. Refer to ss164 for further details.</p>
	<p>Monitoring requirements – Bank condition</p> <p>159(1) The resource operations licence holder must inspect banks for evidence of collapse or erosion within the ponded areas and downstream of the relevant infrastructure listed in Attachments S, 6 and 7 following instances of—</p> <ul style="list-style-type: none"> (a) rapid water level changes; (b) large flows through infrastructure; or (c) other occasions when collapse or erosion of banks may be likely. <p>159(2) For subsection 1, downstream of the relevant infrastructure means the distance of influence of infrastructure operations.</p> <p>Reporting requirements</p> <p>161 The resource operations licence holder must provide—</p> <ul style="list-style-type: none"> (a) annual reports for the previous water year; (c) operational reports; and (d) emergency reports. <p>Reporting requirements – Quarterly Report</p> <p>162(1) The resource operations licence holder must submit a quarterly report to the chief executive after the end of each quarter, of every water year.</p> <p>162(2) The report must contain the following data—</p> <ul style="list-style-type: none"> (a) stream flow and infrastructure water levels—all records referred to in section 152 of this plan; (b) the total volume of water for each quarter— <ul style="list-style-type: none"> (i) taken for each zone; (ii) entitled to be taken from each zone; (c) water quality—all records referred to in section 158 of this plan; (d) a summary of bank condition monitoring and incidences of slumping, undertaken in accordance with section 159 of this plan; and (e) the details and status of any programs implemented under section 12 of this plan. <p>Reporting requirements – Annual Report</p> <p>163(1) The resource operations licence holder must submit an annual report to the chief executive after the end of the water year.</p> <p>163(2) The annual report must include—</p>	<p>Not compliant with ROP. No reporting.</p>	<p>Not compliant with ROP. No reporting.</p>	<p>Not compliant with ROP. No reporting.</p>	<p>Not compliant with ROP. No reporting.</p>	

Relevant ROP Requirement	Programs Currently in Existence (as submitted to DERM in February 2010 and confirmed in 2010 Approved Interim Program)	Interim Program, Including Methodology	Timetable
<p>(a) water quantity monitoring results required under section 164 of this plan;</p> <p>(b) details of the impact of infrastructure operation on water quality as required under section 164 of this plan;</p> <p>(c) a discussion about any issues that arose as a result of the implementation and application of the rules and requirements of this plan.</p> <p>Reporting requirements – Water quantity monitoring – Annual Report</p> <p>164 The resource operations licence holder must include in the annual report under section 163—</p> <ul style="list-style-type: none"> (a) A summary of announced allocation determinations, including— <ul style="list-style-type: none"> (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 sharing arrangements have been implemented— <ul style="list-style-type: none"> (i) an evaluation of the announced allocation procedures and outcomes; and (ii) the commencement date(s) and effective period(s) for each stage of the arrangement—records referred to in section 153; (c) records from infrastructure—records referred to in section 153; (d) the total annual volume of water taken by each water user, specified by zone, namely— <ul style="list-style-type: none"> (i) the total annual volume of supplemented water taken; (ii) the total annual volume of supplemented water entitled to be taken; and (iii) the basis for determining the volume entitled to be taken; (e) details of seasonal water assignments, namely— <ul style="list-style-type: none"> (i) the total number or seasonal water assignments (ii) arrangements; and (iii) the total volume of water seasonally assigned; (f) all details of changes to infrastructure or the operation of the infrastructure that may impact on compliance with rules in this plan; and (g) details of any new monitoring devices used such as equipment to measure stream flow. <p>Reporting Requirements – Impact of Infrastructure operation on natural ecosystems – Annual report</p> <p>165 The resource operations licence holder must include in the annual report under section 163—</p> <ul style="list-style-type: none"> (a) a summary of environmental considerations made by the resource operations licence holder in making operational and release decisions; (b) a summary of the environmental outcomes of the decision including any adverse environmental impacts; (c) a summary of fish condition and fish stranding monitoring and assessment, including— <ul style="list-style-type: none"> (i) results of investigations of fish stranding downstream of infrastructure; and (ii) changes to the operation of infrastructure to reduce instances of bank slumping, erosion or fish stranding; (d) a discussion and assessment of the following water quality issues— <ul style="list-style-type: none"> (i) thermal and chemical stratification in catch water storage associated with infrastructure; (ii) contribution of the water storage and its management to 			

Relevant ROP Requirement	Programs Currently In Existence (as submitted to DERM in February 2010 and confirmed in 2010 Approved Interim Program)	Interim Program, including Methodology	Timetable
<p>the quality of water released;</p> <p>cumulative effect of successive water storages associated with infrastructure on water quality;</p> <p>cyanobacteria population changes in response to stratification in each water storage; and</p> <p>(v) any changes to the monitoring program as a result of evaluation of the data.</p>			
<p>Reporting requirements – Operational Report</p> <p>166 The resource operations licence holder must—</p> <ul style="list-style-type: none"> (a) notify the chief executive within one business day of becoming aware of any of the following operational incidents— <ul style="list-style-type: none"> (i) a non-compliance by the resource operations holder with the rules in this plan; and (ii) instances of fish stranding or bank slumping within the impounded areas or downstream of infrastructure listed in Attachment 9, Table 1 or watercourses associated with the operation of the Central Brisbane River, Crossbrook Creek, Pine Valleys and Stanley River water supply schemes; (b) provide to the chief executive a report which includes details of— <ul style="list-style-type: none"> (i) the incident; (ii) conditions under which the incident occurred; and (iii) any response or activities carried out as a result of the incident; (c) notify the chief executive upon commencement and cessation of critical water sharing arrangements; and (d) notify the chief executive on approval of any seasonal water assignment, including— <ul style="list-style-type: none"> (i) the name and location of the assignees and assignors; and (ii) the zone or zones where water is being seasonally assigned to and from; (e) notify the chief executive upon making a decision relating to an initial announced allocation and/or its recalculations; (f) transfer to the chief executive— <ul style="list-style-type: none"> (i) details of any arrangements of addressing circumstances where the resource operations licence holder is unable to supply water allocations under subsection (c); and (ii) relevant supporting information used in making a decision under subsection (e). 	<p>ss166(a)(i), (b); Seqwater will submit operational reports as required, commencing for the 2010/2011 water year. ss166(f)(ii); Process for reporting instances of fish stranding and bank slumping will be progressively implemented beginning 1 July 2010 with finalisation by December 2011.</p> <p>Ponded area bank inspections for erosion are currently being undertaken on a weekly basis. Seqwater will add interim downstream visual bank inspections to weekly surveillance inspections with results collated quarterly and reported (commencing 1 July 2010 and implemented by September 2010). These interim downstream visual inspections will allow to the distance of influence of infrastructure for each storage to be determined and an appropriate monitoring and inspection program to be implemented (commencing December 2010 and fully implemented by December 2011).</p> <p>ss166(g); New Critical Water Sharing Arrangements processes and procedures will be in place by the commencement of the 2010/2011 Water Year (i.e. from 1 July 2010).</p> <p>ss166(h); Procedures for monitoring and approving Seasonal Water Assignments have been developed and will be in place for all schemes from 1 July 2010, however, it should be noted that Seasonal Water Assignments in the Central Brisbane River Water Supply Scheme are connected to implementation of a metering program (anticipated to take until December 2012 – please refer to ss68 and 164 for further detail).</p> <p>ss166(c-f); New Medium Priority and High Priority Announced Allocation processes and procedures will be in place by the commencement of the 2010/2011 Water Year (i.e. from 1 July 2010).</p>	<p>Not compliant with ROP.</p> <p>No reporting.</p>	<p>1 July 2010.</p>
<p>Reporting requirements – Emergency report</p> <p>167 In an emergency where the resource operations licence holder cannot comply with a rule in this plan as a result of an emergency, the resource operations licence holder must—</p> <ul style="list-style-type: none"> (a) notify the chief executive upon discovery of the emergency; and (b) provide to the chief executive a report that includes— <ul style="list-style-type: none"> (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 specified in this plan that the resource operations licence holder is either permanently or temporarily unable to comply with due to the emergency. 		<p>Not compliant with ROP.</p> <p>No reporting.</p>	<p>Seqwater will submit emergency reports as required, commencing for the 2010/2011 water year.</p>
<p>Relevant ROP Requirement</p> <p>Water Allocation Number 137: Brisbane Zone, Any Purpose, 25ML</p>	<p>Programs Currently In Existence</p> <p>The map in Attachment 2(b) of the ROP does not include Somerset</p>	<p>Interim Program, including Methodology</p>	<p>Timetable</p>

Attachment 8, Table 1 – Water Allocation Schedule

High Class A Priority, "This authorisation was authorised to continue under section 36QZDP of the Water Act 2000.	Dam, where part of this water allocation has always been taken. Due to the boundaries of the Brisbane Zone, this allocation is currently being taken outside of the specified zone in the ROP.	The zone where this entitlement has been issued does not include Somerset Dam, where part of this water allocation has always been taken. Due to the boundaries of the Brisbane Zone, this allocation is currently being taken outside of the specified zone in the ROP.
Water Allocation Number 139; Mid-Brisbane Zone, Any Purpose, 150ML, Medium Priority, "This authorisation was authorised to continue under section 36QZDP of the Water Act 2000.	In accordance with current take of water from the Mid-Brisbane zone.	

Attachment 9 – Resource operations licence holder monitoring: Locations where continuous time series height and flow data and storage water level data are required.

Location	Continuous time series storage water level data	Programs Currently in Existence	Interim Program, including Methodology	Timetable
Mount Crosby Weir Inflow	Y	Not continuous	A daily inflow derivation model is being developed which will incorporate outflow from Whetstone Dam, flow from Lockyer Creek and local area, change in Mt Crosby water levels and local irrigation and water supply demands.	1 July 2010.
Mount Crosby Weir headwater level	Y	Continuous	Water level is monitored via ALERT to a 20mm resolution.	1 July 2010.
Mount Crosby Weir tailwater	Y	Not continuous	Downstream of Mt Crosby Weir is tidal land, as such, a downstream gauging station will not provide estimates of river flow. Releases are not made from Mt Crosby Weir and any flow through the weir way and over the weir crest will provide an estimate of the flow from the weir.	Estimate of flow from the weir in place by 30 December 2010.
North Pine Dam inflow	Y	Not continuous	A new daily inflow model is being developed and will be available by 1 July 2010.	1 July 2010.
North Pine Dam headwater [level]	Y	Continuous	Complainant.	1 July 2010.
North Pine Dam tailwater		Not continuous	Water level is monitored continuously at the Dayboro Rd WPS Weir about 1km downstream of North Pine Dam. At present, this is only available via SCADA and is not rated. Until the rating is developed and equipment installed at the site to enable remote monitoring, flow downstream of North Pine Dam can be estimated from the gate and valve openings at the Dam (anticipated for July 2011). A rating can be developed for the Dayboro Rd Weir based on recorded flows and heights.	July 2011.
Somerset Dam Inflow	Y	Not continuous	A new daily inflow model is being developed and will be in place by 1 July 2010.	1 July 2010.
Somerset Dam headwater level	Y	Continuous	Complainant.	1 July 2010.
Somerset Dam tailwater	Y	Not continuous	Somerset Dam tailwater is affected by levels in Whetstone Dam. When full, the water in Whetstone back up to the toe of Somerset Dam. As such, a tailwater gauge is considered inappropriate. Outflows from Somerset can be estimated from the recorded openings of the gates, sluices and valves at the dam.	NIL
Whetstone Dam Inflow	Y	Not continuous	A new daily inflow model is being developed and will be available by 1 July 2010.	1 July 2010.
Whetstone Dam headwater level	Y	Continuous	Complainant.	1 July 2010.
Whetstone Dam tailwater	Y	Not continuous	Please note: Water level is continuously monitored and recorded via ALERT and on-site logger with a resolution of 20mm which is owned by QERM not Seqwater (143035A). The site is rated but can be affected by backwater from Lockyer Creek. Discharge from the dam can also be estimated via the rated gates and valves. Since the gauge is owned by DERM, Seqwater will not undertake monitoring for tailwater at this site.	Site since the gauge is owned by DERM (143035A).