A METHOD FOR DETERMINING A FEE FOR ACCESS TO THE AQUATIC ENVIRONMENT FOR AQUACULTURE AND PEARLING PURPOSES

Water Lease Fees Working Group Report to the Hon Minister
Norman Moore, MLC Minister for Fisheries
July 2011

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1.0 INTRODUCTION

1.1 Background

The Minister for Fisheries ("Minister") established the Water Lease Fees Working Group ("Working Group") to provide advice on an appropriate fee, and to determine a method for calculating a rate per hectare, for access to the aquatic environment for pearling and aquaculture purposes.

The Minister also established the related Access Rights Working Group to identify factors affecting aspects of statutory access and other usage rights as they relate to commercial fishers and the aquaculture and pearling industries; and where appropriate to enhance various aspects of those usage rights.

For pearling, the access to the wild stock pearl oyster resource would be subject to the 5.75% access fee; access to areas of water for growout would be subject to a process yet to be agreed to by the Minister.

The Minister indicated the Working Group should consider access fees applied by other jurisdictions in the scope of its work and identified 30 August 2010 as the date by when it should provide advice.

The Working Group was also advised to develop the fee setting model and process taking into account the current legislative framework.

In October 2010, the Working Group provided the Minister with an interim report, which made the three recommendations set out below.

1. For the 2010/11 year only, the “At Cost Method” should be adopted for the pearling industry.
2. For the 2010/11 year only, the “Status Quo Method” should be applied to the aquaculture industry given the high transactional costs of moving the aquaculture industry to the ”At Cost Method”.
3. That the Minister note and take into account the impact of any resulting fee on the pearling and aquaculture industries.

1.2 The Water Lease Fees Working Group

The membership of the Working Group comprises people with relevant industry and Government experience and expertise. The Working Group had the option of periodically inviting additional people to provide specific expert information and, or, advice as required.

The initial membership of the Working Group was:

Mr John Hutton (Chair)
Mr Glenn Dibbin (Industry)
Mr Dan Machin (Industry)
Mr Ken Smith (Department of Fisheries)
Mr Jason Froud (Department of Fisheries)

Messrs Smith and Froud ceased working at the Department of Fisheries during the term of the Working Group; they were subsequently replaced by Messrs Mick Connolly and Steve Nel.
The Working Group met several times and was also informed on various occasions by members of the Department of Fisheries, the Access Rights Working Group, Landgate, the Valuer-General’s office and industry representatives.

1.3 Terms of Reference

The Terms of Reference of the Working Group are set out below.

1. Provide advice to the Minister for Fisheries on an appropriate method for determining a fee for access to the aquatic environment for pearling and aquaculture purposes based on the existing tenure arrangements.

2. Provide advice to the Minister for Fisheries on the likely impact of proposed new tenure arrangements (for example, the Fish Resources Management Amendment Bill 2011 and the proposed new legislative framework) on fees for access to the aquatic environment for pearling and aquaculture purposes.

3. Identify issues that may have an impact on the implementation of current and future tenure arrangement and fees.

4. Provide advice regarding an appropriate consultation and communication process with industry and department stakeholders regarding the issue of Water Lease fees, noting the limited timeframe of the Working Group.

1.4 Principles

In reviewing the existing water lease fees regime, the Working Group determined its effectiveness and efficiency should be measured against the best practice criteria and principles set out below.

• Rationale – provide a clear justification for raising the fee in the first instance, with consideration of a return to the community for the use of public waters.

• Impact on development – consider the impact of the fees on the development and economic sustainability of the industry, including the costs of complying with fees requirements.

• Comparability – take into account other jurisdictional arrangements.

• Efficiency – determine an efficient method and, or, process for fee determination.

• Effectiveness – ensure delivery of lease fee arrangements consistent with the objects of the Acts, which include the sustainable growth of the industry and benefits to the community.

• Transparency and accountability – adopt a process that enables industry, government and the general public to readily enquire about and obtain information about fees and services.

• Clarity – ensure clarity regarding the nature of the leasehold right and the responsibilities of both government and industry.

• Review – determine a proper mechanism with stakeholders.
2.0 BACKGROUND

2.1 Legal Context

Section 97 of the *Fish Resources Management Act 1994* ("FRM Act") enables the Minister to grant aquaculture leases over land and waters vested in the Minister for aquaculture purposes, or over an area of coastal waters.\(^1\)

The FRM Act states that a lease may be granted subject to such terms, covenants and conditions as the Minister thinks fit, including the requirement of payment of money to the Minister. The FRM Act also provides that a lease may be varied in the manner provided in the lease.

Section 97(6) provides the Minister with the power to require security to be given for the observance of any terms, covenants, restrictions or conditions.

Section 99 specifies that an aquaculture lease does not authorise the use of the lease without an aquaculture licence.

The FRM Act provides for a lease to be granted for an initial term not exceeding 21 years.

The *Pearling Act 1990* ("Pearling Act") provides for the issuing of pearling leases. As indicated in the Access Rights Working Group report, it takes a similar approach to the FRM Act in relation to access entitlements to the wild pearl oyster resources. Statutory pearling rights are issued under the relevant provisions of the Pearling Act.

Additional information on the legal context of aquaculture and pearling leases is provided in Chapter 2 of the draft Access Rights Working Group report: *Improving Commercial Fishing Access Rights in Western Australia*.

The FRM Act also provides the power to charge fees and enforce requirements attached to them.

Under s.97(3) of the FRM Act, subject to their respective provisions, an aquaculture lease granted under the FRM Act vests in the lessee:

a) The exclusive right during the currency of the aquaculture lease to keep, breed, hatch and culture within the leased area the species of fish that are specified in the lease; and

b) The ownership of all fish within the leased area that are kept, bred, hatched or cultured under the lease.

Under s.97(4) of the FRM Act, a lease may be granted for a term not exceeding 21 years and renewed for further 21-year terms; s.97(5) provides for terms, covenants, restrictions and conditions as the Minister thinks fit including the requirement for payment of money to the Minister.\(^2\)

Sections under Part 12 of the FRM Act provide for aquaculture leases to be kept in a register, for information such as any security interest in the lease to be included in the register and for notations of security interests.

2.2 Leases and Licences

There is a distinction between aquaculture leases and licences: both are site specific; however,

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1 The Draft Policy on the Granting Renewal and Regulation of Aquaculture Leases in Western Australia is provided in Fisheries Management Paper No. 215 (May 2006).

2 Proposed Fees and Charges for Section 97 Aquaculture Leases is provided in Fisheries Management Paper No. 216 (May 2006).
an aquaculture lease provides tenure for an area of water, while an aquaculture licence authorises the specific aquaculture activity. Aquaculture lessees require an aquaculture licence to conduct the authorised activity.

An aquaculture lease provides the lessee with a degree of security in the form of statutory tenure (to conduct the specific aquaculture activities) in respect of the land or waters that are the subject of the lease. It provides a non-exclusive right to occupy or use the site for the purposes of aquaculture.

An aquaculture licence is currently issued for a period of 12 months under Section 92 of the FRM Act. Under Section 94, if a person applies to the Executive Director for the renewal of an aquaculture licence, the Executive Director must renew the licence, subject to there being no breach of licence conditions.

Aquaculture and pearling leases are issued with regard to Ministerial Policy Guideline No. 8: Assessment of Applications for Authorisations for Aquaculture and Pearling in Coastal Waters of Western Australia (FMPG8).

Some key points about aquaculture and pearling leases, provided in the associated Access Rights Working Group report, are summarised below.

• Leases for aquaculture and pearling provide a right to use specific areas for defined purposes.
• The status of State waters (that is, waters within three nautical miles of the coast) as Crown land under the Land Administration Act 1997 influences the issuing of leases and the nature of their underlying rights, unless these “lands” are formally vested in the Minister for Fisheries.
• Leases issued under the FRM Act provide leasehold rights, while the associated licence authorises the activity.
• This is only of any consequence if the rights are challenged or if there is a wish to transfer them to another entity.
• A key question for Government is the extent, if any to which it wishes to strengthen the property right and to enable and regulate their transfer or other variation (for example, ability to sublease).
• Another issue identified is the absence of a statutory marine planning framework that takes into account the requirements of the aquaculture and pearling industries.
• Current leases issued under s.97 of the FRM Act do allow some flexibility to the lessee, by including provision for subletting, subject to the Minister providing his consent.

The Minister for Fisheries issues leases. The main terms, covenants, restrictions and conditions of leases are broadly consistent; information and conditions specific to a particular lease are itemised in an accompanying schedule.

The Department of Regional Development and Lands (“DRDL”), which administers the Land Administration Act 1997 (“LAA”), has adopted the principle that the Department of Fisheries is the lead agency for assessment of applications for (among other matters) aquaculture and pearling leases in or on Crown land including coastal waters; and that the Minister for Fisheries may grant leases in accordance with powers provided in the respective Acts in conjunction, where necessary, with the exercise of powers of the Minister for Lands.

3 FMPG8 is available at: www.fish.wa.gov.au
A Memorandum of Administrative Arrangements dated June 2000 ("MoAA") has been executed as a means of managing the interface between the LAA, the FRM Act and the Pearling Act.

A Sub-Working Group, which was jointly established by the Access Rights and Water Lease Fees Working Groups, considered the approach described above to be appropriate and to use a relatively straightforward administrative process.

The Sub-Working Group, which was established to discuss several matters including tenure, recommended (inter alia) that decisions on the issuing and transfer of licences and leases for pearling and aquaculture leases should remain under administrative control and continue to be managed under Fisheries legislation.

Notwithstanding the advice of the Sub-Working Group, based on the possibility of improving leasehold rights and achieving efficiency gains in the approvals process, the Working Group considered it may be appropriate to include in this report a recommendation to the Minister that the nature of leases and the administrative process by which they are issued should be reviewed. That process should be undertaken through consultation between DRDL and the Department of Fisheries (the respective CEOs of which departments executed the MoAA). The Working Group acknowledged, however, that this matter lies outside the scope of its Terms of Reference.

As noted above, the FRM Act provides for a lease to be granted for an initial term not exceeding 21 years. Lease deeds for new projects may provide a five-year initial term, during which a bond is not required, followed by two 21-year options, with the bond being due at the start of the first 21-year term. There is an automatic (but not absolute) right of renewal to renew the lease at the end of the terms, unless the lessee fails to meet the lease conditions.

Leases and licences include conditions that allow resumption of the lease, or cancellation of the licence, in the event of lessees and licensees not meeting the agreed conditions or commitments.

The Working Group considered the term of the aquaculture leases issued under s.97 of the FRM Act to be appropriate.

The terms and conditions of leases issued by a Minister of the Crown under s.97 of the FRM Act are considered to go some way towards providing security of tenure, to the extent that they assist the modelling of medium and long term business plans, opening possible avenues for sources of funding and possibly help with depreciation of capital invested over a longer period.

There also exists a nexus between for aquaculture leases and licences, the main purpose of which is to prevent speculation or investment for a purpose other than aquaculture or pearling. The Working Group noted that this nexus between licences and leases has the effect of reducing the ability to attract investment.

**Performance Criteria**

There are concerns the future growth of the offshore sector of the industry may be affected by areas of water being unavailable through non-use; and that producers who want to expand pearling or aquaculture activities could be restricted because otherwise suitable sites may not be available because they are committed by leases not being acted upon. To ensure leases are used for the purpose for which they are intended (that is, to avoid the “sterilisation” of sites by non-use), the Department anticipates introducing performance criteria.

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4 Generally, leases granted over existing licences would start with a 21-year term with the bond being payable at the start of the term.
Some consideration is needed in setting performance criteria, however, because there can often be good reasons for non-activity by pearlers and aquaculturists. The Department proposes to address the setting of performance criteria in a separate policy development process in consultation with industry and stakeholders.

The establishment and enforcement of performance criteria may go some way to reducing the need for the “nexus” between leases and licences in the future.

Where long-term leases are issued with rights to sublease, there is justification for the Crown (Department of Fisheries) to be involved in the use of lease areas, in terms of auditing the use of water areas and enforcing termination rights in the event of inaction. Under these circumstances, the lessees should clearly have the right to provide an explanation in respect of the non-use or limited use of the water.
3.0 METHOD FOR FEE CALCULATION

3.1 Preamble

A key objective of the Working Group is to develop a basis to calculate a fair and equitable lease fee for the use of the State’s aquatic resources. In determining a fee, or a formula to calculate a fee, the State’s obligation to obtain a reasonable return for the use of its resources needs to be balanced with the benefit of supporting the growth of an industry that provides, and can provide, maximum value to the aquatic resources as well as providing valuable economic and social benefits to regional communities.

Water lease fees for aquaculture purposes can be determined using a variety of methods, including reference to equipment used (and this can include either “consented” or “deployed” equipment), production level or profitability; and several advantages and disadvantages are associated with each method. There is no single correct method to calculate rentals; however, most commonly, leasing rates are based on a percentage of the value of the land, with rates rising and falling according to economic conditions at the time and land values reflecting the earning potential of the land.

The fundamental methods for setting lease fees are percentage of market valuation and budgeting. The main problem with setting a lease fee for pearling and aquaculture leases based on market valuation is the lack of a trading history in these sectors – a situation that is likely to persist for some time. The budgeting method that can be used to verify appropriate lease values uses the principle that a fair rental would be based on a percentage of the potential returns for business being carried out at the site. Given the variability that exists between different sectors of the industry and the economic changes that can occur from time to time within sectors, the Working Group and industry representations were generally opposed to basing fees on budgeting or similar methods based on profitability.

The October 2010 Working Group report provided four methods for calculating lease fees. In brief, these options were:

i. status quo – the continuation of the existing rate for all leases (recognising that this method affords an interim option for the 2010 – 11 year);
ii. at cost – a method based on full recovery of the Government’s costs of managing the lease estate;
iii. variable index – by which the Valuer-General determines the base rate, which would be used in a formula together with specified dilution factors to calculate the fee; and
iv. Valuer-General rent yield – which is similar to the variable index method, but provides more certainty about the estimation of the dilution factors.

The respective advantages and disadvantages associated with each of these options are elaborated in the copy of the Working Group’s October 2010 report provided at Attachment 1.

3.2 The Preferred Model

Following consideration of the proposed methods and ensuing corroborating advice from the Acting Valuer-General of Landgate, and noting that a market-based valuation is not possible at present, the Working Group determined that, until such time that the Valuer-General deems a market has been established, the fee should be set administratively. This proposed method is supported by the industry representative organisations and consistent with those used in several other states.
To derive a formula for calculating a fee, the industry organisations generally support a model comprising elements of options 3 and 4 in the October report; that is, elements of the variable index and rent yield methods.

The Valuer-General also considers as having merit a formula that identifies a base rate, which is multiplied by a set of dilution or discount factors.

The Working Group concurred that the preferred model for calculating a lease fee for aquaculture and pearling leases should use a base fee and apply discount factors; and, further, that the fee should be set administratively until a trading history is established for these industries that enables the Valuer-General to set a base fee.

3.3 Base Fee

The key to the formula to be used to calculate an annual lease fee is the establishment of the base rate.

The Working Group considered establishing a base fee calculated as a percentage of unimproved capital value (“UV”) of the land or water, expressed as dollars per hectare per year.

The submission by PPA proposed the base fee be set at 3% of the median market value of adjacent rural land; that by ACWA proposed 3% of median unimproved value of adjacent rural land.

There is some justification for basing the fee on lease rents paid for agricultural leases on mainland WA. Among other benefits, that method would be transparent and equitable. In its ensuing discussion, both internally and with representatives of the industry organisations, the Working Group considered the view that setting a base fee according to the UV of adjacent rural land is unrealistic – there is no analogous interrelationship between the respective values of water and adjacent land. By way of example, the world’s best aquaculture site could be in coastal waters adjacent to a terrestrial desert with no value and, similarly, moderately productive coastal waters may be located adjacent to high-value horticultural land.

The Working Group considered the concept that it may be more appropriate to set a base fee according to an “equivalent” agriculture industry sector; that is, to determine whether aquaculture and pearling practices may be generally similar to a particular sector of land-based agriculture, such as pastoral grazing, broad acre farming, horticulture or viticulture. The key to this method is determining which agricultural sector is “equivalent” to aquaculture and pearling and obtaining UV information for those sectors within WA.

Aquaculture can be described in the context of some land-based farming activities by equating elements such as the level of investment, day-to-day activity, technology and management. In that context, the Working Group considered aquaculture activities may be broadly analogous to intensive grazing, dairy production and viticulture.

Information provided by the Property and Valuations section of Landgate provides indicative UVs for different areas and associated land uses various land uses around the State (Table 1).

Indicative UVs for the agriculture sectors considered broadly equivalent to aquaculture and pearling activities are between approximately $6,000 and $2,500 per hectare (the average of all the UV values is $6,084/ha and the average excluding the extreme values (that is, excluding the values for Pilbara and Kimberley pastoral and Carnarvon irrigated agriculture) is $2,456).

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5 The Working Group considered the use of average, rather than median, values were sufficient for its purpose, because it proposed to use these land values only to provide a broad indication of values to affirm their compatibility with water lease fees charged in other jurisdictions.
Table 1  Indicative unimproved land values for various agriculture sectors in WA

<table>
<thead>
<tr>
<th>Area</th>
<th>Agricultural Land use</th>
<th>UV/ha</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Pastoral</td>
<td>Pilbara</td>
<td>$3 – $8</td>
<td>Variation depending on location, rainfall and quality of land systems</td>
</tr>
<tr>
<td>North Pastoral</td>
<td>Kimberley</td>
<td>$3 – $16</td>
<td>As above</td>
</tr>
<tr>
<td>Mid west Farming</td>
<td>broad acre cropping / grazing – varying rainfall areas</td>
<td>$1100 - $400 - $200</td>
<td>Katanning, Merredin, Yilgarn</td>
</tr>
<tr>
<td>South west Intensive grazing</td>
<td></td>
<td>$1350 – $2000</td>
<td>Kojonup and Collie</td>
</tr>
<tr>
<td>South west Dairy production</td>
<td></td>
<td>$3000</td>
<td>Industry continues to shrink</td>
</tr>
<tr>
<td>North Irrigated</td>
<td>agric Carnarvon</td>
<td>$40,000</td>
<td>Values are for a ‘wet’ ha - intensive vegetables - 10 – 15 ha lots</td>
</tr>
<tr>
<td>North Irrigated</td>
<td>agric Ord</td>
<td>$4000 – $5000</td>
<td>Flat-lined values for last 6 – 7 years. Values are for a ‘wet’ ha broad acre mixed crop farming 80 – 300 ha lots</td>
</tr>
<tr>
<td>South west Tree crops (Blue Gums)</td>
<td></td>
<td>$2000</td>
<td>Tree companies not actively buying</td>
</tr>
<tr>
<td>South west Viticulture</td>
<td></td>
<td>$3000</td>
<td>Currently experiencing difficulty</td>
</tr>
</tbody>
</table>

DRDL (Landgate) currently determines pastoral lease rents at 2% (previously 3%) of the determined UV of the individual lease (Table 2). This methodology – assessing a UV and applying a percentage return – is used in all states. In the NT and Queensland the rate of return is determined by the Minister in consultation with the industry (rates of return are non-market-based), while in SA and WA the Valuer-General sets the rate of return (market-based).

Table 2  Pastoral lease rentals

<table>
<thead>
<tr>
<th>State</th>
<th>%</th>
<th>Assessed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Australia</td>
<td>2.7% maintained for 2009 review</td>
<td>VG</td>
</tr>
<tr>
<td>Queensland</td>
<td>0.02 – 0.2%</td>
<td>Minister</td>
</tr>
<tr>
<td>NT</td>
<td>1.124%</td>
<td>Minister</td>
</tr>
<tr>
<td>WA</td>
<td>3% 2004 review 2% for 2009</td>
<td>VG</td>
</tr>
</tbody>
</table>

The previous lease rent (“cap rate”) of 3% for pastoral leases was considered a minimum return to the capital value of the land and roughly aligned with long term inflation at the time and it was considered that any lower rate would result in decreasing real rentals.

Some relevant information and supporting evidence includes:

- the limited historical evidence of improved sub-leases of cattle properties of around 6%;
- improved remote area agricultural and horticultural leases at 5% to 7%, i.e. Broome and Ord areas;
- the Reserve Bank inflation target at under 3% (WA is currently 3.7% and falling);
• the Government long-term bond rate of 3.5% (three years) and 4.5% (10 years); and
• other Australian states pastoral lease rentals (Table 2), noting that Queensland and NT are not market related returns and other rural land uses in WA are calculated at values of 5% to 7% for cropping leases and 5% for improved SW grazing.

On the basis of the above rationale and the information provided in tables 1 and 2, for UVs of $6,000 and $2,500 per hectare, respectively, base fee ranges for aquaculture and pearling can be calculated as follows:
• cap rate at 2%: base fee range $120 to $50;
• cap rate at 5%: base fee range $300 to $125.

The Working Group also considered the lease fees currently applied in several Australian jurisdictions (Table 3). The average of these fees is approximately $96/ha.

**Table 3**

<table>
<thead>
<tr>
<th>State</th>
<th>Type of lease</th>
<th>fee per hectare ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Australia in 2005/06</td>
<td>Marine</td>
<td>$45.00</td>
</tr>
<tr>
<td></td>
<td>Tuna</td>
<td>$65.00</td>
</tr>
<tr>
<td></td>
<td>Finfish</td>
<td>$165.00</td>
</tr>
<tr>
<td></td>
<td>Intertidal shellfish</td>
<td>$315.00</td>
</tr>
<tr>
<td></td>
<td>Subtidal shellfish</td>
<td>$220.00</td>
</tr>
<tr>
<td></td>
<td>Subtidal abalone</td>
<td>$150.00</td>
</tr>
<tr>
<td></td>
<td>Holding site/algae</td>
<td>$40.00</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>$187.85</td>
</tr>
<tr>
<td>Tasmania</td>
<td>Shellfish</td>
<td>$55.00 + $110 base fee</td>
</tr>
<tr>
<td></td>
<td>Finfish</td>
<td>$220.00 + $1925 base fee</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td>$137.50</td>
</tr>
<tr>
<td>New South Wales in 2005/06</td>
<td>Marine</td>
<td>$43.00 (min of $116)</td>
</tr>
<tr>
<td>Northern Territory in 2006</td>
<td>Class A (&lt; 50km from Darwin)</td>
<td>$25.00</td>
</tr>
<tr>
<td></td>
<td>Class B (50 – 100km from Darwin)</td>
<td>$12.50</td>
</tr>
<tr>
<td></td>
<td>Class C</td>
<td>$6.00</td>
</tr>
</tbody>
</table>

The Working Group considered a base fee of $96/ha a reasonable starting point for WA, insofar as it represented current aquaculture lease fees within Australian jurisdictions and, further, that it lies within the admittedly broad range of possible fees provided from calculations for land-based agricultural activities considered reasonably compatible with aquaculture and pearling and particularly where the cap rate is two percent.

The average fee for Australian jurisdictions shown in Table 3 included intertidal and subtidal areas, which generally have significantly less exposure than the marine sites characteristic of WA coastal waters and afford more economic development options. The Working Group
consequently formed the view that the base rate should be adjusted to recognise the additional risk to which at-sea ventures are exposed. This risk element was previously contemplated as a discount factor; however, given that it applies in all instances, the Working Group considered it appropriate to accommodate risk into the calculation of a base fee by reducing it by approximately 50 percent. The Working Group also noted that in general, lease fees in other states and sectors are between $6 and $315 per hectare. When removing minimum and maximum outliers, the range reduces to $12.50 to $220 per hectare.

For the reasons provided above, the Working Group proposes the base fee for aquaculture and pearling leases be set at $50 per hectare, with a minimum fee being set at $200 to allow for administration costs associated with small lease areas.

3.4 Discounts

PPA and ACWA proposed, respectively, four and three discount categories. The three categories common to both submissions are intensity; property rights; and access to infrastructure and amenities. PPA proposed an additional category of distance from a populated area.

Ensuing discussions with representatives of ACWA and PPA suggested an additional category to cater for pearling holding sites, which are only used for a proportion of the year and consequently that may be afforded a discount on that basis. Proportional site use may be either temporal, as described for pearling holding sites, or spatial, for sites that may be large for reason of environmental sustainability or other reason where the lessee or licensee is required to have a larger site than would otherwise be needed; for example, to achieve a minimum separation between production units.

The Working Group proposed an additional discount factor, to be applied at the discretion of the Minister, to enable a discount to be applied in the event of incidents such as disease outbreak, hardship arising as a result of prevailing economic conditions, industry development initiatives or impositions placed on operators to accommodate environmental or social requirements.

These proposed discount categories and their proposed values are considered in more detail in the following sections.

Submissions made to the Working Group variously expressed the proposed values of discount factors as percentages representing the proportion of the base fee that should be paid (in the case of the intensity discount) or as the reciprocal of that proportion (in the case of the property rights discount). To calculate a fee according to the formula it had adopted, the Working Group consistently uses a multiplier between 0.1 and 1.0 to represent, respectively, payments of 10% and 100% of the base fee and consequently discounts of 90% and zero.

3.4.1 Discount 1 (Intensity)

ACWA and PPA proposed implementing the dilution factor as follows:

- Intensive 100%
- Semi-intensive 75%
- Extensive 50%

(representing discounts of 0%, 25% and 50% respectively).

The submissions provided no rationale supporting the proposed discount figures and no definition of the terms intensive, semi-intensive and extensive, other than endemism, feeding
strategy and environmental impact.

Endemism was considered irrelevant in this context – it is an ecological (and possibly an environmental) factor unrelated to intensity and in any case the translocation and culture of non-endemic species is highly unlikely to be permitted in the marine environment.

The description provided for intensity only considered the level of feed inputs and not other defining factors such as technology, capital investment, corporate management, product value, profitability, stock density and yield.

One submission incorrectly claimed oysters are “endogenous” and marine fish fed with manufactured feeds are “exogenous” feeders and proceeds to use that precept to justify the former sector as “extensive” and the latter as “intensive”. In fact, oysters and finfish both consume feed from exogenous sources, so by that definition are both “intensive”.

Further, on the basis of the provision and consumption of feed, an argument could be made that the cost of feed to growers of filter feeders (such as pearl oysters, mussels and other molluscs) is nil, since the animals consume algae and other material present in the natural environment and that, consequently, this makes the site more valuable so the reverse should apply and these sites should have a smaller or nil discount.

In any case, the Working Group considered the majority of aquaculture activities undertaken in the marine environment to be intensive and consequently that, if a discount was to be applied for intensity, the same value should be applied to all offshore aquaculture sites.

The Working Group is of the view that there appears no justification for a discount based on intensity and this element was therefore not considered in the calculation of a lease fee.

### 3.4.2 Discount 2 (Property Rights)

Term of Reference No. 1 required the Working Group to propose a formula for calculating a fee for access to aquatic resources for pearling and aquaculture purposes based on the existing tenure arrangements.

ACWA and PPA proposed fundamentally similar approaches to determining a discount rate based on property rights; these are summarised by Table 4.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Calculation of a property right discount proposed by industry organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Element</strong></td>
<td><strong>Pearling</strong></td>
</tr>
<tr>
<td>Score</td>
<td>Justification</td>
</tr>
<tr>
<td>Exclusivity</td>
<td>2</td>
</tr>
<tr>
<td>Permanence</td>
<td>3</td>
</tr>
<tr>
<td>Transferability</td>
<td>3</td>
</tr>
<tr>
<td>Security</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>55%</td>
</tr>
<tr>
<td>Discount</td>
<td>45%</td>
</tr>
</tbody>
</table>
The four elements making up a property right are identified as exclusivity, permanence, transferability and security. Allocating a maximum “score” of five to each of these elements, a “perfect” property right would total 20.

ACWA and PPA proposed the formulae for aquaculture and pearling leases be based on the values set out in Table 4. Based on these values, PPA and ACWA proposed property rights discounts of 45% and 30% for, respectively, pearling and aquaculture leases.

This method for calculating a property right discount appears reasonably transparent and accountable; however, the actual figures used for each defining element required additional discussion before being agreed by the Working Group.

In a general sense the Working Group noted that to have effective property rights you need two primary powers that relate to property in a spatial sense and link into land law through the Lands Administration Act, the new Fisheries Act, or both. These two primary powers are:

• Power to excise areas of Crown land for the purposes of aquaculture; and
• Power to create leases with specific terms of tenancy.

The Working Group undertook a qualitative assessment of nature of the property rights, based on the method used by the Access Rights Working Group. This method is based on the following four key features of property and non-possession rights widely recognised in the international literature and law:

• exclusivity – the impact of others on the right;
• permanence – the degree of temporal duration and renewability of the right;
• transferability – including the divisibility of the right and ease of temporary leasing; and permanent transfer; and
• security – the quality of the right, including ease of cancellation or change and degree of legal protection.

The Working Group mapped and compared the relative strength of three forms of property right; namely freehold title, pastoral lease and a lease issued under s.97 of the FRM Act (Figure 1). As for the Access Rights Working Group, the Working Group also considered the wider context of government policy and law in which these rights exist.

The Working Group agreed the following scores for each of the elements defining the property right for a lease issued under s.97 of the FRM Act:

• Exclusivity 3.5
• Permanence 4.0
• Transferability 3.5
• Security 3.5
Figure 1 Depiction of strengths of selected property rights.

The proposed property right represents 70% of the total score, affording a discount of 30% (representing a multiplier value of 0.7).

The Working Group recognised that these elements of the property rights calculation are based on leases issued under s.97 of the FRM Act and would vary according to factors such as the industry sector and legislative provisions that may change from time to time. By way of example:

- mussel farmers operate in Cockburn Sound under s.97 leases; however, the tenure arrangements for these lessees are less secure because they are located in port waters; and
- pearling leases may afford a lower level of property right because they are only transferable to holders of quota units.

These factors may be accommodated by either varying the multiplier value or subject to implementing a discount under Ministerial discretion (section 3.4.6 below).

3.4.3 Discount 3 (Access to Infrastructure and Amenities)

There was some contention in respect of a discount applied for access to infrastructure and amenities.

The Working Group’s October 2010 report proposed leases could be categorised according to their proximity to infrastructure and amenities and the applied discount then being proportional to the distance; that is, the greater the distance the greater the discount that would be applied.

Broadly, both PPA and ACWA expressed the view that water-based leases offer no infrastructure and, or, amenities. On that basis, they would support a discount of 50% (that is, a multiplier of 0.5), regardless of the distance of the lease or site from land-based infrastructure.
The Working Group generally agreed a discount factor should be applied, provided that the base rate does not take distance from infrastructure into account (thereby avoiding two discounts being afforded for the same factor). This is justified on the basis of the higher costs associated with doing business in the north of the State and the Abrolhos Islands.

The Working Group proposes a discount factor be applied to accommodate access to infrastructure and amenities, based on whether the site is located to the north or south of parallel 26° S. The Working Group proposes discount factors of 40% for sites to the north of parallel 26° S or in the Abrolhos Islands; and zero for those to the south (that is, multipliers of 0.6 and 1.0 respectively).

3.4.4 Discount 4 (Distance from Populated Area)

PPA proposed a discount based on proximity of the lease to population, with the rationale that there are more competing interests for water in areas in close proximity to densely populated areas.

The Working Group did not support the proposal that distance from populated areas be included as a discount factor, in part because the concept of “remoteness” is already catered for in the discount for access to infrastructure and amenities and because distance from populated areas has previously been cited as an advantage, for example for pearling leases, in that the distance and remoteness provide a measure of security.

3.4.5 Discount 5 (Proportional Use)

A proportional use discount was proposed for situations where either:

sites are not used for the entire year but are required for a specific purpose for shorter periods (for example, pearling holding sites); or

larger water areas are imposed as an environmental requirement (for example, where a minimum distance is required between operating culture units to achieve an environmental objective) or for a social objective.

The Working Group did not support a proportional use discount for several reasons. Even if an area is only used for a part of the year, it is still unavailable for other activities and therefore, effectively, is “used” for the full period.

It was also noted that lessees need to cater for environmental requirements in their activities and, in any case, a requirement for larger water areas on the basis of environmental or social requirements that do not benefit the lessee could be considered through a Ministerial discretion discount.

3.4.6 Discount 6 (Ministerial Discretion)

The Working Group recognised any of a number of contingencies could affect the viability of aquaculture and pearling in the State that are beyond the influence of these sectors. These contingencies include, but are not restricted to, financial hardship, economic downturns, disease outbreak and pollution. The Working Group therefore proposes a special discount category, entitled Ministerial discretionary, which could be applied as its title suggests at the discretion of the Minister and could include:

- a start-up allowance (such as the current period of five years aligned with the payment of the bond);
- hardship (may be applied in the event of disease or prevailing economic conditions);
• poor water quality as a result of pollution from an event outside the control of the lessee; and
• other factors that would reasonably qualify a lessee to apply for a Ministerial discount.
• The Working Group noted that s.128(1) the Land Administration Act 1997 similarly provides for a payment of rent for a pastoral lease to be delayed or waived subject to a lessee applying for rent relief.

3.5 Summary of the Proposed Formula
The Working Group proposed the following formula to calculate lease fees:
Annual lease fee = base rate ($50/ha) x property right x remoteness x Ministerial discretion.
Table 5 provides examples of annual fees using the proposed formula.

Table 5 Indicative lease fees for selected regions in WA

<table>
<thead>
<tr>
<th>Region</th>
<th>Base rate</th>
<th>Property right</th>
<th>Remoteness</th>
<th>Ministerial discretion</th>
<th>Annual rate per hectare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kimberley (pearling)</td>
<td>$50.00</td>
<td>0.70</td>
<td>0.60</td>
<td>1.00</td>
<td>$21.00</td>
</tr>
<tr>
<td>Kimberley (non-pearling)</td>
<td>$50.00</td>
<td>0.70</td>
<td>0.60</td>
<td>1.00</td>
<td>$21.00</td>
</tr>
<tr>
<td>Exmouth</td>
<td>$50.00</td>
<td>0.70</td>
<td>0.60</td>
<td>1.00</td>
<td>$21.00</td>
</tr>
<tr>
<td>Shark Bay (north of 26)</td>
<td>$50.00</td>
<td>0.70</td>
<td>0.60</td>
<td>1.00</td>
<td>$21.00</td>
</tr>
<tr>
<td>Shark Bay (south of 26)</td>
<td>$50.00</td>
<td>0.70</td>
<td>1.00</td>
<td>1.00</td>
<td>$35.00</td>
</tr>
<tr>
<td>Abrolhos Islands</td>
<td>$50.00</td>
<td>0.70</td>
<td>0.60</td>
<td>1.00</td>
<td>$21.00</td>
</tr>
<tr>
<td>Cockburn Sound</td>
<td>$50.00</td>
<td>0.70</td>
<td>1.00</td>
<td>1.00</td>
<td>$35.00</td>
</tr>
<tr>
<td>Albany</td>
<td>$50.00</td>
<td>0.70</td>
<td>1.00</td>
<td>1.00</td>
<td>$35.00</td>
</tr>
</tbody>
</table>

By way of example, should a sector of the pearling industry apply for and be granted a Ministerial discretionary discount of 50% on the grounds of current industry hardship, the annual rate would be reduced to $10.50 per hectare. That discount would be subject to conditions that would define the terms under which it would be applied and removed.

3.6 Fee Implementation, Increases and Review
The Working Group proposed that any substantial fee increases ensuing from the implementation of the formula in this report be phased in over a reasonable period. Fee increases should be applied at a minimum rate per hectare then increased at a rate of 100% (that is, doubled) per year until the calculated fee amount is reached.

In respect of fee increases and reviews, the Working Group proposed that:
• the annual lease fee should be increased annually according to CPI increases;
• the annual lease fee should be reviewed at three-year intervals; and
• any increases exceeding annual CPI increases that ensue from future reviews of lease fees that may be undertaken should be subject to appeal in the State Administrative Tribunal.
4.0 CONCLUSION

The change from the current systems used to calculate and apply lease fees will inevitably result in some lessees being advantaged, while others are disadvantaged. The Working Group was of the view, however, that the model proposed for the calculation of lease fees provides the most practicable and equitable approach.

The submissions from PPA and ACWA indicated general industry agreement with the concept of a water lease fee being set administratively.

The fee needs to be competitive to attract investors to the industry and to help underpin its growth.

The Working Group noted that the preferred method of setting a lease fee would be market-based, which could occur when there is a sufficient trading history to underpin the application of that method. When that stage is reached, the Working Group is of the view that the lease fee should be set by the Valuer General. That view is consistent with the opinion of the Valuer General, provided in earlier correspondence.

The Working Group provides the following summary in respect of addressing the Terms of Reference.

1. Provide advice to the Minister for Fisheries on an appropriate method for determining a fee for access to the aquatic environment for pearling and aquaculture purposes based on the existing tenure arrangements.

   Section 3 of this report provides the method the Working Groups considers appropriate for setting a fee for access to the aquatic environment for aquaculture and pearling purposes. The method is based on existing tenure arrangements and accommodates the considered views of industry representative organisations and other relevant Government agencies.

2. Provide advice to the Minister for Fisheries on the likely impact of proposed new tenure arrangements (e.g. FRMA 2010 amendment and new legislative framework) on fees for access to the aquatic environment for pearling and aquaculture purposes.

   The Working Group is of the view that the passage of the Fish Resources Management Amendments Bill 2011 is unlikely to have any impact on the proposed lease fees. The new legislative framework is equally unlikely to have any impact.

3. Identify issues that may have an impact on the implementation of current and future tenure arrangement and fees.

   The Working Group is of the view there are no significant issues that may have an impact on the implementation of fees. There are powers in the FRM Act and the Pearling Act to enable fees to be applied to leases and sites authorised under a licence.

   The working group considered the impact that application of bonds may have, particularly when applied to the pearling industry.

   The purpose of applying bonds to leases is to demonstrate the credibility of the lessee and guarantee performance and completion according to the terms of the lease agreement. In this context, a lease bond functions as a guarantee from the lessee to the Government and the community that the lessee will comply with the terms of the lease; it also ensures funds are available to rehabilitate a site in the event of a default.

   The Working Group recognised that the current system, which is based on cash bonds or bank guarantees, may have a significant financial impact on sectors of the industry. Based
on total aquaculture and pearling lease areas of approximately 60,000 hectares and a bond rate of $500/ha, the value of bonds can be estimated at $30 million. For this reason, the Working Group is of the view there is merit in exploring alternative options for providing the requisite assurances; for example, a model based on the Mining securities review may have the capacity to provide a similar level of financial security to the Government at a lower cost to industry.

A relevant recommendation is provided in the following section.

4. Provide advice regarding an appropriate consultation and communication process with industry and department stakeholders regarding the issue of Water Lease fees, noting the limited timeframe of the Working Group.

The communication and consultation process provided industry representative organisations to provide written submissions and to address the Working Group on several occasions. Similarly, relevant Government stakeholders were consulted and provided information to the Working Group, including the Department of Fisheries, Department of Regional Development and Lands and the office of the Valuer-General.

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6 This assumes that the total area under lease will be used as the basis for calculating the bond. That may not be the case: bonds may be calculated according to the lease area that accommodates deployed aquaculture gear and not the total area.
5.0 RECOMMENDATIONS

The Working Group makes the six recommendations set out below.

Recommendation 1  That the formula to be used to calculate lease fees for aquaculture and pearling activities is:
Annual lease fee = base rate ($50/ha) x property right x remoteness x Ministerial discretion.

Recommendation 2  That a minimum lease fee be set at $200.

Recommendation 3  That the following implementation schedule be applied:
i. where lease fees are lower than those applied in 2010 – 11, they are implemented immediately at the lower rate; and

ii. where lease fees are greater than those applied in 2010 – 11, they be implemented at 200% of the 2010 – 11 rate, then increased by an additional 100% per year until the calculated fee is achieved.

Recommendation 4  That the annual lease fee should be increased annually according to CPI increases, that it be reviewed at three-year intervals and that increases exceeding annual CPI increases that ensue from future reviews should be subject to appeal in the State Administrative Tribunal.

Recommendation 5  That the Department of Fisheries and Department of Regional Development and Lands consider and explore the option of DRDL issuing Crown leases for aquaculture and pearling in the future.

Recommendation 6  That the Minister reviews the current bonds policy to consider the introduction of a flat fee for small operators and an industry fidelity fund to provide a mechanism to reduce the cost of funding the bonds.