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**APPRAISAL GUIDELINES**

# Water Lots

**PURPOSE**

These guidelines provide an understanding of the policy on water lot appraisals, riparian and other rights and legislation affecting water lots, and describes the basic methods for the valuation of water lots.

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## 1.0 PREFACE

- 1.1 Estimating the market value of submerged lands is one of the most challenging assignments an appraiser will face. Because of the difficulty in finding tangible market evidence of water lot transactions, the appraiser's conclusions may often appear to rely heavily on subjective analysis.
- 1.2 There are no miracle techniques to simplify the problem of water lot appraisals. To minimize objectivity concerns and to ensure that the value conclusion is accepted by the market place, the appraiser must provide a convincing analysis of all factors affecting the use of the waterlot. Moreover, the appraiser must understand some basic terms, characteristics, rights, legislation and regulations concerning the use of water lots.
- 1.3 To assist appraisers in their analysis and evaluation, this guide:
  - describes the characteristics of a water lot,
  - indicates the rights affecting the waterlot,
  - outlines some typical problems in the appraisal of a water lot, and
  - describes the basic methods for the valuation of water lots.

## 2.0 POLICY

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- 2.1 Water lots must be appraised in accordance with standard professional appraisal practises. This guideline describes the basic methods for the valuation of water lots.
- 2.2 When appraising a water lot for purposes of transfer of ownership, the appraiser must obtain appropriate information concerning a description of the subject property, and all rights of ownership, including federal and provincial legislation affecting its usage from the PWGSC Regional Land Surveys Officer and/or Department of Justice Legal Services Officer.
- 2.3 When basing the value of a water lot as a percentage of the upland value (see paragraph 6.7), the report must contain justification for the percentage applied. Ideally, the justification will consist of an analysis of appropriate market data.

### 3.0 WATER LOT CHARACTERISTICS

#### 3.1 Definition of a Water Lot

The Appraisal Journal (Volume 45, No. 1, P. 70) defines water lot as “an area of land either contiguous or attached to dry land, or it may be entirely separated from dry land; and is usually covered with water, but not necessarily at low tide. It may be partially filled”.

Simply put, a water lot is “land” covered by water at some time. The depth of the water covering the land can be an important factor in determining the highest and best use or proposed use.

#### 3.2 Title to Water Lots

Historically, like upland properties, submerged lands within navigable waters are under the jurisdiction of respective provincial crown agencies or, in some instances, a federal crown agency. A water lot is established when a patent describing the land is created by the provincial or federal Crown usually through the issuance of an Order-in-Council. The appropriate land title or land registry office will then create an abstract of title for the water lot area. The abstract of title is a chronological statement of the instruments and events under which a person is entitled to property.

As water lots can have an impact on the rights of other private and public interests (e.g., upland owners' riparian rights and public water navigation), they are subject to numerous acts and regulations. In addition, crown agencies have preferred to lease water lot areas rather than sell the fee simple interests, although there are instances where the fee simple interests of water lots are held privately.

#### 3.3 Typical Water Lot Use

Water lots were created to provide specific rights of use to defined water lot areas, usually for the following five basic uses:

##### Navigational

- a. Dock access
- b. Navigational aids

- d. Loading and unloading
- e. Temporary mooring
- f. Breakwaters, training walls, dykes

##### Storage Lots

- a. Storage of ships, barges, houseboats, aircraft etc.
- b. Log storage
- c. Shipbuilding and vessel repair

##### Recreational Lots

- a. Marinas, private moorage
- b. Pleasure craft storage
- c. Clear view aesthetics and environmental protection
- d. Boat launching ramps

##### Providing an Extension to Uplands

- a. Land Fill
- b. Wharves and Docks
- c. Piers (supporting a building structure or decking)
- d. Water Intake Pipes & Submerged Utility Cables
- e. Houseboat sites and year round “live-aboards”
- f. Bridges and abutments

##### Aquaculture Lands

- a. Commercial shellfish and salmon net pens
- b. Recreational shellfish harvesting

#### 3.4 Functions of Appraisals of Water Lots

Generally PWGSC's clients require valuations of water lots for two functions:

- to support an acquisition or sale of lands from or to an owner other than the federal Crown. In these instances, a market value estimate is required, as is required for other types of real estate transactions; and
- to provide a basis on which rental rates can be established for the purpose of leasing the water lot. In this case, valuation might not be based on the market value of the property, but on a formula in accordance with an established policy or convention.

## **4.0 PROBLEMS CONFRONTING THE WATER LOT APPRAISER**

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The water lot appraiser encounters a number of concerns not usually experienced by the upland appraiser. These include a lack of comparable market data in a given area, unusual legal and regulatory factors affecting water lot usage, and physical characteristics of a water lot which may be difficult to determine or document, let alone translate into a value.

#### **4.1 Lack of Comparable Market Data**

Because there may be few open market sales and little leasing activity, the appraiser often finds it difficult to use the Direct Comparison Approach. The vast majority of water lots are owned by either the provincial or federal Crown. Government agencies over the years have preferred to lease out water lot areas rather than sell the fee simple rights.

#### **4.2 Unusual Legal and Regulatory Factors**

An upland or riparian owner has rights of access to water fronting the upland and rights of usage of water. These rights may have an impact on or restrict the use of the water lot. The appraiser must understand both the rights of upland owners and the rights' effects on a waterlot.

The appraiser must also understand all legal and regulatory factors affecting navigable and non-navigable waters. Water lots are subject to numerous federal and provincial acts and regulations that specifically control water lot usage. The appraiser must either be aware of or seek specialised advice concerning legal uses of the water lot.

#### **4.3 Limited Supply/Demand Factors**

Because of the riparian rights of upland owners, water lots are often not developed independently but rather in conjunction with the upland. The value of this type of water lot to the owner of the upland is therefore latent, whereby the water lot generally gains significance only when the contiguous upland owner desires it. In many situations, the demand for a water lot is initiated by an upland user. The appraiser may have difficulty analyzing normal supply/demand forces affecting the market for water lots. The highest and best use under normal market forces may differ from upland dictated uses of the water lot.

#### **4.4 Restrictions on Permitted Uses**

Water lot leases ordinarily have restrictions on permitted uses. It is usual, then, for the rental valuation to be predicated on the assumption that the permitted use stated in the lease agreement is the highest and best use. The appraiser must analyze and adjust selected comparable sale or lease properties for these restricted uses.

#### **4.5 Physical Characteristics**

The appraiser may find it difficult to inspect, measure and describe the physical factors of a water lot normally considered in analysis of its highest and best use. These factors include:

- accessibility from both the adjacent upland and the nearest navigable channel;
- the water depth;
- easements and restrictions;
- ice conditions;
- low or high exposure to currents, waves, winds;
- period of usability; tidal influences and ice conditions may restrict the use of the water lot area to certain times of the day or seasons,
- availability of services;
- the submerged land surface's topography, and type and nature of the shoreline; and
- proximity/accessibility to markets (e.g., fish processing plants, tourist facilities).

Two seemingly identical upland properties may have water lots attached that are subject to significantly different water or topographical conditions, making comparisons difficult to establish.

Occasionally, surveyors establish the property limits of water lot areas using readily established reference points, rather than basing them on the minimum required area of the user. This results in water lot areas disproportional to the actual needs of and value to the user. The appraiser then has difficulty in determining suitable size adjustment factors for a Direct Comparison Approach.

#### 4.6 Reversionary Crown Interest

Some water lots may have a reversionary Crown interest; that is when the lot is no longer required for its original intended purpose, it reverts back to the provincial Crown. These circumstances may inhibit transfer or redevelopment to a higher use. The appraiser must ensure these factors are considered in the evaluation of comparable sale properties as well as the subject property.

## 5.0 IMPACT OF RIPARIAN RIGHTS & OTHER LEGISLATION

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5.1 Riparian and other rights, legislation and regulations can have a significant impact on the permitted usage of a water lot area. Riparian rights are perhaps the most common rights affecting all water front lands. In its simplest form, a riparian right is the right of an owner to the use and enjoyment of water that flows across or along his/her land. Littoral rights concern land abutting the shore of the sea or a lake. In English common law, the seashore belongs to the Crown and in most provinces belongs to the provincial crown. In Canada, the word "riparian" has replaced "littoral", with riparian rights used for all waterfront lands.

5.2 There are six categories of common law riparian rights traditionally associated with the ownership of waterfront lands. These are:

- the right of access to the water;
- the right of drainage;
- the rights relating to the flow of water;
- the right to undiminished quality of water (pollution);
- the right to use of water; and
- the right of accretion.

5.3 Over time, a waterfront owner's right to exercise riparian and littoral rights has been limited to some extent by federal and provincial legislation. These acts include the *Navigable Waters Protection Act*, the *Canada Shipping Act*, *Canada Water Act*, *Dominion Water Power Act*, *National Harbours Board Act*, *Public Works Act*, *Fishing and Recreational Harbours Act* and the *Canadian Environmental Protection Act*.

5.4 Land registry and land title legislation in various provincial jurisdictions may override normally recognized riparian rights (e.g. land ownership may be limited to a specific boundary line as opposed to a high water mark, low water mark, or water's edge). In addition, the laws and regulations may differ from province to province. The appraiser must therefore understand the title and legal descriptions of lands of upland owners that may affect the use of water lots, as well as the legislation and regulations where the water lot is located. The appraiser should obtain legal advice, where necessary, to ensure the subject property's proposed or existing usage complies with appropriate federal and provincial legislation and regulations.

5.5 A detailed discussion of Riparian Rights is found in the addenda.

**6.0 APPRAISAL TECHNIQUES**  
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**6.1 Seven Alternative Valuation Methods**

The appraiser must understand the physical and regulatory factors that affect the use of the subject and comparable properties for valuation purposes. For valuation analysis, if sufficient comparable data exists, the appraiser will normally use the Direct Comparison Approach for valuing a water lot. However, often the appraiser encounters either a limited market or an absence of market transactions.

Because of the lack of comparable market data and other limitations, five alternative valuation methods are presented that rely on a modified Direct Comparison Approach. In addition, two alternative methods have evolved where there are no comparable sales involving water lots.

**6.2 Zoning Method**

This method is based on the principle that the value of a water lot decreases as the distance from the upland increases. It is a recognised technique applied to many commercial rental properties where the highest value area is adjacent to the street or high traffic area and a lesser value is given to the rear lands or lowest traffic areas. This permits the appraiser to divide the lot into supportable value zones. For example, the 4-3-2-1 rule has been used in municipal tax assessment practises to value commercial sites on a graduated zoning basis. According to this rule of thumb, the front quarter of the site is worth 40% of the total value, decreasing to the rear quarter valued at 10% of the total.

For application of this principle to water lots, the appraiser must analyze a number of sales of water lots representative of the various zones of the subject property. In this application the nearest 1/4 water lot to the upland may be valued at 40% of the value of the whole; decreasing to 10% of the value of the whole for the quarter of the water lot furthest from the upland. The appraiser then totals the values of the various depth zones for an overall estimate of the market value of the water lot. Caution is advised to apply the four categories to only the usable areas of the water lot. There may be situations where the most outward area of a waterlot area may be unusable, and provide no value in contribution.

This method is considered at best a hypothetical method for estimating the value of a water lot. Without sufficient market data it becomes difficult to determine what comparable water lot sales indices are appropriate market indicators of each zone of the subject. If there is sufficient data on water lots sales available, the appraiser will likely use the Direct Comparison Approach. However, the Zoning Method is best used when sales data may be minimal and in combination with other techniques.

### 6.3 Overall Method

The Overall Method can be used when a water lot is to be valued as part of a combined parcel of upland and water lot. The principle is that the presence of the water lot contributes to the value of a parcel of land that includes both upland and water lot. In this case, the appraiser estimates the market value of the upland and waterlot combined, using a Direct Comparison Approach of other similar sale properties that have upland and water lot areas combined. The upland area of the subject is then applied to this value estimate to provide for a single unit rate representing the value of both areas.

In using this approach, the appraiser must take care to ensure that the comparisons between the subject and the sale properties are appropriate. The properties should have a similar ratio between upland and water lot areas. Adjustments for physical factors affecting both the upland and water lot areas must also be addressed, which could make this process complex.

This method has been accepted by the courts as an appropriate valuation technique. However, it can only be used when valuing the water lot as an integral part of the combined upland and water lot parcel.

### 6.4 Extraction Method

This is an extension of the overall method, where the appraiser estimates a total price for the upland and water lot area combined using the Direct Comparison Approach. The appraiser then determines the value of the upland by itself, using upland sales data (without water lots). Through subtraction of the value of the upland, the appraiser is then able to extract the value of the water lot itself.

### 6.5 Fill Cost Method

Through this method, the value of the water lot as though it were upland is valued first and then a deduction is made for the cost of the fill to provide a value of the water lot itself. The value of the filled water lot area is estimated first by way of the Direct Comparison Approach. Adjustments would normally be made to comparative upland properties to consider the fill area's lack of services. The appraiser then estimates the cost of adding fill to convert the water lot to a dry land area. The value of the water lot is then determined by subtracting the cost of the fill from the filled water lot area value. For example, if the upland value to be applied to the fill area after adjustment is \$800 per square metre when compared to competitive upland areas, and the cost of fill is \$600 per square metre, then the value of the water lot area existing prior to any attempt to fill is \$200 per square metre.

In practice, the appraiser may encounter some difficulty obtaining reasonable estimates by this method. Not every addition to an upland will necessarily achieve the full value of that upland. As well, the cost of fill will often exceed the value of the waterlot as upland. Expenses may be encountered for other related expenses, such as the cost of pilings, and soft costs such as the legal expenses necessary for regulatory approval to fill a hypothetical water lot. All such costs must be factored into the analysis.

The viability of filling the water lot will depend on the cost and availability of suitable fill and on the demand for such land when the filling operation is complete. A further complication is that the deeper the water, the more fill is required - resulting in less value for the water lot. In addition, unless vertical retainers are used, any filling of a water lot must create a smaller area of dry land in accordance to the required angle of repose, as all fill must be within the water lot's boundaries.

In using this method of valuation, the appraiser must ensure that the highest and best use indicates that an extension of the surface of the adjacent upland is appropriate. There is a danger that the appraiser's value may reflect an amount that the upland owner is willing to pay to extend the upland area rather than the price which a

typical buyer would be prepared to pay for the same water lot for water lot usage.

### 6.6 Capitalization of Water Lot Rent Method

Where there is an inactive market of water lot sales, the appraiser may find some activity with leasehold properties. Ground rent capitalization is an accepted land valuation technique which may be appropriate for water lots. It can be applied to the valuation of water lots by capitalizing the annualized net income of the rent proceeds obtained from a water lot. The appraiser must ensure that the rent rate used for capitalization is considered market and appropriately derived from arm's length rental transactions. There is a risk that the rental rate used may be based upon a use or utility value method, resulting in a "chicken or egg" situation. In other words, the rent used in estimating a capital value itself should not be based upon a hypothetical water lot value.

### 6.7 Water Lot Value as a Percentage of Upland Value

With this method, the appraiser establishes the value of uplands in the vicinity of the water lot being appraised and applies an appropriate percentage representing the value of the water lot in proportion to the value of the upland. In such cases, information, albeit sparse, must be analyzed to support the ratio of water lot value to upland value.

The appraiser must exercise considerable judgement in estimating a reasonable ratio of value between upland and water lot. In practice, this percentage has varied considerably - reported to range from 10% to 25% in eastern Canada and to 40% in western Canada. Appraisers have selected these percentages with perhaps more consideration being given to established pricing practises than to the existing or potential use of the water lot. These percentages may not be substantiated in all cases. However, existing file information and past analysis by some appraisers indicate that the few sales that have taken place tend to support these ranges.

### 6.8 Utility Value

The Utility Value method is an accepted practise in some areas of British Columbia for rent setting purposes. While there may be a ratio of value between upland and water lot area, the ratio can vary depending on the degree of use being made of the water lot area. The basic premise is that the use of the submerged land is integrated with the upland use, one being just as important to the overall use as the other. In the simplest application of this approach, once a wharf, pier or other structure is constructed on pilings or other structures sunk into a portion of a water lot, the appraiser considers the area of the water lot covered by the structure equivalent in utility to the upland; thus equal in value. The balance of the water lot then has successively decreasing values based upon intensity of use in relation to the area covered by the structure.

The Utility Value Method as applied in B.C. incorporates the following steps:

1. Each specific water lot fronting upland within a defined zone is surveyed and its area segmented into four defined categories of use by the client. Each category is determined based upon the intensity of existing or projected use it has with an upland zone use. The accepted categories of each waterlot, and their respective intensities of use expressed as a percentage of upland use are as follows:

- 100% - areas covered by fill, wharves, piers or any other permanent structure,
  - 50% - areas covered by gangways, floats, boathouses, berthage areas, mill ponds,
  - 25% reasonable ingress/egress to high use areas, and
  - 10% exclusive use intertidal areas and excess area of waterlot.
2. The appraiser defines the upland zones used for determining a comparable upland value using the following criteria:
- proximity of the waterlots to the nearest municipality or urban area,
  - common geographic features found in the upland area, and
  - similar land uses found in the upland area which correspond to the types of uses permitted in the water lot areas.
3. The appraiser examines sales activity in the defined upland zones and then estimates a zonal value for a similar category of water lot use. Assuming, for example, water lot uses in front of the upland within a defined upland zone are industrial in nature, the appraiser estimates an industrial land zone value based upon an average of market sales of comparable industrial land uses for a given period of time within that defined zone. The zonal value is normally expressed as a price per unit such as \$ X per ha or per sq. metre.
4. The water lot value is then determined by applying the upland zonal value rate to each category of water lot area at the specific percentage. The utility value of the water lot is then the sum of the values for each of the categories.

The value estimated by the appraiser is considered a utility value and is used for rent setting purposes only. To convert this value to rent, the utility value is then multiplied by an appropriate percentage given by the client. This method has been accepted by landlords and lessees such as harbour commissions and their tenants in British Columbia.

The water lot Utility Value Method is so labelled since it reflects a specific use value.

Only where the use value coincides with a value in its highest and best use can it be considered an estimate of market value. Some may argue that since the rental rates resulting from this approach are accepted in the market, the capitalized value (where market determined rates are used) of the waterlot rental rates can provide an indication of market value. Others allege that the monopoly situation enjoyed by the harbour commissions in determining water lot uses, supply, and value approaches, in realty, distort the market.

The Guideline on Summary Appraisal Reports (Form Reports) #1B3 includes a sample of the "Water Lot Utility Report" as applied in British Columbia.

## 6.9 Water Lots Surrounded by Submerged Lands

The techniques for valuation of water lots surrounded by submerged lands might be similar to those outlined above for valuation of water lots adjacent to dry land. The highest and best use of such a property may be so specialised or of such limited market appeal that only a use value may be applicable.

A possible technique would require the appraiser to compare the water lot surrounded by submerged lands with non-waterfront land where a co-relationship of use can be established (e.g., a lumberyard on dry land to log storage on a water lot). Adjustments for storage capacity, time usable, etc., would be required. The appraiser might consider this method appropriate, although the adjustments may be difficult to support.

## 6.10 Improved Water Lots

When the appraiser must estimate the value of an improved water lot, he/she may use any one or a combination of the above methods to provide an estimate of value "as if vacant and unimproved". The value of improvements can then be estimated and added to this vacant land value. The appraiser can estimate the value of the improvements by using a cost approach indicated in the Fill Cost method or by using an income approach.

The income approach will consider the economic value that might be generated from a water lot improved with a wharf. Here the appraiser estimates the net income that the wharf is able to

generate after deduction of annualized costs of operating and structural maintenance, taxes and management from the rent. The net income is capitalised at an appropriate rate determined from the market for an estimate of the value of the water lot and improvements.

## **7.0 SUMMARY**

The appraiser is faced with significant issues in the appraisal of a water lot, and must consider the following to provide for a comprehensive analysis:

- In most circumstances there is very little comparable market data of waterlots for direct comparison;
- The appraiser must thoroughly investigate the legislative, regulatory, and physical factors that affect the use of the subject waterlot;
- It is important for the appraiser to understand and analyze local conditions, customs and the behaviour of the local market for an appropriate estimate of market value of water lots;
- To minimise objectivity concerns, the appraiser must present a convincing analysis of all factors affecting the use of the waterlot;
- In many instances the appraiser's estimate is based upon the value which flows from the upland, and may therefore be regarded as a "use value" or "utility value"; and
- Valuation that is based upon a percentage of upland value has been accepted by the market in many situations.



## APPENDIX A

# Riparian Rights -- A Detailed Discussion

In common law the owner of lands adjoining a river, stream or lake has certain rights related to the use of water. The rights arise from the ownership of the bank, that portion which adjoins the upland with the water itself. The latin word for bank is "ripa" hence the rights are called "riparian", and the owner is similarly referred to as "riparian owner". Since riparian rights are part of common law, there is no requirement for them to be expressly conveyed in a deed or title certificate.

In Canadian law riparian rights may be classified under six categories:

1. the right of access to the water,
2. the right of drainage,
3. the rights relating to the flow of water,
4. the right to undiminished quality of water (pollution),
5. the right to use of water, and
6. the right of accretion.

### 1. **The Right of Access**

Access to the adjoining water is the basic right of a riparian owner. Without access to the water, a riparian owner could not enjoy the other rights.

The right includes access both to and from the water. On tidal waters, this involves the right to go on the shore (i.e., the land between the high and low water mark). On non-tidal rivers or lakes, this involves a right of access over the shoal waters to deeper waters where navigation can practically begin. The right of access extends across the entire length of a riparian owner's land fronting the body of water.

An example where a riparian owner would lose a right of access may involve a situation where land is required for a public work on a portion of the shore located in front of the riparian owner's land. Even though the owner may still have access from a portion of the lands to the water, the owner has lost the right of access to the water from lands fronting the public work itself. This would be considered a compensable item in an expropriation settlement even though no land is taken, and access is still available from other points on the riparian owner's remaining waterfront lands.

The riparian owner's right of access to waters must be distinguished from the public's right of navigation on the water and the public's right to fish. Navigation on a body of water may legally interfere with a riparian owner's right of access to some extent (e.g., a ship or a log boom, depending upon circumstances, temporarily anchored in front of private lands). The public in the exercise of its right of fishing, may, for example, land fish on the shore or dig for clams. While these acts may temporarily obstruct access to some degree, the right of access cannot be blocked by permanent fishing installations.



## 2. **The Right of Drainage**

Owners of land adjoining a natural stream have a right to drain their lands in the stream. Since the natural function of watercourses is to drain land within a specific drainage area, draining lands from areas outside the natural watercourse may increase the flow of water which could have an adverse impact on lands further downstream.

An upper riparian landowner may be held liable for damages to a lower riparian owner's lands. This could occur where an increased flow of water causes damage to the lower lands which is attributable to drainage of lands outside the natural watercourse.

## 3. **The Rights Relating to Flow**

A riparian owner is entitled to certain rights respecting the manner in which water reaches and leaves the land. An owner is entitled to permit water to flow through the lands as it has been accustomed to flow, substantially undiminished in quantity and quality. A riparian owner is also entitled to have water leave the land unobstructed.

There are some underlying rights which have evolved through practical considerations and court decisions. These rights include:

- a) The right to have water flow in its natural course.

While the riparian owner is entitled to have water flow down the stream to his/her land along its regular channel, a riparian owner may alter the course of the stream so long as it is returned to its normal channel without affecting the flow downstream.

- b) The right to prevent the permanent extraction of water from the stream.

If water is diverted from a stream, it must be returned to the stream substantially undiminished in quality and quantity. Accordingly, courts have decided that water diverted for the purpose of irrigation must be done without sensibly diminishing the flow of water downstream.

While a claim for minimal diminution (as in some irrigation projects) may not result in legal redress; where the damages may be appreciable, a claim for damages or an injunction to prevent the diversion may likely be successful. An example of damages being appreciable is where a town will divert water from a stream to suit its municipal requirements, resulting in a diminished downstream flow that leaves the remaining water stagnant and foul.

- c) The right to prevent the alteration of the rate of flow to downstream property.

While a total flow of water downstream might not be affected over a specific period; an upstream owner could potentially alter the times when the water will flow, by increasing or decreasing its rate. This might be required for replenishing a reservoir for an irrigation project, or a head pond for a hydro-electric facility.

With strict interpretation of the principle of an undiminished flow through downstream lands, an upstream riparian owner could be severely restricted in the use of water. The development and maintenance of control dams on an upper riparian owner's lands would be impractical with this type of interpretation. As well, it would be unfair since the upper riparian owner would not have a right equal to that of the lower owner to make use of the water.

Courts have made it clear that a riparian owner is entitled to a reasonable use of water in a stream or on adjoining land which of necessity, affects the flow downstream. Whether a use is reasonable requires consideration of all the circumstances including the size of the stream, the season of the year, the nature of the use and the operations involved.

- d) The right to have water leave land in its accustomed manner

As indicated in a) above, a riparian owner has a right to have water enter lands unobstructed. A riparian owner also has the right to have water leave the land unobstructed. The most frequent source of obstruction to be faced by an upstream owner are dams built downstream which can result in a flooding of upstream lands.

Court decisions have made it clear that any person who interferes with the course of a stream must ensure that the works substituted for the natural channel can adequately carry the water brought downstream.

#### 4. **The Right to Undiminished Quality of Water (Pollution)**

A riparian owner is entitled to the flow of water in its natural state. While an upstream riparian owner has the right to drain lands, the owner is not permitted to collect and discharge contaminants into the stream to the detriment of downstream riparian owners.

An upper riparian owner would not ordinarily be liable, where water in its flow carries with it, for example, oils or salts found naturally in the earth which affects the quality of downstream water.

#### 5. **The Right to Use of Water**

While a riparian owner does not own the water running in a stream, an owner may use it as it passes through the lands. Water cannot be granted, however access easements can be granted by land owners for its use.

Riparian rights of use differ between ordinary and extraordinary uses. The use of water for drinking purposes, watering stock and other domestic purposes such as washing are categorised as "ordinary uses". The use must be closely related to the adjoining land. Should an owner exhaust the water supply through ordinary uses, there is no liability for damages to a downstream riparian owner. Further, water from a stream that is used to supply properties that do not adjoin the stream would be considered extraordinary.

A riparian owner may make use of water for extraordinary purposes so long as it is incidental to the use of the lands. What amounts to an extraordinary purpose will depend on the general conditions in the area and other uses of the stream. A common example is the use of water for running a mill. Unlike a person who uses water for ordinary purposes, one who uses water for extraordinary purposes, must restore it to the stream substantially undiminished in quantity and quality. There is no right of first appropriation. A riparian owner has no first right of use of the water for extraordinary purposes over downstream riparian owners.

#### 6. **The Right of Accretion**

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The riparian owner is entitled to land created by accretion. There are two types of accretion. One is created by the gradual and imperceptible deposit of alluvium on the banks of a riparian owner's land. The other results from the gradual and imperceptible recession of the waters to a lower level. In either case the additional dry land normally belongs to the riparian owner. On tidal waters, a riparian owner's right to accreted land occurs only where the lands accreted are above the high water mark.

In practice, distinctions have been made between accretions which result from natural causes and those which result from man-made structures. An accreted portion of land which results from the action of water on man-made structures such as wharves, dikes, or breakwaters may not belong to a riparian owner. Court decisions concerning title to such accreted lands normally consider the circumstances of the land either forming gradually and imperceptibly or suddenly.

Riparian owners have the right to protect their property from invasion of water from the shore. The owners may take steps such as building a bulwark, dike or berm on their side of the water's edge to protect the lands from being washed away.

Encroachment of the water through erosion of the banks can occur because of changes in the flow caused by neighbouring owners. Anyone who for example, either removes material such as sand and gravel from a bed of a stream that may weaken the supporting bank structure, or constructs a barrier such as a breakwater which causes increased wave turbulence in front of a riparian owner's land, can be held liable for damages caused by the resulting erosion.

### **Riparian Rights and Current Legislation**

It may be said that the common law of riparian rights is geared to simpler times where perhaps only an adjoining owner was affected by waters. Today water affects more than the rights of adjoining owners of land, it affects the interests of the public.

To meet the demands of contemporary society it has been the practise to obtain statutory powers whenever they are seen to be for the public good. Over time, a waterfront owner's right to exercise riparian and littoral rights has been limited to some extent by federal and provincial legislation. In Canada to-day, the issue of riparian rights as developed under common law, is linked with the demands of contemporary society through many acts and regulations. This legislation includes the *Navigable Water's Protection Act*, the *Canadian Environmental Protection Act* and its provincial equivalents, the *Fisheries Act*, the *Commercial Fishing and Recreational Harbours Act*, the *Canada Shipping Act*, the *National Harbours Board Act*, the *Dominion Water Power Act*, the *Railway Act*, the *Public Works Act*, the *Expropriation Act*, and the *Land Titles Act*.

As an example of the above, the *Navigable Waters Protection Act* limits an owner's riparian rights. By this act, federal government approval is required to construct works on navigable waters. The federal government may also remove all works built without federal approval.





## APPENDIX B

# Terms Related to Submerged Lands

**ACCRETION** - The gradual and imperceptible increase in an area of land by natural causes e.g., by alluvial deposits resulting from movements of a river course or of the sea. Accretion can be caused by the washing up of silt or sand.

**AIR RIGHTS** - the use of air space above the water, the ground or a structure without impeding the original use of the property.

**BEACH AND DEEP WATER LOT** - a term used in some regions to describe and make a distinction between the portion of a water lot that is located between the high and low water marks and that portion if any, located below the low water mark (the portion of the water lot submerged on a permanent basis).

**BUILDING** - a structure which provides shelter for persons, animals and things. This is not to be confused with crib-work and earth filling done upon a water lot to raise it to the level of the adjoining dry land to render it suitable for the erection of buildings. This may be of significance to some water lot leases where the lessor may agree to pay at the end of a lease for "building and erections" then on the demised premises.

**COASTAL WATERS** - waters facing the sea.

**CONSENT FEE** - amount paid to the adjacent upland owner for his riparian rights, usually an annual fee by agreement.

**DERELICTION** - is the retreat of the sea exposing new land or land formed by the action of receding waters as the change in course of a river. If natural then it belongs to the upland owner.

**EASEMENT** - a right or privilege which the owner of a parcel of land (the owner of the dominant tenement) enjoys over the land of another (the owner of the servient tenement), in order to reap a benefit for the dominant tenement, but without taking any tangible profit from the servient tenement. A limited right to use, or to prevent the use of, the land of another which accommodates or improves the beneficiary's land, but grants no right of possession of land.

**FORESHORE** - The shore of the sea, or of any tidal water, that lies between the limits of the high and low water marks at ordinary tides. An area of land that may extend into creeks, channels, bays, estuaries or up navigable rivers as far as the tide flows; as well as the "sea shore" in common usage. When used in a conveyance, the words "seashore" and "foreshore" have the same meaning.

**LITTORAL** - is the term normally used in respect to tidal waters. The rights concerning land abutting the shore of a sea or a lake. However, this term is often used interchangeably with the term riparian.

**NAVIGATION** - the right of navigation is a right of way which may be enjoyed in the sea, in tidal and in non-tidal waters; and includes all rights necessary for the full enjoyment and exercise of the rights of convenient passage, such as the right to pass, to ground, to anchor, to remain for a reasonable time and for purposes of loading and unloading, or completing repairs; or of waiting till the wind or weather or the season permits the ship to leave.



The right of navigation is paramount to the rights of property of the Crown and its grantees in the bed of a river, and such property cannot be used in any way so as to derogate from or interfere with the public right of navigation.

**NON-NAVIGABLE WATERS** - a river is non-navigable when its water cannot be used for navigable or wood floatation. In most cases, non-navigable waters can be identified (swamps, creeks, dammed lakes, etc.). In doubtful situations, legal opinion should be obtained.

**NON-TIDAL WATERS** - waters not affected by tides usually refer to inland waters such as lakes, rivers, etc. An owner of land that normally adjoins a non-tidal watercourse may own the bed of the watercourse up to the centre - *ad medium filum aquae* depending on specific title descriptions and conveyancing intent.

**RIPARIAN RIGHTS** - pertain to the rights and privileges that are incidental to the ownership of land fronting on a body of water. The rights appertaining to the land that adjoins or abuts a watercourse or river running between banks.

**SUBMERGED LAND AREA** - is the bed or shore of a lake, river, stream or other body of water below the natural boundary (high water mark).

**SUBMERGED LANDS** - refers to the land area seaward, lakeward or riverward from the mean high water mark of a body of water.

**TIDE FLAT** - is a term used to describe land which is above water at a normal low tide. The bed of a tidal river normally belongs to the Crown unless it has been granted to a subject.

**TIDAL WATERS** - refer to rivers affected by sea waters.

**UPLAND** - waterfront land located above high water mark.

**USE VALUE** - Use value is the value a specific property has for a specific use. If a property's current use is so specialized that there is no demonstrable market for it, but the use is viable and likely to continue, the appraiser may render an estimate of use value. Use value focuses on the value the real estate contributes to the enterprise of which it is apart, without regard to the highest and best use or the monetary amount that might be realised upon its sale.

**UTILITY VALUE** - Is a term used to describe the value of water lot properties for rent setting purposes accepted in some parts of British Columbia by landlords and lessees. Utility value applies to an integrated use of a waterlot with its upland. Its value is determined by applying conventional percentages for categories of use to a zone value of the upland. Zone value is determined by use of a direct comparison approach applied to similar use upland properties for the establishment of an appropriate rate expressed as a price per ha, sq. metre, etc. This zone value is applied at varying percentages to various predetermined areas of a water lot in accordance to their relative utility to the upland.

**WATER LOT** - a legally defined area of land covered by water which may be either contiguous or attached to dry land, or may be separated entirely from dry land, - may be filled, partially filled or not filled - or a piece of land normally covered with water at high tide.

**WORK LINE** - represents the boundary line dividing actual or theoretical upland lots and water lots.

**WORKS** - any improvement to the land that cannot be classified as a building, such as roads, sewers, water supply lines, docks, fences, cribbing, retaining walls, etc.



## APPENDIX C

# Court Cases - Riparian Rights

1. A.G. of Straits Settlement vs. Wemyss (1888) 18 A.C. 192 P.C.
2. Lyons vs. Fishmongus Co.: (1876) 1 A.C. 662 H.L.
3. Both vs. Ratte (1890) 15 A.C. 188
4. Tetreault vs. Montreal Harbour Commissioner (1926) A.C. 229
5. North Shore Railway vs. Pion (1889) 14 A.C. 612
6. Wolfe vs. British Columbia Electric Railway Co. (1949) 1 W.W.R. 1123
7. Clarke vs. City of Edmonton (1930) S.C.R. 1370
8. Young vs. Bankier Distillery Co. (1893) A.C. 691
9. Vaughn vs. Eastern Township Bank (1909) 41 S.C.R. 286
10. V.V. & E. Railway vs. Milsted (1908) 7 W.L.R. 384
11. Cooke vs. Vancouver (1914) 6 W.W.R. 1492
12. Romanica vs. Winnipeg (1921) 2 W.W.R. 339
13. Gerrard vs. Crowe (1921) 1 A.C. 385-397
14. Kennedy vs. Husband (1923) D.L.R. 1069
15. Gillespie vs. Rex, 12 Ex. C.R. 406
16. Res. vs. Hudsons Bay Co. (1961) 17 Ex. C.P. 441
17. Attorney General of B.C. vs. Neilson (1958) S.C.R. 819
18. Carrol vs. Empire Limestone Company, Ont. (1919) 45O.L.R.
19. Georgian Cottagers Association Inc. vs. Corp. of the Township of Flos, Ont. (1962) O.R. 429-435
20. Walker vs. Attorney General of Ontario (1971) 1 O.R. 151-181
21. Keewatin Power Co. vs. Town of Kenora (1906) O.L.R. 232-243
22. McPhee vs. Township of Plymton (1987) D.L.R. 233-255
23. Scarborough Golf & Country Club (1988) D.L.R. 1-17
24. Gibbs vs. Grand Bend (1989) RPR-1990 Volume 7. 13-77

# Court Cases - Market Value of Water Lots

1. City of Saint John vs. Montreal Trust Co. Book 6 Page 398-400 L.C.R. items covered (Market Value - basis of valuation - landlocked parcel below high-water mark submerged at high tide - value based on fact that property useful only for construction of wharf).

For the terms "reasonable and economical" the principle of valuation involved the practical use of the submerged lands as an extension of the upland.

2. Gulf Oil of Canada Limited vs. National Harbours Board, Saint John. Federal Court of Canada, 1971 (Tt-1478-71). The Judge agreed with J. Ross Corbett's (N.H.B.'s appraiser) approach by treating the property's uplands and submerged lands as one entity.
3. Cyril J. O'Hearn vs. The City of Dartmouth, 1980. The Expropriations Compensation Board accepted the opinion that the waterlot area that was expropriated along with some dry up-land area should be valued at 25% of the dry upland value.



## APPENDIX D

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