The Coastal Marine Area

THE OPTIONS AND BASIS FOR A COASTAL MARINE OCCUPATIONS CHARGING REGIME

Report Prepared for:
Environment Bay of Plenty

by:
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This report has been prepared on the request of Environment Bay of Plenty.

It comprises a review and detailed analysis of the market information and established methodology for the purpose of analysing the options and viability of establishing a charging regime for a wide range of occupations in the Coastal Marine Area.

Property Solutions are a well-established valuation practice based in Tauranga with experience in the geography and valuation issues involved in the creation of the proposed regime.
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1 Introduction

Environment Bay of Plenty (EBOP) administers a large area of water known as the Coastal Marine Area on behalf of the Crown and the public.

Areas of the Coastal Marine Area are occupied by private individuals, groups of individuals (boat clubs, marina societies, etc) and commercial entities such as marine farms and commercially run marinas.

The Resource Management Act (under Section 64 (A)) requires the Regional Council to consider whether or not to implement a Coastal Occupation Charging Regime and the circumstances under which charges will be imposed.

1.1 Purpose of Report

This report sets out the analysis of options and the viability of establishing a Coastal Occupation Charges regime.

In the research for this report we have reviewed the market information, valuation philosophies and methodologies used in both New Zealand and overseas situations where marine occupations are subject to charges.

The ultimate goal of the report is to establish a robust basis for developing appropriate occupation charges for inclusion in the Environment Bay of Plenty’s Coastal Plan.

1.2 Terms of Reference

The Resource Management Act clearly states that income raised from Coastal Occupation Charges is to be used for the purposes of managing and enhancing the environment in which the charges are raised.

The charges are levied in situations where there is a private use of what is effectively a public asset. It is considered fair that the Regional Council (on behalf of the public and the Crown) receive a return for this use. This principle is strongly supported by the international examples where many central and local government agencies apply similar charges.

The charges should reflect the value of the occupancy having taken onto account the split between the public versus private benefits. The underlying principle of the occupation charge is that it reflects the value of the loss of public opportunity to use and enjoy the coastal marine area (i.e. the loss of public tenure).

It is also important for the methods of charging to be equitable and reasonable in terms of the different occupations and uses.

This report agrees with the points outlined in the review of charging issues and options as recorded in the report “Discussion Document on Charging Methodology” (Regional Council Users Group report, 30 June 2004) that states the following:
In implementing the Coastal Occupation Charges then there is a need to be mindful of:

- Any charging regime must be easily understood within the coastal plan, ie. simplicity should be a goal of any charging regime.
- It must be (relatively) easily administered.
- It should not be costly to administer and collect revenue, ie. it must be economic to apply.
- Overall, it must be simple and logical (excepting that anomalies are not always best addressed by simplicity).
- It must be defensible.

1.3 General Notes

The information contained within this report comes from a valuation perspective.

The market information is based on the Bay of Plenty market environment with support from the national and international situation.

The methodologies and philosophies are based on information available from within New Zealand, a reasonably extensive search of the international situation and discussion with some users and managers of the coastal marine area.

1.4 Summary of the Process to Determine Outcomes

The report covers the steps required to determine the appropriate methodology and levels for the Coastal Occupation Charges. This includes:

1. Analysis of the market rental and sales information that is available to support a charging regime. This covered a wide search for comparable rental and value information.

2. Review of the methodologies for calculating marine rents in situations where there is no rental information.

3. Determining the appropriate comparable land value approach.

4. Determining the appropriate adjustments to the underlying land value.

5. Deciding on the appropriate method for the calculation of occupation rents based on the adjoining land value approach (applicable to most occupation types).

6. Deciding on the appropriate method for calculating occupation rents where there is market rental information available (e.g. moorings)

7. Applying the appropriate adjustments to the resultant rents for the balance between the public and private benefits.

8. Converting the occupation rents into an occupation-charging regime.
2 Overview of Main Findings

2.1 General Issues

For most occupancies our research comes to the following conclusions:

- There is general acceptance of the need to charge for the occupation in recognition of the fact that the private users are gaining a benefit at the expense of the public.

- There is agreement that the charges must be market based and that the value of the “loss of public tenure” is fairly represented by the value of the “private gain”. (Refer: Coastal Occupation Charges, Discussion Document 30/6/04 page 11).

There is generally limited market evidence available to assess the value of the “loss of public tenure” and there is a reasonable volume of market information available to assess the value of the “private gain”.

- For some situations the public benefit is 100 percent and no charge should be made to the occupier.

- In most situations the nature of the market evidence for the value of the private gain relates to the nature of the tenancy. This is outlined as follows:
  - In some situations the market value of an occupancy is established by sales of individual occupancies (for example moorings or marina berths and marine farms).
  - In some situations, the value is established through a process where the owners of a seabed site (usually the Crown) offer a proposed occupancy to the market (usually by tender). This relates to situations such as proposed marina developments, marine farms or sites suitable for a commercial development over water.
  - In most other situations the rental value of the occupancy is calculated by establishing the return on the equivalent value of a comparable parcel of adjoining land (with the appropriate adjustments).
  - We note that in some overseas situations the method of calculating the rent (particularly for marinas and marine farms) is on the basis of a percentage of business turnover.

The marine charges (noted in the sub points above) include situations where the actual methodology or charging formula is outlined in statute or in the operating procedures and regulations of government agencies.
2.2 Conclusion on the Methods for Calculating the Charges

The conclusion from our research is that there are three appropriate methods for calculating the Coastal Occupation Charges. These are summarised for the different occupations as follows:

**Moorings**: The charges can be based on actual mooring rental information.

**Marine Farms**: The charge is based on a return to the *per hectare value* of the marine farm site, as established from marine farm sales (with appropriate adjustments for size, nature of the farm etc).

**All Other Occupations**: The rental is calculated by a formula that is based on a return to a comparable land value, which is then adjusted to reflect the balance between the public and private benefits (losses and gains).

The components of the formula are as shown, with the definition for each of the components described in the “Definitions” heading below:

- Adjoining Land Value (ALV).
- Adjustment for the sea-based nature of the occupancy (ADJ).
- Rental Rate (RR).
- Adjustment Public/Private benefit (PP).

\[
\text{Occupation Charge} = \text{ALV} \times \text{ADJ} \times \text{RR} \times \text{PP} \times \text{The area of the occupation}
\]

The balance of this report seeks to do two things:

1. Outline the basis for the three methods of charging and the information that is available to support the charges.
2. Apply the methodology to the EBOP region to calculate the charges.
3 Definitions

The following definitions are for the terms as used throughout this report.

**Occupation Charge**: The charge as defined in the legislation. It reflects the return to the owner (on behalf of the crown or public) for the private use of a public site, after adjustments have been made to reflect the degree of public loss (or gain) generated by the private occupation.

**Occupation Rent**: This term is used to describe the market-based annual rent for seabed or marine site occupations. This is the return to the owner prior to any adjustment for public/private loss or gain. In essence it reflects the rent that would be paid where the occupier has full use of the total benefits offered by the site and there is no remaining public benefit (or use).

**Public loss or gain**: This is the degree to which the public tenure of the site is diminished by the private occupancy. It can range from 100 percent public loss (where the rent would be the full market rent for the site), to a situation of no public loss. A nil public loss situation would be where the occupancy is developed for the full benefit of the public.

Public gain may occur when an asset is constructed for private use, such as a jetty, but the public are allowed a degree of use (assuming that physical access is available and likely to be utilised).

**Adjoining Land Value**: The value of the land in a comparable use that adjoins the marine occupation, or if there is no immediately adjoining land of comparable use, then the value of the nearest land that has a comparable use. Known as the *upland land value* in North America.

This may be either:

- Residential land at the rate per square metre of the market value of an adjoining waterfront section of a typical size.

- Commercial or industrial land (adjoining or nearby) at the value per square metre based on general market evidence.

- The rural value per hectare based on established rural land sales

**Capitalisation Rate**: The market based return being the annual rent divided by the value of the asset being rented (expressed as a percentage). The capitalisation rate varies for a number of factors such as the type of property, the terms of the lease, the expected rate of appreciation of the asset value or its rent.

**Ground Rent**: The contract rent for vacant land. This is usually calculated as a percentage of the land value. The percentage is known as the *Rental Rate*. The percentage is generally lower than for improved assets (land and buildings) as the investment does not have any depreciating components. The rental rate will reflect the frequency of the rent reviews with the more frequent the review the lower the rent percentage. These rents are typically associated with land owned by Harbour Boards/ports, local authorities, railways etc.
Land Value: The value of land in its “paddock” or “grass state”.

Note: Unimproved value has not been used as a basis within this report for a number of reasons including the almost total lack of unimproved land sales. However, the land value is adjusted within the overall occupation charge calculations to reflect the fact that it is water and not land that is being occupied (see heading 8.2).
4 Philosophy

The following points outline the philosophies that support the Charging Regime. These reflect the RMA requirements, the requirements of EBOP, the philosophies of similar charging regimes nationally and overseas and the general principles of land valuation.

- The charge is a *return to the public* for the *loss of tenure*, being the loss of public use of and access to the space. It must have regard to both the public benefits (lost or gained) and the private benefit gained.

- The charge does not relate to the effect of the use on the environment or the economy (other than the loss of public use and access).

- The charge does not relate to the “value of the use” or the “nature of the use”. It simply recognises the fact that the public space is being occupied.

- The charge is not an allocation tool per se. It does not provide the mechanism for the distribution of coastal marine occupancies. It may however influence whether or not a development or use proceeds or is economically viable. It may also have some bearing on the locational choice of developments or uses.

- The degree of *public loss* must be reflected in the level of charge for each occupancy and the degree of loss will depend on how the space is occupied. For example a private boat shed effectively occupies the vertical space from the seabed to the sky above, resulting in a high degree of public loss. By comparison, a boat ramp doesn’t intrude into the air space (the public may be able to use the water for swimming or fishing) and there may even be some public gain if the permit requires the ramp to be available for the public to launch their boats.

- Whether or not there is direct market evidence available from which to establish a fair rent, we consider that, wherever there is a private gain, a fair equivalent market rental can be established.

4.1 Philosophy Conclusion

From the points noted above we concluded that rentals based on market evidence can be derived for all categories of occupancies and that the level of rent is to be adjusted to reflect the level of public loss or gain.
5 Introduction to the Methodology

5.1 General

In essence there are two components to establishing the Coastal Occupation Charges being:

1. Establishing a Fair Market Rental for the space being occupied.

2. Converting the rent to an Occupation Charge. This involves establishing the level of public loss as a portion of the full tenure to determine the portion of the full market rent that should be paid to compensate for the public loss.

The final step in the process is the conversion of the Occupation Charges into an appropriate Charging Regime that meets the requirements discussed in the Terms of Reference.

We note that some occupation classes are for tenancies that are subject to market discipline (for either their sale or rental) and for these there are varying amounts of market evidence available. Other occupations are not subject to the market. Generally, the occupations that are not subject to the market tend to be either lower valued type occupancies or those where the underlying owner has not yet decided to establish a rental regime. However noting the points in “Philosophy” (heading 4.0 above), it is confirmed that, where there is a private gain, it is possible to place a value on that gain.

The available market evidence can be any of the following:

- Directly comparable rental information (e.g. mooring or marina rents).
- Rent for an alternative site that offers similar amenity (e.g. hardstand rents for boat storage).
- Rents for alternative type assets that have a degree of comparability (e.g. car parking rentals compared with boat storage).
- Sales of occupancies (e.g. marina berths, fish farm sites, moorings) from which it is possible to establish a fair market return.
- Sales of comparable land or land that is considered to offer a comparable degree of utility (e.g. commercial land being comparable to a mooring site for a floating restaurant).
- The value of the land required to provide an alternative amenity to marine occupation (e.g. the area of a residential section required to store a boat or build a boat shed).

The above market evidence reflects what an individual (or enterprise) is prepared to pay to acquire the private rights to a public space. The rents could also be considered as the opportunity cost that the seabed owner (on behalf of the public) is able to charge for the private use of the public space.
Some of the information reflects the cost of the alternative to the marine occupation. For example a boat owner has the option of a swing mooring, marina berth, hard stand storage or sacrificing some of their residential section for storage of their boat. Each of these options has different characteristics/benefits and some options are not available to all types of boats or situations (e.g. a non trailerable boat generally has to be moored). However the options do give an indication of the storage cost that the owner must be prepared to pay to as part of boat ownership.

Some of the rents are for situations that reflect one hundred percent private gain but other rental information naturally reflects the balance between public loss and private gain (e.g. mooring rents).

5.2 Outline of the Steps Involved in the Methodology

The overall methodology is broken down into the following components that form the major headings that follow:

- **Heading 6.0.** Review of the available market information. This covers rental information and occupation values available within New Zealand and from overseas. It also includes information on actual sales of occupations.

- **Heading 7.0.** Review of the Methodologies that are used in New Zealand and internationally for calculation Coastal Occupation Rents.

- **Heading 8.0:** Methodology adopted for the coastal occupation charges where the adjoining land is the basis for the rent.

- **Heading 9.0:** Swing mooring rental methodology and conclusions.

- **Heading 10.0:** Marine farm rental methodology and conclusions
6 Overview of Market Information

The marine occupations that have the most market based rental information relate to the storage of boats (either in marinas or on moorings). For other occupations, the information tends to relate to the formula or methodology adopted by the leasing or licensing organisation.

The character of the market is that commercial developments tend to charge a market level of fees. These developments usually relate to boat storage and are a significant cost in the ownership of a boat. The costs reflect the level of capital invested by the developer and the services offered. In non-commercial situations there is usually much lower level of capital invested (if any) and the fees are very low. It appears that many situations are established or controlled in such a way as to avoid a market developing. This is usually achieved by the use of a waiting list to allocate space (i.e. rather than by price).

In both the commercial and non-commercial situations there are waiting list for spaces and these are particularly long for non-commercial occupations.

The available market information is summarised in the following sub headings.

6.1 Rental Information

- **Mooring Rents:**
  
  New Zealand: Nationwide, private rents range from $50 per month to $250 per month depending on the situation. We note a Tauranga Harbour mooring recently advertised at $15 per week.

  Overseas: In the UK, mooring for areas controlled by “Crown Estate” (Government Agency that manages crown land) are on the basis of an agreement between Crown Estate and the occupier that is usually a yacht club providing multiple mooring sites. Crown Estate has issued a schedule of proposed mooring rents (see appendix). Any disagreement is settled by the District Valuer (National Valuation Office).

  The Royal Yachting Association has produced a reasonably detailed formula for calculation mooring rents based on £2.15 per foot of boat length (as at 2002) plus a wide range of adjustments.

  Moorings in the Solent in 2002 started at around £250 per annum for a 10 metre boat with the price rising depending on services provided.

  In British Columbia the annual rent for a mooring site is $C 400.

  In New South Wales mooring site licence fees for a 10 metre boat are $A260 in a low rate area, $A476 in a medium rate area and $A592 in a high rate area.

- **Marina Site Rents (the area of water occupied by the marina):**
  
  In the UK, Crown Estate leases marina sites (typically to yacht clubs for groups of swing moorings) on the basis of a “base rent” plus a percentage of marina turnover. The rental is market based as far as possible and it takes into account factors such as location, catchment area, ease of access, tides etc. If there is a
dispute in the rent then the District Valuer (Valuation Office) is required to establish the rent.

British Columbia has a clearly defined rent formula for marina sites that includes a percentage of turnover for the moorage portion and a return on land value for the non-moorage portion of the development.

In Washington State (USA) the State regulations (the Revised Code of Washington) have a clear formula for assessing marine land rents including a percentage of turnover basis for marinas.

The New South Wales government has outlined a formula for the assessment of waterfront tenancy rents.

- **Marina Berth Rents:**
  Marinas are the upper end of options for the storage of boats.

  The Tauranga Bridge Marina berth rents range from $270 per calendar month (pcm) for a 10.5-metre boat to $1,500 pcm for a 36-metre boat (advertised 2004).

  The marina at Tutukaka is one of the cheaper in New Zealand at $267pcm for a 14m berth and the Waikawa Marina in Picton is at $230 pcm for a 10-metre berth.

- **Hard Stand Storage:**
  In Tauranga the Sulphur Point hardstand is at around $1,000 per annum for boat storage.

  Commercial storage for boats in a secured compound (e.g. Fort Knox) is at a similar amount.

- **Other Occupancies:**
  There is a degree of market information available within New Zealand for marine farms. This relates to the sale of sites having the necessary approvals to operate as well as the analysis of developed farms back to the seabed component.

  There is some information for the other types of occupancies. The majority of the information relates to the method of calculating the rent (see details below) rather than the actual level of rent adopted.

  **Note:** We were able to find a report on the web that was addressed to the Independent Pricing and Regulatory Tribunal (of New South Wales) that recorded rentals for oyster farms at 0.004 cents per square metre, 0.51cents per square metre for swing moorings and $A50 per metre for wet moorings. These are apparently set by the Australian Department of Lands.

- **Sites Comparable to Marine Occupations:**
  In reviewing all of the comparable rental information we have also considered situations where there are buildings on land that are in a similar situation to buildings on water sites. For example a sports hall on a council reserve has a degree of comparability to a boat club clubhouse on a marine occupation.

  We note that Tauranga City Council charges a site occupancy fee of $0.50 pa, per square metre of building area for buildings such as scout halls. This fee was set in 1991 and has not yet been reviewed.
6.2 Sales Information

Following is a sample of the actual sales information that is also considered beneficial in determining rents.

- Ohiwa harbour mooring offered for sale at $1,500 and Tauranga Harbour moorings apparently selling at up to $2,500.

- The Tauranga Bridge Marina has sold a high proportion of its berths with those remaining currently on the market in the range of $37,000 to $42,000 for a 10.5 metre berth to $110,000 plus for a 20-metre berth. These prices appear to be in line with the national situation with variations for factors such as services provided, proximity to city centre etc.

- Analysed marine farm sites range from $20,000 per hectare to $200,000 per hectare for the site exclusive of improvements. (information provided by Alexander Hayward Limited, Valuers Blenheim)
7 Methods used to calculate Occupation Rents:

7.1 Formula currently used to calculate Marine Occupation Rents

Summarised below are the range of methods that we have found being used in establishing fair rents from both New Zealand and overseas.

**Mooring Rents:**
These tend to be actual market rents for the mooring (as noted above) and no alternative formulas are required although in the UK there is an established basis for making adjustments to the base level to accurately reflect the characteristics of the individual situation. Within New Zealand moorings are advertised for lease/rent and sale.

**Marina Site Rents (the area of water occupied by the marina):**
The information for these developments relates to the initial establishment and the subsequent process for rent reviews as there is no trading of the sites once they are actually developed.

- In the UK the initial release of the site is generally by open market tender. There is a requirement for the Crown agency letting the tender to obtain the best reasonable return to the Crown/public but the return shall not be a monopoly return if the Crown is in a monopoly supply situation.

  Ongoing rent reviews are on the basis of a base rent plus a percentage of turnover.

- In British Columbia the rent for the mooring component is 3.5% of the potential gross turnover for the first 15 years and 4% for the next 15 years.

  The non-mooring portion of the development is at 5 to 8 percent of land value depending on use.

- In Washington State the process is similar to British Columbia.

- Within New Zealand, the past few years has seen a number of Marina site rents settled on review. Most of these are in Auckland with the rents reflecting the specific characteristics of the site.

**Other Marine Occupations:**
There is a general theme that runs through the methods adopted by a wide range of organisations that grant the permits/leases/licences. This information forms a strong basis for the rent calculations on all of the EBOP occupations.

The theme is to adopt an adjoining land value as the basis for applying a rental percentage. The actual land value adopted varies as is outlined in the summary of methods below:
New Zealand:

We are aware of the following methods:

- One Crown agency has accepted the following basis for the ground rent of structures that are on crown reserve in a marine situation. The base value is 100 percent of the adjoining land value (usually as a residential site) and the annual rents are at 1% for boatsheds, 2% for residential buildings and 4% for commercial uses. The result of this calculation is not dissimilar to a number of other situations where the land value is discounted but a higher rental percentage is used (e.g. a 50% land value discount and a 3.5 to 7.0 return).

- The Auckland Harbour Board and Ports have used a rental calculated by adopting two thirds of the adjoining land value as the base land value for the rental percentage (for jetties, wharves etc).

- We are aware of anecdotal evidence that a small marine farm has been sublet for a rental based on 10% of the gross income.

Overseas:

- Crown Estate (UK) charges a rental for salmon farms (sea based sites) of around 1.0% of gross turnover and a more nominal rent of around £145 per licence for shellfish farm rents. Undersea cables are at a nominal rent.

- Washington State (Revised Code of Washington -RCW) requires rents for state owned lands for aquaculture production or harvesting to be established through a competitive bidding or negotiation process.

- The Revised Code of Washington outlines the following formula for occupying other state-owned lands for aquatic uses:

  a. The assessed land value, (exclusive of improvements), as determined by the county assessor (government valuer), of the upland tax parcel used in conjunction with the leased area, or if there are no such uplands, of the nearest upland parcel used for water dependant uses, divided by the area of land to give a land value rate. Translates as the value per hectare, or square metre, for the land adjoining the aquatic lease or the nearest land that is used for a similar purpose.

  b. The assessed land value per hectare (or per square metre) is then multiplied by the area of the aquatic lease and then multiplied by thirty percent. (i.e. they discount the land value by 70% to reflect its aquatic characteristics)

  c. The resulting value of the leased area is then multiplied by the rent rate. This rate was initially set (1989) at 5% but given a range of 3% to 7% that it must be within on review (four yearly).

The formula covers a range of uses including log storage on water sites.

- Land and Water British Columbia has very clearly defined valuation formulas for the calculation of rents for marine occupations (effectively a return on land value).
a. The base for the rent is the *land value for aquaculture*, which is a market based land value (agreed with valuers if required). This aquaculture land value depends to a degree on the use of the site (e.g. as at April 2004 the shellfish land value is $5,296 per hectare and the finfish land value is $8,086 per hectare).

b. These land values are adjusted as follows. Intensive shellfish and finfish farms are at 100%, but extensive shell and fin fish farms are at 50% of the land value. Utilities are at 50% of the appropriate land value, being a situation similar to New Zealand.

c. The rents are assessed at 5% of appropriate land value for shellfish leases and at 8% for finfish leases. Licences are at 0.5 to 1.0% below the lease rate.

- In New South Wales the Independent Pricing and Regulatory Authority (IPART) undertook a comprehensive review of the Rentals for Water Front Tenancies (April 2004). This review looked at the range of formulas used in Australian situations (current and historic) and concluded that the appropriate formula for calculating rents for jetties, reclamations, tidal pools etc, is as follows:

  a. Calculate the Precinct Land Value. This is the total land value (Rateable Value or GV) as assessed by the State Valuer for the adjoining precinct (roll), divided by the area of the precinct. This gives an average land value for the local area.

  b. Multiply this rate by the area of the occupancy to give an assessed value for the occupancy.

  c. Multiply the assessed value of the occupancy by the *discount factor of 50 percent*.

  d. Apply the Rate of Return. The Tribunal adopted a figure of 3.05 percent being a mid point in the range of achievable *residential returns* (i.e. rental housing returns that are traditionally lower than land or commercial returns).

Note: The Australian Department of Lands uses a similar formula but with 6.0% return.

- We note that a major review of international legislation for the Commonwealth of Bahamas (as part of its preparation for drafting Aquaculture legislation) suggested that aquaculture leases be at the lower rate of their terrestrial farm lease rates (i.e. 100% of the value of poor quality farm land).

### 7.2 Summary of Methodology Information

**Directly Comparable Rental Information**

Where possible the best approach to the valuation of land and assessment of rents is on the basis of direct comparison.

Within the range of coastal marine occupations the main class of that occupancies that has direct market rental information are moorings and these rents may include the
value of the mooring tackle. Marina berth rents are widely advertised but these reflect the high level of capital invested in the marina development. These rents will also vary depending on the level of service offered. They do however give an indication of the price boat owners are prepared to pay for that option.

Rental evidence for alternative options to a marine occupation (such as hard stand for boat storage) provides strongly supportive evidence for mooring and other boat storage occupation rental levels.

Rental evidence for comparable types of assets also provides a degree of supportive evidence and can be used as a check on the rents derived using the main method of assessment.

**Land Value Based Rental Methodology Information**

For all occupations other than boat storage situations, the market information relates to the methodology used to calculate the rent rather than comparable rents.

Worldwide there is a reasonably strong level of consistency in the general methodology.

Marinas tend to be on the basis of a percentage of Gross marina turnover.

For all other situations the method relates to a rent based on a percentage return (ground rent or rack rent) on a comparable land value, where the land value is assessed on the basis of adjoining or nearby land. There are variations to the treatment of the components of this method as follows:

**Base Land Value:**
Internationally there are several variations in the definition for the base land value. These include adopting the immediately adjoining land value, the value of a residential section one street removed from the water front, the nearest comparable land (by use), or the average land value of all the properties in the adjoining district.

**Land Value Adjustment:**
The adjustment for the fact that the occupation is of a water site and not land range from no adjustment (i.e. adopt 100% of the land value) to a more typical range of 30 to 66 percent of the full land value.

**Percentage Return:**
These were all within an expected range of returns for real estate investment and tend to be at market levels with no adjustment for the seabed-based nature of the occupation.
8 Occupation Rent Calculations: Comparable Land Basis

We broadly accept the methodologies outlined above as appropriate for the calculation of the occupation rents. It is however acknowledged that the methodology requires adapting to the particular circumstances of this project and to relate to the full range of additional occupations not detailed above.

The occupation rent calculations are split into three broad groups being:

1. Occupations were there is direct rental evidence available. In essence this only relates to moorings.

2. The mooring rent information is handy for the other calculations as it can be used as a check on the rents. For example it would be reasonable to expect that a boat-shed site be of greater value than a swing mooring in a comparable location. (See heading 9.0)

3. Marine farms. These are different from the other occupations in the sense that there is sales evidence for actual occupancies (this can be used as a basis for rent calculations) and the offshore farms do not readily relate to an adjoining land value. (See heading 10.0)

4. Occupations where the rent is based on a comparable land value methodology. This covers the majority of occupations and is outlined as follows.

Comparable Land Based Rent Calculations

The following details are for all types of occupancy where the rent is calculated on the basis of a return to a comparable adjoining land value. There are four main decisions to be made as part of this process, being:

1. Which of the adjoining land value approaches should be adopted (Heading 8.1).

2. What percentage of the total land value is it appropriate to use (Heading 8.2).

3. What is the appropriate rental rate (Heading 8.3).

4. What is the appropriate adjustment for the Public loss / Private gain (Heading 8.4).

NOTE: We have discounted the option of turnover-based rents for two reasons being:

1. The necessary business information is not available to the public, although we note that the information could be calculated based on berth fees. In addition one marina may be a society that aims to keep its turnover low while another may be a company aiming to maximise its turnover. In terms of the return to the public for their loss of occupancy if these two marinas were physically similar they should pay a similar charge.
2. A turnover-based rent is effectively a rent that is based on the specific use of the site. This is out of line with the principles of the Occupation Charges that relate to the public loss of the use of the site and not the economic return that a particular occupier can generate from their business. (see notes in heading 4.0 Philosophy).

8.1 Which Adjoining Land Value to Adopt

The various approaches outlined above all use slightly different underlying land values. In our review we also considered the following option as potentially providing an appropriate starting land value.

Adjoining Land Value: Reserve Land Values

Coastal marine areas have a number of attributes that are similar to land based reserves owned by local authorities for the purposes of providing recreational and other amenity values to the public. It is therefore reasonable to say that the value of an area of accessible marine reserve has a degree of comparability to the value of a local authority reserve. This is the price that a council would expect to pay to acquire new reserve.

The most economical option for Councils to purchase reserves in a residential situation is to purchase at the block land stage prior to residential development. On this basis is it quite simple to determine relevant block values using the standard valuation methodology for calculating a hypothetical subdivision.

If residential block land values were adopted as the basis for the occupation rents then the percentage deduction should be much less than the 40 to 70 percent as used in the alternative methods (described above). This is because the value already reflects a reserve level of value as opposed to the full residential value.

Adjoining Land Value Options

The list of Land Value Options is as follows:

1. Average government land value for the surrounding or nearby area (precinct). Expressed as a rate per square metre.

2. The value of a residential section one street inland from the waterfront.

3. The value of a residential section adjoining the water.

4. The value of the adjoining land or the nearest land of comparable use (including commercial or industrial land).

5. The value of reserve land.

6. A rural based land value for marine farms.
Adjoining Land Value Conclusion

Having reviewed all of the above approaches we conclude the most appropriate land value is: The value of the adjoining land or the nearest land of comparable use.

This is further defined to mean:
Residential land of a standard sized site (750 square metres) adjoining the water;

Or: Commercial or industrial land of a typical rate per square metre for an area of a size comparable to the area of the occupancy;

Or: Farmland as the paddock value for rural type occupations.

In making this decision it must be recognised that there is a relationship between the land value basis, the land value percentage adjustment and the rental rate. We note for example in the New South Wales formula a high percentage adjustment is used (50% of land value) but a lower rate of return (3.05%).

The reasons for adopting the value of the Adjoining Land include:

- Generally it can be clearly established and verified
- The rents are for water based uses and the adjoining land best reflects the amenity value offered by the water use/access factors. The market for land adjoining the water is also likely to be the most accurate at reflecting the market situation for the occupations.
- Using the available rental information as a guide to the actual rent or rental check ensures that rents are not high due to high land values.
- It enables a consistent approach across the widest range of occupation types.
- It makes appropriate adjustment for location.
- While the actual use of an occupancy does not form the basis for charging, the adjoining land value appropriately reflects the benefits offered by each situation. For example a site that adjoins commercial land and has potential for a range of commercial uses will attract an appropriate commercial based rent (not specific to any particular use).

8.1.1 Adopted Land Values

Issues:

- We have reviewed the approach considered by another Regional Council (as it relates to the distance from MHWM) and conclude that it does not relate to the EBOP district due to the geography of the region. For example in this district moorings are concentrated into small clearly defined areas and within each area the different distance from shore for each mooring is not a factor that will impact on value.
- We do however consider that for the purposes of establishing the base “adjoining land values” the overall EBOP coastal marine area can be broken into a number of zones. The values adopted for each zone are a fair representation of the adjoining
land values for all land within the zone. The zones are shown on the plans prepared by the EBOP staff.

- The zones aim to reflect the locational factors that relate to adjoining land uses. From this, the values within each zone aim to be a fair representation of the base land value for the uses in that zone.

- For the calculation of the residential land values per square metre we have assumed a standard section size of 700 square metres over the whole region.

The table below outlines the proposed zones (as shown on the associated EBOP plans) and the associated *adjoining land values*.

**Land Value Table**

<table>
<thead>
<tr>
<th>Area</th>
<th>Adjoining Land Values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tauranga Harbour</strong></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>Rural, ($ per ha) 60,000</td>
</tr>
<tr>
<td>Matakana Island</td>
<td>Residential Site 300,000</td>
</tr>
<tr>
<td>Balance of Harbour- Residential</td>
<td>Residential 700,000</td>
</tr>
<tr>
<td>Tauranga City Central Commercial</td>
<td>Commercial-central (psm) 2000</td>
</tr>
<tr>
<td>Tauranga City Peripheral Commercial</td>
<td>Commercial-periphery (psm) 1000</td>
</tr>
<tr>
<td>Tauranga City Industrial</td>
<td>Industrial (psm) 200</td>
</tr>
<tr>
<td><strong>Ocean Coast</strong></td>
<td></td>
</tr>
<tr>
<td>Waihi Beach</td>
<td>Residential Site 700,000</td>
</tr>
<tr>
<td>Tauranga City (Mt Maunganui, Papamoa and Pilot Bay)</td>
<td>Residential Site 1,200,000</td>
</tr>
<tr>
<td>Maketu to Opotiki township including Ohiwa Harbour</td>
<td>Residential Site 350,000</td>
</tr>
<tr>
<td>Ohope</td>
<td>Residential Site 600,000</td>
</tr>
<tr>
<td>Opotiki township to Cape Runaway</td>
<td>Residential Site 100,000</td>
</tr>
<tr>
<td>Waihi, Maketu Estuaries and Ohiwa Harbour Rural</td>
<td>Rural, ($per ha) 30,000</td>
</tr>
<tr>
<td><strong>Whakatane River</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commercial 500</td>
</tr>
<tr>
<td></td>
<td>Industrial 200</td>
</tr>
<tr>
<td><strong>Opotiki Township</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Residential Site 40,000</td>
</tr>
<tr>
<td><strong>Offshore</strong></td>
<td></td>
</tr>
<tr>
<td>Residential on an Island</td>
<td>Residential Site 50,000</td>
</tr>
<tr>
<td>Offshore Rural rate</td>
<td>Rural ($per ha) 20000</td>
</tr>
</tbody>
</table>
Notes: The commercial and industrial land values are “dollars per square metre” (psm).
The residential land values are based on a site of 750 square metres

8.2 What is the Appropriate Adjustment to the Base Land Value

The adopted land value needs to be adjusted to reflect the fact that the occupancy is over water rather than being solid land.

Issues that effect the size of the adjustment:

- The weight of evidence is in the 60% to 66% range to reflect the fact that the value is not actually for solid land but for an area that comprises seabed and water. (The evidence does extend from 30% to over 66% in some circumstances). For a lot of uses this is not actually a negative issue. For example a boat shed is most conveniently placed on the water, a marine farm simply provides the appropriate site to generate an income based on aquaculture and the mooring for a floating restaurant may have no less value as a site than a parcel of commercial land for a standard restaurant business.

- It may be possible to work out the value of a seabed site as the residual component in a land reclamation development. The seabed site value would be calculated as the fully developed land value, less the costs to reclaim the land. The Port of Tauranga Sulphur Point development is an example of this situation. While there are a large number of variables in this type of analysis, we consider it likely that the seabed or site value could easily be 50% or more of the developed land value in residential, commercial or industrial situations.

- Communities place a high value on the marine environment. The only sales of the seabed that we are aware of are the marine farm occupation transactions. These certainly appear to be at levels that are well above the adjoining rural land values. They are more in line with the potential economic returns that are expected from the developments. We are aware of historical situations were developers have purchased land for the purposes of building marinas or canal type residential developments. In these situations the developer is paying the full land price to create a partial marine environment.

The established range of adjustments is:

1. 30% of land value adopted in the Washington State legislation.

2. 50% of land value adopted in the New South Wales IPART report. Also adopted in British Columbia for utility occupation rentals and general aquatic occupations and in general practice in New Zealand for easements such as gas pipelines.

3. 60% to 66% as historically used by the Ports of Auckland for wharf, jetty and boat ramp type occupations and discussed in the New Zealand literature as an established basis. This is also the range for marina rent settlements where the adjoining land is considered to be comparable to the marina use.

4. 66% proposed in the Auckland Coastal Occupation Charging regime.

5. 100% is used or recommended in a number of situations.

Land Value Percentage Adjustment Conclusion
Having reviewed the evidence that relates to this issue and the relationship with the other factors adopted in the calculation formula we conclude that the appropriate discount for this charging regime is 40% of the full land value.

That is, the Adjustment Factor (for the sea based nature of the occupation) to be applied to the Adjoining Land Value is 0.6.

8.3 What is the Appropriate Rental Rate and Rent Review Period

Issues:

- Returns to bare land tend to be lower than the return achieved for commercial or industrial buildings. This in part reflects the fact the vacant land does not include any depreciating component in the investment.

- Investment returns vary depending on factors such as the frequency of rent review, the rate of appreciation of the asset and returns available from alternative forms of investment such as bank deposits.

- The returns from residential rental property are generally lower than for commercial or industrial property. This is partly because the residential market includes a wide range of buyers who are not buying for investment reasons. It is also noted that traditional farm income, as a return on asset value, has always been very low.

The range of national and international evidence is:

1. 3.05% adopted by the New South Wales IPART report with well laid out reasons, and being in the mid point of the range for residential rental investment property.

2. 4.5 to 7.5% for the non-moorage portion of marinas in British Columbia and for other aquatic occupations.

3. 5.0% in Washington State for non-marina occupations and suggested in the Auckland proposed charging regime based on three yearly rent reviews.

4. New Zealand property returns at 7-9% for standard commercial or industrial property (in a good location), 4-8% for residential rental property and around 6-7.5% for ground rents depending on the review period.

Conclusion on Appropriate Rental Rate and Rent Review Period:

As the occupation charges relate to an asset that excludes any improvements the rate will be at the lower end of the range as supported by the well-established vacant land rates. These rates are typically used in port, crown, and local authority ground leases.

It is likely that the rents will be reviewed (or the charging regime indexed) on a regular basis, which also puts the rents at the lower end of the range.

We conclude that the appropriate Rental Rate is 5.5 percent and that the rent review period be five yearly.
8.4 **Public/Private Loss/Gain Adjustment**

The Coastal Occupation Charge recognises the fact that each occupation has a varying degree of impact on the loss of public amenity. This is a reflection of both the physical nature of the use and the terms and conditions of the occupation agreement.

A submerged cable causes minimal public loss compared with a boat shed on a prominent waterfront site. A jetty that is for the total exclusive use of the occupier creates a higher public loss than the same jetty that allows for full public use.

There are some occupations where there is a debate regarding the loss/gain. For example seawalls that protect private residences have a high level of private gain. The degree of public loss is being debated with the two sides of the debate being that the wall offers protection to the land in general (and it may be reserve land in front of the house site) and therefore there is a public gain. The other side is that the public say that the wall is an unattractive intrusion into the natural environment and there may be evidence that the wall does not protect the immediate coastal environment in the long term.

**Adjustment Factors**

The following factors and issues are of assistance in determining the level of adjustment that should be applied for the gain/loss.

- Some rents already reflect the public loss/private gain and therefore can be used as a benchmark for the calculations. This particularly relates to moorings where the market rent reflects the right to occupy a specific portion of the total estate in a very define manner.

- Easement and Right of Way valuation protocol (New Zealand and overseas) confirms that when a right of use is granted that offers a benefit to the occupier and varying degrees of restriction to the underlying land owner there is an appropriate level of payment made. This is usually a lump sum where occupation is permanent or a rental if it is for a defined period. Gas pipeline, cables, and access rights of way are common examples and the payment is usually based on 50% of the land value.

- The value of land can be described as the present value of the bundle of rights offered by the land. The benefits that that the harbour or sea offer can be broadly split into three areas being:
  1. The vertical space above the water. This offers visual or passive characteristics (the sense of space, view, etc).
  2. The surface level of the water. This relates to the ability to undertake activities on the water.
  3. The below water level area. This relates to both the environmental aspects that society values (a location for the preservation of wildlife etc) and the activities that people undertake that utilise various aspect of the submarine level (fishing, swimming etc).

The granting of a marine occupation will impact on some or all of these benefits. For example a seabed cable will not impact on the visual or passive
factors but may impact on the ability to undertake recreational activities to a degree (no fishing or boat mooring adjoining the cable.

If the value of the marine asset was split evenly between the three benefits then the split could be used directly as the basis for calculating public/private loss/gain. For example if an occupation results in the total loss of the ability of the public to undertake leisure activities on the water but the visual and environmental aspects were not impacted then the degree of public loss may be 33% of the value. However the split in value is not that clearly defined but the underlying philosophy of the principle is an additional guide for calculating the degree of public loss.

- It must be recognised that some occupations have an impact on an area wider than the physical occupancy. For example a cable may be 0.1 metres wide but the restricted anchoring area may be 50 metres either side of the cable.

**Conclusion on Public/ Private Loss/Gain Adjustment:**

From our overall analysis we have adopted the adjustments for loss/gain factors as shown in the table following.

This factor relates only to rentals that are based on the *Comparable Land Value Methodology*. Mooring and marine farms already have the loss/gain element factored into the rents.

The adjustments as shown in the schedule are the percentage of the full rent that the occupier must pay, i.e. a twenty five percent retention of public benefit is expressed as “the full rent x 0.75”.

The 50% adjustment adopted for many occupancies is a strongly supported factor for situations where the actual use is not visible.

A 100% deduction reflects an occupancy that is effectively there for the public benefit (e.g. a traffic bridge or an artificial surfing reef).

In the schedule below the left hand column is for occupations where the permit grants full exclusive occupancy rights to the occupier i.e. the public are excluded.

The right hand column reflects the situation where the public are allowed to use the space. It is also recognised that for some situations the public may retain restricted access or use rights in which case the charge should be in between the relevant two charges.

Examples of the situations where the public may have some use are a private jetty that is accessible to the public and which they are allowed to use. The major marinas are in this category to a degree in that the public are allowed access during specific hours (for fishing etc).
## Public / Private Benefit Adjustments

<table>
<thead>
<tr>
<th>Occupancy/Structure type</th>
<th>Percentage Adjustment</th>
<th>Available for Public Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrecked vessel, Artificial reef</td>
<td>0.50</td>
<td>0.0</td>
</tr>
<tr>
<td>Boat ramp</td>
<td>0.50</td>
<td>0.25</td>
</tr>
<tr>
<td>Pipe, Cable</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Groyne, jetty, seawall, wharf, bridge, walkway, Scientific Equipment, Access Culvert, slipway</td>
<td>0.75</td>
<td>0.50</td>
</tr>
<tr>
<td>Manhole, Pipe outlet, non access culvert</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>Maimai, building, marina, boat shed</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Commercial wharves – adjacent to wharf area</td>
<td>NA</td>
<td>0.10</td>
</tr>
<tr>
<td>Commercial wharves - area of wharf structures</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

### Miscellaneous (structure not listed above)

| Occupations of less than 25 square metres                                                | 0.5                   | 0.0 or 0.50 depending on nature of public access |
| Covered at high tide                                                                     | 0.0 or 0.50 depending on nature of public access |
| Between high tide and 1.5 metres                                                        | 0.75                  | 0.0 or 0.75 depending on nature of public access |
| Greater than 1.5 metres above adjoining land                                              | 1.00                  | 0.0 or 1.0 depending on nature of public access |
| Occupations of greater than 25 square metres                                              | Case by case basis    |

### Exceptions

| Occupations by public organisations, where the structure is provided with public funding for fully public use | N/A | 0 |
| Occupation for the predominant purpose of gathering scientific data:                       | N/A | 0 |
| - where that data is available to the public at no cost,                                     |     |   |
| - and the occupation does not exceed 3.5 hectares                                             |     |   |
| Navigation aids                                                                           | 0.0 | 0.0 |
Note: Local Authority Occupations

As a general rule, local authority occupancies that are provided for the general public or rate payers (ie where the service is paid for out of rates) are regarded as having a full public benefit and therefore has a 100% deduction in the charge.

If the local authority occupation is established for a specific group of ratepayers and the defined group pays for the development, then the occupation is along the lines of a private occupation. This will occur in the situation where the local authority is the most appropriate entity to organise/coordinate the occupation on behalf of a group of individuals. An example may be a seawall that is for the specific benefit of a small group of ratepayers but the local authority organises its construction while the beneficiaries pay for it over and above their general rates.

8.5 Summary of Rent Calculations By the Comparable Land Value Method

The steps in calculating the rent are as follows:

1. Determine the Zone in which to use is located (from EBOP plans).
2. Determine the Adjoining Land Value (see Land Value Table).
3. Apply the land value Adjustment Factor. (0.6)
4. Multiply the adjusted land value by the Return Rate. (5.5%)
5. Apply the public/private loss/gain adjustment. (Table above)
6. Multiply the result by the area of the occupation.

Note: The rural values are required for occupancies that have a distinctive character such as fences and cables etc that are in a rural situation.
9 Occupation Rent Calculations: Swing Moorings

9.1 Comparable Rent Information

The New Zealand market evidence appears to range from $50 per calendar month (pcm) to $250 pcm including tackle ($600 to $3000 pa). The $50 pcm rate reflects a situation that is in a muddy stream accessible only at high tide. Swing and pile moorings in a managed marina situation start at $8.0 per night on a casual basis ($15 per week in the non marina situation at Whakatane River). As noted a Tauranga Harbour mooring was recently advertised at $15 per week.

We understand that new tackle costs around $2500. A 15 percent return on this portion of the asset (reflecting the high depreciation) equates to around $400 for the capital portion of the rent.

For a swing mooring on the Tauranga Harbour we conclude that for a 10-metre boat in a situation of average appeal (access location etc) a conservative mooring rental must be at least $800 pa.

Adopting a rent of $800 and deducting the return to the capital of $400 gives a mooring site rent of $400 (ten metre Boat).

9.2 Rental Check: Other Locations

New South Wales mooring site rentals range from $A260 to $A592 depending on the quality of the location (see also other countries example quoted under heading 6.1 on page 10).

9.3 Rental Check: Alternative Boat Storage Options

Commercial Hardstand:

Hard stand storage within a marine situation and in a commercial storage compound are at similar rents of around $900 to $1,000 pa (Tauranga City).

Home Storage:

An owner has the option of storing their boat on their own residential section. In essence they have to own the appropriate area of land to store the boat and there is a cost associated with this investment.

The land value for the 40 square metres of land required to store a 10m boat on a trailer based on a standard 600square metre section with a value of $150,000 is $10,000. At a typical ground rent rate of 7% this equates to a rent of $700 pa.

Reflecting on the New South Wales Independent Pricing and Regulatory Tribunal report adopting a residential return may be appropriate. These are in the order of 5% to 7%, so adopting 6% gives a rent of $600 pa including a minimal degree of site development.
Marina Berth:

For a 10m boat the minimal berthing typically starts at around $270 pcm including all services (i.e. $3,240 pa)

9.4 Rental Check: Alternative Asset Storage

Boats typically have a value of at least equivalent to a car and standard carpark rents (uncovered and unsecured) are at $10 per week minimum in the broader Tauranga location. This indicates that the market is prepared to pay $520 pa to store an asset of similar value to a boat.

9.5 Swing Mooring Rent Conclusion

We consider that the indicated rent of $400 pa for a mooring site in the Tauranga Harbour within the Tauranga City Council boundaries is well supported by the broad range of evidence. This is adopted as the base level in our calculations for the Occupation Charge calculations.

From this figure we have adopted the following charges using the relativities of the residential land values as a guide:

<table>
<thead>
<tr>
<th>Location</th>
<th>Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moorings in Tauranga Harbour within Tauranga City Council Area:</td>
<td>$400 pa</td>
</tr>
<tr>
<td>Moorings within Tauranga Harbour within the WBoPDC area:</td>
<td>$315 pa</td>
</tr>
<tr>
<td>Whakatane River and Ohiwa Harbour</td>
<td>$230 pa</td>
</tr>
<tr>
<td>Waioeka and Otara Rivers</td>
<td>$150 pa</td>
</tr>
<tr>
<td>Other Situations</td>
<td>$100 pa</td>
</tr>
</tbody>
</table>

Note: These rents are for a ten-metre boat.
10 Occupation Rent Calculations: Marine Farms

10.1 General

We consider that there are four potential methods of calculating these rents being:

1. The return to the per hectare rates established from the available sales evidence.

2. Return on an assessed aquacultural value per hectare along the lines of the British Columbia example. The per hectare rates would relate to the economic production of the activity. This approach would require a significant level of analysis of the industry and its economic factors.

3. A comparable land value approach (adjoining rural land) as per outlined above.

4. The return calculated as a percentage of farm turnover.

Issues:

• We note that internationally the marine farming industry appears to be in varying states of economic strength. The UK information that is associated with the setting of marine lease rents takes a very conciliatory approach to the rents in acknowledgement of the declining fortunes of the operators. However by contrast the British Columbia rents appear to be at a non-concessionary level.

• The New Zealand industry is in a state of flux with limited investment at present. This is perhaps more of a reflection of the political situation rather than the economics of the industry.

• The region includes three types of farm being the small intensive, harbour based operations and similar intensive near-shore coastal operations plus the very large offshore proposals that are only in development stages at present.

• The loss of public amenity in the small intensive marine farms is in line with other occupancies, while the very large offshore farms are situated in the context of a much large environment and the loss of public amenity is considerably less.

• The available sales evidence relates to the small intensive units and there is as yet limited national sales information on the larger developments.

• The larger developments are less productive on a per hectare basis than the intensive units, with production perhaps in the order of one quarter of the small units. They also have higher costs to set-up and operate.

• The offshore farms are less intensive and therefore must be less valuable on a per hectare basis. They also allow for a greater degree of public access.
10.2 Conclusion on the Methodology to Marine Farm Rents

Having reviewed the options and issues above we conclude that the most appropriate method for these rents is to calculate the return based on marine farm sales. The reasons for this are:

- The information is market based. This eliminates the inconsistencies that could arrive with the more hypothetically based options adding a degree of robustness defensibility to the assessment.

- The approach best reflects what the private operator is prepared to pay for the right to occupy the public amenity.

**Intensive Marine Farm Values**

From our analysis we consider that the rate of $40,000 per hectare is appropriate for the seabed occupancy value for the intensive harbour based farms and $20,000 per hectare for the intensive near-shore coastal operations. These relate to developments that would typically be up to 10 hectares in total area.

**Extensive Marine Farms - Developed Portion**

For the larger offshore developments (up to 5000 hectares) we consider that it is appropriate that the rent be split between the areas that are actually developed and the areas that form part of the occupancy but are as yet undeveloped. This reflects the fact that there is a considerable difference is the degree of public loss between the two situations.

The extensive farms require up to four times the area of an intensive farm to achieve the same level of output so the adopted per hectare rate is divided by four as a starting point. However this requires further adjustment for the higher levels of capital and operating costs that reduces the profit per production and per hectare. On the basis of the additional costs we proposed a further reduction of 30% to arrive at the per hectare value of the extensive developments.

Based on the rate of $20,000 per hectare for the intensive coastal developments the extensive farm value is:

$20,000 \times \frac{1}{4} \times 70% = \text{\$3,500 per hectare value for extensive marine farms.}$

**Extensive Marine Farms – Undeveloped Portion**

The undeveloped portion of the extensive marine farms is sea to which the public has virtually full access. The public’s use is however restricted to a small degree simply by the existence of the right to occupy. There is also a private benefit to the occupier in that right.

We therefore propose that the value of the undeveloped portion of extensive marine farms be set at ten percent of the full extensive farm value.
10.3 Marine Farms Occupation Charges

The occupation rents noted above are considered to reflect the degree of public loss/private gain as they are based on the markets direct interpretation of the value of the occupancy (as compared to the comparable land value approach used for other occupations). This is in line with the mooring rents. Therefore the occupation charge can be assessed simply by applying the appropriate rate of return to the per hectare value.

We consider the 5.5% rate to be appropriate for these occupations and the resulting Marine Farm Occupation Charges are as follows:

**Intensive Harbour Based Marine Farms:**
$40,000 \times 5.5\% = $2200 per hectare

**Intensive Coastal Based Marine Farms:**
$20,000 \times 5.5\% = $1100 per hectare

**Extensive Marine Farms:**
$3,500 \times 5.5\% = $192 per hectare

**Undeveloped Extensive Marine Farm Areas:**
$350 \times 5.5\% = $19.2 per hectare

We recommend that the increase in the charge from the undeveloped stage to the developed stage be progressive over the expected period of the development.
11 Occupation Charges Relativity Checks

The calculation for charges other than moorings and marine farms are shown in the appendices.

Outlined below are samples of the overall charges listed against other rents to confirm the appropriateness of the overall level of charges as well as comparisons between the various charges to confirm the appropriateness of the different calculation methodologies.

Comparable Use Analysis

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Charge</th>
<th>Comparable Use</th>
<th>Comparable Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mooring: Tauranga City location</td>
<td>$400 pa</td>
<td>Hard stand storage</td>
<td>$900-$1,000 pa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Car park rental</td>
<td>$520-$650 pa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Home site storage</td>
<td>$600 pa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moorings other NZ locations</td>
<td>$600 pa minimum</td>
</tr>
<tr>
<td>Boat shed Tauranga City location</td>
<td>$985 pa</td>
<td>Purchase water front land</td>
<td>$1642 pa on $700,000 LV</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marina berth</td>
<td>Minimum $3240 pa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stacked boat storage</td>
<td>Minimum $3000 pa</td>
</tr>
<tr>
<td>Marina: based on the calculated per berth amount</td>
<td>$1200 pa per berth</td>
<td>Compared with the current total berth rent</td>
<td>Minimum $3240 pa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rental of comparable industrial land</td>
<td>Over $1400 pa</td>
</tr>
<tr>
<td>Mooring for commercial use (e.g. floating restaurant)</td>
<td>$66 per m²</td>
<td>Adjoining commercial land for building rent</td>
<td>$130 per m² or more</td>
</tr>
</tbody>
</table>
Review of Proportionality of Charges

Note: The charges below are based on the actual occupation sizes as outlined in the original schedule supplied by EBOP staff. The actual areas of the occupations vary.

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Charge</th>
<th>Proportion of Swing Mooring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swing Mooring Charge (Tauranga)</td>
<td>$400</td>
<td>1.0</td>
</tr>
<tr>
<td>Boat Shed (Tauranga)</td>
<td>$950</td>
<td>2.38</td>
</tr>
<tr>
<td>Boat Ramp</td>
<td>$410</td>
<td>1.02</td>
</tr>
<tr>
<td>Jetty (no public use)</td>
<td>$495</td>
<td>1.24</td>
</tr>
<tr>
<td>Marina berth</td>
<td>$1200</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Conclusion: There appears to be a logical relativity between comparable occupancies that take up varying portions of the public domain.
12 General

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Property Solution wishes to thank the EBOP staff and particularly Aileen Lawrie for their assistance and support in undertaking this project.
13 Bibliography

General References


Critique of “Coastal Occupation Charges Discussion Document” Richard Ball. 2004


Coastal Rental under the RMA: Wayne Kimber 1994

Economic Analysis of Coastal Occupation Charges: Craig Welsh 2002


EBOP resource consent data for details on the nature of occupation permits.

Web References

New Zealand Mooring and Marina Rental and Sale Information

Noonsite.com, Trademe.co.nz, Sellit.co.nz, Boatsalesnz.com, Yatchsalesnz.com and apolloduck.co.nn indicate what is currently available in the market

The main marinas have web sites that advise rents, charges and berths for sale. These include the Nelson, Gulf-Harbour, Tauranga Bridge, Pineharbour and Opua marinas

General Web References

Royal Institute of Chartered Surveyors (UK)

contactrics@RICS.org

Public Works and Government Services Canada: Appraisal and Valuation Services. (Water lots)

www.pwgsc.gc.ca

Australian Property Institute

www.propertyinstitute.com.au

Department of Lands and Waterways (Australia)

www.lands.gov.au

Parks Victoria (Australia)

www.parkweb.vic.gov.au
New Zealand Fish and Game  
www.fishandgame.org.nz

Aquaculture in New Zealand  
www.fish.govt.nz

The Crown Estate (UK)  
www.thecrownestate.co.uk

(for example RCW 79.90.480)  
www.leg.wa.gov/RCW

Independent Pricing and Regulatory Tribunal (Australia)  
www.ipart.nsw.gov.au

Aquaculture Legislation for the Commonwealth of the Bahamas  
www.fao.org/docrep

The Global Site for Cruising Sailors  
www.noonsite.com

Land and Water British Columbia  
www.lwbc.bc.ca

Royal Yachting Association (UK)  
www.rya.org.uk/

Hampshire County Council  
www.hants.gov.uk

New South Maritime Authority  
www.maritime.nsw.gov.au

**Note:** The majority of international data was sourced from the web. This covered a wide range of supporting information predominantly relating to central, state and local government agencies in the management and disposal of marine occupations and land associated with the marine environment. The disposal of the land was in the form of sale, tender, leasing and licensing and outlined a range of methods for the establishment of rents.

The web did include information from private organisations and those on the other side of the book to the government agencies.

Contact was also made with the Royal Institute of Chartered Surveyors (UK) via the web and email and the UK equivalent of the Office of the Valuer General.
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Garth Laing
Registered Valuer, ANZIV, SNZPI

Encl.
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