

# THE LAW AND THE LAKE: Navigating Alberta's Regulatory Framework<sup>1</sup>

*What everyone should know before working around water.*

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Historically, water and owning land next to a water source have always been a highly sought after resource. This desire remains to this day. Unfortunately, not everyone is able to be a land owner with an adjoining water source, yet an ever increasing part of the population wants to be able access Alberta's lakes, rivers and streams for a variety of purposes. This inevitably results in conflict over access, resource use, the quantity and quality of resources, and the type and extent of development that occurs or should occur within our watersheds.

The wide variety of legislation and regulations that have been developed over time related to water and adjacent lands, is testament to the high value placed on these resources by law makers and in recognition of the potential conflicts that can arise over their use.

It is critical that today's resource managers, land use decision makers, developers, riparian land owners, and recreational users have a basic understanding of the variety of legislation that exists which governs what can and cannot be done in and around a water body.

The objectives of this paper are to:

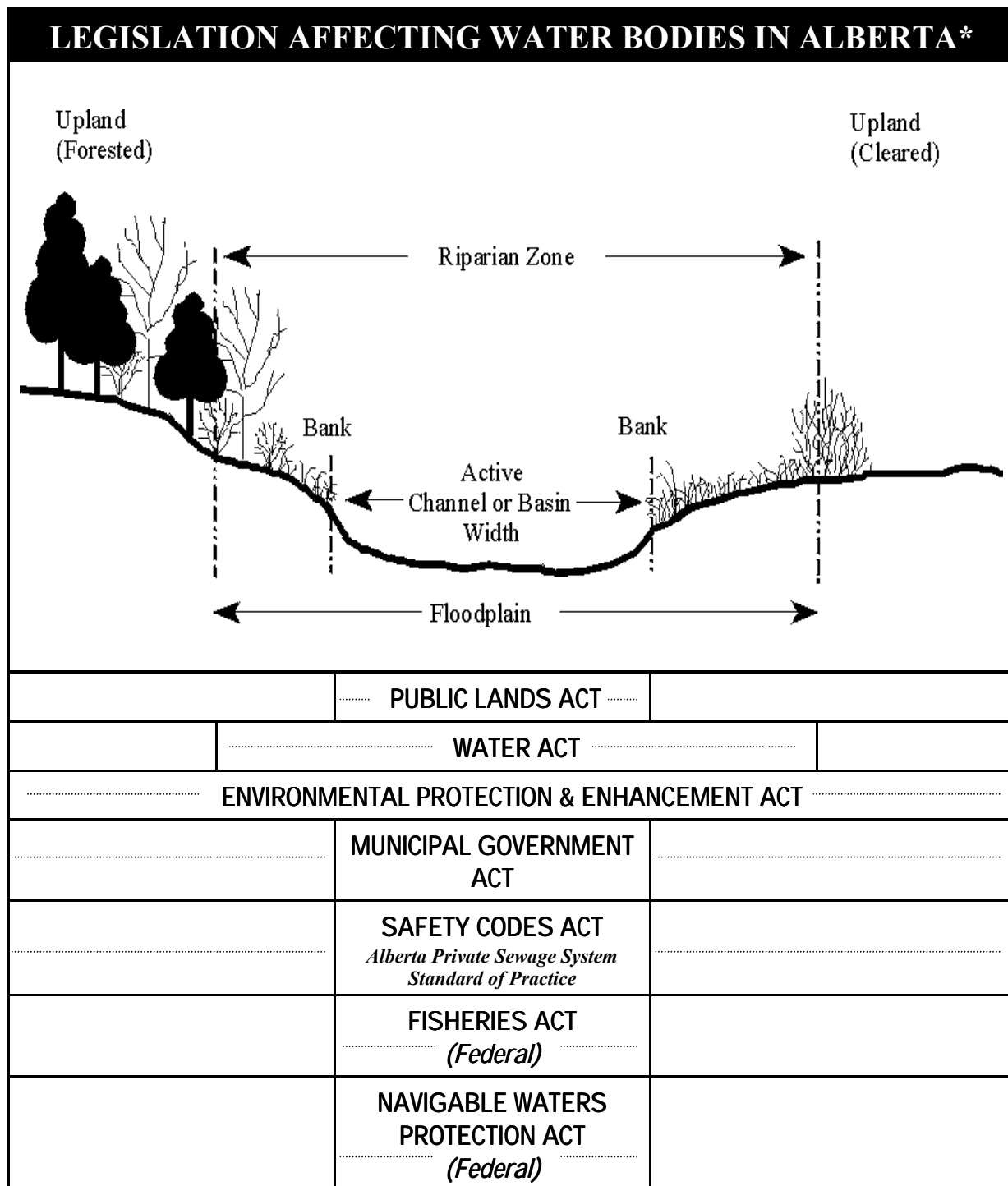
- describe the most common legislation<sup>2</sup> (not a complete and exhaustive list!) and its relevance to an adjacent body of water or land that a lakeshore owner or user is likely to encounter when undertaking an activity or development next to a water body (see table 1),
- specify which government agency (local, provincial, or federal) is responsible for lake and watershed management (see appendix 1),
- × specify which common development activities require government approvals (see appendix 2),
- Ø dispel some of the common myths surrounding land ownership next to a water body (see appendix 3), and
- Ù highlight some of the current land use, management and development issues that need to be addressed by those agencies responsible for managing lake and watershed resources.

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<sup>1</sup> All readers are reminded that this summary has no legislative sanction and is intended for general information purposes only. The related legislation, a lawyer, or the department responsible for administrating the Act(s) should be consulted for the purpose of interpreting and complying with the various statutes.

<sup>2</sup> The following description of the various pieces of legislation affecting water bodies and associated lands is partially excerpted from the unpublished draft "Guidebook to Water Management" under development by the Bow Basin Plan Steering Committee. Contact the project manager Bob Morrison, Alberta Environment at (403) 297-6462 for more information.

Table 1. Diagrammatic representation of a water feature and the common legislation related to the surrounding lands.



\* Not all applicable legislation is depicted in the table, only the most commonly encountered.

## COMMON LAW & RIPARIAN RIGHTS

Under *English Common Law*, a riparian owner is a property owner whose lands are bordered or crossed by a watercourse<sup>3</sup>. Such persons enjoyed certain rights to water and the use of that water. In most instances however, the common riparian right to water remains distinct from ownership of the resource. The rights of ownership and control have for the most part, been retained by the province by legislation (see the *Public Lands Act* and the *Water Act*).

Table 2. Status of common law “riparian” rights related to water in Alberta.

COMMON LAW RIGHT	PRESENT STATUS
7 Right to use <b>water for domestic purposes</b> .	7 <b>Protected</b> in <i>Water Act</i> , however “domestic” has been further defined as “household purposes”.
7 Right to <b>continued flow</b> of water (upstream landowner was required to allow water to pass through their land undiminished in quantity).	7 <b>Abrogated</b> by <i>Water Act</i> . A first-in-time, first-in-use priority licencing system now exists for the right and use of water.
7 Right to <b>water quality</b> (upstream landowner was required to allow water to pass through their land unimpaired in quality).	7 Appears to be <b>preserved</b> by the <i>Environmental Protection and Enhancement Act</i> .
7 Right of <b>access</b> to and from water (ingress & egress).	7 Common Law Right <b>Preserved</b> .
7 Right of <b>natural drainage</b> .	7 Common Law Right <b>Preserved</b> . <sup>4</sup>
7 Right of <b>accretion</b> .	7 Common Law Right <b>Preserved</b> .

Unless provincial or federal legislation has been enacted to govern the rights a landowner has with respect to water and its use (i.e. replace Common Law rights), English Common Law generally still prevails. The extent of remaining common law rights however, remain unclear, but the following are probable:

- (i) *It is probable (but not certain) that a riparian owner no longer has the right to bring about a legal action if the flow of water is diminished by diversion of water that was duly licenced under the Water Act.*
- (ii) *It is probable that a riparian owner can still bring an action to restrain an unlicensed diversion of water or a diversion that is made contrary to the provisions of a licence, for this right does not appear to be taken away by the Water Act.*

It should be noted that the common riparian right to water is distinct from ownership of a water body’s bed and shore (see *Public Lands Act*) or the water (see *Water Act*).

<sup>3</sup>Tingley, Donna, Ed. *Into The Future: Environmental law and policy for the 1990's*. Environmental Law Centre (Alberta) Society, Edmonton. 1990.

<sup>4</sup>Percy, David. *Wetlands and the law in the prairie provinces in Canada*. Environmental Law Centre (Alberta) Society, Edmonton. 1993.

The Common Law right of accretion is often misunderstood. Accretion is a natural process where new land forms upon the bank of a lake, river, or stream. Under Common Law, an adjacent land owner is entitled to any extension of land arising through accretion. Conversely, the natural, gradual erosion of land or the natural, gradual encroachment of water upon land increases the extent of the bed and shore owned by the Crown. Accretion however, cannot usually be claimed as a result of a short-term drought or period of “low water” as it is likely the water body will have a propensity to return to normal levels. A claim to accreted land can therefore only occur if the accreted land occurred through the gradual and imperceptible recession of water or deposition of material. To claim accreted lands and add them to your title, a title amendment registered by Alberta Land Titles must occur.

Note: Artificial interference with a water body can impair the right of ownership to that newly formed land (e.g. if the land resulted from a deliberate attempt to create new land).

## PROVINCIAL LEGISLATION

### PUBLIC LANDS ACT

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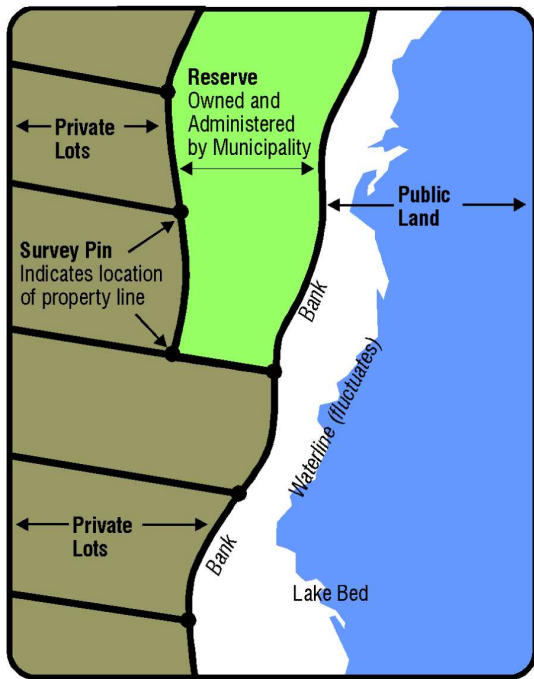
With respect to the management of water bodies, the *Public Lands Act* principally deals with two important factors: (1) ownership of the beds and shores of permanent water bodies, and (2) prohibits certain activities that may cause injury to Crown lands.

#### Ownership:

Since 1930, the *Public Lands Act* has provided for provincial ownership of the beds and shores of “all permanent and naturally occurring” bodies of water and “all naturally occurring rivers, streams, watercourses and lakes”.

The shore is that part of the lake bed that is exposed when the level of water is not at its normal fullest level. The line where private properties typically end and the bed and shore of a water body begins is called the legal bank. In most cases, it is a distinct line formed by the normal, long continued action or presence of surface water along the land at the edge of the water body. The location of the bank is not affected by occasional periods of drought or flooding. This bank separates public land from the adjacent land.





Lakeshore properties can be separated from the lake by a municipally owned and administered reserve. These reserves (municipal or environmental) ensure that sensitive banks and lake shores remain protected, and that public access to them is maintained. These reserves are generally located between the lakeshore lot boundary and the bank of the water body. From the bank towards the water is considered public land.

Most lakeshore properties do not extend to the water's edge. Land titles used with survey plans for lakeshore subdivisions will show whether the lakeward boundary of the lakeshore owner's property is the bank or a municipal reserve.

It is important to remember that a subdivision survey plan shows the location of the bank, not the water's edge (see diagram).

### **Piers, Docks & Boat Lifts**

A temporary, seasonal pier, dock or boat lift (i.e. removed completely from the lake at the end of summer) may be constructed or placed on the bed and shore of a lake without obtaining an approval, except in those areas or circumstances:

- 7 where an environmentally sensitive area or a management concern is identified by the provincial or federal government, and restrictions have been established;
- 7 where a local municipal development plan, a lake management plan, or a water management plan limits or restricts such uses;
- 7 where the proposed structure's design may interfere with the normal flow of water or is likely to increase the probability of bank or shoreline erosion; or
- 7 where such structures may adversely block public access along the bed or shore of the lake.

Users are advised to contact their local municipal planning office, and their provincial Public Lands, Water Management, or Fish and Wildlife offices to determine if there are any areas at a lake that may be subject to a restriction. Structures placed in any of the above areas may be required to be removed or require prior approval.

### **Access To Bed And Shore:**

Although the banks and shores of most rivers, streams and lakes are public land, and users can walk on bed and shore below the "high water mark" or "bank" without trespassing on adjacent land, users must ensure however, that they have legal access to these water bodies first. If public access across adjacent land (public land under disposition or private) is in question, the user should contact the land owner or lessee for permission to access the water body.

### **Use of Frozen Watercourses:**

The surface use of frozen watercourses (e.g. snowmobile use), is not considered trespassing as that use is on vacant Crown land (bed and shore). However, if the user must cross private land to get to the water course, then the user is required to obtain the consent of the private landowner prior to crossing the land and using the creek.

Landowners often object to noise levels as a result of snowmobile use. Landowners can contact the local municipality to determine if there are any bylaws governing the level of noise and the disturbance of peace within communities.

### **Role In Municipal Planning:**

Public Lands also has a role in municipal planning where Crown owned water features are involved. Sec. 5(3)(e) of the Subdivision and Development Regulations (*Municipal Government Act*) requires subdivision authorities to refer applications for subdivision to the Deputy Minister responsible for the *Public Lands Act*. This must occur if the proposed parcel is bounded by or contains, wholly or partially, the bed and shore of a Crown- claimable water feature. The referrals are necessary to ensure that provincial resource management interests are addressed as part of the decision on the subdivision. Recommendations are often made for Environmental Reserve dedications.

As an affected landowner, Public Lands is often part of statutory planning exercises involving detailed subdivision planning, lake management, and broad land use issues. Again, these referrals ensure that any significant provincial resource management issues are considered as part of the land use planning process. Municipalities are encouraged to consult with and involve Public Lands as early as possible in the development of their planning initiatives involving Crown owned resources.

### **Prohibited Activities / Enforcement:**

Section 54(1) of the Act contains a general prohibition that no person shall do anything on public land that:

- (1) may injuriously affect watershed capacity,
- (2) is likely to result in injury to the bed and shore of any river, stream, watercourse, lake or other body of water or land in the vicinity of that public land, or
- (3) is likely to result in soil erosion.

Any "unauthorized use" of public land, including the beds and shores of a watercourse or water body may be subject to a variety of penalties, including administrative penalties (fines), disposition cancellation, ministerial orders to restore/reclaim disturbed areas, or legal action/ court imposed penalties.

### **Approvals:** (see Appendix 2)

Due to the sensitive nature of shoreland resources, most activities on bed and shore (i.e. public land) require some form of authorization from either Public Lands or Water Management, or both. Conditions are placed on all authorizations:

- (1) to ensure that compatible activities and resources are used properly,

- (2) to limit the chance of degrading aquatic and shoreland environments, and where necessary,
- (3) to mitigate, reclaim or restore an area where disturbance is unavoidable.

Approved activities and developments are monitored to ensure environmental standards are maintained.

Approval applications for activities on bed and shore are available from the Land Administration Division or any regional Public Lands, Water Management, or Land and Forest office. A one-window application process has been established with Water Management and Fish and Wildlife to coordinate the approval process. A single application form completed with requested documentation can be used to obtain required permits under both the *Water Act* and the *Public Lands Act*. The office at which the completed application is submitted becomes the client's "one-window" to government.

The application form "LS102 - Lakeshore/Water Body Modification" can be used for a variety of proposed activities (see Table ). Separate application processes are utilized for Pipeline Water Crossings (regulated) and Surface Material (Sand and Gravel) Operations. These may be obtained from the Land Administration Division, Public Lands Division, or any district Public Lands office.

### **Shoreland Management Program:**

The *Shoreland Management Program* cooperates closely with the Fish and Wildlife Division, Land and Forest Division, and Water Management in Alberta Environment to ensure that shoreland resources are managed in an integrated way to effectively protect Alberta's water bodies. The success of the program is reliant on individuals taking responsibility for the resources they use. Although enforcement provisions are available, the main focus of the *Shoreland Management Program* is to develop a public awareness of the value of shorelines and to educate users so that they become effective stewards over these areas. Consultative and extension services are available to the public, including a variety of information publications.

## **WATER ACT**

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The *Water Act* is the primary legislation dealing with water and its management from ownership of the resource and the regulation of activities within water bodies, to the allocation and use of water by a licencing and approval system. The *Water Act* is also broader in scope than its predecessor and contains protection measures to safeguard the aquatic environment which has been defined as "the components of the earth related to, living in or located in or on water or the beds or shores of a water body, including but not limited to all organic and inorganic matter, and living organisms and their habitat, including fish habitat, and their interacting natural systems".

### **Ownership:**

As with the *Public Lands Act* where the Crown is the owner of the bed and shore of a permanent water body, so too does the Crown own the resource of water through the *Water Act*. Since activities within a flood plain may also impact the management of water, this Act applies over a water body's flood plain, as well as to the bed and shore of the water body.

People who are the owners of land that adjoin a watercourse (commonly known as "riparian owners") and of land under which ground water exists are entitled to use water without a licence for household purposes only. Additional water uses must either be registered as a traditional agricultural use or be licenced.

## **Water Management Planning:**

The Act provides for the development of water management planning to address increasing demands on aquatic resources, and to ensure that a clean, abundant supply of water is available for a variety of uses including for the protection of the aquatic environment. The Act also requires that a strategy for the protection of the aquatic environment be developed as part of the provincial water management planning framework and the government's commitment to maintain, restore and enhance current aquatic environmental conditions in the province.

Water management planning can involve a small geographic area to address lake management issues such as flooding or fish habitat loss, or more broadly, encompassing an entire watershed. Water management plans provide broad guidance for water management, set out specific directions how water should be managed, or result in specific actions to be taken. A plan can impact how business is done in other resource areas.

A key component of the planning process includes public participation. Individuals, local groups and associations, as well as other levels of government may all have a role in developing water management plans that address local lake or broader watershed management issues.

## **Approvals:**

An approval is required under section 36 of the Act for all activities that may impact water and the aquatic environment. A one-window application process has been established with Public Lands and Fisheries Management agencies to coordinate the approval process (see *Public Lands Act - approvals*).

An activity is defined in section 1(1)(b) of the *Water Act* as follows:

Section 1(1)(b) "activity" means

- (i) placing, constructing, operating, maintaining, removing or disturbing works, maintaining, removing or disturbing ground, vegetation or other material, or carrying out any undertaking, including but not limited to groundwater exploration, in or on any land, water or water body, that
  - (A) alters, may alter or may become capable of altering the flow or level of water, whether temporarily or permanently, including but not limited to water in a water body, by any means, including drainage,
  - (B) changes, may change or may become capable of changing the location of water or the direction of flow of water, including water in a water body, by drainage or otherwise,
  - (C) causes, may cause or may become capable of causing the siltation of water or the erosion of any bed or shore of a water body, or
  - (D) causes, may cause or may become capable of causing an effect on the aquatic environment;
- (ii) altering the flow, direction of flow or level of water or changing the location of water for the purposes of removing an ice jam, drainage, flood control, erosion control or channel realignment or for a similar purpose; ...
- (iv) anything defined as an activity in the regulations for the purposes of this Act.

See appendix 2 for a list of common activities that require an approval.

## **Exemptions from Approvals - Water (Ministerial) Regulation**

Schedule 1 Section (2) of the Water (Ministerial) Regulation specifies a number of activities that are exempt from requiring an approval, and includes but is not limited to:

- 7 Placing, constructing, installing, maintaining, replacing or removing a floating platform, portable or seasonal pier, boat launch, or a dock in or adjacent to a water body;



- 7 Landscaping that is not in a watercourse, lake, or wetland if the landscaping does not result in and adverse effect on the aquatic environment on any parcel of land, or any change in the flow or volume of water on an adjacent parcel of land;
- 7 Installing a water supply line if installed by directional drilling or boring, and if a licence is not required for the diversion of water;
- 7 Installing a portable pump or portable water supply line if there is no significant alteration or disturbance to the bed and shore of the water body; or
- 7 Removal of debris from a water body that is not frequented by fish if the person removing the debris owns or occupies the land adjacent to the water body where the debris is located.

### **Enforcement and Penalties:**

The new Water Act has enforcement provisions similar to the Environmental Protection and Enhancement Act. It is an offence under the Water Act to commence or continue an activity unless an approval or other authorization under the Act has been issued; to contravene a term or condition of an approval or licence; to contravene a water management order; or contravene an enforcement order. Penalties can include significant fines for regulatory offences, administrative penalties for lesser contraventions, water management orders, remedial and other enforcement orders, court orders, and civil remedies.

## **MUNICIPAL GOVERNMENT ACT**

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The *Municipal Government Act* replaced the *Planning Act* in 1995. The Act is the primary mechanism that enables municipalities to function, administer, plan and direct development within their jurisdictions. With respect to water management and development near water bodies, the Act gives a municipality authority to:

- 7 determine & control the type and density of land uses (i.e. land use planning & zoning).
- 7 determine & control extent of land subdivided, including those next to water bodies (including the creation of municipal and environmental reserves).
- 7 regulate the type and extent of development on private land (i.e. issue development permits for all developments).
- 7 establish bylaws and controls on activities and the use of lands within their jurisdictions (including enforcement).
- 7 regulate the type of waste disposal system(s) for cottage and recreational developments next to a water body.
- 7 regulate through the use of zoning bylaws, the placement of seasonal piers within a subdivision (where no Provincial authorization has been issued).

Alberta Municipal Affairs have also developed ***Land Use Policies*** which municipalities must incorporate into their planning documents and practices.

- Section 5 (Natural Environment) encourages municipalities to identify, in consultation with Alberta Environment, significant corridors, lakeshores, wetlands and any other unique landscape areas, and areas of significant fish, wildlife and plant habitat. Land use patterns are to be established in the vicinity of these features, having regard to their value to the municipality and to the province, and to utilize mitigative measures designed to minimize possible negative impacts or loss of habitat.
- Section 6 (Resource Conservation) encourages municipalities to identify, in consultation with Alberta Environment, significant water resources, including lakes, rivers and streams, their beds and shores, wetlands, groundwater, reservoirs, and canals within their boundaries. Land use patterns are

to be established in the vicinity of these resource features, having regard to impacts on an entire watershed as well as local impacts.

If a subdivision or development is to be approved in the vicinity of a water feature, municipalities are encouraged to incorporate measures which minimize or mitigate any negative impacts on water quality, flow and supply deterioration, soil erosion, and groundwater quality and availability.

Municipalities are further encouraged to facilitate public access and enjoyment of these water features, and to protect sensitive fisheries habitat and other aquatic resources.

## **ENVIRONMENTAL PROTECTION & ENHANCEMENT ACT**

With regard to water, the *Environmental Protection and Enhancement Act* provides an extensive framework for evaluating the impacts of proposed developments or activities on water quantity and quality (applies also to activities requiring approval under the *Water Act*), protecting the quality of both surface and ground water, regulating the discharge or deposition of harmful substances into water bodies and aquifers, and managing many land uses that can have a significant impact on the quality of water supplies.

For designated industrial activities, statutory requirements ensure that land is reclaimed to a capability equivalent to the capability that existed before the development occurred. The Act also regulates the drilling of water wells, the treatment and supply of water for human consumption, as well as the regulation of the handling, sale and use of pesticides.

### **Prohibited Activities / Enforcement:**

The Act prohibits the release of any substance that causes or may cause a significant adverse effect unless the release has been authorized. Enforcement of the Act occurs through the use of:

- (a) **Environmental Protection Orders** to prevent environmental problems or failing that, to ensure action is taken to fix problems by environmental audit requirements or plans specifying remedial measures.
- (b) **Enforcement Orders** where the Act has been violated, resulting in the shut-down of an activity or the suspension or cancellation of an approval.

Penalties can be issued in substantial amounts for knowingly conducting a prohibited activity, releasing prohibited substances, providing false or misleading information, or for violating an approval, Environmental Protection or Enforcement Order.

For the average cottage owner, the aspect of the Act should be noted is the use of pesticides/chemicals within 30m of a water body.

### **A) Pesticides and Weed Control**

The *Environmental Code of Practice for Pesticides*, incorporated into the regulations under the Act in 1997, restricts weed control within 30 metres of a water body to the use of a selected list of herbicides (e.g. 2,4-D, glyphosate, paraquat). Application of these herbicides must occur in the following manner:

- 1) it “does not create observable impact [visible effects, such as plant injury] on vegetation within 5 metres of an open body of water”.
- 2) herbicides shall be applied:
  - a) selectively within the zone between 5 and 30 metres,
  - b) using a backpack sprayer, pump sprayer, hand-gun sprayer or an application that treats individual woody plants,
  - c) to treat no more than 30 percent of the vegetation, based on distribution over one hectare,
  - d) only on woody plants where they interfere with forest regeneration or the safe operation or maintenance of man-made structures (e.g. dams, canals, roads, industrial facilities), and
  - e) only on herbaceous plants classified as “restricted” or “noxious” under the *Weed Control Act*.
- 3) herbicides shall not be applied where there are visible signs of soil erosion.
- 4) insecticides shall not be allowed to drift into or onto an open body of water.

The implication for lake shore property owners is that care should be taken when controlling weed growth with chemicals near water.

### **B) Special Use Permits (In-Water Aquatic Plant Control Using Reglone A™)**

The use of Reglone A™ (Diquat) for the large scale use of controlling submerged aquatic plant growth within the shallow areas of a lake requires the use of a special permit issued by the Pesticide Management Branch, Chemicals Assessment and Management Division, Alberta Environment.

A recent study conducted at Lac Ste. Anne (unpublished) by the department of Alberta Environment on the effectiveness of this chemical control method confirmed that Reglone A™ was not very effective as a controlling agent in an open system like a lake. Reglone A is a contact herbicide which kills only the green portions of the plant it touches (like a lawnmower) but not the roots. Due to the high degree of suspended sediment and algae in many of Alberta’s lakes, most of the Reglone A is effectively bound-up before it can come into full contact with the target weed species. Studies also indicate that Reglone A shows some toxicity to some aquatic invertebrates (amphipods and an aquatic snail). Further study on the toxicity of Reglone A is occurring.

## **SAFETY CODES ACT (Private Sewage Systems)**

Alberta Municipal Affairs’ Safety Services Branch works in partnership with the Safety Codes Council, municipalities, corporations, and industry to administer the *Safety Codes Act*. The Safety Codes Council has established codes and standards which regulate plumbing and private sewage systems which receive 25 m<sup>3</sup> of sewage or less each day. The *Alberta Private Sewage System Standard of Practice (1999)* outlines the requirements that are intended to ensure private systems do not create environmental or health problems. These standards include:

- i) specific design and sizing criteria for various system components,
- ii) minimum lot size restrictions for disposal systems,
- iii) minimum setback distances, and
- iv) minimum depth restrictions between disposal systems and the water table.

Septic tanks, sewage holding tanks or sewage effluent tanks shall not be located within:

- a) 1 m from any property line,
- b) 9 m from any water source,
- c) 9 m from a water course, and
- d) 1 m from any building.

Disposal fields shall not be located within:

- a) 1.5 m from a property line,
- b) 15 m from a water source,
- c) 15 m from a water course,
- d) 9 m from a basement, cellar or crawl space,
- e) 1 m from a building that does not have a basement, cellar or crawl space, and
- f) 1 m from a septic tank or packaged sewage treatment plant.

A soil percolation test may also be required where disposal fields are considered.

Any system that handles between 25 and 50 cubic metres per day is regulated by the *Wastewater and Storm Drainage Regulation* under the *Environmental Protection and Enhancement Act*.

Water management or municipal development policies/bylaws can also limit the location of residential development to prevent surface and ground water contamination. This may be done by establishing enhanced clearances/building setbacks, or the regulation of the type of disposal system that is acceptable.

In some cases, subsurface disposal is prohibited (e.g., pit privies are required to have concrete vaults).

### **Approvals:**

A permit and inspection is required for the installation of all subsurface waste disposal systems. Standards and permitting are subject to enforcement. Penalties can be issued for failure to obtain a permit for the installation a new subsurface disposal system. Unpermitted systems that are found to be contaminating the environment may be designated a nuisance under the *Public Health Act*. A Public Health Inspector can issue an Order to upgrade a disposal system.

## **PUBLIC HEALTH ACT**

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The *Public Health Act* is directed towards protecting the health of the public and is very broad in application. Alberta's regional health authorities interpret the general text of the legislation while suitably respecting the mandates of other government agencies. The *Public Health Act* and it's regulations are related to water management in the following areas:

- 7 Nuisances** Section 75(f): “respecting the prevention and removal of nuisances”. A nuisance is defined in the Act as “any condition that is or that might become injurious or dangerous to the public health, or that might hinder in any manner the prevention or suppression of disease”.
- 7 Drinking Water** Section 75(f)(1)(v): “respecting the location, operation, maintenance, equipping, cleansing, disinfecting and disinfestation of... “(v) wells, water fountains, cisterns and water tanks”.

- 7 **Waste Management Facilities and Outdoor Lavatories** Section 75(g): “respecting the construction, location, maintenance, disinfection, disinfection and disposition of waste management facilities and outdoor lavatories.”
- 7 **Contaminants** Section 75(g)(1): “prescribing the maximum level of contaminants permissible in air or water”.

Table 3. Health regulations related to water management.

REGULATION	RELATIONSHIP TO WATER MANAGEMENT
<b>Communicable Disease Regulation</b>	Generally empowers a health authority to take appropriate action to deal with any water-related communicable diseases.
<b>Housing Regulation</b>	Empowers a health authority to take appropriate action to deal with any water-related issues impacting on public and rental accommodation.
<b>Nuisance and General Sanitation Regulation</b>	Empowers a health authority to take appropriate action to deal with complaints and referrals on general water-related issues. 7 Section 2(1): “No person shall create, commit or maintain a nuisance”. 7 Section 2(2)(c): “Without limiting the generality of subsection (1), no person shall create, commit or maintain [something] that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease”. 7 Section 2(3): “An executive officer who receives a complaint alleging the existence of a nuisance in the health [authority] in which he is designated an executive officer, shall visit the place or premises complained of and inquire into the facts”.
<b>Recreation Area Regulation</b>	Empowers a health authority to take appropriate action to deal with specific water-related issues respecting recreational areas.

In the context of public health and water quality, the primary concern for health officials and landowners is the quality of water for recreational uses (e.g. swimming areas) and drinking, especially if potable water comes directly from the lake. The federal departments of Health and Environment have established guidelines for drinking water and recreational water quality in Canada.

A number of factors can pose a concern to water quality. The presence of the bacterium *E. coli* in the water is an indicator of fecal coliform contamination from raw sewage produced by humans and/or animals. Runoff contaminated by fecal matter can pose a health hazard when discharged in the vicinity of recreational waters.

Many of Alberta’s lakes are very biologically productive. The greenish colour of the water is a result of suspended algae. This is normally not a concern unless the population of algae quickly grows to excessive levels and “blooms” over a short time period in late summer. Lake users should take care when the water contains algae with the distinctive blue-green colour and should treat an intensive bloom with care. Toxins produced by these blue-green algae (neuro- and liver toxins) have been responsible for the death or illness of livestock, waterfowl, fish and humans. It is not uncommon to find domestic animals such as dogs poisoned after drinking lake water during a bloom, or dead fish on shorelines or after a bloom.

In recent years, outbreaks of pathogenic protozoans and other parasites in recreational waters have also been increasingly reported in news media in British Columbia and Alberta. Both *Giardia*, commonly

known as “beaver fever”, and *Cryptosporidium* cause diarrheal illness.

The local health authority can be contacted if a water quality problem is suspected.

## **AGRICULTURAL OPERATIONS PRACTICES ACT (& Codes of Practice)**

The *Agricultural Operation Practices Act* provides a general framework for resolving conflicts between agricultural producers and urban/rural non-farmers. Under the Act, farmers using **generally accepted practices** and not contravening the land use bylaws of the municipality in which the operation is located, are not liable in a nuisance lawsuit and cannot be prevented from carrying on their operation because it causes or creates a nuisance.

The Act was amended in 2001 to establish a regulatory framework for the siting on new and expanding confined livestock feeding operations. In the Act, **generally accepted agricultural practices** mean "a practice that is conducted in a manner consistent with appropriate and accepted customs and standards as established and followed by similar circumstances, and without restricting the generality of the foregoing includes the use of innovative technology used with advanced management practices". What this general definition means will likely be further defined as nuisance grievances are filed for review under the Act.

As of January 1, 2002 the Natural Resource Conservation Board (NRCB) is responsible for administering the Act including the siting of new and expanding confined feeding operations, and the monitoring and compliance with provincial standards. The standards have been established under the Act's *Standards and Administration Regulation*.

The new regulatory framework replaces the Department of Agriculture, Food and Rural Development's ***Code of Practice for Responsible Livestock Development and Manure Management (2000)*** which were meant to reduce rural conflicts by providing guidelines for proper land use siting and animal manure management, and between the siting of new livestock facilities and encroaching non-farm developments. The Codes assisted producers in minimizing the potential for nuisance and environmental problems by providing practical alternatives for manure storage and use. The regulatory framework incorporates much of the technical guidelines originally developed for the Code.

## **STRAY ANIMALS ACT**

Complaints are often expressed about livestock waste entering the water when animals use a lake or stream as a water source. The *Stray Animals Act* requires that a livestock owner confine livestock on the land they own or control. However, as an adjacent landowner, the livestock owner has a riparian right to access that water for domestic uses, including livestock watering.

If animal waste may be causing water pollution or if fecal contamination is suspected, the local health authority can be contacted to have a potential problem assessed.

## FEDERAL LEGISLATION

There are two additional pieces of legislation that have a direct bearing on landowners living next to a water body.

### **FISHERIES ACT** (A revised draft Act is currently before parliament).

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The *Fisheries Act* affects more water users than any other legislation than perhaps the provincial *Water Act*, in that any activity or works developed within water may result in damage to fish habitat. The Act's habitat protection provisions provide a **strong** tool for resource managers to control, manage and protect fish habitat.

Fish habitat is defined as the “*spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes*”.

#### **Prohibited Activities / Enforcement:**

Under section 35 of the Act, no person “*shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat*”. Section 36(3) further prohibits the depositing of a “*deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water*”. Deleterious substances are defined as “*any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water*”.

Implications for riparian landowners: The unauthorized cutting of aquatic plants (weeds) can have serious impact on the quality of the fisheries resource within a lake. Some fish species require rooted aquatic vegetation to attach their eggs to when they spawn. These areas are also used by immature fish as protective shelter against predation by larger fish. The dumping of sand for beach creation or deposition of other earth material (i.e. from clearing lots or reserves) covers and destroys spawning habitat areas in shallow water and is a violation under the Act.

There is long history of successful prosecutions and enforcement of this Act by the courts. Penalties can range from substantial fines to court orders requiring the reclamation or restoration of fish habitat.

#### **Approvals:**

The regulation of activities or proposed works/developments that may affect fish habitat within a water body are addressed under the approvals issued under the *Public Lands Act* and the *Water Act*. Staff responsible for the administration of these Acts will refer all proposals for in-water work and on all activities that may involve a fish bearing water body to Fisheries staff for consultation and approval.

### **NAVIGABLE WATERS PROTECTION ACT**

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The primary purpose of the *Navigable Waters Protection Act* is to prevent obstructions from interfering with navigation in rivers and lakes. The Act however does not define “*navigability*”, but for administrative purposes, a navigable water includes “*any body of water capable, in its natural state, of*

*being navigated by floating vessels or any description for the purpose of transportation, recreation or commerce; it also includes a canal and any body of water created or altered for public use, as a result of the construction of any work, and any waterway where the public right of navigation exists by dedication of the waterway for public purposes, or by the public having acquired the right to navigate through long use”.*

#### **Prohibited Activities / Enforcement:**

The construction of works without an approval in, on, over, through or across any navigable water that may substantially interfere with navigation, is prohibited. The deposit of rubbish or other materials that may interfere with navigation is also prohibited.

Substantial penalties (fines) can be assessed for failure to comply with a ministerial order to remove or alter an obstruction to navigation, or for depositing rubbish into water that is liable to interfere with navigation.

Enforcement of this Act by the federal government is becoming more common. The owner of unauthorized works can be ordered to remove or alter such works. When the owner fails to comply with such an order, the Minister responsible may arrange to have the works removed or destroyed.

#### **Approvals:**

If a proposed development may potentially interfere with navigation, an approval should be sought from the Minister of Transport (Canadian Coast Guard). Works that may apply to this legislation include the construction of public marinas, breakwaters, bridges, and permanent public piers. The Canadian Coast Guard now maintains an office (for inland waters) in Edmonton and can be contacted at (403) 495-3701.

## **OTHER**

### **Boating Regulations/Restrictions**

#### **The “10-30 Rule”**

The Province of Alberta introduced new boating restrictions in 1996 that limit the speed at which boats can travel near river and lake shores. The amendment to the Boating Restriction Regulations under the *Canada Shipping Act* now places a blanket restriction, known as the “10-30 Rule”, on all of Alberta’s water bodies. Unless otherwise posted, boat speeds are limited to 10 kilometers per hour within 30 metres (100 feet) of the shore. Boaters may only exceed the 10 km/h speed limit if towing a person on waterskis as long as the trajectory is perpendicular to the shore (i.e. away from the shore towards the center of the lake) and only when it is safe to do so.

#### **Boating Restriction Regulations (*Canada Shipping Act*)**

More specified boating restrictions may be placed on navigable waters in Alberta to regulate boating activities. A boating restriction for a water body requires an amendment to the federal *Boating Restriction Regulations* pursuant to the *Canada Shipping Act*. The request for including a water body



restriction must be made by the Alberta Government. The process is lengthy, requiring a minimum of seven months.

## **LAKE AND WATERSHED DEVELOPMENT ISSUES:**

Our lakes and watersheds are under constant pressure to accommodate more and more of the demands and uses that we place on them. This in turn can affect the quality of the land and water resources within our watersheds, and ultimately our experience at the lake.

A number of issues need to be addressed by those who have some control over development within watersheds. The following are the primary issues that can readily be addressed.

**β Municipal & Environmental Reserves:** Encroachment onto municipally owned reserves is increasingly becoming a problem. Adjacent land owners are clearing and developing reserves, and treating them as extensions of their own properties. Access through reserves is a common concern that often results in land owners clearing the reserve. Municipalities are encouraged to develop clear an enforceable policies to address the access, use and management of reserves. Municipalities are also encouraged to mark their reserve boundaries to reduce encroachment and other user conflicts that may arise.

The sale of a recreational property by a land owner who may have encroached on reserve land can affect the potential sale of a property. The sale may be hindered if a Certificate of Compliance, a requirement from the bank, is difficult to obtain from the municipality.

**à Development in Flood Plain Areas:** Development of subdivisions next to a watercourse can have serious implications for land owners and municipalities when lands are naturally eroded over time or by short-term high flood events. Streams and rivers do not recognize surveyed boundaries or lines on a map. Municipalities and planners are encouraged to evaluate flooding history and potential, as well as erosion rates when considering the approval of a subdivision next to a watercourse. Appropriate environmental reserve widths and development setbacks should be set.

**á Siting of Intensive Agricultural Operations:** This is becoming more of an issue as country residential areas are developed and as the environmental awareness of lakeshore and acreage residents increases. Municipalities are encouraged in their planning and management efforts to identify where intensive livestock feeding areas are not compatible with current or future land uses. Concerns include siting of operations near streams, and that surface runoff does not flow through confined feeding areas to carry manure and nutrients into streams that flow into recreational lakes.

**â Sewage Management and Permanent Lake Properties:** As the number of permanent residences are constructed around the shores of a lake, sewage waste management becomes more of a concern. Municipalities are encouraged to ensure that sewage disposal methods do not result in sewage leaking into a water body. It is recommended that at a minimum, pump-out holding tanks be a requirement for residences around a lake, and that proper hauling and disposal of these wastes occur.

**ã Seasonal Pier Management:** The placement of seasonal piers on the bed and shore of a lake can lead to conflicts between back lot and lakeshore owners. Municipalities and developers are encouraged to use community docking facilities to reduce conflicts.

The winter storage of seasonal piers and boat lifts is also a concern that ought to be addressed in planning and management documents. Often portions of municipal or environmental reserves are cleared to store these seasonal structures. The cumulative effect on encroachment of reserves in their natural state can be considerable. In time any natural aspect of the reserve will be lost. Failure to deal with unauthorized uses as they happen will make enforcement more difficult in the future.

It is imperative that land and resource managers, municipalities, industry and land owners all work together to ensure that our land and water resources within our watersheds are used in a sustainable way, and that the quality of those resources are the same, if not better, for future generations.

Appendix 1. Table of Government Agencies Responsible for Lake & Watershed Management

Government Agencies Responsible for Lake & Watershed Management			
Interest	Local Government	Provincial Government Ministry / Agency	Federal Government Department
Agriculture	7 County Fieldman 7 Ag. Society	7 Agriculture, Food and Rural Development (AFRD) 7 Local Regional Advisory Service Specialist	Agriculture & Agri-Food Canada
Aquaculture	Planning & Development	AFRD 7 Aquaculture Section (Duncan Lloyd, 381-5539 Lethbridge)	Fisheries and Oceans
Crown Lands	NA	Sustainable Resource Development 7 Land and Forest Division (Forested Region) 7 Public Lands Division (Settled Region)	Canadian Heritage/Parks Canada, National Defense
Enforcement of Environmental Laws	Bylaw Services	Alberta Environment (ENV) 7 Environmental Protection & Enhancement Act 7 Water Act SRD 7 Public Lands Act 7 Forest Act	Environment Canada (Fed. Lands only)
Farm Water Management Well / Dugout Management	NA	AFRD 7 Conservation & Development 7 Engineering Services	Prairie Farm Rehabilitation Administration (PFRA)
Fisheries Management	NA	SRD 7 Fish & Wildlife Division	Fisheries and Oceans
Flood Management / Disaster Recovery Programs	Director of Disaster Services	ENV 7 Natural Resource Service (Water Sciences Branch, Forecasting) AI 7 Disaster Services Branch	?
Forestry (Timber Harvesting)	Planning & Development	SRD 7 Land & Forest Division	Natural Resources Canada
Intensive Livestock Feeding Operations	Planning & Development	Natural Resource Conservation Board (NRCB)	NA
Gravel Extraction	Planning & Development	AI 7 Safety and Technical Services, Planning & Programming Branch (Land & Aggregates) SRD 7 Public Lands Division, (Ian Hancock, 427-4648 Edmonton)	NA
Groundwater	NA	ENV 7 Natural Resource Service (Water Sciences Branch, Hydrogeology)	NA
Land Use / Watershed Management Planning	Planning & Development	Community Development (CD) 7 Recreation & Protected Areas 7 Land and Forest Division (SRD) 7 Water Management (ENV) 7 Corporate Management Service - Strategic & Regional Support - Integrated Resource Planning (ENV) 7 Public Lands Division (SRD)	Any federal dept. that has responsibility over specific federal lands.

## Government Agencies Responsible for Lake & Watershed Management

Interest	Local Government	Provincial Government Ministry / Agency	Federal Government Department
Marinas, permanent public piers, developments that may interfere with navigation	Planning & Development	ENV 7 Water Management SRD 7 Public Lands Division 7 Land and Forest Division	Transport Canada (Canadian Coast Guard), Fisheries and Oceans
Parks, Ecological Reserves & Natural Areas, Municipal and Environmental Reserves	Parks & Recreation, Planning & Development	CD 7 Natural Resource Service (Recreation & Protected Areas) 7 Land and Forest Service SRD 7 Public Lands Division	Canadian Heritage / Parks Canada
Roads & Culverts	Public Works, Transportation	7 Safety and Technical Services (AI)	NA
Seismic Exploration (flowing holes)	NA	SRD 7 Land and Forest Service 7 Public Lands Division, Industrial Services (John Begg, 427-4657 Edmonton)	NA
Sewage Management / Standards	Bylaw & Enforcement	AFRD 7 Bill MacMillan, Intensive Livestock & Environmental Engineer, (403) 340-7018 Red Deer)	NA
Shoreland Management	Bylaw & Enforcement Services (Municipal & Environmental Reserves)	SRD 7 Public Lands Division (Gerry Haekel, Shoreland Management Coordinator, 427-4767 Edmonton) 7 Fish & Wildlife Division 7 Land & Forest Division ENV 7 Water Management	Canadian Heritage / Parks Canada
Water Quality / Water Quality Guidelines	Local Health Authority / Unit	ENV 7 Water Sciences Branch (Water Management) AFRD 7 Conservation & Development Branch (Sandra Cooke, Water Quality Biologist, 427-3397 Edmonton)	Health Canada (Monitoring & Criteria Division) / Environment Canada (Environmental Conservation Service)
Water Use / Licencing	Local Irrigation Districts	ENV 7 Water Management (Licensing & Permitting Branch)	NA
Weed Control <i>* Land owner is responsible for all weed control.</i>	Bylaw & Enforcement Services	SRD 7 Land & Forest Division (Forested Region) 7 Public Lands Division (Settled Region)	Any dept. responsible over the management of specific federal lands.
Wildlife Management	NA	7 Fish and Wildlife Division (SRD)	Environment Canada (Can. Wildlife Service)
Woodlot Management	Planning & Development	SRD 7 Land & Forest Division (Forested Region) 7 Public Lands Division (Settled Region) AFRD 7 Conservation & Development (Private Land)	NA

**NOTE:** AFRD = Agriculture, Food & Rural Development; ENV = Alberta Environment; AI = Alberta Infrastructure; SRD = Alberta Sustainable Resource Development; CD = Community Development

Appendix 2. Bed & Shore Activities Requiring Approvals / Permits From Various Government Agencies.

Common Bed & Shore Activities Requiring Approvals / Permits		
Activities (Partial list)	Approval Requirement (Government Agency)	Legislation
Aquatic Plant Control	7 Temporary Field Authority (Public Lands Division) 7 Approval (Water Management) 7 Special Permit-Chemical Control (Pollution Control Division)	7 Public Lands Act 7 Water Act 7 Environmental Protection & Enhancement Act 7 Fisheries Act (Canada)
Boat Launch / Pad	7 Licence of Occupation (Public Lands Division) 7 Development Permit (Local / Municipal Planning or Development Department)	7 Public Lands Act 7 Bylaws (as per Area Structure Plan / Municipal Government Act)
Beaver Control / Dam Removal	7 Permit (Wildlife Management)	7 Wildlife Act
Commercial Developments (permanent & temporary)	7 License of Occupation (Public Lands Division) 7 Approval (Water Management)	7 Public Lands Act 7 Water Act 7 Navigable Waters Protection Act (Canada)
Drainage Works	7 Approval (Water Management)	7 Water Act
Erosion Protection, Retaining Walls, Groynes, Breakwaters or Causeways	7 Temporary Field Authority - minor erosion protection, Licence of Occupation - permanent encroachments (Public Lands Division) 7 Approval (Water Management)	7 Public Lands Act 7 Water Act 7 Navigable Waters Protection Act (Canada)
Gravel Extraction	7 Surface Materials Lease/Licence (Public Lands Division) 7 Approval (Water Management)	7 Public Lands Act 7 Water Act
Municipal & Environmental Reserves (all Reserve developments)	7 Development Permit (Local / Municipal Planning or Development Department)	7 Bylaws (as per Area Structure Plan / Municipal Government Act)
Permanent Structures	7 Licence of Occupation (Public Lands Division) 7 Approval (Water Management)	7 Public Lands Act 7 Water Act
Piers & Boat Lifts (permanent), Marinas	7 Licence of Occupation (Public Lands Division) 7 Approval (Water Management)	7 Public Lands Act 7 Water Act 7 Navigable Waters Protection Act (Canada)
Piers, Boat Lifts (temporary/seasonal)	7 NO APPROVALS ISSUED (Public Lands Division) 7 Exempt (Water Management)	7 Public Lands Act 7 Water Act
Re-aligning Watercourses	7 Licence of Occupation , Formal Land Exchange (Public Lands Division) 7 Approval (Water Management)	7 Public Lands Act 7 Water Act 7 Fisheries Act (Canada) 7 Navigable Waters Protection Act (Canada)
Rip-Rap	7 Temporary Field Authority -minor erosion protection, Licence of Occupation - permanent encroachments (Public Lands Division) 7 Approval (Water Management)	7 Public Lands Act 7 Water Act 7 Navigable Waters Protection Act
Sand / Earth (fill, removal or dredging)	7 Letter of Authority (Public Land Services) 7 Approval (Water Management)	7 Public Lands Act 7 Water Act 7 Fisheries Act (Canada)
Water Supply Lines (permanent lines)	7 Licence of Occupation (Public Lands Division) 7 Exempt if directionally drilled/bored (Water Management )	7 Public Lands Act 7 Water Act

**NOTE:** Only one application needs to be submitted for an activity requiring both a *Public Lands Act* and a *Water Act* approval.

## SHATTERING COMMON MYTHS

<p><i>Myth #1</i></p>	<p><b>I own my property right to the water’s edge!</b>                  The vast majority of lake front property owners in Alberta do <b>NOT</b> own their land right to the water’s edge. In fact, if a Municipal or Environmental Reserve doesn’t separate your lot from the lake, the most lakeward extent of your property is usually the bank of the water body. Very few exceptions exist. In Alberta, cottage properties are legally defined by their land title and the registered survey plan of the subdivision. It doesn’t matter what the real estate agent or seller said, the land title will tell you what you own and the survey plan will show you visually the dimensions and extent of your property.</p>
<p><i>Myth #2</i></p>	<p><b>The Municipal or Environmental Reserve is an extension of my property!</b>                  It is a common mis-belief that if Municipal and Environmental Reserves are “publicly” owned, then it is an adjacent landowner’s right to use this land for their enjoyment. Such reserves are separate parcels of land titled to the municipality. These parcels are created at the time the land is subdivided. Unauthorized developments or use of reserve lands are a trespass on another persons land.</p>
<p><i>Myth #3</i></p>	<p><b>I’m entitled to a view of the lake - I paid good money for my lot!</b>                  You are one of the few privileged land owners to have a property directly next to a lake. However, this does not entitle you to a view of that lake. If a municipally owned reserve (which may be treed) separates your lot from the lake, you do not have the right to cut down the vegetation on someone else’s property without approval!</p>
<p><i>Myth #4</i></p>	<p><b>I can do what I want with my property once I’ve bought it!</b>                  Just like in the city, bylaws and development restrictions limit what can and cannot be done on private property. A permit from the municipality’s (County or Summer Village) development office is usually required for all structural improvements, and for permission to occupy or develop within reserve lands.</p>
<p><i>Myth #5</i></p>	<p><b>My cottage needs a sand beach to add value to the property!</b>                  If time and geology didn’t create a sand beach naturally, it’s unlikely an artificial sand beach will remain where you put it. Don’t waste your money on replacing lost sand year after year - use the public beach (it’s safer for swimming and protected from boating).</p>
<p><i>Myth #6</i></p>	<p><b>As a lakefront property owner, I can keep people off “my” lakeshore and restrict others from using my dock!</b>                  The beds and shores of most lakes are Crown owned and therefore public land for everyone to use. You cannot prevent the public from using the shore or a municipal reserve in front of your cottage. Seasonal piers and boat lifts located on a lake bed without a permit are technically (legally) a trespass on Crown land. Any structure left on public land without authority could be assumed by the public as an invitation for use. Although a private structure, it would be difficult for a cottager to initiate a civil action against someone else for using their pier. <b>NOTE:</b> The owner of such a structure is however liable for it and its use by others.</p>

<p><b>Myth #7</b></p>	<p><b>A lake or stream is a convenient place to dispose of sewage and waste water - Because it's diluted, it won't hurt anything!</b> Streams link surface runoff within a watershed directly to some collection point like a lake. Wastes diluted by water in a stream will enter a lake and any nutrients dissolved in the water is then available for algae growth. Wastes from cottage use can result in a considerable input to the nutrient load within a lake.</p>
<p><b>Myth #8</b></p>	<p><b>Aquatic plants in front of my lot have to go. - These "weeds" decrease the quality of my lake and value of my cottage property!</b> Many people consider aquatic plants like cattails and reeds as "weeds" and a nuisance. These plants however play an important ecological role in maintaining the health of our lakes. They stabilize the bed and shore, reduce soil movement and erosion, and are important habitat areas for fish, waterfowl and other wildlife. Aquatic plants also make use of nutrients in lakes that would otherwise contribute to unwanted algae growth. Too much growth however, limits boat access to open water. In such cases, a boat lane may be cut through heavy stands of aquatic plants, however <b>an approval is required.</b></p>
<p><b>Myth #9</b></p>	<p><b>A highly manicured lot in front of my cottage is the best way to landscape a lot. Regular fertilizing of the lawn at my lake shore property won't affect the quality of the lake!</b> A highly manicured grass thatch lawn is high maintenance! Think how much work it is in the city. Remember you are at the cottage to escape the chores and demands of city life and stress. Fertilizers promote grass growth and in turn increase maintenance required to keep it in check. Maintain your yard with as much natural vegetation as possible (it doesn't need to look wild). Landscape your lot based on your recreational needs. Most people don't need nor regularly use 1000 square feet of lawn. A sitting and play area with a good path to the water should provide more than enough weekend work.</p> <p>Too much fertilizer used too often is usually wasted. It also ends up washing into the lake where it is used by algae. Don't use fertilizers prior to rain. Grass lawns are actually a fairly hard surface and rain will wash fertilizer out into the lake.</p>
<p><b>Myth #10</b></p>	<p><b>A septic field is good enough for getting rid of sewage and grey water!</b> This may have been true with limited development and when a lake cottage was only a weekend cabin receiving occasional use, but today we are living at the lake year round and in permanent homes. Septic fields can be effective in dealing with limited amounts of solid waste but are less effective at containing liquid wastes. Highly nutrient liquid wastes can move through soil and into our lakes. It is recommended, at the very least, that pump-out holding tanks be used instead.</p>

# Key Contacts

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## Alberta Conservation Association (ACA) - Shoreline Conservation & Education Program

David Park  
Alberta Conservation Association  
#111, 4999 - 98 Avenue  
Edmonton, AB T6B 2X3  
Tel: (780) 415-1333

## Alberta Lake Management Society

c/o Department of Biological Sciences  
University of Alberta  
Edmonton, AB T6G 2E9  
Tel: (780) 492 - 1294  
(<http://www.alms.ca>)

## Boating Regulations, Standards, Safety, and Training

Larry Patterson, Program Manager  
Lifesaving Society  
11759 Groat Road  
Edmonton, AB T5M 3K6  
Tel: (780) 415-1755  
Fax: (780) 427-9334  
(<http://www.lifesaving.org>)

or  
Office of Boating Safety  
Canadian Coast Guard  
9021 - 46 Street  
Edmonton, AB T6B 3B2  
Tel: (780) 495-8360 (Toll Free) 1-877-525-5255  
  
(<http://www.ccg-gcc.gc.ca/obs-bsn/main.htm>)

## Boating Restriction Requests for Water Bodies in Alberta (Canada Shipping Act)

(Alberta Sustainable Resource Development makes application to Office of Boating Safety, Canadian Coast Guard)

Vonn Bricker  
Enforcement - Field Service Branch  
Fish and Wildlife Division  
Alberta Sustainable Resource Development  
4<sup>th</sup> Floor, Great West Life Building  
9920 - 108th Street  
Edmonton AB T5K 2G8  
Tel: (780) 427-3887

## Canadian Coast Guard (Navigable Waters Protections Act)

Steve Drumond  
Navigable Waters Protection Officer  
Canadian Coast Guard  
9021 - 46 Street  
Edmonton, AB T6B 3B2  
Ph: (780) 495-3701

or  
Ken Brant  
Regional Superintendent  
Canadian Coast Guard  
201, N. Front St. Suite 703  
Sarnia, Ontario N7T 8B1  
Ph: (519) 383-1862  
Fax: (519) 383-1995



## **Confined / Intensive Livestock Operations (Agricultural Operation Practices Act)**

The Natural Resources Conservation Board (NRCB) maintains a web page on this subject at  
<[www.nrcb.gov.ab.ca/ILOpage.html](http://www.nrcb.gov.ab.ca/ILOpage.html)>.

General inquiries: (780) 422-1977 (Edmonton) Toll-free response line 1-866-388-6722 (1-866-388-NRCB)  
(403) 297-8269 (Calgary)

## **Environmental Reserve Marking Programs**

See "Alberta Conservation Association"

## **Fisheries and Wildlife Division**

Fisheries and Wildlife Division  
Alberta Sustainable Resource Development  
2<sup>nd</sup> Floor, Great West Life Building  
9920-108 Street  
Edmonton, AB T5K 2G8  
Tel: (780) 427-7581

## **Land Administration Division -License of Occupation**

(Approvals for permanent encroachments on bed and shore)

Diane Fournier  
Disposition Services Branch,  
Public Lands Division  
Alberta Sustainable Resource Development  
5<sup>th</sup> Floor, South Petroleum Plaza  
9915 - 108 Street  
Edmonton, AB T5K 2G8  
Tel: (780) 427-3570

## **Public Lands - Shoreland Management Program**

Gerry Haekel  
Shoreland Management Program Coordinator  
Public Lands Division  
Alberta Sustainable Resource Development  
200, J.G. O'Donoghue Building  
7000 - 113 Street  
Edmonton, AB T6H 5T6  
Tel: (780) 427-5570

## **Subdivisions - Appeals (Bed and Shore or other Crown Resources Involved)**

Dennis Hawthorne  
Secretariat, Municipal Government Board  
Alberta Municipal Affairs  
15<sup>th</sup> Floor, Commerce Place  
10155-102 Street  
Edmonton, AB T5J 4L4  
Tel: (780) 422-8652

## **Subdivisions - Appeals (Local)**

Subdivision and Development Appeal Board  
Tel: contact local municipal authority

## **Subdivisions - Approvals**

Tel: contact local municipal authority

## **Water Management - *Water Act* Approvals**

Licensing and Permitting Branch  
Water Management  
Alberta Environment  
9<sup>th</sup> Floor, Oxbridge Place  
9820-106 Street  
Edmonton, AB T5K 2J6  
Tel: (780) 427-9516

## **Water Management - Water Quality Monitoring**

Water Quality Section  
Water Sciences Branch  
Water Management  
Alberta Environment  
10<sup>th</sup> Floor, Oxbridge Place  
9820-106 Street  
Edmonton, AB T5K 2J6  
Tel: (780) 427-6277