Permit[1]

Environmental Protection Act 1994

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit[1] number: EPPR00864913

The anniversary date of this environmental authority is the same day each year as the effective date. An annual return and the payment of the annual fee which is currently $3,312.00 will be due each year on this day.

Environmental authority holder

Name	Registered address
Pacific Reef Fisheries (Australia) Pty Ltd	Lot 1 Trent Road AYR QLD 4807

Environmentally relevant activity and location details

Environmentally relevant activity(s)	Location(s)
1-(1b) Aquaculture >10ha but <100ha land 1-(2a) Aquaculture >100m^2 but <10ha land 16-(1a) Dredging >1000t but <10000t/yr 27-Seafood processing >500t/yr	Trent Road Ayr - Lot 1 Plan RP804106

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994*.

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

Contaminated land

It is a requirement of the *Environmental Protection Act 1994* that if an owner or occupier of land becomes aware a Notifiable Activity (as defined in Schedule 3 and Schedule 4 of the *Environmental Protection Act 1994*) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.

	24/6/13
Signature	Date

Anthony Morrison
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the *Environmental Protection Act 1994*, and the regulations made under the *Environmental Protection Act 1994*. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Relevant activity/s:

ERA 1(1)(b) - Cultivating or holding crustaceans in enclosures that are on land and have a total area of more than 10ha but not more than 100ha
ERA 1(2)(a) - Cultivating or holding marine, estuarine or freshwater organisms, other than crustaceans, in enclosures that are on land and have a total area of more than 100m^2 but not more than 10ha
ERA 16(1)(a) - Dredging in a year, 1000t to 10,000t of material
ERA 27- Processing in a year 500t or more of seafood products

Conditions:

Agency interest: General	
Condition number	**Condition**
(G1)	In carrying out the environmentally relevant activity(s), the holder of this environmental authority must take all reasonable and practical measures to minimise releases and the likelihood of releases of contaminants to the environment, except as otherwise provided by the conditions of this environmental authority.
(G2)	The holder of this environmental authority must: (a) install and operate all works and control equipment, and (b) take all measures, perform all acts and do all things, necessary to ensure compliance with the conditions of this environmental authority.
(G3)	**Access to Copy of Environmental Authority** A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.
(G4)	**Records** Any record or document required to be kept by a condition of this environmental authority must be kept at the licensed place for a period of at least five years and be available for examination by an authorised person. For daily and weekly records, the record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three years and these records are then kept in the form of annual summaries after that period.

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(G5)	**Alterations** No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority. An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantity of the contaminant to be released into the environment.
(G6)	**Monitoring and Measurements** All determinations of the quality of contaminants released to the environment and all measurement and reporting of noise levels that are required by this environmental authority must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.
(G7)	All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.
(G8)	**Integrated Environmental Management System (IEMS)** The holder of this environmental authority must: (a) implement the Integrated Environmental Management System "Pacific Reef Fisheries Pty Ltd, Alva Beach IEMS, October 2000", or subsequent versions, which provides for the following functions: (i) the monitoring of releases of contaminants into the environment and an environmental assessment of the releases; and (ii) staff training and awareness of environmental issues; and (iii) the conduct of environmental and energy audits; and (iv) waste prevention, treatment and disposal; and (v) stormwater management; and (vi) a program for continuous improvement; and (vii) reporting arrangements on the effectiveness of the environmental management of the activities. (b) lodge with the **Administering Authority** a brief report describing the progress in implementing and operating the IEMS with the annual return; and (c) submit details of any amendment to the IEMS to the **Administering Authority** with the annual return which immediately follows the enactment of any such amendment.
(G9)	A copy of the Integrated Environmental Management System must be kept at the licensed place.
(G10)	**Number and Area of Ponds** This environmental authority applies to the operation of aquaculture ponds having a combined total area of not greater than 98 hectares.
(G11)	**Competency** The holder of this environmental authority shall ensure that the operation and maintenance of the aquaculture facility is carried out by or under the supervision of a person competent to operate and maintain the aquaculture facility.
(G12)	**Dredging** Operation of dredging equipment must be in accordance with the conditions of the sanction granted on 12 December 1995 pursuant to section 86 of the *Harbours Act 1955*.

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Agency interest: Water	
Condition number	**Condition**
(W1)	**Release of Contaminants to Waters** Contaminants must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters except as permitted under the water schedule or the Stormwater Management agency interest, or to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.
(W2)	**Release Points** The only contaminants permitted to be released from the licensed place are those contaminants from the release point listed in Schedule 3- Table1.
(W3)	Notwithstanding any other condition of this environmental authority, the **prawn farm effluent** must be directed from release point W1 in a manner which does not erode or otherwise disturb mangrove vegetation, the stream bed, the stream banks or the habitat in general.
(W4)	**Quantity of Contaminants Released** The total quantity of contaminants released collectively from the release point W1 during any day must not exceed 88,500m^3. The total quantity of wastes discharged during one calendar year shall not exceed 26,827,500m^3, being an average of 73,500m^3 per day.
(W5)	Should a staged development of the project be undertaken or less than the full number of hectares be in operation at one time, the quantity of wastes discharged during any day, the total quantity of wastes discharged during one calendar year and the average flow per day must be limited to a proportion of the above volumes, based on the number of hectares in operation in relation to the full development of 98 hectares.
(W6)	**Quality Characteristics Of Release to Waters** The release of contaminants to waters must comply at the monitoring point specified in Schedule 3- Table1, with each of the limits specified in Schedule 3- Table 1 for each quality characteristic.
(W7)	For all parameters in Schedule 3 -Table 1, except dissolved oxygen concentration, where a **mean** and/or **80th percentile** and/or **maximum** limit is specified, the set of data describing the release quality characteristics must have a **mean** lower in value than the **mean** limit and an **80th percentile** lower in value than the **80th percentile** limit and a **maximum** lower in value than the **maximum** limit. For dissolved oxygen concentration, the set of data describing the release quality characteristics must have a **mean** higher in value than the **mean** limit and a **minimum** higher in value than the **minimum** limit.
(W8)	Notwithstanding any other condition of this environmental authority, any release of contaminants to waters must not produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other objectionable matter.

Agency interest: Stormwater Management	
Condition number	**Condition**
(SM1)	**Spillage Control** All existing chemical tank storages must be within a spillage control **compound** sufficient to contain at least 100% of the largest storage tank.
(SM2)	All chemical tank storages constructed after 1 March 1997 must be within a spillage control **compound** sufficient to contain at least 100% of the largest storage tank plus 10% of the second largest tank within the **compound**.

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(SM3)	All spillage control compounds must be constructed and maintained so as to be sufficiently impervious to allow retention and recovery of any materials being stored within the **compound**.
(SM4)	All chemical package storage and handling areas must be within a spillage control **compound** sufficient to contain at least 100% of the capacity of the largest package plus 25% of the storage capacity up to 10,000 L together with 10% of the storage capacity beyond 10,000 L.
(SM5)	Notwithstanding Condition SM3, floors forming part of the spillage control **compound** for the chemical package storage and handling areas must be impervious and not liable to degradation.
(SM6)	Washing, degreasing, servicing or other maintenance of vehicles, plant, or other equipment must not occur on the licensed place in any area where resulting contaminants will or may be released to any stormwater drain, land or waters.
(SM7)	Any waste resulting from a spillage including any clean up materials must be recovered and disposed of to a facility approved under the *Environmental Protection Act 1994* to accept such waste.
(SM8)	**Pond Sludge Conditioning Areas** Runoff from pond sludge conditioning areas must be directed in such a manner as to be retained within the catchment of the discharge channel or in such other manner as to ensure that runoff does not directly enter natural waterways.
Agency interest: Noise	
Condition number	**Condition**
(N1)	**Emission of Noise** In the event of a complaint being received by the **administering authority** about noise that the **administering authority** considers is reasonable, then the emission of noise from the activity must not result in levels greater than those specified in Schedule 3- Table 2, except during such reasonable period as may be required to implement abatement measures, until the circumstances which gave rise to the complaint are resolved.
Agency interest: Land	
Condition number	**Condition**
(L1)	**Release of Contaminants to Land** The release of pond sludge to **land** must only occur in soil conditioning areas identified Schedule 1 of this environmental authority.

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Agency interest: Self Monitoring And Reporting	
Condition number	**Condition**
(SMR1)	**Complaint Recording** All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed place must be recorded and kept with the following details: (a) time, date and nature of complaint; (b) type of communication (telephone, letter, personal etc.); (c) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded); (d) response and investigation undertaken as a result of the complaint; (e) name of person responsible for investigating complaint; and (f) Action taken as a result of the complaint investigation and signature of responsible person.
(SMR2)	**Incident Recording** A record must be maintained of events including but not limited to: (a) the time date and duration of equipment malfunctions where failure of such equipment may result in environmental contamination; (b) any shut-downs of treatment systems; and (c) Any disease outbreak in ponds.
(SMR3)	**Notification of Emergencies and Incidents** Where the holder of this environmental authority has not given notification to the **administering authority** under section 320 of the *Environmental Protection Act*, as soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the **administering authority** of the release by telephone or facsimile.
(SMR4)	Where the holder of this environmental authority has not given notification to the **administering authority** under section 320 of the *Environmental Protection Act*, the notification of emergencies or incidents as required by condition number SMR3 must include but not be limited to the following: (a) The holder of the environmental authority; (b) the location of the emergency or incident; (c) the number of the environmental authority; (d) the name and telephone number of the designated contact person; (e) the time of the release; (f) the time the holder of the environmental authority became aware of the release; (g) the suspected cause of the release; (h) the environmental harm and or environmental nuisance caused, threatened, or to be caused by the release; and (i) actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.
(SMR5)	Where the holder of this environmental authority has not given notification to the **administering authority** under section 320 of the *Environmental Protection Act*, not more than 14 days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition number SMR4 in addition to: (a) proposed actions to prevent a recurrence of the emergency or incident; and, (b) outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance.

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(SMR6)	**Monitoring of Contaminant Releases to Waters** Monitoring the quality of contaminants released to waters must include but not be limited to samples taken at a time when **maximum** flow rate is occurring from the outlet.
(SMR7)	The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released from monitoring point W1 as described in Schedule 3 – Table 1, at the frequency specified in Schedule 2- Table 1 and Schedule 2 - Table 2.
(SMR8)	Samples for determination of quality of contaminants released must be taken, at least, in duplicate and the duplicate sample must be analysed if: (a) The primary sample is destroyed or otherwise rendered unsuitable for analysis before an accurate analytical result is obtained; or (b) The analysis of the primary sample is not considered to be accurate.
(SMR9)	All determinations of the quality of contaminants released to waters must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 3rd Edition, December 1999, or more recent additions or supplements to that document as such become available.
(SMR10)	**Monitoring Of Volume of Release** The daily quantity of contaminants released must be determined by a method which is accurate to within 10% of the actual amount released.
(SMR11)	Records must be kept of the results of all determinations of the daily quantity of contaminants released to waters.
(SMR12)	**Impact Monitoring** The holder of this environmental authority must develop and undertake an Environmental Impact Monitoring Program, in relevant creeks and along the western shoreline of the Pacific Ocean adjacent to the licensed premises, to determine: (c) presence of water quality disturbances; and (d) any changes to representative natural biological communities, with an 80% certainty of detecting any such changes should any be present.
(SMR13)	A copy of the Environmental Impact Monitoring Program must be kept at the licensed place where practical.
(SMR14)	Participation in an Environmental Assessment Study, which has been approved by the administering authority, is deemed to fulfil the requirements of condition number SMR12.
(SMR15)	**Report Submission** The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority for the period covered by the return are submitted with the Annual Return.
(SMR16)	**Exception Reporting** The holder of this environmental authority must notify the administering authority in writing within 28 days of completion of analysis of any result of a monitoring program required by a condition of this environmental authority which indicates an exceedance of any limit specified in this environmental authority.
(SMR17)	The written notification required by condition number SMR16 above must include: (a) The full analysis results, and (b) Details of investigation or corrective actions taken, and (c) Any subsequent analysis.

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Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

For the purposes of this environmental authority the following definitions apply:

Act means the *Environmental Protection Act 1994*.

Administering Authority means the Department of Environment and Heritage Protection or its successor or predecessors.

bund means an embankment or wall which may form part or all of the perimeter of a compound.

compound means an area bounded by natural ground contours or by a bund, sufficiently impervious to retain spillage or leakage pending recovery.

Disease means a disease that is:
(a) exotic to Australia; or
(b) a variant of an endemic disease; or
(c) a serious infectious disease of unknown or uncertain cause; or
(d) a severe outbreak of a known endemic disease, and
(e) That is considered to be of a national significance with serious social or trade implications (AUSVETPLAN, Disease Strategy, version 3.0, 2009).

Land means land excluding waters and the atmosphere.

maximum means that the measured valued of the quality characteristic or contaminant must not be greater than the release limit stated.

mean means the measure of central tendency calculated by dividing the sum of a set of observations by the number of observations.

mg/l means milligrams per litre.

minimum means that the measured valued of the quality characteristic or contaminant must not be less than the release limit stated.

Prawn Farm Effluent means aquaculture and seafood processing wastes from the aquaculture ponds or seafood processing waste treatment system.

range means that the measured valued of the quality characteristic or contaminant must not be higher than the higher release limit stated nor lower than the lower release limit stated.

Total Nitrogen means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen.

80th percentile means that the measured values of the quality characteristic must not be greater than the release limit for any more than one out of five consecutive samples where the time interval between the taking of each consecutive sample is not less than three days.

µg/L means micrograms per litre.

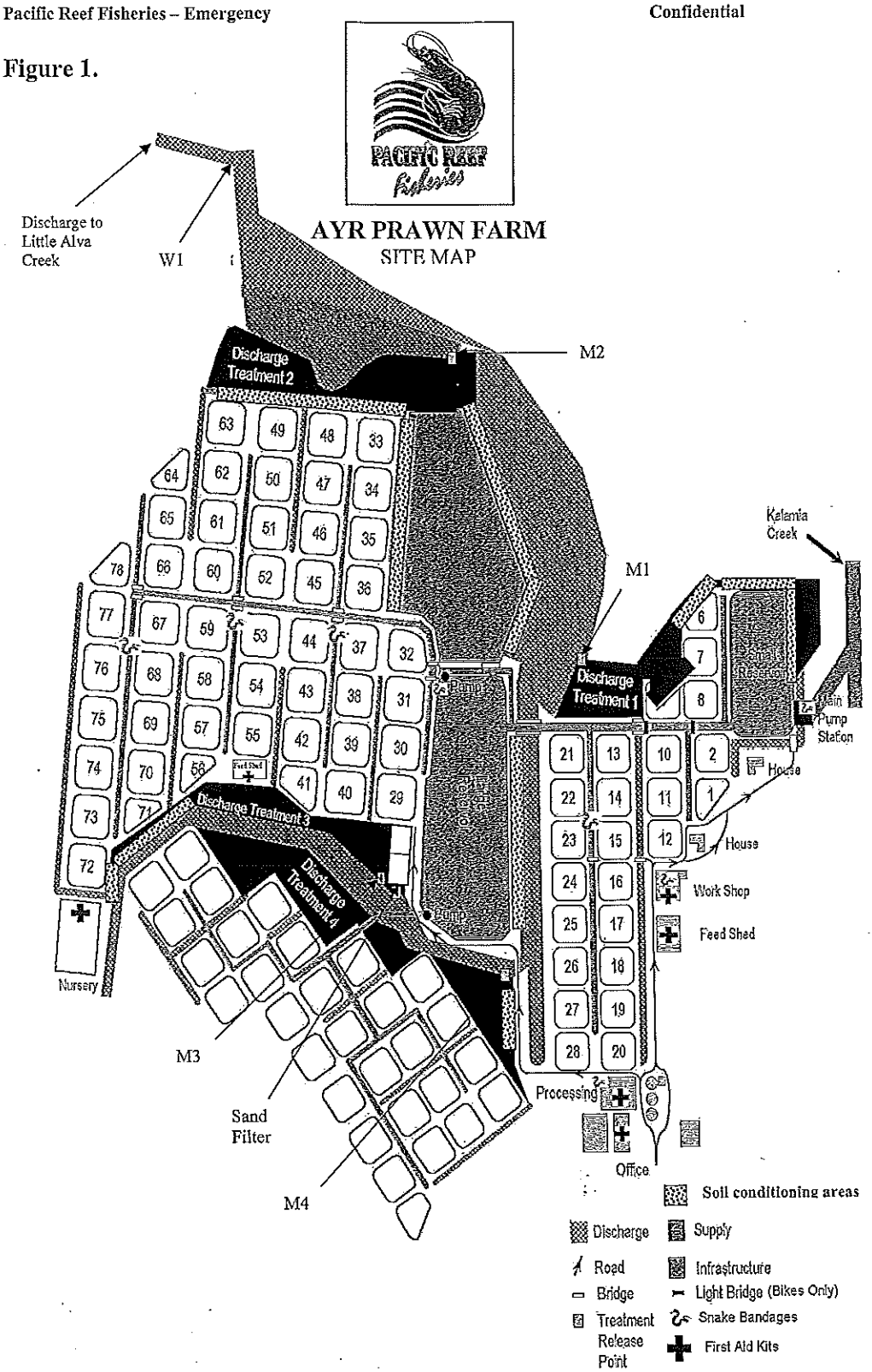
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Schedule 1—Approved plans

Pacific Reef Fisheries – Emergency

Confidential

Figure 1.



PRF – EM 01

Authorised By:
Wayne Di Bartolo

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Replaces: 08/04/11

cycom 24/6/13

Schedule 2—Monitoring

Table 1

Quality Characteristic Determination	Monitoring Point	Frequency
Suspended Solids	Release Point -W1	once per month in each month that a discharge occurs and once per day on each day that Turbidity indicates that the **maximum** licence limit for Suspended Solids may be exceeded
pH		on each day that a discharge occurs
Dissolved Oxygen		
Temperature - Celsius degrees		
Total Nitrogen as N		once per month, in each month that a discharge occurs and during each discharge
Chlorophyll *a*		
Total Phosphorus as P		
Turbidity		on each day that a discharge occurs

Table 2

Quality Characteristic Determination	Measurement Point	Frequency
Suspended Solids	Release Point -W1	during the first, last and median hour of the draining during harvest for three harvests per year
Turbidity		during each hour of the draining during harvest for the same harvests as for suspended solids

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Schedule 3—Release limits

Table 1

Location	Location Description	Contaminants	Quality Characteristics	Discharge Limit
Release Point -W1 GPS Location S 19°28.380' E 147°29.341'	Downstream of and immediately adjacent to, the tidal gate which forms part of the final discharge structure.	Prawn Farm Effluent	Suspended Solids (**mg/l**)	**mean** - 40 80th Percentile - 65 **maximum** - 100
			pH (pH units **range**)	6.5 - 8.7
			Dissolved Oxygen (**mg/l**)	**minimum** - 4 **mean** - 5.8
			Total Nitrogen (**mg/l**)	**mean** - 1.1 80th Percentile - 2.5 **maximum** - 3.5
			Total Phosphorous (**mg/l**)	**mean** - 0.11 **80th percentile** - 0.35 **maximum** - 0.45
			Chlorophyll *a* (**µg/l**)	**mean** - 15 **maximum** - 200

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Table 2

Noise Limits At A Noise Sensitive Place	
Period	**Noise Level at a Noise Sensitive Place Measured as the Adjusted Maximum Sound Pressure Level $L_{Amax\ adj,\ T}$**
7 am - 6 pm	Background noise level plus 5 dB(A)
6 pm - 10 pm	Background noise level plus 5 dB(A)
10 pm - 7 am	Background noise level plus 3 dB(A)
Noise Limits At A Commercial Place	
Period	**Noise Level at a Commercial Place measured as the Adjusted Maximum Sound Pressure Level $L_{Amax\ adj,\ T}$**
7 am - 6 pm	Background noise level plus 10 dB(A)
6 pm - 10 pm	Background noise level plus 10 dB(A)
10 pm - 7 am	Background noise level plus 8 dB(A)

END

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