



Hunter and Central Coast Sustainable Aquaculture Strategy

Readers' Note

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Project Profile Analysis

Hunter and Central Coast Sustainable
Aquaculture Strategy
Land Based Aquaculture

A NSW Government Initiative

Hunter and Central Coast Sustainable Aquaculture Strategy

A NSW Government initiative of Department of Primary Industries, Department of State and Regional Development, Department of Environment and Conservation, Department of Lands, Department of Infrastructure, Planning and Natural Resources and NSW Premiers Department to encourage sustainable aquaculture in New South Wales.

Project Profile Analysis

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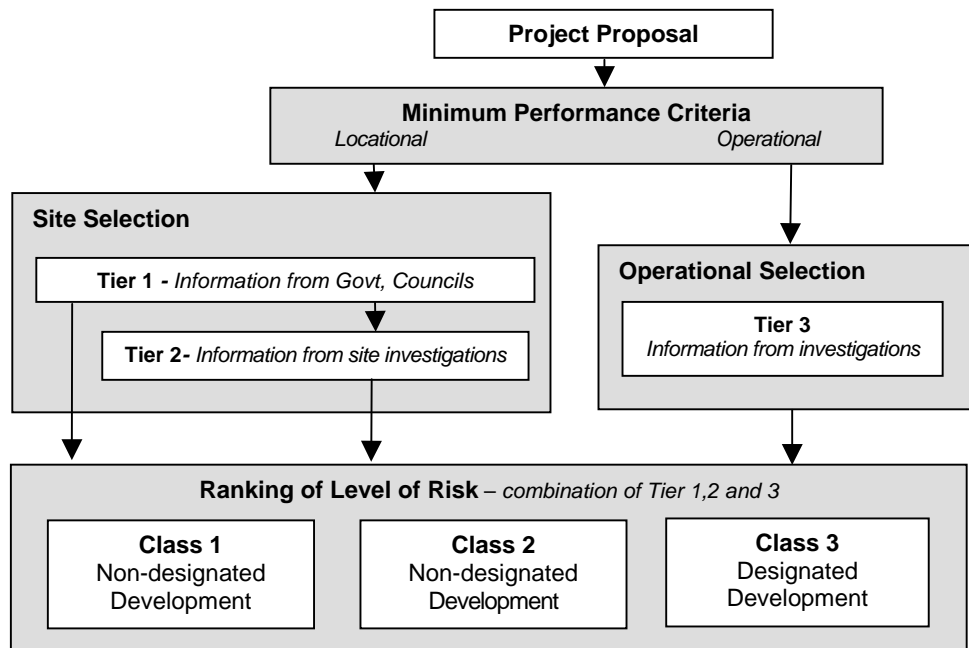
1. Overview of Project Profile Analysis

The Aquaculture Industry Development Plan (AIDP) sets out best practice for the establishment and operation of land based aquaculture projects. Based on this information, a Project Profile Analysis has been developed to enable a preliminary evaluation of the risks associated with site selection, species, design and planning and operational criteria. These criteria allow the applicant and the consent authority to evaluate the likely risks associated with a project and to establish the level of assessment to match the likely risks to the environment.

The Project Profile Analysis provides three “sieves” to evaluate options.

- The **Minimum Performance Criteria** provides the first environmental sieve for selecting sites and project characteristics. These must be met in order for the project to proceed.
- The **Site Selection Criteria** (Tier 1 and Tier 2) provide the next two environmental sieves to determine the acceptability of risks. Tier 1 information is available from Government or Council sources. Tier 2 information will need to be obtained from site investigation or studies.
- Following the selection of a site, **Operational Selection Criteria** (Tier 3) provide the next “sieve” to evaluate various options including species, layout and operation factors. The Tier 3 evaluation can serve as a cost effective device to determine the relative risk associated with species, design and operational options and to assist in deciding if certain options should be excluded from further consideration.

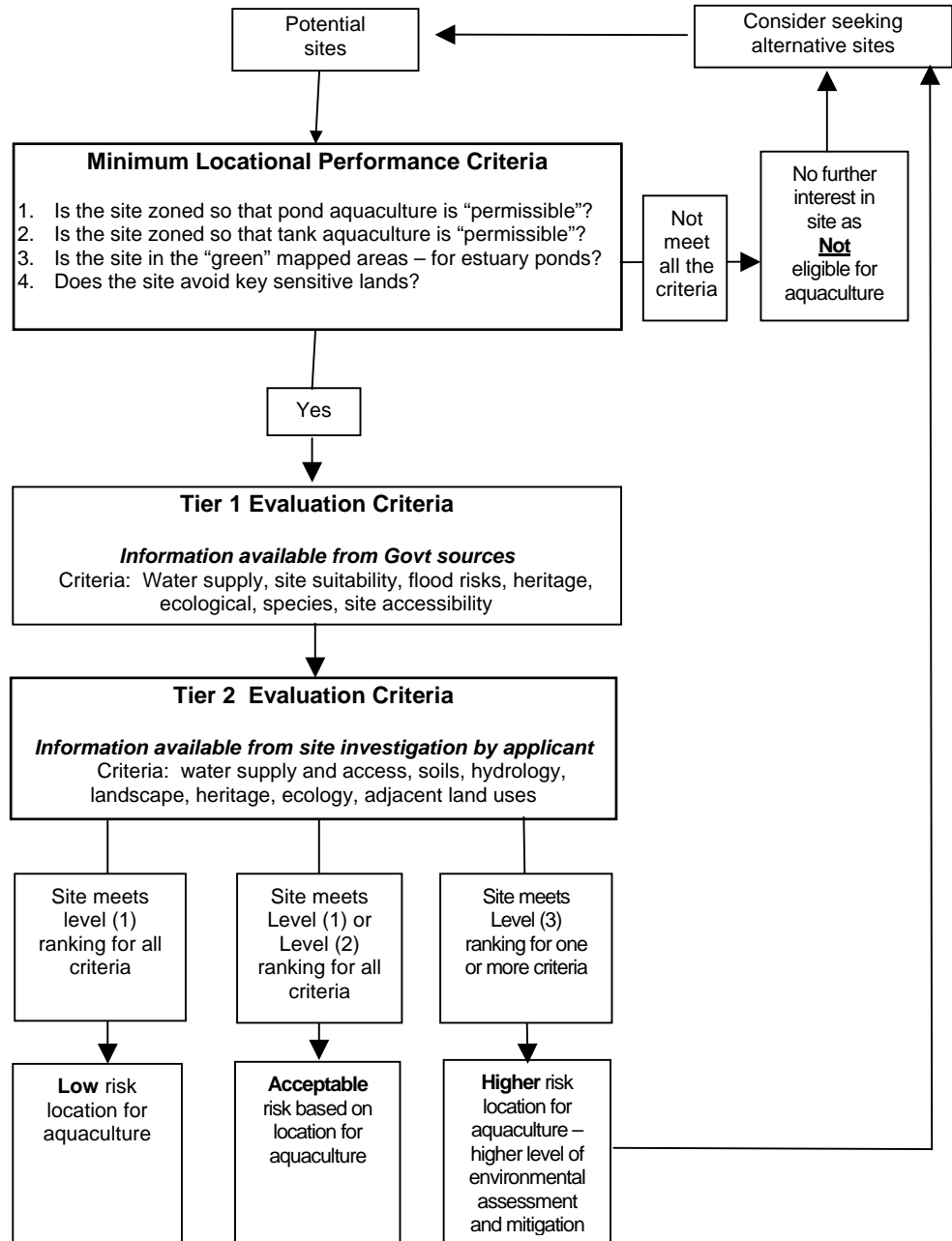
Figure 9. “Sieves” in Project Profile Analysis



2. Site Evaluation Criteria

The Site Selection Section of the AIDP has identified environmental and other factors that should be considered when selecting a site for aquaculture. These factors can be used to rank the likely risks associated with establishing an aquaculture facility in a particular location, e.g. as representing a Level 1, 2 or 3 risk.

Figure 10. Site Selection



2.1 Minimum Site Performance Criteria

It is essential at the outset, that the **Minimum Performance Criteria for Land-based Aquaculture in the Hunter and Central Coast Region** (see Project Profile Analysis) is considered, as aquaculture projects that cannot meet these minimum performance criteria are not permissible on the Hunter and Central Coast. Information regarding the minimum locational performance criteria is readily available from Council DLor DIPNR maps and the **Aquaculture Land Suitability and Estuarine Aquaculture Maps** for the region provide a quick evaluation to determine if a potential site meets these minimum locational criteria. For estuarine pond sites, the site must be within the areas coloured green on the Estuarine Aquaculture Map for the particular estuary.

2.2 Tier 1 Evaluation

For sites that meet the Minimum Locational Performance Criteria, the Tier 1 information should be sourced to determine the relative acceptability of the site for aquaculture. The Tier 1 criteria can be sourced from information held by Council, Department of Primary Industries, DEC, DL and DIPNR. The ranking of Level 1, 2 or 3 for individual criteria will begin to provide a picture of the potential hurdles in developing a site and the likely level of environmental assessment and regulation which could apply – the lower the level of risk, the lower the level of assessment and regulation required. Whenever possible, higher risk sites should be avoided at the Tier 1 evaluation level.

2.3 Tier 2 Evaluation

For sites that are not eliminated as a result of Tier 1 evaluation, the next layer of information should be sourced. Tier 2 investigations may involve significant expenditure with site investigations by technical experts, and in some cases, laboratory analysis. For example, investigations by consultants may be required:

- to confirm the levels of acid sulfate soils or soil contamination and develop management options,
- to determine soil suitability for dam construction,
- to identify threatened species, populations or ecological communities or their habitat (both flora and fauna surveys required),
- to identify any Aboriginal sites, areas of high potential to contain sites, areas of cultural sensitivity or other values of cultural significance to the Aboriginal community (e.g. bush foods),
- to assess of potential water supply quality and security of supply.

It should be noted that the level of analysis at this stage need not be as detailed as would be required once the site has been selected and the detailed project design is being undertaken. However, it should provide sufficient information for an informed decision to be made so that there will be no unpleasant surprises later, resulting in costly management options.

The level of risks associated with the location along with the risks levels associated with operational constraints (see section 3) will decide the assessment regime for the project. The lower the risks, the lesser the level of assessment complexity, the lower the costs in assessment and mitigation, and the lower the level of environmental supervision by councils and government agencies.

3. Aquaculture Maps

Sound site selection is particularly important in estuarine areas where problems related to suitable water quality, drainage and acid sulfate soils could impose costly constraints on the long-term aquaculture viability in those areas.

Estuarine Aquaculture Maps have been developed for two estuarine areas in which saline pond culture is potentially suitable within the Hunter and Central Coast Region. These two areas are:

11. Port Stephens including Myall and Karuah rivers.
12. Hunter including Hunter, Patterson and Williams Rivers.

These maps will play a pivotal role in identifying sites that meet the minimum locational performance criteria for estuarine pond aquaculture. The maps have been developed using GIS information and identify potential locations based on attributes including

- elevation above Australian Height Datum,
- spatial salinity for the estuary and bathymetry assessment,
- acid sulfate soil profile,
- land use zoning, and
- conservation exclusion zones.

These maps identify land which meet the Minimum Locational Performance Criteria for estuarine pond aquaculture. Other evaluation criteria must still be considered in assessing the suitability of a particular site for aquaculture. The Tier 1 and Tier 2 selection criteria are in the Project Profile Analysis provides details of the site selection factors.

While A4 versions of the estuarine pond aquaculture maps are included in the AIDP, the Aquaculture Division of Department of Primary Industries can provide access to full scale estuarine pond aquaculture maps for estuaries on the Hunter and Central Coast from south of the Manning to the Hawkesbury which identify potentially suitable areas as well as in some cases, specific sites with potential for estuarine pond aquaculture.

Because of the extent of locational possibilities for freshwater tank and ponds, a detailed mapping approach to identify land that meets the Minimum Locational Performance Criteria has not being taken. However, a general overview map (see attached CD) of the Hunter and Central Coast Region is enclosed to provide an indication of potentially suitable sites. Therefore, criteria should be applied at the preliminary stage to eliminate any sites that do not meet these criteria.

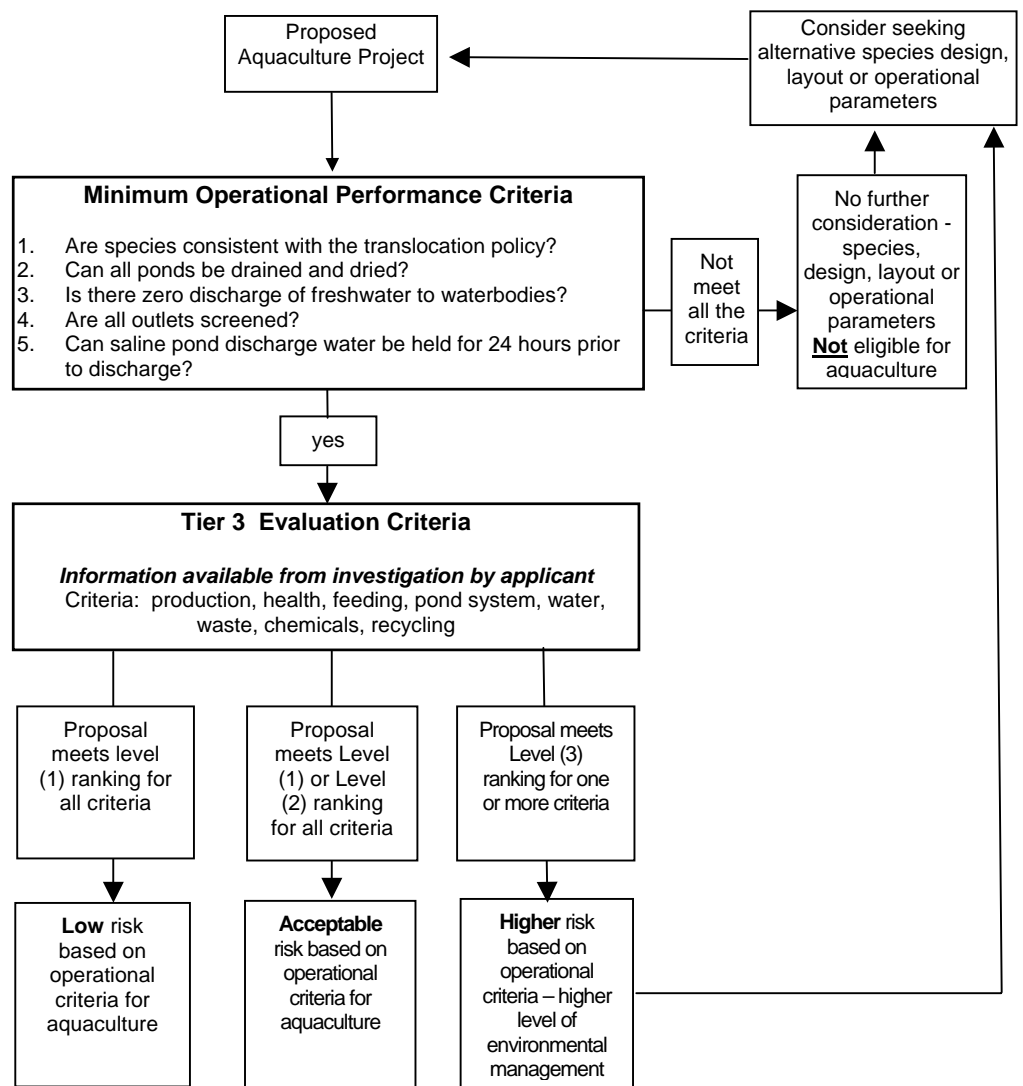
It should be noted that the Aquaculture Land Suitability Maps were compiled based on data available at the time of production and only represent areas that may have potential for aquaculture. Detailed site assessment is still required and current LEP and other mapping information may need further investigation.

The site selection factors are discussed in more detail in the Site Selection section of the AIDP.

4. Operational Evaluation Criteria

While Tier 1 and Tier 2 Site Selection Criteria provide guidance in the selection of a preferred site, the Tier 3 evaluation criteria aim to provide guidance on the evaluation of alternative operational regimes. Information from planning and design investigations will lead to a project profile ranking which will assist in identifying the likely risks to the environment of various operational alternatives.

Figure 11. Operational Selection



4.1 Minimum Operational Performance Criteria

It is essential at the outset, that the Minimum Performance Criteria for Aquaculture in the Hunter and Central Coast Region be considered, as aquaculture which cannot meet these minimum performance criteria, are not permissible on the Hunter and Central Coast.

4.2 Tier 3 Operational Evaluation

Following the selection of a site, and confirmation that the proposed design and planning parameters meet the Minimum Operational Performance Criteria, Tier 3 evaluation criteria provides the next “sieve” to determine the relative level of risk associated with the aquaculture proposal.

The Tier 3 evaluation can serve as a cost-effective device to determine if any of the proposed operational parameters are likely to lead to longer term costs associated with expensive mitigation measures and should be excluded from further consideration. The ranking of Level 1, 2 and 3 operational criteria will begin to provide a picture of the potential hurdles and the likely level of environmental assessment and regulation which could apply; the lower the level of risk, the lower the level of assessment and regulation required.

5. Interpreting the Rankings

5.1 The Rankings

The tables associated with Tier 1, 2 and 3 provide a ranking in relation to the criteria and the level of risk associated with the project characteristics. These rankings assist in evaluating individual sites and operational options as well as providing for a comparison between alternative options. The values are not to be added up and should result in an aggregate reading of the acceptability of the site for aquaculture.

Table 31. Interpreting the Rankings

Project Profile Analysis Rankings	Class of development	Development Assessment	Assessment Document
Minimum Performance Criteria Not Met	Prohibited		
Minimum Performance Criteria met and all the rankings are Level (1)	Class 1	Non-designated Development	SEE
Minimum Performance Criteria met, any of the rankings are Level (2) and none are Level (3)	Class 2	Non-designated Development	SEE
Minimum Performance Criteria met and any of the rankings are Level (3)	Class 3	Designated Development	EIS

It must be reinforced that for aquaculture projects to be undertaken on the Hunter and Central Coast, they must meet the Minimum Locational and Operational Performance Criteria.

5.2 Who makes the decision

It is essential that the consent authority (the local council or the Minister for Infrastructure and Planning) and Department of Primary Industries are consulted prior to lodging the development application.

The applicant should submit sufficient information to the consent authority so that the consent authority can decide whether the project meets the Minimum Performance Criteria and the level of assessment required based on the level of risk according to the Project Profile Analysis. This must be done prior to submitting the development application. It is the responsibility of the consent authority to determine if a proposal is a Class 1, 2 or 3 development.

5.3 Transitional Provisions

Where there is an existing aquaculture enterprise or a site of an abandoned aquaculture enterprise and there is a proposal to upgrade or re-establish an aquaculture operation on that site, the Hunter and Central Coast Sustainable Aquaculture Strategy will apply.

For proposals that do not comply with the best practice in the AIDP and do not meet the Minimum Performance Criteria, the applicant must formally seek and obtain agreement of the Minister for Infrastructure and Planning to be exempted from the Minimum Performance Criteria that would have otherwise made the proposal not permissible.

In making a decision for an exemption from the Minimum Performance Criteria, the Minister shall take into consideration whether the proposal will lead to:

- improved environmental outcomes despite non or partial compliance with the Site Location Minimum Performance Criteria; and
- total compliance with the Operational Minimum Performance Criteria.

Project Profile Analysis for Ponds, Raceways and Tanks

Minimum Performance Criteria

The following are Minimum Performance Criteria which proposals must meet to be permissible development within the Hunter and Central Coast Region.

Information available from Government Sources

Locational Criteria	Minimum Performance
1. LEP zones for ponds	Within zones listed in Column 2 of Zoning Table
2. LEP zones for tanks and raceways	Within zones listed in Column 3 of Zoning Table
3. Estuarine pond based aquaculture	Within an area coloured green on an Estuarine Aquaculture Map
4. Conservation exclusion zones	DEC protected areas (e.g. National Parks, Nature Reserves, Aboriginal Areas, Historic Sites, Karst Conservation Reserves) Aquatic Reserves or Marine Parks (excluding general use zones) Vacant Crown Land ¹
Operational Criteria	
5. Species	Culture method, operation and location must be permissible for all proposed species according to the Species Table in the Species Selection Section. No non-indigenous species shall be cultured in saline pond culture.
6. Intensive Grow-out Pond design	Capable of gravity draining and completely drying ponds.
7. Freshwater pond or tank culture (except for species approved for flow through systems eg. Salmonoids)	Zero discharge of water to a natural water bodies or wetlands.
8. Outlets from ponds and flow through systems.	All outlets must be screened to avoid escape of stock.
9. Outlet from estuarine pond farms (does not include tanks and raceways)	All saline discharge water must be held in a sedimentation system for a minimum of 24 hours prior to discharge and must be returned to saline tidal reaches of the waterway.

LEP Zoning Table For Locational Criteria 1 and 2

Column 1	Column 2	Column 3
Local Environmental Plan	Zones for Ponds	Zones for Tank and Raceway
Cessnock Local Environmental Plan 1989	1 (a) Rural ``A''	1 (a) Rural ``A'' 1 (a1) Rural ``A1'' 4 (a) Industrial 4 (b) Light Industrial
Dungog Local Environmental Plan 1990	1 (b) General Rural 1 (d) Rural Farmlets	1 (b) General Rural 1 (d) Rural Farmlets 4 (a) General Industrial 4 (b) Light Industrial
Gloucester Local Environmental Plan 2000	1 (a) Rural 7 (d) Environment Protection (Scenic)	1 (a) Rural 4 (a) Industrial 7 (d) Environment Protection (Scenic)

¹ This provision will not apply to the use of such land required for gaining access to water that will be subject an assessment by the appropriate authority for each situation on its merits.

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Gosford Interim Development Order No 122 1979	1 (a) Rural (Agriculture) 1 (b) Rural (Highway Protection) 7 (b) Conservation and Scenic Protection	1 (a) Rural (Agriculture) 1 (b) Rural (Highway Protection) 4 (a) Industrial
Gosford Planning Scheme Ordinance 1968		4 (a) Industrial (General) 4 (b) Industrial (Light)
Great Lakes Local Environmental Plan 1996	1 (a) Rural	1 (a) Rural 3 (d) Special Business Waterfront 4 (a) Industrial
Lake Macquarie Local Environmental Plan 1984	1 (a) Rural ``A" 1 (b) Rural ``B"	1 (a) Rural ``A" 1 (b) Rural ``B" 1 (c) Rural ``C" 4 (a) General Industry 4 (b) Special Industry
Lake Macquarie Draft Local Environmental Plan 2002	1 (1) Rural 9 Natural Resources	1 (1) Rural 1 (2) Rural 4 (1) Industrial Core 4 (2) Industrial General 9 Natural Resources
Maitland Local Environmental Plan 1993	1 (a) Prime Rural Land 1 (b) Secondary Rural Land	1 (a) Prime Rural Land 1 (b) Secondary Rural Land 4 (a) General Industrial 4 (b) Light Industrial
Merriwa Local Environment Plan 1992	1 (a) General Rural Zone	1 (a) General Rural Zone 4 (a) Industrial Zone
Murrurundi Local Environmental Plan 1993	1 (a) Rural ``A" Zone	1 (a) Rural ``A" Zone
Muswellbrook Local Environmental Plan 1985	1 (a) Rural ``A" Zone 5 (a) Special Use (power station)	1 (a) Rural ``A" Zone 4 (a) General Industrial Zone 4 (b) Light Industrial Zone 5 (a) Special Use (power station) 7 (L1) Environmental Protection General (Alluvial Areas) Zone
Newcastle Local Environmental Plan 1987		1 (a) Rural Zone 4 (a) Light Industrial Zone 4 (b) General Industrial Zone 4 (c) Eco-industrial Zone
Newcastle Draft Local Environmental Plan 2002	7(a) Conservation	4 (a) Light Industrial Zone 4 (b) General Industrial Zone 4 (c) Eco-industrial Zone
Port Stephens Local Environmental Plan 2000	1 (a) Rural Agriculture ``A" Zone 1 (c1) Rural Small Holdings Zone 6 (a) General Recreation ``A" Zone 6 (c) Special Recreation ``C" Zone 7 (a) Environment Protection Zone 7 (f1) Environment Protection ``F1" (Coastal Lands) Zone	1 (a) Rural Agriculture ``A" Zone 1 (c1) Rural Small Holdings Zone 1 (c2) Rural Small Holdings Zone 4 (a) Industrial General ``A" Zone 6 (a) General Recreation ``A" Zone 6 (c) Special Recreation ``C" Zone 7 (f1) Environment Protection ``F1" (Coastal Lands) Zone
Scone Local Environmental Plan 1986	1 (d) Rural Holdings Zone 1 (e) General Agricultural Zone 1 (i) Intensive Agricultural Zone 1 (s) Small farm zone	1 (d) Rural Holdings Zone 1 (e) General Agricultural Zone 1 (i) Intensive Agricultural Zone 1 (s) Small farm zone 4 (a) General Industrial Zone)
Singleton Local Environmental Plan 1996	1 (a) Rural Zone	1 (a) Rural Zone 4 Industrial Zone
Wyong Local Environmental Plan 1991	1 (a) Rural Zone 1 (c) Rural Holding Zone 7 (b) Scenic Protection Zone	1 (a) Rural Zone 1 (c) Rural Holding Zone 4 (a) General Industrial Zone 4 (b) Light Industrial Zone 4 (e) Regional Industrial and Employment Development Zone 7 (b) Scenic Protection Zone

Project Profile Analysis for Ponds

Tier 1 - Site Evaluation for Ponds

As a first step in the site evaluation process, a “desk top” study should be undertaken of potential sites using readily available information in maps and other data sources held by Councils, DL, DIPNR and government agencies. This desk top study will provide a quick and efficient approach to weeding out unsuitable sites and for focusing in on those sites which would justify a more intensive site evaluation. Tier 1 Evaluation Criteria are used to as a first “sieve” to identify areas that are likely to be suitable for aquaculture.

Information available from Government Sources

SITE EVALUATION CRITERIA FOR PONDS	TIER 1 LEVEL OF ASSESSMENT FOR PONDS		
	Level 1	Level 2	Level 3
1. Water Supply based on DIPNR information			
(a) Estuarine - Tidal amplitude	> 600mm	100 - 600mm	< 100mm
(b) Fresh - Water availability	<ul style="list-style-type: none"> Existing irrigation license approved for bore or river extraction, or Irrigation licence available for purchase. 	<ul style="list-style-type: none"> New licence required for bore or river extraction, or Reliant upon on-farm dam and 10% of local run-off. 	
(c) Freshwater projects that plan to pump water from a river – Environmental flows	No access restrictions based on flows in normal conditions	Access permitted only during high flows in normal conditions	
(d) Drinking Water supply protection [⊘] :	Not located in a drinking water catchment	Located within a drinking water catchment	
2. Acid Sulphate Soils			
If site is < 2metres AHD based on survey data, ASS soil profile based on ASS Risk Maps ¹	ASS Landform Process Class A with Landform Element Class b, l, t, p, y or w	ASS Landform Process Classes A,W, B, E, L, S with other Landform Element than b, l, t, p, y or w	
3. Heritage issues			
(a) Heritage sites based on LEP or REP maps and State Heritage Inventory	No listings on the proposed site	Listings onsite	
(b) Aboriginal heritage based on DEC Aboriginal Sites Register and Local Aboriginal Land Council	No recorded sites or places and the DEC advises that no archaeological assessment is required	Sites or places recorded on the land and/or the DEC advises that an archaeological assessment is required.	Sites/places of regional or national significance present and likely to impact on sites/places.
4. Native Title Issues			
Status of native title interests	<ul style="list-style-type: none"> Crown Land, previous determination Native Title extinguished 	Crown Land Native Title interest needs to be determined	
5. Conservation issues²			
(a) DEC protected areas, Aquatic Reserves and Marine Parks (except “General Zone”)	Not located adjacent these areas and no potential to impact these areas	Adjacent to but no potential to drain into or extract water from these areas or impact on the conservation values.	Activity may impact on these areas.
(b) SEPP 14, SEPP 26, Marine Parks (“General Zone”), World Heritage Areas, Ramsar Wetlands, Critical Habitat	Not located in or adjacent these areas and no potential to impact these areas	Adjacent to but no potential to drain into or extract water from these areas but may involve water pipe access across the areas.	Activity located in areas or draining into these area or may impact on the conservation values
6. Site accessibility			
Vehicle & electricity accessible based on LEP maps & power suppliers information	Existing access and services or access and services can be readily provided	Access or services limited or difficult – e.g. across a wetland (other than SEPP 14 wetlands dealt with above)	Access or services across SEPP 14 or SEPP 26 areas

¹ Sourced from the Acid Sulphate Soil (ASS) Risk Maps

² This provision will not apply to the use of land required for gaining access to water

[⊘] Note: a drinking water catchment means the restricted areas prescribed by the controlling water authority

Tier 2 - Site Evaluation for Ponds

The next step in site evaluation is to undertake more detail site assessment including investigations by technical experts and in some cases, laboratory analysis. The purpose of this level of investigation is to eliminate sites that have inherent management problems that could result in increased costs during assessment and approval, construction or operation. The information gained from this investigation can provide the basis for preliminary design and operation planning.

Information sourced from site investigations by applicant

SITE EVALUATION CRITERIA FOR PONDS	TIER 2 LEVEL OF ASSESSMENT FOR PONDS		
	Level 1	Level 2	Level 3
7. Water Supply Quality			
(a) Water quality risks from nearby land uses	Grow-out water quality is consistently suitable for aquaculture and has low risk of contamination.	Grow-out water quality is mostly suitable for aquaculture and has low risk of contamination.	Grow-out water quality is not generally suitable for aquaculture and requires treatment OR does not have a low risk of contamination. For estuarine, inlet within 1km of sewage treatment plant outlet
(b) Potable water for processing etc.	<ul style="list-style-type: none"> Mains water; or Onsite existing reliable water of potable quality 	<ul style="list-style-type: none"> Onsite water of potable quality but may need to be supplemented during drought; or No existing potable water supply on site 	
8. Water Supply Access from rivers or estuaries			
(a) Estuarine ponds - pump station site	Not require sump pit or any deepening of bed of estuary or waterway	Require sump pit in estuary or waterway or need to cross an ocean beach	
(b) Estuarine - Estuary Circulation	Flushing time < 15 days	Flushing time 15 – 30 days	Flushing time > 30 days
(c) Fresh water ponds - pump station site	Not require sump pit or any deepening of bed of river	Require sump pit in river	
9. Mean Site Elevation			
(a) Mean elevation of the land to which the DA applies for Estuarine growing ponds	2-10m AHD ³	1-2m AHD ³ if less than 5 ha of pond area	1-2m AHD ³ if more than 5 ha of pond area
(b) Mean elevation of the land to which the DA applies for Freshwater growing ponds	>1 metre AHD		<1 metre AHD
10. Topography			
(a) Estuarine ponds - slope of land	< 2% slope	>2% and < 5 % slope	> 5% slope
(b) Freshwater ponds - slope of land	<5% slope.	>5% and <10% slope.	> 10 % slope
(c) Irrigation area landform limitations*	slight	moderate	severe
11. Soils			
(a) Soil Characteristics - Suitability for Pond/Dam Construction	Clayey with mixture of soil/sand and low erosion potential and suitable for dam construction	Sandy/gravelly with erosion potential and/or limited water holding capacity – may need to import most pond clay for lining material or an artificial liner	
(b) Soil Characteristics - Suitability for Irrigation for freshwater ponds	Soils suitable and/or adequate land to irrigate/use recycled water on site or off-site near-by	Soils potentially unsuitable and/or inadequate land to irrigate or use recycled water	
(c) Irrigation area soil limitations*	slight	moderate	severe
(d) Soil Contamination based on SEPP 55 criteria	Suitable for residential use or for animal occupation	Exceed levels safe for animal or residential uses and the contaminated area is less than 3ha	More than 3ha of land exceed levels safe for animal or residential uses
12. Hydrology issues			
(a) Potential to affect groundwater	No underlying potable or high quality fresh groundwater within 3m	Underlying groundwater within 3m is not of high quality or potable.	Underlying potable water within 3m

* see Table 17 in Site Selection chapter for more details.

³ note:- Proposals which disturb more than 1 tonne of acid sulfate soils will be required to prepare an Acid Sulfate Soils Management Plan consistent with the ASS Manual.

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SITE EVALUATION CRITERIA FOR PONDS	TIER 2 LEVEL OF ASSESSMENT FOR PONDS		
	Level 1	Level 2	Level 3
(b) Catchment Stormwater Drainage	<ul style="list-style-type: none"> No catchment related stormwater drainage across site, or If present, measures to manage across site flows not likely to affect surrounding area 	<ul style="list-style-type: none"> Important catchment stormwater drainage across site; or Change in drainage of stormwater likely to affect surrounding properties 	Flood management likely to alter the course of the river
(c) For Estuarine Ponds: Flood liability	Site above 1:100 year flood	Below 1:100 year floods	
13. Stock security			
(a) Proposals for culturing species listed as High Security Status for Disease Pest OR Establishment in the Species Table (see Species Selection Section)	<ul style="list-style-type: none"> Site not flood liable (above the PMF level) Bird exclusion netting on all grow-out ponds; AND Escape management plan prepared. 	<ul style="list-style-type: none"> Below PMF but above 1:100 year; AND Bird exclusion netting on all grow-out ponds; AND Escape management plan prepared 	
(b) Proposals for culturing species listed as Low Security Status for Disease Pest and Establishment in the Species Table (see Species selection Section)	Site not flood liable (above the PMF level).	Below PMF but above 1:100 year flood	Below 1:100 year flood but can construct ponds so unlikely to be inundated by 1:100 year flood
14. Excess water disposal			
Management of excess water	<ul style="list-style-type: none"> non-irrigation reuse scheme eg hydroponics: OR irrigation re-use scheme and discharge receival site has adequate area and suitable soils 		<ul style="list-style-type: none"> no non-irrigation reuse scheme, AND no identified discharge receival site that has an adequate area and suitable soils.
15. Ecology			
(a) Type of existing vegetation on the actual development site (flora survey required)	Cultivated land, improved pasture, or predominantly cleared. No need for a consent to clear or disturb native vegetation under Native Vegetation Conservation Act or Rivers and Foreshore Improvement Act	Predominantly native vegetation – trees, shrubs, grasslands. Clearing vegetation requires a consent under Native Vegetation Conservation Act or Rivers and Foreshore Improvement Act	
(b) Likely occurrence of threatened species, populations or ecological communities or their habitats (flora & fauna survey required)	No threatened species, populations or ecological communities or their habitats known or likely to occur – 8 Part Test not required	Threatened species, populations or ecological communities or their habitats known or likely to occur – 8 Part Test required	Likely to significantly affect threatened species, populations or ecological communities or their habitats. ¹
(c) Likely impact on aquatic habitats and mangroves.	No likely disturbance or impact	Disturbance or impact on aquatic habitat or mangroves – approval or permit needed to disturb mangroves or seagrasses, reclamation or dredging works or impeding fish passages.	
16. Aboriginal heritage			
(a) Consultation with Aboriginal community (<i>Call DEC for appropriate contacts</i>)	No values of cultural significance to the Aboriginal community identified.	Values of cultural significance to the Aboriginal community identified. Agreement reached between Aboriginal community, DEC and proponent on the management of these values.	Values of cultural significance and no agreement reached with Aboriginal community, DEC on the management of these values.
(b) Location of Aboriginal Sites	No recorded Aboriginal site/place and DEC advises that no archaeological assessment is required	Recorded Aboriginal site/place and/or the DEC advises that an archaeological assessment is required	
(c) Likely impact on Aboriginal heritage ⁴	No impact on Aboriginal sites/places or values of cultural significance to Aboriginal community	Impact on Aboriginal sites/places or values of cultural significance to Aboriginal community	Sites/places of regional or national significance present and likely to impact on sites/places.

⁴ Note: approval from DEC is required.

SITE EVALUATION CRITERIA FOR PONDS	TIER 2 LEVEL OF ASSESSMENT FOR PONDS		
	Level 1	Level 2	Level 3
17. Adjacent land use to pond culture			
(a) Potential for conflict with neighbours	Neighbouring lands utilised for compatible purposes e.g. agriculture/industrial development	Neighbouring land zoned for residential or rural residential purposes or has been identified as suitable for this purpose in an LEP or REP	
(b) Potential visual impact	Site not visible or predominantly obscured from neighbours or from prominent vantage points (e.g. highway)	Site clearly visible to neighbours or from prominent vantage points (e.g. from highway)	
(c) Proximity to residences (not part of the site)	No residences within 400m of the ponds or pumps if line of sight.	Residences within 400m of the ponds or pumps if line of sight.	

Tier 3 - Operational Evaluation Criteria for Ponds

The next sieve in the evaluation process is to consider the operational criteria – species, design, layout and operating regime and the likely risk to the environment from various options. Avoidance of environmental impacts on the community or the environment should be paramount. Where avoidance is not possible, impact minimisation must be considered. The lower the level of environmental risk, the lower the costs of mitigation and the simpler the assessment and approval process

Information sourced from investigations by applicant

OPERATIONAL CRITERIA FOR POND CULTURE	TIER 3 LEVEL OF ASSESSMENT FOR PONDS		
	Level 1	Level 2	Level 3
18. Location of Ponds – Distance from the top of the high bank of a natural waterbody or wetland and the edge of the pond water surface.	> 50 metres		< 50 metres
19. Health Management			
(a) Period of total farm dryout after every production cycle for prawns	>6 weeks between crops	3 - 6 weeks between crops	<3 weeks between crops
(b) Arrangements for the timely identification and treatment of disease	<ul style="list-style-type: none"> On site trained staff with appropriate facilities, or Demonstrated arrangement with accredited laboratory or veterinary practice 	No onsite provision for analysis of stock health problems and no backup arrangements with an accredited laboratory or veterinary practice	
(c) Predators management of fingerling ponds	All ponds screened or equivalent systems		No screening for fingerling ponds
(d) Predators management of grow out fish ponds	Combination of systems which may include screening, scare and other management systems not intending harm to predators	Only "scare" systems. May trigger need for 8 Part Test if affect threatened bird species	No control for predators
20. Feeding Management			
(a) Feed storage to prevent odour emissions or vermin problems	Facilities to store feed (e.g. enclosed shed)	Feed stored outdoors or so as not to minimise odour or other problems	
(b) Pond design includes feeding adjustment system	<ul style="list-style-type: none"> System to monitor feeding and adjust feed quantities accordingly; or System can adjust feed via feeding guide schedule 	No system to monitor feeding and adjust feed quantities	
(c) Feeding system including mechanical feeders, systematic dispersal equipment and feeding program	<ul style="list-style-type: none"> System to broadcast feed homogenously to prevent the creation of "dead" areas"; or System can broadcast feed in defined feeding strips 	No system to broadcast feed homogenously	
21. Water Monitoring			
(a) Capacity to measure DO, temperature, ammonia and pH.	Provisions for regular daily monitoring; e.g. with good quality hand-held meter or test kit;	No provisions for regular daily monitoring	
(b) Capacity to analysis water for N, P, Alkalinity, NFR, BOD	On site facilities for basic water quality analysis, or dependent on accredited laboratory for water analysis	No provision for regular water analysis	
22. Pond water management			
(a) Supply pipe or channel capacity	Largest growout pond can be filled in 1 day or less	Largest growout pond can be filled in 1 - 3 days	Largest pond can be filled in > 3 days
(b) Intensive Pond Outlet system	No pumping required to drain pond completely.	Requires pumping from an external sump to drain pond.	

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OPERATIONAL CRITERIA FOR POND CULTURE	TIER 3 LEVEL OF ASSESSMENT FOR PONDS		
	Level 1	Level 2	Level 3
(c) Recycling System capacity for estuarine pond systems which discharge to waterbodies expressed in terms of: (i) Retention period of water prior to reuse or discharge; or (ii) Surface area of water in recycling pond (including drainage channels) relative to total water surface area of growing ponds	<ul style="list-style-type: none"> Retention period of >6 days; or Surface area of recycling pond > 20% of total water surface area of the growing ponds 	<ul style="list-style-type: none"> Retention period of 1-6 days; or Surface area of recycling pond 10-20% of total water surface area of the growing ponds 	<ul style="list-style-type: none"> Retention period of <1 days; or Surface area of recycling pond <10% of total water surface area of the growing ponds
(d) Estuarine pond discharge limits (averaged over the growing season when measured above the background) based on 4% daily water exchange rate	Nil discharge	< 12kg/ha/day TSS < 0.48 kg/ha/day Total N < 0.06 kg/ha/day Total P	> 12kg/ha/day TSS > 0.48 kg/ha/day Total N > 0.06 kg/ha/day Total P
(e) Storage capacity of recycling pond system (excluding growing ponds) for freshwater ponds	> 2 times the volume of largest growing pond	1-2 times the volume of largest growing pond	< the volume of the largest growing pond
23. Organic Waste Mgt (eg dead fish, processing waste and other putrescible waste)			
(a) Temporary storage of organic waste prior to disposal	<ul style="list-style-type: none"> Daily disposal; or Held prior to disposal so no odour generated (e.g. in freezer in sealed container) 	Held in covered containers prior to intermittent disposal	No specific arrangements
(b) Disposal of organic waste on-site or off-site	<ul style="list-style-type: none"> Disposed at an approved off-site recycling or landfill facility; or Buried (with lime) in an area which is > 100m from a waterways and where the groundwater is > 3m. and the soil has low permeability 	<ul style="list-style-type: none"> Buried (with lime) in an area which is < 100m from a waterways or where the groundwater is < 3m or the soil is not low permeability; or Composted (with lime) 	No specific arrangements
(c) Disposal of stock in the event of a mass mortality, on-site or off-site	Arrangements in place for disposal at an approved off-site recycling or landfill facility.	Buried (with lime) in an approved onsite disposal area.	No specific arrangements
24. Planning and building issues			
(a) Buildings or structures Set back from nearest road boundary	> 5 metres or conforms to local Council standards.	< 5 metres or does not conform to local Council standards.	
(b) Building height excluding any parapet	< 7.2 metres or conforms to local Council standards.	> 7.2 metres or does not conform to local Council standards.	
(c) Driveways with regard to access, widths and turning circle	Complies with the local government's standards and no s.138 permit required from the RTA.	Modifications required to the public road to comply with the standards required by the local government and or a s.138 permit required from the RTA.	
(d) Truck loading and unloading space on site	No queuing or waiting on public roads	Queuing or waiting required on public roads	
(e) Compliance with Building Code of Australia	Meet the "deemed to satisfy" provisions	Modifications required	
(f) If unsewered site, on-site human sewerage system	Reticulated sewerage connection or adequate licensed on-site treatment system installed which complies with the approval requirements of the Local Govt Act	Modifications required to comply with the approval requirements of the Local Govt Act	

Project Profile Analysis for Tanks & Raceways

Tier 1 - Site Evaluation for Tanks & Raceways

As a first step in the site evaluation process, a “desk top” study should be undertaken of potential sites using readily available information in maps and other data sources held by Councils, DL, DIPNR and government agencies. This desk top study will provide a quick and efficient approach to weeding out unsuitable sites and for focusing in on those sites which would justify a more intensive site evaluation. Tier 1 Evaluation Criteria are used to as a first “sieve” to identify areas that are likely to be suitable for aquaculture.

Information available from Government Sources

SITE EVALUATION CRITERIA FOR TANKS & RACEWAYS	TIER 1 LEVEL OF ASSESSMENT FOR TANKS & RACEWAYS		
	Level 1	Level 2	Level 3
1. Grow-out Water Supply Based on DIPNR information			
(a) Saline - if dependent on Estuarine – Tidal amplitude	>300mm	100 - 300mm	< 100 mm
(b) Fresh - Water availability	<ul style="list-style-type: none"> Existing irrigation licence approved for bore or river extraction; or Irrigation license available for purchase. 	<ul style="list-style-type: none"> New licence required for bore or river extraction; or Reliant upon on-farm dam and 10% run-off 	
(c) Projects that plan to use a mains water supply		All projects that plan to use a mains water supply for grow-out, nursery or hatchery	
(d) Fresh water flow through - raceway production eg Salmonoids.	Not within a domestic water supply catchment or above a conservation zone (i.e. National Park)		Within a domestic water supply catchment or above a conservation zone (i.e. National Park).
(e) Freshwater projects that plan to pump water from a river – Environmental flows	No access restrictions based on flows in normal conditions	Access permitted only during high flows in normal conditions	
(f) For Fresh Water Tanks: Drinking Water supply protection ^φ	<ul style="list-style-type: none"> Not located in a drinking water catchment; or With a trade waste agreement for the disposal of discharge water 	Located within a drinking water catchment.	
2. Acid Sulfate Soils			
If site is < 2 metres AHD based on survey data; ASS soil profile based on ASS Risk maps ¹	ASS Landform Process Class A with Landform Element Class b, l, t, p, y or w	ASS Landform Process Classes A,W, B, E, L, S with other Landform Element than b, l, t, p, y or w	
3. Heritage issue			
(a) Heritage sites based on LEP or REP maps and State Heritage Inventory	No listings on the proposed site	Listings on-site	
(b) Aboriginal heritage based on DEC Aboriginal Sites Register and Local Aboriginal Land Council	No recorded sites or places and the DEC advises that no archaeological assessment is required	Sites or places recorded on the land and/or the DEC advises that an archaeological assessment is required.	Sites/places of regional or national significance present and likely to impact on sites/places.
4. Native Title Issues			
Status of native title interest	<ul style="list-style-type: none"> Crown Land, previous determination Native Title extinguished 	Crown Land Native Title interest needs to be determined	
5. Conservation issues²			
(a) DEC protected areas, Aquatic Reserves and Marine Parks (except “General Zone”)	Not located adjacent these areas and no potential to impact these areas	Adjacent to but no potential to drain into or extract water from these areas or impact on the conservation values.	Activity may impact on the conservation values of these areas.
(b) SEPP 14, SEPP 26, Marine Parks (“General Zone”), World Heritage Areas, Ramsar Wetlands, Critical habitat	Not located in or adjacent these areas and no potential to impact these areas	Adjacent to but no potential to drain into or extract water from these areas but may involve water pipe access across the areas.	Activity located in areas or draining into these area or may impact on the conservation values

^φ Note: a drinking water catchment means the restricted areas prescribed by the controlling water authority

¹ Sourced from the Acid Sulphate Soil (ASS) Risk Maps

² This provision will not apply to the use of land required for gaining access to water

SITE EVALUATION CRITERIA FOR TANKS & RACEWAYS	TIER 1 LEVEL OF ASSESSMENT FOR TANKS & RACEWAYS		
	Level 1	Level 2	Level 3
6. Site accessibility Vehicle & electricity accessible based on LEP maps & power suppliers information	Existing access and services or access and services can be readily provided	Access and services limited or difficult – may involves disturbance of a wetland (other than SEPP 14 wetlands dealt with above)	

Tier 2 - Site Evaluation for Tanks & Raceways

The next step in site evaluation is to undertake more detail site assessment including investigations by technical experts and in some cases, laboratory analysis. The purpose of this level of investigation is to eliminate sites that have inherent management problems that could result in increased costs during assessment and approval, construction or operation. The information gained from this investigation can provide the basis for preliminary design and operation planning.

Information sourced from site investigations by applicant

SITE EVALUATION CRITERIA FOR TANKS & RACEWAYS	TIER 2 LEVEL OF ASSESSMENT FOR TANKS & RACEWAYS		
	Level 1	Level 2	Level 3
7. Water Supply Quality			
(a) Water quality risks from nearby land uses	Grow-out water quality is consistently suitable for aquaculture and has a low risk of contamination	Grow-out water quality is mostly suitable for aquaculture and has a low risk of contamination	Grow-out water quality is not generally suitable for aquaculture and requires treatment OR does not have a low risk of contamination For estuarine, inlet within 1km of sewage treatment plant outlet
(b) Potable water for processing or other purposes	<ul style="list-style-type: none"> Mains water; or Onsite existing reliable water of potable quality 	<ul style="list-style-type: none"> Onsite water of potable quality but may need to be supplemented during drought; or No existing potable water supply on site 	
8. Water Supply Access from rivers or estuaries			
(a) <i>Estuarine</i> - pump station site	Not require sump pit or any deepening of bed of estuary or waterway	Require sump pit in estuary or waterway or need to cross an ocean beach	
(b) <i>Estuarine</i> - Estuary Circulation	Flushing time < 15 days	Flushing time > 15 days	
(c) Fresh water - pump station site	Not require sump pit or any deepening of bed of river	Require sump pit in river	
9. Soils			
(a) For freshwater tanks culture: Area to irrigate for agriculture, plantation, horticulture or landscaping if: <ul style="list-style-type: none"> i. no trade waste agreement for disposal of discharge water or ii. no non-irrigation reuse scheme e.g. hydroponics 	<ul style="list-style-type: none"> Soils suitable; and/or Adequate land to irrigate/use recycled water on site or off-site near-by 	<ul style="list-style-type: none"> Soils potentially unsuitable; and/or Inadequate land to irrigate or use recycled water-dependent on neighbours or other arrangements for use of water 	
(b) Irrigation area soil and landform limitations*	slight	moderate	severe
10. Excess water disposal			
Management of excess water	<ul style="list-style-type: none"> non-irrigation reuse scheme eg hydroponics; OR irrigation re-use scheme and discharge receival site has adequate area and suitable soils 		<ul style="list-style-type: none"> no non-irrigation reuse scheme, AND no identified discharge receival site that has an adequate area and suitable soils.
11. Hydrology issues			
(a) Catchment Stormwater Drainage	<ul style="list-style-type: none"> No catchment-related stormwater drainage across site; or With provision to manage across-site flows not likely to affect surrounding area 	<ul style="list-style-type: none"> Important catchment stormwater drainage across site; or Change in drainage of stormwater likely to affect surrounding properties 	
12. Stock security			
(a) Proposals for culturing species listed as High Security Status for Disease Pest OR Establishment in the Species Table (see Species Selection Section)	<ul style="list-style-type: none"> All grow-out facilities totally enclosed in a vermin proof building; AND Escape management program proposed; AND All grow-out facilities not flood liable (above the PMF level). 		<ul style="list-style-type: none"> Any grow-out facility not totally enclosed in a building; OR Escape management program not proposed; OR Any grow-out facility below the PMF level.

SITE EVALUATION CRITERIA FOR TANKS & RACEWAYS	TIER 2 LEVEL OF ASSESSMENT FOR TANKS & RACEWAYS		
	Level 1	Level 2	Level 3
(b) Proposals for culturing species listed as Low Security Status for Disease Pest and Establishment in the Species Table (see Species Selection Section)	<ul style="list-style-type: none"> All grow-out facilities totally enclosed in a building; AND All grow-out facilities not flood liable (above the PMF level). 	<ul style="list-style-type: none"> Any grow-out facility not totally enclosed in a building; OR Any grow-out facility below the PMF level but above the 1:100 year flood level. 	
(c) Proposals for culturing species in Flow through systems	<ul style="list-style-type: none"> Escape management program proposed All grow-out facilities not flood liable (above the PMF level) 		<ul style="list-style-type: none"> No escape management program proposed Any grow-out facility below the PMF
13. Ecology			
(a) Type of existing vegetation on the actual development site (flora survey required)	Cultivated land, improved pasture, or predominantly cleared. No need for a consent to clear or disturb native vegetation under Native Vegetation Conservation Act or Rivers and Foreshore Improvement Act	Predominantly native vegetation – trees, shrubs, grasslands. Clearing vegetation requires a consent under Native Vegetation Conservation Act or Rivers and Foreshore Improvement Act	
(b) Likely occurrence of threatened species, populations or ecological communities or their habitats (flora & fauna survey required)	No threatened species, populations or ecological communities or their habitats known or likely to occur – 8 Part Test not required	Threatened species, populations or ecological communities or their habitats known or likely to occur – 8 Part Test required	Likely to significantly affect threatened species, populations or ecological communities or their habitats. ¹
(c) Likely impact on aquatic habitats and mangroves	No likely disturbance or impact	Disturbance or impact on aquatic habitat or mangroves – approval or permit needed to disturb mangroves or seagrasses, reclamation or dredging works or impeding fish passages.	
14. Aboriginal heritage			
(a) Consultation with Aboriginal community (<i>Call DEC for appropriate contacts</i>)	No values of cultural significance to the Aboriginal community identified.	Values of cultural significance to the Aboriginal community identified. Agreement reached between Aboriginal community, DEC and proponent on the management of these values.	Values of cultural significance and no agreement reached with Aboriginal community, DEC on the management of these values.
(b) Location of Aboriginal Sites	No recorded Aboriginal site/place and DEC advises that no archaeological assessment is required	Recorded Aboriginal site/place and/or the DEC advises that an archaeological assessment is required	
(c) Likely impact on Aboriginal heritage ⁴	No impact on Aboriginal sites/places or values of cultural significance to Aboriginal community	Impact on Aboriginal sites/places or values of cultural significance to Aboriginal community	Sites/places of regional or national significance present and likely to impact on sites/places.
15. Location for tank and raceway farms			
(a) Mean elevation of the land to which the DA applies for tanks and raceways	>1 metre AHD		<1 metre AHD
(b) Location of inlet pipe for Estuarine or Marine tank and raceway farms.	Suitable existing infrastructure to carry inlet pipe	Estuary or rock anchoring of pipeline	Established across ocean beach
16. Adjacent Land use to tank culture			
(a) Potential for Conflict with Neighbours	Neighbouring land zoned for compatible purposes, eg. agricultural or industrial development,	Neighbouring land zoned for residential or rural/residential purposes or has been identified as suitable for this purpose in an LEP or REP	

⁴ Note: approval from DEC is required.

* see Table 17 in Site Selection chapter for more details.

SITE EVALUATION CRITERIA FOR TANKS & RACEWAYS	TIER 2 LEVEL OF ASSESSMENT FOR TANKS & RACEWAYS		
	Level 1	Level 2	Level 3
(b) Potential Visual Impact	<ul style="list-style-type: none"> • In an existing building; or • In a new building < 7.2 metres in height; or • Meets local government design requirements. • Site not visible or predominantly obscured from neighbours or from prominent vantage point (e.g. highway) 	<ul style="list-style-type: none"> • In a new building >7.2 metres in height; or • In a new building in rural area and site is clearly visible to neighbours or from prominent vantage point (e.g. from highway) 	
(c) Proximity to residences	<ul style="list-style-type: none"> • In industrial zone; or • In rural zone with no residences within 200 m of buildings or pumps 	Residences in rural zone < 200m of the buildings or pumps	

Tier 3 - Operational Evaluation Criteria for Tanks & Raceways

The next sieve in the evaluation process is to consider the operational criteria – species, design, layout and operating regime and the likely risk to the environment from various options. Avoidance of environmental impacts on the community or the environment should be paramount. Where avoidance is not possible, impact minimisation must be considered. The lower the level of environmental risks the lower the costs of mitigation and the simpler the assessment and approval process.

Information sourced from investigations by applicant

OPERATIONAL CRITERIA FOR TANK & RACEWAY CULTURE	TIER 3 LEVEL OF ASSESSMENT FOR TANKS & RACEWAYS		
	Level 1	Level 2	Level 3
17. Health Management			
(a) Arrangements for the timely identification and treatment of disease	<ul style="list-style-type: none"> On site trained staff with appropriate facilities, or Demonstrated arrangement with accredited laboratory or veterinary 	No on-site provision for analysis of stock health problems and no backup arrangements with an accredited laboratory or veterinary	
(b) Clean in Place (CIP)	Systems are designed to ensure total disinfection and dry-out of all facilities to break pathogen cycle	Difficulty in ensuring total disinfection and dry-out of all facilities	No CIP provision
18. Food and Feeding Management			
(a) Feed storage to prevent odour emissions or vermin problems	Facilities to store feed (eg. enclosed shed)	Feed stored outdoors or so as not to minimise odour or other problems	
(b) Feeding system	<ul style="list-style-type: none"> Facilities to monitor food consumption and adjust feed; or Provision of a system to adjust feed quantities via feeding schedule 	No system to monitor feeding and adjust feed quantities	
19. Water Monitoring			
(a) Capacity to measure DO, temperature & pH	Provisions for regular daily monitoring	No provisions for regular daily monitoring	
(b) Capacity to analysis water for N, P, Alkalinity/acidity, NFR, BOD and other required parameters.	<ul style="list-style-type: none"> On site facilities for basic water analysis; or Only dependent on contract with accredited laboratory for water analysis 	No provision for regular water analysis	
20. Grow-out Water Management			
Tank or raceway systems with water recycling	Recycle system with biofiltration and/or mechanical filtration or better	No mechanical filtration system	
21. Tank and Raceway Water Management			
(a) Storage capacity of recycling ponds	> 2 times the volume of largest growing tank	1 - 2 times the volume of largest growing tank	< the volume of the largest growing tank
(b) Saline tank and raceway culture	Zero discharge	Mechanical filtering <1000 microns or retention dam >10% of growout volume	Mechanical filtering >1000 microns or retention dam <10% of growout volume
(c) Recycling system for freshwater production.	Zero discharge		No recycling of water
22. Flow through Water Management			
(a) Flow through systems for approved Species.	Zero discharge	Mechanical filtering <1000 microns or retention dam >10% of growout volume	Mechanical filtering >1000 microns or retention dam <10% of growout volume
(b) Daily Discharge limits for species approved for freshwater flow through culture eg. salmonoids.	Zero discharge	< 60mg/l TSS < 0.30mg/l Total N < 0.05mg/l Total P	> 60mg/l TSS > 0.30mg/l Total N > 0.05mg/l Total P
(c) Total Discharge load limits for species approved for freshwater flow through culture eg. salmonoids.	Zero discharge	< 55kg N/tonne of fish produced < 12kg P/tonne of fish produced	> 55kg N/tonne of fish produced > 12kg P/tonne of fish produced
(d) In stream water quality objectives.	Zero discharge	In stream water quality objectives met.	In stream water quality objectives not met.
23. Organic Waste Management (e.g. dead fish, processing waste and other waste)			
(a) Temporary storage of organic waste prior to disposal (e.g. dead fish, processing waste and other putrescible waste)	<ul style="list-style-type: none"> Daily disposal or Held prior to disposal so no odour generated (e.g. in freezer in sealed container) 	Held in covered containers prior to intermittent disposal	No specific arrangements

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OPERATIONAL CRITERIA FOR TANK & RACEWAY CULTURE	TIER 3 LEVEL OF ASSESSMENT FOR TANKS & RACEWAYS		
	Level 1	Level 2	Level 3
(b) Disposal of organic waste	<ul style="list-style-type: none"> Disposed at an approved off-site recycling or landfill facility; or Buried (with lime) in an area which is > 100m from a waterways and where the groundwater is > 3m. and the soil has low permeability 	<ul style="list-style-type: none"> Buried (with lime) in an area which is < 100m from a waterways or where the groundwater is < 3m or the soil is not low permeability; or composted (with lime) 	No specific arrangements
(c) Disposal of stock in the event of a mass mortality, on-site or off-site	Arrangements in place for disposal at an approved off-site recycling or landfill facility.	Buried (with lime) in an approved onsite disposal area.	
24. Planning and building issues			
(a) Buildings or structures Set back from nearest road boundary	>5 metres or conforms to local Council standards.	< 5 metres or does not conform to local Council standards	
(b) Building height excluding any parapet	< 7.2 metres or conforms to local Council standards.	> 7.2 metres or does not conform to local Council standards.	
(c) Landscaping with trees and shrubs on each street frontage or surrounding buildings (except in industrial sites where space is a limiting factor)	> 3 metres in width	< 3 metres in width	
(d) Driveways with regard to access, widths and turning circle	Complies with the local government's standards and no s.138 permit required from the RTA.	Modifications required to the public road to comply with the standards required by the local government and or a s.138 permit required from the RTA.	
(e) Truck loading and unloading space on site	Queuing or waiting not required on public roads	Queuing or waiting required on public roads	
(f) Compliance with Building Code of Australia	Meet the "deemed to satisfy" provisions	Modifications required	
(g) If unsewered site, on-site human sewerage system	Reticulated sewerage connection or adequate licensed on-site treatment system installed which complies with the approval requirements of the Local Govt Act	Modifications required to comply with the approval requirements of the Local Govt Act	