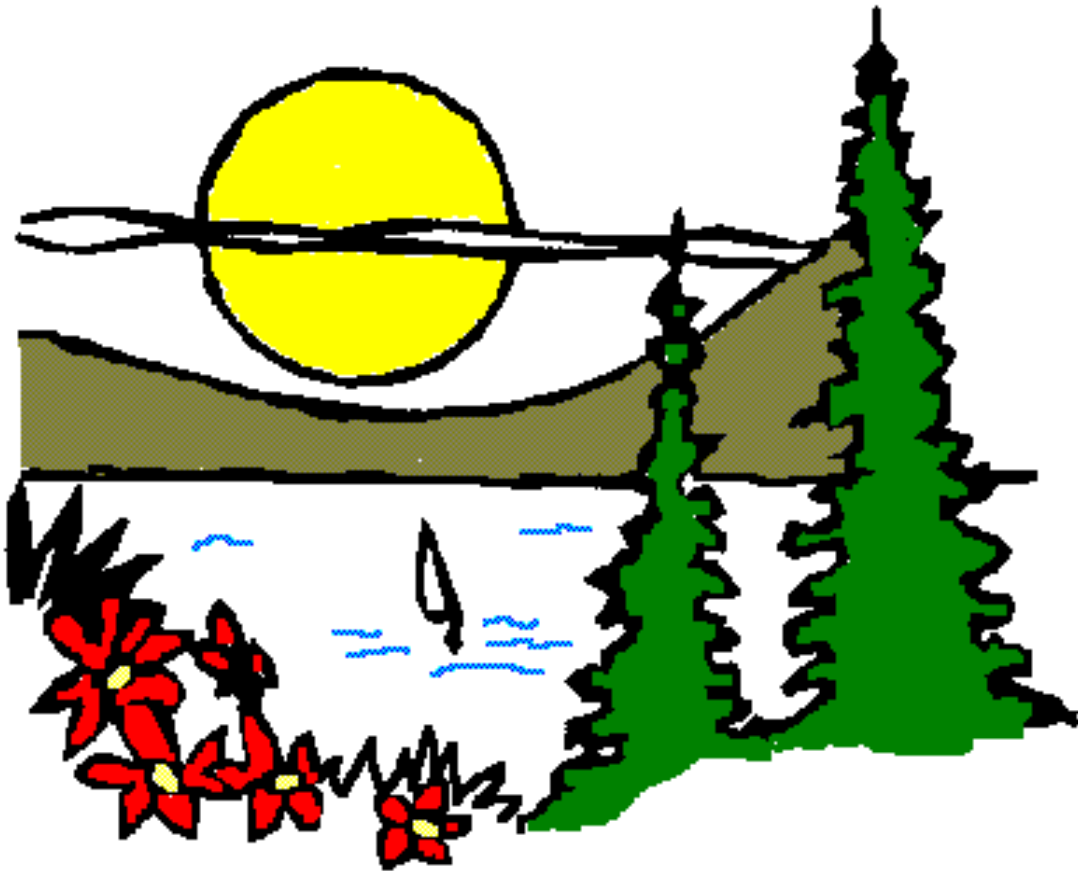


City of Kelowna

LAKE OKANAGAN

SHORE ZONE PLAN



PLANNING AND DEVELOPMENT SERVICES DEPARTMENT, 1997

ACKNOWLEDGEMENTS

The Shore Zone Plan was initiated by City Council and was prepared by City of Kelowna Planning, Leisure Services, and Works and Utilities staff with guidance received from an Advisory Committee of community interests represented by the following members:

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Mr. Don Wilson (Central Okanagan Naturalists Club)

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HIGHLIGHTS

A comprehensive review of shore zone issues and opportunities has resulted in a Shore Zone Plan which:

1. Recommends designation of the Shore Zone as an Environmentally Sensitive/Hazardous Condition Area subject to Development Permit
2. Provides recommendations for addressing waterfront property owner/foreshore user conflicts
3. Establishes priorities for acquisition of future linear park corridors along the lake (beyond the foreshore)
4. Recommends incorporation of dock regulations (Private Moorage Guidelines) into the City's Zoning Bylaw
5. Recommends retention of all existing road right-of-way beach access points and provides for future acquisition of such access points
6. Makes recommendations regarding the number and size of beaches and waterfront parks to be added in future years
7. Establishes recommendations for amenities to be considered at existing and future beaches
8. Makes recommendations regarding the types of upland development that would be most appropriate within the shore zone area
9. Clarifies which levels of government control which aspects of the Shore Zone
10. Provides for adjustment of the City's western boundary to the centreline of Lake Okanagan
11. Recommends the application of zoning to the portions of Lake Okanagan that lie within the City's boundaries
12. Recommends negotiation of a head lease arrangement

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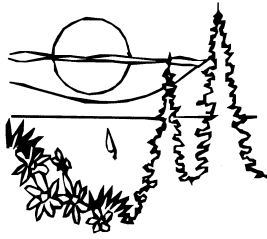
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CHAPTER 1 INTRODUCTION

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History
Council Direction
Advisory Committee
Consultation Activities
Content of Plan
Role of Plan

Okanagan Lake has, throughout our history, played a vital role in shaping Kelowna's social, environmental, and economic identity. To continue to achieve community benefits afforded by the Lake, it is important that the demands of a growing population are responsive to the natural balances which render the lake so outstanding. In essence, the quality of the Lake and our quality of life are inextricably linked.

It was with a commitment to protection and enhancement of the Lake that Council directed the City of Kelowna Planning and Development Services Department to investigate current shore zone conditions and provide policy direction for future initiatives.

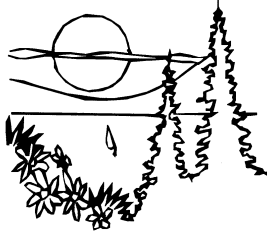
In December 1995, an Advisory Committee of Kelowna residents and area interests was established. The role of this committee has been to provide input to the Shore Zone Plan. During 1996, interdepartmental staff, in conjunction with this Committee, undertook an extensive investigation of shore zone issues and opportunities. This involved significant consultation with the general public (through open houses and random sample surveys), as well as with affected agencies and interest groups.

The above consultation activities identified that primary issues of public concern centred on various aspects of:

- the natural shore zone environment
- recreational use of the shore zone
- development along the lakefront
- management of the shore zone

The Shore Zone Plan will address each of the above aspects. Each section of the Plan will include recommendations for actions that can be taken to address the issues and opportunities pertaining to the subject matter of that particular chapter.

The Shore Zone Plan will serve as a document to provide guidance to future initiatives concerning the City's lakefront. It is suggested that policies relating to development of the shore zone area be included in the City's Official Community Plan.



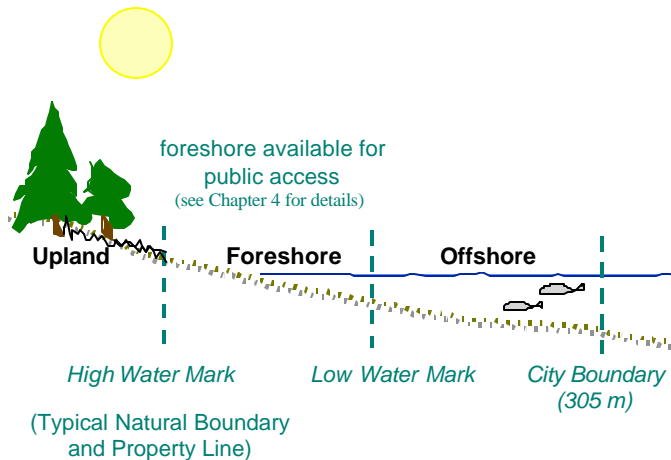
CHAPTER 2: WHAT IS THE SHORE ZONE?

CONTENTS
 City Boundary
 Definition of Foreshore
 High/Low Water Marks

For the purposes of this Plan, the Shore Zone is considered to include all those upland and associated properties that front on Lake Okanagan, the foreshore between the high and low water marks, and the offshore area between the low water mark and the City’s present boundary 305 metres (1000 ft) into the lake (see Figure 2.1).

The high water mark is that point of the shore where the water stops when the lake level is, on average, at its highest. This point is not static. Erosion and accretion can mean that the high water mark on a given property will, ten years from now, be at a different location than it is today.

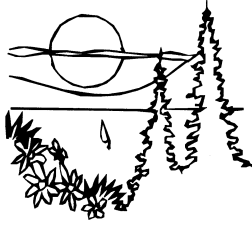
FIGURE 2.1 -- THE SHORE ZONE



Typically, Lake Okanagan water levels fluctuate between 341.3 m (1119.8 ft.) and 342.53 m (1123.8 feet) geodetic. The level of the lake is controlled at Penticton by a dam that helps ensure optimum levels for irrigation, fisheries, water based recreation facilities and other lake-reliant activities. The dam also minimizes the danger of flooding, which was a frequent occurrence prior to the dam’s construction in 1956.

The City of Kelowna has within its boundaries 32 km of Lake Okanagan waterfront.

NATURAL ENVIRONMENT



CONTENTS
Vegetation
Wildlife
Impact Assessments
Interpretive Facilities
Water Quality
Aquatic Weeds

CHAPTER 3: THE NATURAL SHORE ZONE ENVIRONMENT

Public consultation on the matter of shore zone environmental issues reveals that while Kelowna residents are concerned about the state of the natural environment, many do not feel they have sufficient knowledge to make specific recommendations regarding future directions. The lament regarding lack of information is not all that surprising given the scant and mostly dated information on shore zone environmental conditions. To supplement existing information, Trumbly Environmental Consultants were hired to prepare an inventory of Shore Zone habitat conditions. Maps 1-6 summarize the research conducted by these consultants.

UPLAND AND FORESHORE VEGETATION

Maps 1-6 show the vegetation types which characterize the shore zone. Much of the shore zone has been heavily urbanized. The areas that remain in a “natural” state, typically fall into one of the following habitat classifications:

Black Cottonwood Riparian:

Dense mixed forest, with shrub-dominated understories, that includes plant communities that progress through varying mixtures of shrubs and black cottonwood

Rocky Outcrops:

A mixture of nonalpine steep bedrock cliffs, escarpments and outcroppings with little soil development and relatively low vegetative cover (mostly in the northern and southern portions of the study area)

Ponderosa Pine:

Typically a sparse to open coniferous forest, with big sage or perennial grass dominated understories, that occur along the grassland forest border, leading to a Ponderosa Pine and Douglas Fir climax (mostly in the northern and southern portions of the study area)

Bunchgrass Grassland:

Typically a dense herbaceous habitat dominated by perennial grasses and generally lacking shrubs or trees.

Vegetation performs vitally important functions. It serves as habitat for wildlife, provides shade for fish, aids in the removal of pollutants, helps prevent erosion by stabilizing the soil, provides a source of

organic matter, and provides aesthetic appeal.

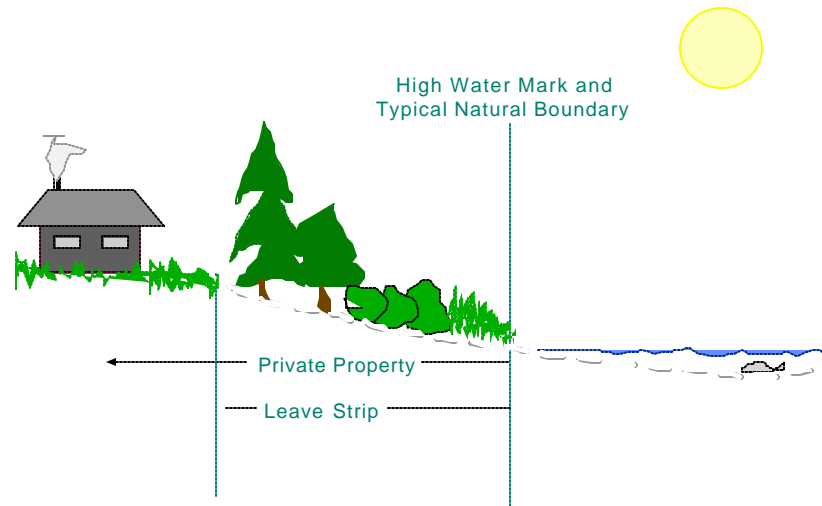
In its natural state, the shore zone ecosystem is one of immense diversity and vegetative species abundance. The changes brought about by urbanization have reduced both the extent and diversity of this vegetation. Where previously there were marshes, there are today often houses built on filled land. Where there were once indigenous trees and grasses, today there are ornamental shrubs and manicured lawns. Over half of Kelowna's Lake Okanagan shore zone has been altered by urbanization. Much of the habitat that once existed is no longer in place. As a result, some of the insects, birds, and animals that were once common-place today no longer frequent the area.

The effects of urbanization have not been uniform. There remain areas that have been left relatively untouched. Some areas, such as Maude-Roxby Marsh, have been restored and now attract a wide variety of birds and animals. There are, however, also some areas that have been severely impacted by human activity and are now virtually devoid of vegetation and wildlife.

Urbanization of an area does not lessen the need for shore zone vegetation. In fact, in some respects, the vegetation which now exists has, because of its scarcity, taken on new importance.

Some habitat areas serve particularly important or unique functions. Areas with Black Cottonwood, shallow open water, shrub swamp and bunchgrass grassland are particularly important to fish and wildlife. In order to protect these areas, it is suggested that a corridor of land along the lakefront be left in its natural state wherever possible. The fulfillment of this objective could be assisted by making development within the sensitive lakefront area subject to a Development Permit. The Development Permit process would require anyone wishing to subdivide or rezone their shore zone property to retain a 10-30 metre "leave strip" along the waterfront. The land within the "leave strip" would be required to be left in its natural state. The 10 metre leave strip requirement would apply to land being redeveloped for single or two family residential development, the higher 30 metre requirement would be the maximum applied to industrial, commercial, multiple-family residential, and institutional development in previously undisturbed areas. The exact requirements and conditions should be stipulated in the Official Community Plan (OCP).

FIGURE 3.1 -- LEAVE STRIP FOR A SINGLE-FAMILY HOME



T

The City’s Parks and Recreation Master Plan surveys indicated that 70.5% of respondents were very supportive of protecting natural areas and wildlife habitats.

The above discussion deals exclusively with leave strip standards (intended to ensure environmental protection). In addition to the leave strip requirements, multi-family, industrial, institutional and commercial development will also trigger requirements for the *dedication* of a public access corridor (discussed in further detail in Chapter 4 of the Shore Zone Plan and within the OCP)

Recommended Action:

- 3.1 **Shorezone as DP area.** Advance revisions to the Official Community Plan to require “Natural Environment/Hazardous Condition Development Permits” for the Shore Zone and to stipulate that a corridor of lakefront land be left in its natural condition upon redevelopment of the upland parcel, or be landscaped in a manner that either enhances conditions for fish and wildlife or maintains conditions equivalent to those that would have existed had no development occurred. Upon review of

development permits, staff should give recognition to the fact that those owning land along the waterfront have the right to build protective retaining walls on their property. This right may in some cases mean that vegetation cannot be preserved or planted. The retaining wall should still, however, minimize environmental damage and should comply with provincial environmental regulations and guidelines.

- 3.2 **Rehabilitation.** Encourage the rehabilitation of natural areas that have been negatively affected by human activity, even on properties where no development initiatives are being proposed.

ENVIRONMENTAL IMPACT ASSESSMENTS

Some areas designated as being sensitive may, upon closer investigation not be as critical as first believed. For this reason, it is reasonable to exempt a development proponent from the requirement to obtain a Development Permit if it can be shown through an environmental impact assessment that development of a particular type on a specific property would have no significant impact on the shore zone eco-system.

Recommended Action:

- 3.3 **DP Exemption.** Upon revision to the OCP, allow a Development Permit (DP) exemption for those properties within the DP area that have been assessed by a qualified professional who has provided a report which concludes, to the satisfaction of the City, that the proposed action or development would have no significant impact on the environment, or which concludes that the land is not considered to be

environmentally sensitive to
development, nor subject to
hazardous conditions.

VEGETATION IN URBANIZED AREAS

Much lakefront land is being used for urban purposes. The primary use is for single-family dwellings. The yards of these lakefront homes form the boundary between the upland and the lake.

Over the years, waterfront land has, in some cases, eroded. Such erosion often follows the removal of vegetation that previously held soil in place. By not removing such vegetation or by replanting with appropriate vegetation, such erosion can in many cases be prevented. The presence of vegetation will help protect the upland homeowner's property, and also provides habitat for wildlife and shade cover for fish.

Upland horticultural practises such as extensive fertilizing can ultimately impact lake water quality.

It is suggested that, if aware of these facts, many existing waterfront property owners would take appropriate action.

Recommended Action:

- 3.4 **Horticultural Practises.** Initiate efforts to raise awareness of appropriate shore zone horticultural practises.

WILDLIFE

The shores of Lake Okanagan provide both seasonal and year-round habitat for a wide variety of land animals, song birds, ungulates, amphibians and reptiles. The concentration and diversity of wildlife is generally greatest where there is substantial and diverse vegetation.

Use of the shore zone environment is changing over time. As shore zone conditions are altered, the area may become either more or less appealing to wildlife. Urban activity may have had a detrimental effect on at least some species. However, other species, such as geese, seem to thrive in or near settlement areas.

Kelowna's Natural Features Inventory (1991) identified the lakeshore as being important for wintering waterfowl, Barrow's Goldeneye, swans, and painted turtle. A June 1996 one-day sample

inventory indicated that the shore zone is being used by at least twenty-five different animal species. In reality, there is much greater diversity than represented by this inventory, since many other species stop in Kelowna enroute to other destinations during the spring and fall migratory seasons. Other species are most commonly found in winter and would therefore not likely have been identified in a summer inventory. Species diversity is greatest in the northern area of the City where vegetation provides appropriate habitat and where there has been least impact from urbanization.

Because people are feeding wildlife, some species such as geese are now wintering in the Kelowna area. Many people consider geese to have become a nuisance. Particularly offensive has been the mess left behind when vast numbers of geese have defecated on carefully groomed parks and yards. Shared preferences for manicured lawns have increased conflicts between humans and geese.

FISH

A variety of fish species inhabit Okanagan Lake. The fish species of greatest interest to sports fishers are Kokanee salmon, Rainbow trout, Lake trout, and Eastern Brook trout.

The fate of all fish species is closely associated with water quality, habitat conditions, and human activities.

It is generally well known that creeks can serve an essential role in providing spawning grounds for Kokanee salmon. Although lesser known, the shores of Okanagan Lake have also been utilized for this purpose. Map 7 illustrates the areas that have historically been primary shore spawning areas.

The diverse biological communities of the shore zone provide protection and serve as a valuable food source for juvenile fish. Natural weed beds act as important rearing areas for the Kokanee fry. In these locations, any nuisance growth of attached algae would jeopardize the reproductive success of the fish.

Fish are demanding in terms of lake level maintenance and water quality. Significant reductions in lake level or quality can threaten the spawning beds of the Kokanee. Changes that may exert negative influences include temperature fluctuations and changes in the biological or chemical composition of the lake.

Spawning beds and juvenile habitat can also easily be disturbed by insensitive construction activity in or immediately adjacent to the water. Structures such as impermeable or solid wharves, jetties,

groins, and breakwaters can all affect natural habitats.

Historically, Kokanee fishing has been a significant natural resource, providing employment opportunities, a food source, and a tourist attraction. The Kokanee fishery was, however, closed in 1994 due to drastic declines in the fish stock. Preliminary estimates placed the 1995 fall Kokanee run at 50,000. As recently as the mid 1970s, there were more than a million spawning Kokanee. There are a number of factors at work in the devastating decline. Pollution and loss of spawning stream habitat likely play a role. However, another likely reason appears to be the ill-fated introduction to the lake several decades ago of mysis shrimp. The expectation was that the shrimp would provide food for the Kokanee; instead, they ate much of the plankton upon which young Kokanee relied.

Development, alteration or modification of the foreshore environment, if done correctly, can, however, be sensitive to the shore zone ecosystem. The Ministry of Environment and the Department of Fisheries and Oceans have published information that provides guidelines for sensitive development (Land Development Guidelines for Protection of Aquatic Habitat). These government agencies have authority to regulate activity in such a way as to protect the fish population.

Recommended Action:

3.5 Land Development Guidelines.

Ensure that development along the lake complies with the Land Development Guidelines for the Protection of Aquatic Habitat (Ministry of Environment, Lands and Parks, and Department of Fisheries and Oceans, 1992), in accord with Provincial regulations.

3.6 Enforcement. Help raise awareness of the Ministry of Environment's and Department of Fisheries and Ocean's Land Development Guidelines for the Protection of Aquatic Habitat and, where it is evident that guidelines are not being complied with, inform the relevant agencies.

NATURAL ENVIRONMENT VIEWING AND INTERPRETIVE OPPORTUNITIES

There are areas within Kelowna where natural habitat is being or has been enhanced (Maude-Roxby Marsh and the Brandt's Creek revitalization). Such areas can attract a great diversity of animal life. Public enjoyment of these areas has in some cases been enhanced by the provision of boardwalks and interpretative facilities that help educate and raise awareness of habitat and wildlife issues.

Recommended Action:

- 3.7 **Viewing Areas.** Encourage the creation of natural environment viewing areas and interpretive facilities where such can be done without jeopardizing sensitive natural vegetation or wildlife.

MUNICIPALLY-OWNED PROPERTY

Municipal government is directly responsible for the management of some portions of the shore zone, such as parks and street-end beach access points. It is therefore important that the City of Kelowna, like other property owners, conduct its affairs in a manner that respects sensitive habitat. Although the City is in a position, like others, of having to respect the natural environment, the City is different from other property owners in that it is also expected to provide for some of its citizens' social needs. This is an expectation that is not placed on other property owners. There may be cases where, although habitat may be impacted, the development at a particular location of a facility for public use may present the best alternative in the constant need to balance human and wildlife demands on the shore zone. For example, cumulative impacts on wildlife and natural vegetation may be less with the placement of one community dock than with the placement of many smaller docks. It is therefore suggested that, where municipal property is concerned, a social assessment be performed in addition to an environmental assessment. With the availability of both, a better decision can be made regarding the balancing of human and wildlife usage.

Recommended Action:

- 3.8 **Municipal Actions.** Refrain from actions on municipally-controlled sites that would have a negative impact on sensitive natural habitat unless environmental and social assessments prove that taking such action is, in the long-run, the best solution to the balance between providing for both human and wildlife usage.

ENVIRONMENTAL IMPACTS OF ACTIVITY WITHIN THE SHORE ZONE

Some activities, such as gas docks and marinas, that are located within shore zone areas have the potential to pollute the aquatic environment. It is important to ensure that the activities permitted to take place within the sensitive shore zone are not allowed to impact the environment in any negative manner.

Recommended Action:

- 3.9 **Environmental Impacts.** Require Development Permits for all development activity within Natural Environment/Hazardous Condition areas. This requirement will give the City an opportunity to review all proposed developments and to ensure that the natural environment will not be negatively affected.

WATER QUALITY

Maintaining the quality of lake water is critical to wildlife, fish, and humans. The lake provides much of Kelowna's drinking water. Locals and tourists also use the lake for swimming. A clean water supply must be maintained to ensure that the lake water can, in future years, be used for both drinking and swimming. The importance of an uncontaminated water supply has most recently been illustrated by the public health concerns associated with the outbreak of Cryptosporidiosis.

The City's Official Community Plan provides direction regarding a number of water quality issues. It is recommended that these policies be implemented.

Recommended Action:

- 3.10 **Water Management Plan.** Through representation on the board of the Central Okanagan Regional District, work towards the preparation of a Water Management Plan for the Okanagan Lake Basin which will set out water quality objectives and a definitive strategy for achieving such objectives (specific issues to be addressed include disposal of boat sewage, foreshore use and management). (OCP Policy 2.17.1)
- 3.11 **Stormwater Treatment.** Pursue stormwater treatment options that may protect and improve the quality of Lake Okanagan. (OCP Policy 11.17.3)
- 3.12 **Storm Drainage.** Continue extension of storm drainage systems and detention facilities toward mitigating environmental impacts of storm runoff in accord with the City of Kelowna Stormwater Policy and Design manual and “Best Management Practices” as recommended by the Ministry of Environment, Lands and Parks” Urban Runoff Quality Control Guidelines for B.C. (OCP Policy 2.4.9)
- 3.13 **Sewer Service.** Initiate and promote the installation of sewer service to all existing urban development, where practical, and economically feasible. (OCP Policy 11.5.1)
- 3.14 **Septic Tanks.** Do not permit the construction of septic tanks, drainage and deposit fields within 30 metres

(98.4 feet) of the normal high water mark of any stream (or any other distance specified by the Ministry of Health or by the Ministry of Environment, Lands and Parks in its Environmental Control Areas). (OCP Policy 2.7.8.)

- 3.15 **Federal Government.** Encourage the federal government to: update the Okanagan Basin Study that was prepared in 1972; continue funding of research on freshwater environmental issues; and to advance policies and increase enforcement to prevent dumping in Lake Okanagan.

AQUATIC WEEDS

Population growth has resulted in heavy recreational usage of Lake Okanagan. Intense usage eventually exposed the lake to Eurasian Water Milfoil (*Myriophyllum spicatum*).

Once established, it does not take much to stimulate the spread of weeds. Weed growth can be triggered by structures such as docks, breakwaters, and groins which directly influence water movement, silt deposition and wave action. A strong direct correlation appears to exist between bottom disturbance and heavy milfoil growth areas. Bottom sediment can easily be disturbed by such activities as burial of water intake pipelines and dredging. Areas with pronounced weed growth are also often associated with creek flows with apparent high silt loadings or with high dissolved nutrient discharges. Given the relative ease with which milfoil can spread, it is not surprising that milfoil has, since its introduction, spread rapidly.

Many swimmers, boaters, water-skiers, and other users of the lake consider milfoil to be a nuisance. The weed can clog equipment and affect the quality of swimming areas. It can also affect the clarity of water and therefore present an aesthetic concern. Milfoil areas may, however, be of some biological value as habitat. The extent to which milfoil is controlled will depend on the social values placed on habitat, recreational and visual amenities.

Milfoil growth is currently restrained only because measures have been taken to control the areas of infestation. Only introduced weeds are currently being controlled. Naturally occurring aquatic plants

such as skirpus reeds are not removed. If weed control measures were to cease, it is likely that the level of infestation would reach the peak levels experienced in the late seventies (Mel Maxnuk, Ministry of Environment).

The Okanagan Water Basin Board and the Ministry of Environment are responsible for weed control. The Okanagan Basin Water Board (made up of political representatives of the three Regional Districts within the Okanagan), in consultation with the Ministry of Environment, identifies the priority areas for aquatic weed harvesting and de-rooting. Generally speaking, public beaches and boat launches are given first priority for weed control.

The weed control program is jointly funded by the three regional districts within the Okanagan and by a grant from the Ministry of Environment. In December 1996, the Ministry of Environment announced that it would be reducing its funding of weed control by 50%. Unless funding can be received from other sources, this loss of revenue will force increased reliance upon summer harvesting. Summer harvesting will lead to more shoreline debris during the swimming season. Until now, winter derooting has been the treatment of choice because it slows regrowth and reduces impact on summer tourism.

Future costs of weed control can be minimized by taking steps to prevent new weed growth. Since weed growth is often stimulated by disturbances to the lake bottom, it is important to reduce the incidents of such disturbances as much as possible.

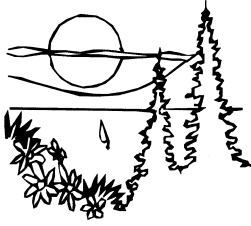
New development may in some cases require that new service lines be installed in the lake. It is important that where the installation of such lines cannot be avoided that they at least do not interfere with weed control machinery.

Dock construction may contribute to the proliferation of aquatic weeds. Unfortunately, at the same time, docks can also interfere with the ability of machine operators to access the newly infested areas. Access is particularly impeded in those cases where the distance between docks is minimal. Docks have already made portions of the shore zone inaccessible to weed control machinery.

Recommended Action:

- 3.16 **Weed Control.** Continue to support the weed control activities of the Okanagan Basin Water Board.
- 3.17 **Placement of Utility Lines.** Discourage utility companies from placing service lines in areas of high public use where there may be a present or future demand for aquatic weed control.
- 3.18 **Placement of Utility Lines.** Encourage waterfront service lines to be placed in such a way as to minimize encouragement of weed growth and in such a way that service lines would not be subject to contact and damage by derooting or harvesting machines.
- 3.19 **Dock Construction.** Ensure that any revisions to regulations regarding dock construction take into account weed control machinery access requirements.

RECREATIONAL USE



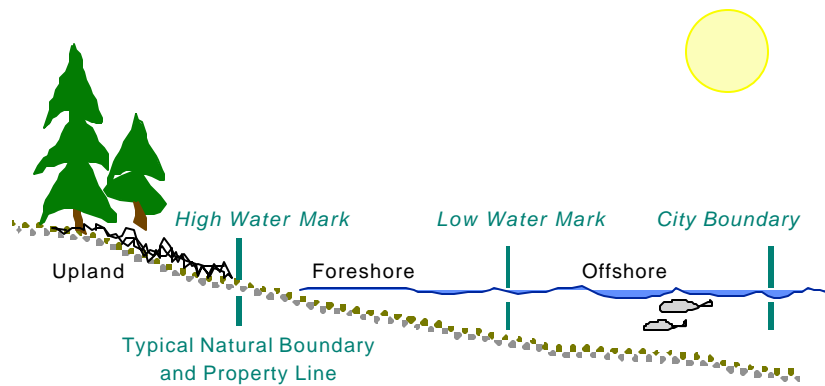
CHAPTER 4: PUBLIC ACCESS ALONG THE LAKE

CONTENTS

Public's Right of Access
Access Limitations
Riparian Rights
Types of Access
Acquisition Mechanisms
Security of Property

With the exception of a few lakefront areas where the City or Regional District own land, public lake access is generally confined to the foreshore.

The foreshore is the area lying below the natural boundary of the lake (high water mark). The natural boundary is distinguished by the change in the character of the soil and vegetation from the upland to the foreshore. Virtually all foreshore in the Okanagan is owned by the Province and is available for casual public use.



Property Owner has right to:

1. access water
2. protect property from erosion
3. apply for ownership of accreted land

Public has right to foreshore access

FORESHORE ACCESS RIGHTS

The public is generally entitled to unimpeded access along the foreshore (the area between the high and low water marks). The Crown Lands branch of the Ministry of Environment, Land and Parks is responsible for the management and allocation of Crown aquatic land. This responsibility includes granting authorization for the use and development of Crown foreshore, primarily for dock construction. When authorizing the placement of improvements on Crown foreshore, the Ministry considers the provision of unimpeded access along the foreshore as one of its objectives. Anyone wishing to build on Crown foreshore must first

receive approval from Crown Lands. The construction of a dock is one example of an action that would require Provincial authorization. Provincial guidelines now stipulate that docks may not impede public access along the foreshore. Any new dock construction must comply with these guidelines.

Eighty percent of those responding to a survey carried out as part of the Shore Zone Plan, felt that action should be taken against those waterfront property owners who have built docks for which provincial licenses have not been issued.

RIPARIAN RIGHTS

Those owning property abutting the lake's natural boundary have certain "riparian rights". Riparian rights include provision for a waterfront property owner to:

- have unobstructed access to and from the water
- protect property from erosion caused by lake
- apply for ownership of natural accretions

By working to ensure that the public's right to foreshore access is not compromised by placement of illegal structures, the City can increase access at little cost. The access granted through Common Law rights of access to the foreshore does, however, have its limitations.

ACCESS LIMITATIONS

There are limitations to the usefulness of the public's foreshore resource. For one, the access is only available when water does not cover the foreshore area. In reality, water generally covers much of the foreshore during summer months which is also the time when access is most in demand.

Foreshore obstructions can further limit access. Some barriers are natural. For example, the steep slopes of the Glenmore Highlands drop so sharply into the water that this portion of the shore zone is to all intents not passable. In other areas, tree growth, large rock outcroppings, or creek outfalls prevent access. It is not possible to alter such conditions without tampering with natural eco-systems. However, it is possible to assist people in getting over or around the barriers. Bridges can, for example, provide effective creek crossings. At the mouth of Mill Creek, there is a small pedestrian bridge that allows people to pass over the creek.

The effects of the barriers presented by nature are compounded by those created by human alteration of the foreshore. In Kelowna, the following types of barriers prevent or seriously discourage public access to

portions of the foreshore:

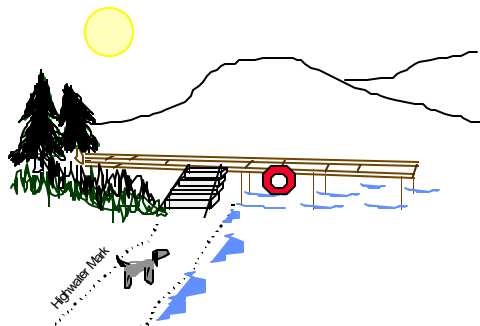
- docks
- berms
- retaining walls
- boats beached on the foreshore
- intimidating or threatening signs
- fences placed below the high-water mark

Over half of all Kelowna residents (58%) responding to a random-sample survey indicated that they do not use the public foreshore. Many of these respondents said that they did not do so because of the barriers encountered. Docks were among the foreshore obstacles most frequently cited. To build a functional dock, it is necessary to cross the foreshore. By building such a dock, however, public access along the foreshore will almost always be impeded unless stairs are provided for the public.

In dealing with the foreshore, the City must respect the riparian rights of waterfront property owners. The City could not, for example, take action to improve foreshore access if this were to obstruct waterfront property owners' access to the lake. To give an example, this would likely mean that the City could not construct a paved pathway along the foreshore. In order to be above water year round, any permanent foreshore pathway would have to be elevated. The construction of such a permanent pathway on the public foreshore could conceivably be construed as an obstruction to an upland property owners' lake access and would therefore not be legal.

Recommended Action:

- 4.1 **Public Access Barriers.** Request that the Provincial Crown Lands Branch intensify efforts to ensure that public access along the foreshore is unimpeded, by requiring, in cases where new docks are to be elevated more than 0.4 metres at the high water mark, that stairs be provided to facilitate public crossing.



LEGALITY OF OBSTRUCTIONS

Without conducting detailed surveys, it is not always feasible to determine the legality of the structures that impede public access. There are instances where retaining walls reach into the lake, even at low water. Such structures would appear to be illegal. However, it is possible that a retaining wall was initially placed on a waterfront owner's upland property as protection against erosion. Waterfront owners have the right to protect their land from erosion, as long as structures are placed only on the upland property. No construction is allowed on the public foreshore. Subsequent erosion of the foreshore in front of the upland property owner's parcel or adjacent parcels may give the appearance that the owner has built illegally (since the structure could now be at or below the current high water mark). In such an instance, however, all the land behind the retaining wall would be part of the property owner's original title -- erosion would have affected only the foreshore. With the erosion of the foreshore, public access is lost.

Apart from the above, there may be instances where unauthorized, illegal construction activity has taken place on public foreshore. Without a full survey and historical documentation, it is difficult to establish the legality of existing installations. In some instances, the illegal structure may have existed for so long that present owners are unaware of the structure's illegal status.

It is only recently that the Province has been applying stringent criteria regarding the retention of public access along the foreshore. It should be noted that the Province has, in the past, licensed docks that block public access to the foreshore. License agreements, however, last for a maximum of ten years. Upon expiration, applicants must reapply under the criteria in place upon reapplication. Therefore, any current dock obstructions to public access can be addressed over a maximum period of ten years.

Recommended Action:

- 4.2 **Action on Illegal Docks.** Request that the Provincial Crown Lands Branch intensify action against those property owners who have not obtained proper authorization for foreshore installations (e.g. docks).
- 4.3 **Provincial Involvement.** Bring any observed instances of non-compliance

with Provincial Private Moorage Guidelines to the attention of the Provincial Crown Lands Branch.

- 4.4 **Construction not Conforming to License.** Request that the Provincial Crown Lands Branch take action against those property owners who have not built in accordance with the license they were issued.
- 4.5 **Voluntary Removal of Barriers.** Where it is in the public interest to do so, consider compensation to property owners voluntarily removing barriers which have been previously authorized.
- 4.6 **Determining Legal Status of Docks.** Encourage the provincial Crown Lands Branch to intensify efforts to determine the legal status of structures in the foreshore area, and to pursue removal of unauthorized installations.
- 4.7 **License Renewal where Docks Block Access.** Discourage Crown Lands from renewing license agreements for docks which impede public access to the foreshore. If the City assumes control over license agreements, renew only those licenses covering docks that do not block public access to the foreshore.

AMBIGUITY OF PUBLIC REALM

Many people have expressed that they feel uncertain about using the foreshore because they are not sure of the exact location of the “public foreshore” and do not wish to risk trespassing on private property. Waterfront property owners expressed concern that some individuals showed no such hesitation and either ignored requests to move off private property or else indicated genuine lack of understanding about the boundaries. Such reactions suggest that there is a need to better define and communicate the location of the high water mark so that both waterfront property owners and the general public understand where the public realm begins and ends.

Recommended Action:

- 4.8 **Education regarding High-Water Mark.** Utilize media publicity to inform the public when the lake level in spring-time reaches the high-water point. This will allow waterfront property owners and the general public to clearly understand the limits to foreshore access.
- 4.9 **Signage at High-Water Mark.** Indicate the location of the highwater mark at selected high-traffic beach access points so that the boundary between public and private land is clearly delineated.

DEVELOPMENT OF YEAR-ROUND ACCESS (BEYOND PUBLIC FORESHORE)

If better-developed, year-round access is desired, upland property will need to be made available. This could occur in a number of ways. Alternatives include requiring those developing waterfront multi-family, commercial, industrial or institutional facilities to dedicate a portion of the shore zone for public use. The City's Official Community Plan requires that 10m be dedicated when foreshore property is developed or redeveloped into such uses. Another mechanism that has historically proven useful in acquiring beach access points has been the Land Title Act (Section 75) provision for municipalities to take, upon subdivision, a 20m road right-of-way dedication at 200 m intervals. It is the application of this legislation that has resulted in many of the City's beach access points (see Maps 8 to 12 for locations).

The above strategies will only result in increased access opportunities if there are substantial land use changes. In some areas, such changes may be very sporadic or may take a long time to occur. If more immediate access improvements are desired in such locations, the only means for obtaining such would be to acquire the property through purchase, lease, or donation.

Of those survey respondents who expressed an opinion on the matter, 54% felt that more land should be acquired to provide year-round public access along portions of the lake. Increasing public access was also a goal that emerged from the public process leading up to the Strategic Plan of 1993.

It is not considered financially or otherwise possible, or necessarily desirable, to make available a year-round access corridor along the entire shoreline. Choices will have to be made in selecting the areas most needing improved access.

Recommended Action:

- 4.10 **Expanded Public Access.** Work towards increasing the amount of public land available for year-round shore zone access, in accord with the direction set out on Maps 8-12 of the Shore Zone Plan.

TYPES OF ACCESS

Shore zone access corridors currently vary greatly in physical form. Some corridors such as the boardwalk at Waterfront Park are finished to a high development standard and provide for access for a broad spectrum of users, including pedestrians, cyclists, people pushing strollers and those in wheelchairs. Other areas have been left much more natural.

Recommended Action:

- 4.11 **Accessibility.** Work towards ensuring that major City waterfront parks and all year-round public access corridors in the area between City Park and Waterfront Park are accessible to various forms of assisted transportation (such as wheelchairs, strollers etc.).
- 4.12 **Further Plans.** Integrate the findings of the Inner City Shore Zone Concept Plans Refinement and Integration Project and the Sutherland Bay Concept Plan into this Shore Zone Plan.
- 4.13 **Parking Impacts.** Ensure that year-round access corridors intended to attract City-wide usage do not contribute to parking problems in adjacent residential neighbourhoods.

ACQUISITION MECHANISMS

By following a broad and diverse range of approaches for acquiring public access corridors, the City will be able to achieve its public access goals more quickly than would be possible if only one or two approaches were considered acceptable.

Recommended Action:

- 4.14 **Shore Zone Dedications.** Acquire a road right-of-way dedication (up to 10m) of lake front corridor upon rezoning, subdivision, or Development Permit issuance for all lakefront commercial, industrial, institutional or multi-family development projects. (OCP Policy 2.29.3)
- 4.15 **Road Dedications.** In new subdivisions, require 20 metre road dedications to be made available for beach access points, as per the provisions made under Section 75 of the Land Titles Act. (Where the closest beach access point is 200 m distant, the Land Titles Act allows the City to require 20 m road dedications to be made available for beach access points at not less than 200 m intervals within the subdivision. In rural areas, where the parcels into which the land is subdivided all exceed 0.5 ha, the City can require 20 metre dedications at distances not greater than 400 m between centre lines.)
- 4.16 **Land Donations.** Facilitate the work of groups and individuals willing to donate land for public access along the lake.
- 4.17 **Leasing of Land.** Where appropriate, consider leasing land for public shore zone access purposes.
- 4.18 **Purchase of Land.** Consider purchase of all or a portion of water front

properties in high-priority access areas in cases where it is unlikely the lots can be obtained by other means within a reasonable timeframe.

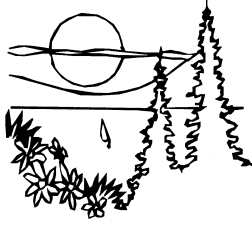
- 4.19 **Offsetting Purchase Costs.** Consider a variety of alternatives for helping to offset purchase costs. For example, where lots are purchased, the water front portion of the lots could be severed and the remainder of the parcel sold to offset costs.

SECURITY OF PRIVATE PROPERTY

Some waterfront homeowners have expressed concern that their property is not adequately respected by all foreshore users and that this is causing them considerable grief.

Recommended Action:

- 4.20 **Actions to Ensure Security of Property.** Ensure the privacy rights of waterfront property owners are maintained by a system of monitoring and enforcement measures (e.g. By-Law enforcement, volunteer Shore Zone Patrol, Neighbourhood Watch, Citizen call-in, camping prohibition, limits to hours of access).
- 4.21 **Signs Regarding Use of Foreshore.** Place signs at high-traffic beach access points that will inform the public of the rights and responsibilities associated with foreshore usage (e.g. no trespassing on private property, no littering etc.).



CHAPTER 5: **BEACHES AND WATERFRONT PARKS**

- CONTENTS
- Facilities
- Improvements
- Maintenance
- Acquisition
- Development Criteria

The community presently has eight major beach parks (see Map 13 for locations). Seven of these are owned and maintained by the City. The eighth, Bertram Creek beach, is owned and managed by the Regional District of Central Okanagan.

Some areas that are unsuitable for beach activities provide for various non-water based lakefront recreational needs. Waterfront parks such as Kinsmen, Sutherland, Knox Mountain, and the Maude Roxby Marsh are among those that serve this function. For example, although Maude-Roxby Marsh is not conducive to swimming, it attracts many residents because of possibilities for wildlife viewing. Kinsmen Park is a grassed area south of the Marsh. The occasionally murky nature of the water in this area makes this part of the shoreline unsuitable for swimming. However, the park contains picnic tables, tennis courts, a children's play ground, and an excellent view over the lake, and as such is used extensively.

BEACH ACTIVITIES

The current beach system provides for many different recreational needs, but swimming and sunbathing/relaxing continue to be the favourite beach activities of both local residents and tourists.



BEACH FACILITIES

The City's beach parks provide facilities that support both swimming and sunbathing as well as a variety of other activities. Some parks, such as City Park and Gyro Park have available a wide variety of facilities. These are also the beach parks that attract the greatest number of visitors.

BEACH PREFERENCES

While many people are obviously attracted to beaches such as City Park and Gyro Park, others prefer quieter, less-crowded beach parks.

One method of offering optimal enjoyment to beach-goers is to ensure that the beach park system continues to provide for a variety of needs. In order to ensure that this is done, it is important to determine who uses the beaches and to determine their preferences. The 1996 Shore Zone Plan survey (SZPS) and Beach User survey (BUS) provide a number of insights.

Profile of Local Beach Users

- households with children are the most likely to use beaches (SZPS)
- approximately 40% of those using the beaches more than ten times per summer week were households containing couples with children at home (SZPS)
- 1/3 of seniors living alone never use beaches (SZPS)
- more than a quarter of Rutland and Mission residents use the beaches more than six times/week (SZPS)
- SE Kelowna residents are least likely to be frequent beach users (SZPS)

Visitor Use

- 37% of beach users are visitors to Kelowna (BUS)
- most visitors are from Alberta (34%) or the Lower Mainland (20%) (BUS)
- City Park and Gyro have the highest percentage of visitors (BUS)

Beach Use Patterns

- a two-four hour beach visit is the most typical (46% of beach users stay for this length of time)
- on average, beach users stay at the beach for 3.13 hours
- 82% of beach users visit the beach at least once per summer week (if visitors, this would be once a week during their present stay) (BUS)

Activity Patterns

- Kelowna residents are much more likely to be found boating, water-skiing, fishing and jet-skiing (these activities all require equipment that visitors may not have brought with them and which may not always be available for rent) (BUS)
- swimming and sunbathing/relaxing are the primary activities of all lake users (BUS)

The identification of “attracting features” indirectly reveals the features that people find important in deciding on their beach destination. To maximize beach enjoyment, it will be important to ensure that the

identified needs are met. For example, survey results indicate that people appreciate uncrowded, well-maintained beaches that provide shaded areas. It is important not to assume that these preferences will always be paramount. Over time, priorities may change. For example, twenty years ago, shade was not identified as being of major importance. Attitudes have changed as a result of greater public awareness of the risks associated with excessive sun exposure.

Generally speaking, half of all respondents (51%) stated that they had no dislikes about the beach they were visiting. The concerns that were expressed can provide direction for future improvements to the beach system. The concerns can also help identify the issues that will have to be addressed as population and tourism levels increase. For example, with parking identified as being an issue at current usage levels, it will likely become even more of an issue as beach visits increase.

BEACH SATISFACTION

As a whole, it would appear that beach users are reasonably satisfied with the current beach system. However, some beaches are already perceived as being “crowded” (Gyro and City Park). Beach use is highest during the summer months. Under hot and sunny conditions, the City would be hard-pressed to ever achieve a beach supply to satisfy all demands. However, the same areas that are, in the summer, packed with people, are often deserted by all but wildlife during the winter months. This raises the question of whether extensive efforts should be exerted to provide a resource that receives full usage only during a few months of the year. The need for more beaches must be balanced with fiscal realities. At \$3000-\$5000 per linear foot, beach acquisitions are expensive. The City could encourage more off-season beach/waterfront park usage in order to optimize the benefits accrued from its existing shore zone resources.

BEACH IMPROVEMENTS

Some beaches could serve the needs of a greater number or a wider variety of people if facility improvements were undertaken.

At the time that this Shore Zone Plan was prepared, Waterfront Beach had just opened. Usage of this beach was modest during 1996. Despite the presence of facilities such as washrooms, showers, and a concession, overall enthusiasm for this beach was dampened by poor sand quality, the presence of large flocks of geese and gulls, and a lack of shade (as reported in the beach user survey of July 1996). By addressing some of these concerns, and thus attracting more people to use this new, centrally-located beach, some pressure could be taken off other City beaches, particularly City Park beach.

Recommended Action:

- 5.1 **Monitoring Usage.** Monitor usage of Waterfront Park, and, if necessary, initiate a publicity campaign to increase awareness of the beach.
- 5.2 **Shaded Areas.** Provide for additional shaded areas at Waterfront Park using natural vegetation that, where possible, is planted in such a way as to also achieve the purpose of deterring goose usage of the park.
- 5.3 **Garbage Containers.** Ensure availability of garbage containers and enforce against littering to discourage gull usage of City Parks.
- 5.4 **Wheelchair Access.** Improve wheelchair access to Rotary Park by providing a ramp or other access from the parking lot to the grass/beach area. A continuous concrete barrier currently makes access difficult.
- 5.5 **Gas BBQs.** Consider adding gas BBQ stands at City Park.
- 5.6 **Concession Stands.** Consider adding a concession stand at Rotary Park.
- 5.7 **Non-Car Access.** Encourage pedestrian, bicycle, and transit access to beaches to reduce parking demands. If parking issues become a primary obstacle to optimal usage of beaches, consider acquisition of parking lots on upland non-waterfront property to reduce costs. Where parking lots are not immediately adjacent to beaches, provide for safe pedestrian crossings between the parking lot and the beach.

BEACH MAINTENANCE

The amount of litter found on Kelowna's beaches depends largely on the behaviour of those visiting the beach. There will always be those who either consciously or unconsciously leave behind litter. To ensure cleanliness, the beaches are raked daily. Once a week the beaches are treated by a mechanical sweeper that sifts through the top three inches of sand.

During the summer season, all washrooms are checked at least six times per day. Despite this, washroom cleanliness has been raised as an issue by users at Strathcona, Rotary, and Sarsons beaches.

Recommended Action:

- 5.8 **Beach Maintenance.** During the summer season, continue to rake beaches daily and to mechanically sweep beaches on a weekly basis. Monitor effectiveness of current schedules and revise if necessary. Particular vigilance should be given to those areas where food concessions have been added.
- 5.9 **BIZ Patrol.** Encourage the downtown Kelowna Business Association to expand "Biz Patrol" litter removal coverage to Downtown beach areas.
- 5.10 **Washroom Cleanliness.** Improve washroom cleanliness at Strathcona, Rotary, and Sarsons beaches.
- 5.11 **Maintenance Schedules.** Post signs at all beach washrooms that indicate the name and phone number of the company responsible for facility maintenance. The sign should also give some indication of when the washroom was last cleaned.
- 5.12 **Shore Zone Clean-up Days.** Promote volunteer shore zone "clean-up" days, with municipality cooperating by providing garbage pick-up at

designated points.

BEACH AND PARK ACQUISITION

If the City is to provide for future population growth and increased tourist volumes, additional beaches and parks will be needed. Such new beaches and parks should be located where population densities will ensure maximum usage and where available means of transportation are varied (transit, pedestrian, bicycle, private vehicle).

Recommended Action:

- 5.13 **Use of Existing Beaches.** Utilize existing beaches to maximum capacity. In some instances, this may require tactics such as relocating most parking off-site to allow for beach expansion onto the parking lot. The waterfront parking lot could be replaced on nearby non-waterfront property that would be less expensive.
- 5.14 **Sutherland Bay Park Plan.** Prepare a Plan for Sutherland Bay Park which will provide a major new opportunity for expansion of the public waterfront system, including a potential beach park component.
- 5.15 **Sarsons Beach Expansion.** Consider expansion of Sarsons Beach as warranted by population increases resulting from infill and multi-family development in the North Mission/Crawford Sector.
- 5.16 **Strathcona Beach Expansion.** Expand Strathcona Beach as opportunities arise.
- 5.17 **Future Beach and Park Acquisitions.** Strive towards making available an additional 10.5 acres of waterfront beaches and parks by the time the City's population increases to

160,000. Locations to be considered might include the Cedar/Meikle Avenue area and the Cedar Creek area. The City has already acquired property at these locations. Another area that could be considered would be the area north of the existing COSBA facility on Hobson Road.

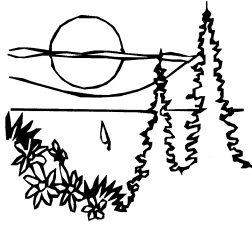
- 5.18 **Financing of Beach and Park Acquisitions.** Finance beach and waterfront park acquisitions through a variety of means including park dedications upon redevelopment, DCC funds, general tax revenue, and purchase using funds approved through referendums.
- 5.19 **Trusts and Service Groups.** Encourage the assistance of Trusts and service groups in the expansion and development of the City's beach and waterfront park system.
- 5.20 **Offsetting of Costs.** Consider offsetting the costs of new beach and waterfront park acquisitions by developing portions of newly acquired sites for residential or commercial purposes. Such an approach could help offset the costs of park acquisition and development. This should only be done if the beach that would be developed would be sufficiently large to serve a useful public purpose and if the non-beach uses would not interfere with enjoyment of the beach.

CRITERIA FOR DEVELOPMENT OF FUTURE BEACHES

The public has, through input to the Shore Zone Plan, identified those beach features which are of most importance. In order to appeal to beach users, designs for new beaches should, wherever possible, incorporate these features.

Recommended Action:

- 5.21 **Future Beach Components.** New beach parks should include, where possible and appropriate, a mixture of fine sandy areas and grassy areas. Shallow water areas should ideally have high-quality, weed-free water with sand on the bottom surface. Shaded areas should be available at the beach and/or grass area. Provision should be made for parking needs either immediately on-site or in close proximity. Beach park designs should be such that those who are wheel-chair bound can access the beach/grass area of the park. At the design stage, special attention should be given to reducing the conflicts between waterfowl and human usage.
- 5.22 **Natural Areas.** The waterfront park system should include areas that retain habitats for indigenous vegetation and wildlife.



CHAPTER 6: “**BEACH ACCESS POINTS**”/ **FORESHORE ACCESS POINTS**

CONTENTS History Existing Facilities Functions

A number of Kelowna’s street-end “beach access points” assist in supplementing Kelowna’s beach system (the locations of the beach access points are shown on Maps 14-19). Some of the access points serve as important recreational resources to neighbouring residents. Others access points are less useable-- either as a result of terrain conditions or due to infringements by adjacent property owners.

ACQUISITION HISTORY

The City’s beach access points are, by origin, road right-of-ways. The Municipal Act allows the City to require a road dedication (20 metres wide) when properties are being subdivided. The legislation provides for a maximum of one dedication every 200 metres. The historic subdivision pattern along the shoreline reflects the taking of the dedications.

Recommended Action:

- 6.1 **City Properties.** Retain in municipal ownership all portions of all those waterfront properties currently owned by the City (including all beach access points).
- 6.2 **Future Acquisitions.** Continue to acquire 20 metre-wide beach access points where such can be obtained through subdivision. (The City is legally entitled to take a road right of way access every 200 metres in new subdivisions.)

STREET-END BEACH FACILITIES

Because of their small size, the beach access points generally have few facilities. Park improvements, where they have occurred, are generally limited to installation of picnic tables and children’s play equipment. Change rooms and washrooms are not presently available. On-site

parking, if provided, is generally limited to a few stalls.

FUNCTIONS

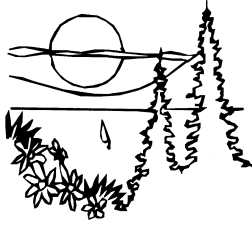
Despite fairly limited facilities, the system of smaller beaches, spread throughout the community, does serve a valuable function in providing for recreational needs. The beach access points provide convenient beach access for nearby residents. The beach ends also provide residents with an opportunity to gain access to and from the public foreshore. Access to this area might otherwise be blocked by illegally placed structures.

Recommended Action:

- 6.3 **Parking Problems.** Address beach access parking or adjacent on-street parking at those beach access points that have generated problematic parking patterns.
- 6.4 **Function of Access Points.** Continue to use street-end beach access points to enhance public foreshore access and to serve as beach access points for residents of surrounding neighbourhoods. Do not focus extensive efforts on adding washrooms and other similar amenities to existing beach access points since such facilities may contribute to an increase in parking demand that cannot be accommodated in a neighbourhood-friendly manner.
- 6.5 **Infringements on Access Points.** Ensure that all beach access points are available for public use by taking action against those adjoining property owners who have infringed on the public access points by planting vegetation, storing goods, or otherwise obstructing access.
- 6.6 **Cost Sharing of Fences.** Amend present Council Policy #10, to allow the City to consider some beach access points as “walkways” and as such make adjacent property owners eligible

for City cost-sharing of fences at these locations.

- 6.7 **Signage.** Ensure that all beach access points are clearly identified with appropriate signage.
- 6.8 **Access from Bikeways.** Wherever possible, make beach access points accessible from bicycle path networks.
- 6.9 **Signage.** Provide signage at high-use beach access points that give direction to the nearest major beach with washrooms, parking and other facilities.
- 6.10 **Swimming Buoys.** Monitor usage of beach access points for swimming and request Coast Guard permission to demarcate swimming areas with buoys if watercraft/swimming conflicts become of concern.
- 6.11 **Hours of Use.** Discourage inappropriate usage of beach access points by allowing for usage of these areas only between dawn and dusk.



CHAPTER 7: WATERCRAFT AND ASSOCIATED FACILITIES

CONTENTS

Concerns
Regulations
Marinas
Boat Launches
Docks
Moorage Buoys
Sani-Dumps
Gas Bars

The offshore portion of the Shore Zone is that area between the low water mark and the City's boundaries 305m (1000 feet) into the lake (see Figure 2.1). This area serves a number of purposes. It is the natural habitat area for fish, birds, insects and various other species. It is a City water supply. The offshore is also used for water-based recreation. Watercraft such as power boats, sail-boats, jet skis, canoes, kayaks, and row boats can all be found using the offshore area.

PUBLIC CONCERNS

Survey returns and public forums revealed that when it comes to the use of watercraft on the Lake, the public is concerned primarily about increased conflicts among lake users (i.e. jet skiers vs. upland property owners, power boaters vs. swimmers etc.).

REGULATION OF BOATING ACTIVITY

With multi-jurisdictional agencies involved in regulating the shore zone, it is often unclear which rules and regulations apply in which areas. This frustrates not only the public, but also the RCMP who have the duty of interpreting and enforcing the regulations. Ticketing of offending vessels is difficult when it is unclear who should enforce which rules. Efforts have recently been made to clarify matters and to deal with identified problems. Various federal and provincial agencies and a local committee formed by the Regional District of Central Okanagan are examining the need for registering small vessels, and licensing operators of small vessels. These issues will likely be addressed in a federal omnibus Bill. If the Bill passes, new regulations would apply to the operation of watercraft. Along with the new rules would also come increased funding for enforcement. Registration and licensing revenues would help offset enforcement costs.

It is recognized that regulations governing watercraft activity are primarily the responsibility of senior levels of government.

The City of Kelowna can, however, enact bylaws that pertain to business licenses. So, the City can, for example, enact bylaws that govern the activities of those who rent boats to recreation customers. The City cannot, without the approval of the Coast Guard, use the Zoning Bylaw to restrict boating activity. The Coast Guard would approve restrictions only if they were required for safety or environmental reasons.

Recommended Action:

7.1 Boating Regulations.

Monitor the progress of senior government initiatives in regulating the environmental and safety impacts of boating activities. If senior government actions appear to be insufficient, request Coast Guard approval for zoning bylaw restrictions in areas where these are necessary for safety or environmental reasons.

7.2 Noise Levels. Once new senior government regulations are introduced, monitor watercraft noise levels on Lake Okanagan and evaluate the need for further municipal regulation.

7.3 Houseboats and Personal Watercraft. Develop a strategy to minimize intrusion of houseboats and motorized personal watercraft on public lands.

MARINAS

The Kelowna Yacht Club is the largest marina facility within the City of Kelowna. The Yacht Club has recently undergone what will likely be its last expansion. It would be feasible from an engineering point of view to add one or more rows of docks if the breakwater was moved further west.

However, it is unlikely that such an approach would be cost-effective or appropriate in the Inner City area.

Recognizing the desirability of the boating function, and a growing population, there will doubtlessly be future additional demand for new marina facilities.

There is a possibility that a facility may be proposed for the area in front of the Grand Hotel. This project was initially proposed as a component of the Grand Hotel development.

On the other side of the lake, the Westbank Yacht Club is seeking to expand its marina to three times its present size. These aspirations cannot be fulfilled at this time because parking requirements cannot be addressed on the site currently owned by the Club.

Any new marinas would require adequate road access and parking facilities, sufficient water depth and shelter from adverse weather conditions.

It should be noted that not all boats necessarily need to be moored in the water. If appropriate structures and equipment are installed, smaller power boats could, when not being used, potentially be stored on land. Land based storage can reduce the need for additional marinas.

Recommended Action:

7.4 **Provision of Marinas.**

Allow private sector provision of another marina facility within the City, possibly through a lease from the City, providing that this can be done in an environmentally sound manner and providing that upland transportation, parking and community impacts can be adequately addressed.

7.5 **Location of Marinas.**

Identify possible downtown locations for a marina facility

through the Inner City Shore Zone Design Study, which forms an integral component of the overall Shore Zone Plan. The Design Study should include an assessment of the possibility for locating a marina in the Sutherland Bay area in conjunction with enhancement of the entire area as a major waterfront park if Riverside Mill were ever to relocate from its present site.

BOAT LAUNCHES

The City has four boat launches. The Cook Road facility is the City's premier facility. It provides four boat launch ramps. Surface parking for both trailers and cars is available immediately adjacent to the launch site. The Water Street boat launch also has four launch ramps, but the long-term usefulness is limited by parking constraints. Sutherland Park has a boat launch which provides one boat launch ramp. Most cars/trucks/trailers associated with the Sutherland Park launch park along Ellis Street. Kerry Park has one deep keel boat launch ramp for use by sailboats. Again, "car or truck plus trailer" on-site parking is not readily available.

Boat launches, like beaches, receive maximum usage during summer months, and most particularly on weekends. Demand for boat launch sites is high when the weather is warm and sunny. Use of the boat launches is, however, much lower when weather conditions are less ideal. For much of the year, the parking lot at the Cook Road boat launch sits empty.

At present, it would appear that existing boat launches provide adequately for the City's needs. A time may come, however, when demand will place significant pressure on the system.

There are few areas within the City that would be suitable for a new boat launch facility. Much of the northern and southern portion of the City are, for example, much too steep to accommodate a boat launch. The water in the vicinity of a boat launch site must be of a sufficient depth, or must be

capable of being dredged to become a suitable depth. Added to these requirements is the need for accommodating a large parking lot in close vicinity to the launch. There are few sites that can fulfill all these requirements. Previous searches for suitable sites have resulted in the identification of but one site at Sutherland Bay.

If no further launches were to be built, future needs would not be met. However, a shortage of launch facilities could be seen as a means of limiting use of the lake to a manageable level. It is conceivable that excessive use of the lake could affect safety. Boat launch capacities should not make feasible more boat use than can be safely accommodated.

Recommended Action:

7.6 **Use of Existing Boat Launches.** Seek creative methods to maximize use of existing facilities before adding another boat launch (e.g. valet service to more distant parking etc.).

7.7 **Future Boat Launches.** Once existing boat launches are utilized to their limit, give consideration to allowing for another facility that should be as economically self-supporting as possible.

7.8 **Location of Boat Launches.** Assess, through the Inner City Shore Zone Design Study and the Sutherland Bay Concept Plan, possible locations for a boat launch facility.

COMMUNITY DOCKS AND MOORAGE BUOYS

The City has only a few docks that are available for short-term use by the general public. Community docks are located at Bertram Creek park and at the foot of Queensway. Public surveys have indicated that there is a desire for more of such facilities.

The Paul's Tomb park area (at the base of Knox Mountain, north of Poplar Point) cannot be directly accessed by car. The Yacht Club has installed moorage buoys at the Paul's Tomb bay to allow boaters to enjoy this extremely popular destination.

Recommended Action:

7.9 Community Docks.

Consider provision of additional temporary usage community docks off of City-owned lands in areas where conflicts would not be too great with designated swimming areas.

7.10 Location of Community Docks. Allow provision for temporary boat moorage in appropriately zoned areas.

SANI-DUMPS

Sani-dumps allow boaters to dispose of sewage temporarily stored on-board. Kelowna Marina has the only such facility within Kelowna. Another facility exists outside the City's boundaries at the Shelter Bay Marina on the west side of the lake. The facility at Kelowna Marina may need to be removed if new pier facilities are placed at that location. The Yacht Club has indicated that it would be willing to assist in providing a sani-dump facility that could be used by both Club members and the general public. The Yacht Club has undertaken the environmental and engineering studies required for this project and could proceed with construction upon City contribution of approximately \$15,000. If sani-dumps are not provided, it is likely that more boaters would be tempted to dump raw sewage into the lake.

Recommended Action:

7.11 Sani-Dump Facilities.

Permit private-sector installation of sani-dump facilities as required, where such can be provided in an

environmentally-sound manner within appropriate water zones.

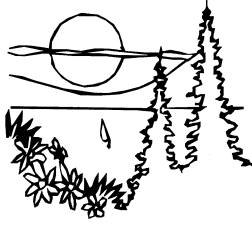
- 7.12 **Funding of Sani-Dumps.** Assist in funding a sani-dump facility if no privately-funded operation is available to Kelowna boaters.

GAS BARS

Kelowna's only water-based gas bar is located at Kelowna Marina. Boat users have indicated that this facility at times becomes congested and that a back-up location would be desirable. Concern has also been expressed that rough water conditions sometimes make it difficult to hold boats still while they are being filled. One suggested solution has been to permit gas barges. Gas barges could be located away from the highest traffic locations. The barges could be removed from the lake when not in use. If large enough, the barge could serve as a break-water so that boats could be held still while being filled.

Recommended Action:

- 7.13 **Marine Gas Facility.** Give favourable consideration to installation of another marine gas facility in an appropriately zoned area, provided that environmental issues can be addressed.



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Public Concerns
Impacts on the
Environment
Regulations

CHAPTER 8: **PRIVATE DOCKS**

Many waterfront property owners wish to maximize enjoyment of their lakeside location by building a dock. In January of 1997, there were 544 waterfront properties within the City of Kelowna. Of those properties, 296 lots had authorized docks, 42 had unauthorized docks, and 206 had no docks.

If all waterfront property owners eventually wished to have docks, the shore would be lined with almost twice as many docks as exist today. The potential for greater numbers of docks would perhaps not be an issue if existing docks were not having an impact on the community at large. Concerns have, however, been raised about existing docks.

Dock concerns have centered on:

- interference with views
- infringement of public access,
- the need to protect fish habitat,
- the spread of Eurasian Milfoil,
- the contribution towards littoral drift,
- preservation of riparian rights, and
- proliferation of non-moorage uses (incl. use for party decks)
- excessive numbers of boats moored at private docks

DOCKS AND PUBLIC ACCESS

Over half of all residents (58%) responding to a random-sample survey indicated that they do not use the public foreshore. Many of these respondents indicated that they did not do so because of the barriers encountered. Docks were one of many foreshore obstacles that were cited.

DOCKS AND THE NATURAL ENVIRONMENT

Dock construction, filling and/or dredging can impact the character of the foreshore with sometimes far-reaching environmental implications. An example is the construction of a solid pier or jetty that could potentially block sand drifting and thereby prevent the deposition of materials on an adjacent beach. Foreshore structures should be designed in such a way that natural processes of lateral drift, deposition, and wave, wind and current action are not hindered.

An interruption in natural lake current can also encourage the establishment of milfoil and accumulation of sediments. In relative terms the worst structures are those which completely block current action (lateral drift). Such structures include breakwaters, dock footings, and shoreline extensions (groins, jetties, berms, etc.). Floating docks or boathouses and structures supported by pilings are less likely to lead to milfoil establishment. In the event that aquatic weeds do become established, it is important that built structures are of a size, shape and type that do not impede use of machinery to control the weeds.

DOCK CONSTRUCTION

The design of docks and other structures is important not just from an environmental perspective, but also from the dock owner's perspective. Over time, it is almost inevitable that structures will become battered and undermined. However, it is in the interests of those erecting docks and structures to ensure that construction is of a quality that will permit the structures to withstand, for as long as possible, the continual exposure to the erosive forces of waves and various lake materials. Those constructing structures such as water intakes, docks, and boat launches must also ensure that they are built in such a manner as to remain operational within typical lake level ranges.

SAFETY CONCERNS

Accidents are more likely to happen when the proliferation of private docks and structures in the foreshore is combined with increased watercraft traffic to and from private docks and moorages. It is important that docks and other structures be built in such a manner that conflicts among boaters and between boats and other users (e.g. swimmers) is minimized.

DOCK REGULATIONS AND LICENSING REQUIREMENTS

Building a functional dock involves construction on some portion of the foreshore that lies between the low and high water marks. As stated earlier, the foreshore is, in most cases, owned by the Province. Those wishing to construct a dock must apply for a license from Crown Lands. Waterfront property owners are not by Canadian law given outright entitlement to construct a dock off their property. In response to public concerns, the Province has felt it necessary to provide some guidelines regarding the size and siting of shore zone structures. The Provincial Private Moorage Guidelines serve this purpose. In order to obtain a license, construction must generally conform to the Private Moorage Guidelines. Once issued, a license is valid for ten years. Some docks that have already been built have been legalized upon payment of a licensing fee. These docks may not necessarily conform to existing guidelines. Such docks have been licensed as "non-conforming" since they were built before the guidelines were

introduced. They can remain as they are until alterations are initiated. At that point, regulators may require that the entire dock be reconstructed in such a way as to conform to whatever standards apply at that time.

ILLEGAL DOCKS

Without a license of occupation, a dock will be deemed illegal, and can, as such, be subject to provincial initiation of trespass action.

The public largely supports the initiation of trespass action. In a spring 1996 survey, 80% of 467 survey respondents indicated that they felt action should be taken to remove illegal docks. In fact, 83% felt that stricter control is required for docks. Although half (52%) of survey respondents felt that waterfront property owners should be permitted to build docks, most felt that this permission should be granted only when construction conforms to guidelines. A strong desire was expressed for better enforcement of established guidelines.

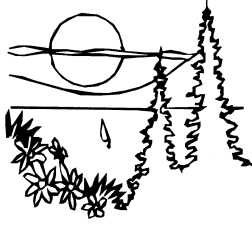
Recommended Action:

- 8.1 **Dock Regulations.** Continue to allow construction of docks providing they conform to the Provincial Private Moorage Guidelines and do not present an obstacle to public access.
- 8.2 **Impact of Subdivision.** Prior to approving any subdivision application, require that any foreshore structures in place at time of application conform to the regulations in place at that time.
- 8.3 **Zoning Bylaw.** Incorporate the Province's Private Moorage Guidelines into the City's Zoning Bylaw.
- 8.4 **Review of Regulations.** Upon incorporation into the City's Zoning Bylaw, periodically review the dock construction requirements to ensure they continue to meet needs.
- 8.5 **Sharing of Docks.** Encourage property owners to share docks so as to minimize the total number of docks

and reduce individual costs.

- 8.6 **Alternatives to Docks.** Encourage property owners to install moorage buoys or floating docks instead of permanent structures.

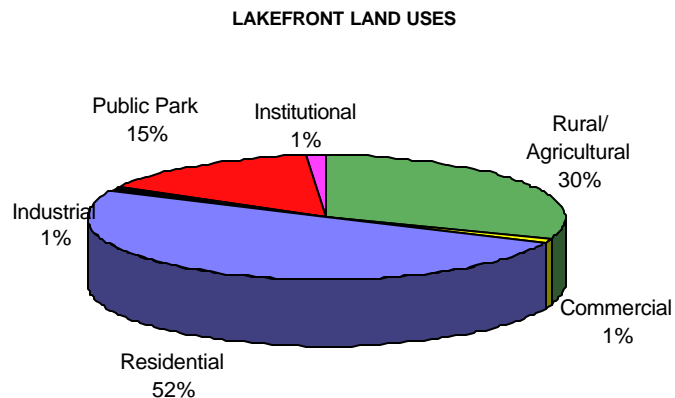
UPLAND DEVELOPMENT



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Lakefront Land Uses

CHAPTER 9:
UPLAND DEVELOPMENT

The upland portion of the shore zone is that part which lies above the high water mark. Map 20 illustrates the zoning which currently applies to the upland parcels along Lake Okanagan. The following pie chart provides a breakdown of land usage.



RESIDENTIAL DEVELOPMENT

As can be seen from the above table, the upland is predominantly used for residential purposes. Most of the residential development is in the form of single family dwellings.

In a survey of City residents, 55% of respondents were opposed to an expansion of multi-family uses along the lakefront. Preservation of view corridors is considered of key importance.

Recommended Action:

- 9.1 **Location of Multi-Family Development.** Allow multi-family development along the shore zone provided that the development complies with applicable Neighbourhood and/or Sector Plans, provided that the building design

maintains view corridors to the lake, and provided that the public enjoyment of the lakefront is enhanced as a result of the development.

9.2 **Subdivision Considerations.** Require that subdivisions be designed so as to protect adequately the water, shoreline aesthetic characteristics, and vistas. Minimize approval of lakefront panhandle lots since the creation of such lots can negatively affect existing view corridors, in addition to placing unnecessary servicing demands on existing infrastructure.

9.3 **Development over Lake Surface.** Prohibit development over the lake surface unless public enjoyment of the waterfront is significantly enhanced as a result of such development (e.g. creation of park space).

COMMERCIAL DEVELOPMENT

The Eldorado Hotel, Manteo Beach and Canamara Motel developments are currently the only year-round upland commercial uses located directly on the lakefront. Commercial facilities are found in close proximity to the lakeshore in the Downtown and South Pandosy areas. Concession stands are operated on a seasonal basis at Gyro Park and City Park. In addition to these facilities, mobile food vendors operate from locations such as City Park, Strathcona Park and Rotary Park. A sports rental outlet is located at Rotary Beach.



A certain level of commercial use can serve to enhance the public's enjoyment of the shore zone. If no limitations were imposed, however, it is possible that the number and types of businesses could detract from the shore zone experience. It is for this reason that the City has in recent years generally discouraged commercial use of City parks and

beaches. Commercial use of City beaches and parks requires a license from the Leisure Services Department.

Commercially-operated tourist facilities provide attractions for visitors to Kelowna. Many of these facilities are located along the Highway 97 corridor. It is possible that some operators may in the future seek to locate within the shore zone area. Such a possibility raises the question of whether commercially-operated tourist attractions are appropriate along the shoreline.

To date, tourist attractions have been relatively low-key and for the most part non-commercial. There are a few tourist attractions such as, for example, the Fintry Queen, that are by necessity, located within the Shore zone. For the most part, the lake itself has served as the primary shore zone attraction.

Out-of-town summer visitors have historically been attracted to tourist accommodation located close to the lake. Establishments ranging from hotels and motels to campgrounds and RV parks have provided accommodation. Some of these facilities are now being converted to other uses. This raises the question of whether the City should be taking actions to help preserve the remaining facilities. Although the City could not force facilities to continue operating, it could discourage conversion to other uses by not favouring the rezoning of existing visitor accommodation facilities.

In a survey of City residents, respondents indicated that they did not wish to see expansion of commercial uses (64% opposed to expansion), or tourist accommodation (60% opposed).

Recommended Action:

9.4 **Commercial Usage.** Continue the present policy of generally discouraging commercial usage of the waterfront. Consideration may, however, be given to some restaurant use (excluding drive-through restaurants), or other tasteful commercial usage, providing that public enjoyment of the lakefront is enhanced as a result of the development.

9.5 **Visitor Accommodation.** Allow for provision of visitor accommodation

along the shore zone provided that the building design maintains views of the lake and provided that the public enjoyment of the lakefront is enhanced as a result of the development.

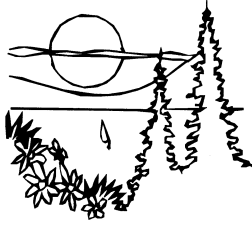
9.6 **Commercial Tourist Attractions.**

Discourage commercial tourist attractions from locating in the shore zone area. The lake itself should be the main tourist attraction. Only those attractions which are directly dependent on the lake, which are environmentally-friendly, and which add to the public enjoyment of the shore zone should be allowed.

9.7 **DP for Commercial Structures.**

Require that commercial facilities built offshore (e.g. as part of pier developments) be subject to Commercial Development Permits.

MANAGEMENT



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CHAPTER 10: MANAGEMENT

THE CURRENT SYSTEM

The rules and regulations of all levels of government have an impact on the types of activities that can take place along the Lake Okanagan shoreline. In addition to the involvement of local government, there are at least eight provincial ministries, and four federal agencies that have regulatory authority over some aspect of the Shore Zone.

Federal Government

Okanagan Lake is a navigable lake and thus falls within federal jurisdiction insofar as the regulation of navigable waters is concerned. The Navigable Waters Act delegates authority to the Coast Guard to “. . . safeguard the navigability of waters, thereby protecting the public right of navigation.” Legislation addresses the approval of works, the removal of obstructions and the regulation of navigational aids for safety.” No municipality can take any action that would affect federal jurisdiction regarding Navigable Waters.

Fisheries and Oceans Canada (through the Fisheries Act) regulates pollutants harmful to fish, obstructions which hinder the free passage of fish, and the maintenance of flows required for the safe passage of fish and preservation of spawning grounds. Significantly, this Act requires no net loss of fish habitat resulting from any development activity.

The Federal Government is also involved in the establishment of wildlife reserves and national parks, and the regulation of wharves and marine structures that they themselves have constructed.

Provincial Government

The Provincial Government has authority over the Agricultural Land Reserve, mineral resources, water management, forestry, treatment of sewage, ecological reserves, and Crown Lands. All of these have the potential to affect the shore zone area.

The administration of the foreshore area itself falls under the jurisdiction of the Ministry of Environment, Lands and Parks whose responsibility it is to ensure that adjacent upland property owners’ access to the

foreshore is not impeded and that the general public can access the foreshore. Licenses are required for erection of wharves, piers, docks and retaining walls. The Ministry is responsible for the issuance and enforcement of all foreshore leases and licenses, unless these tasks have been delegated to a municipality through a “head lease”. Under provincial management of the foreshore, the Municipality is regularly requested to comment on proposed shore zone uses.

The Provincial government is also involved in environmental and health matters. The Fish and Wildlife Branch of the Ministry of Environment has a mandate to manage and protect wildlife and sport fish resources. The Waste Management Branch of the Ministry of Health regulates the treatment and disposal of sewage effluent.

Municipal Government

Municipal government administers zoning, subdivision, and Development Permits.

Zoning has traditionally only been applied to land. However, the Provincial Government has encouraged the City to zone the water area that lies within City boundaries, which extend 305m (1000 feet) into the lake. The Province has suggested that it will honour the zoning the City places on the lake.

At present, the City has only limited control over the shore zone area. A few policies are included in the Official Community Plan, but these are confined mostly to discussion of dedication requirements for public access corridors, requirements for Development Permits in certain shore zone areas, and statements discouraging lake view obstructions. The City does not currently regulate structures placed on the foreshore. Regulation of such structures is currently the responsibility of the Provincial government. The Province uses interim “Private Moorage Guidelines” to evaluate structures applications. The guidelines were developed in 1993 in consultation with City staff.

There are advantages to the current system. For example, few municipal staff resources are required in the management of the shore zone. This keeps administrative costs to a minimum.

There are, however, also disadvantages to the current system. Included among these, is the fact that many residents have expressed frustration over the seeming lack of enforcement of guidelines and regulations. Another concern is that when residents wish to communicate with approving authorities, they must contact out-of-town offices. The distance between Kelowna and the Crown Lands office in Kamloops means that authorities are not always as accessible as local residents

might desire. The distance has also resulted in a requirement for City staff involvement in enforcement activities. In cases where infractions have occurred, City staff are requested to deliver notices to the party responsible for the offense. Despite the involvement of some City resources, the current system does not provide compensation for such expenses through the sharing of license revenues.

How do People feel about the Current System?

Through the Shore Zone Plan survey and public forums, Kelowna residents have indicated that they would like better enforcement of activities along the shore zone. In general, people seem satisfied with the Private Moorage Guidelines that are used to evaluate dock applications. Many people have, however, expressed a desire for better regulation of other shore zone structures such as fences and retaining walls. Concern about fences and retaining walls centre particularly on ensuring that such structures are not allowed to block public access to the foreshore. Many (82%) of those surveyed expressed a desire for the City to have more influence/control over activities in the shore zone.

ALTERNATIVES TO THE CURRENT SYSTEM

It is obvious from the above, that there are drawbacks associated with the current system. Two options exist for future management of the shore zone -- either these shortfalls are accepted, or an alternative approach is adopted. In the way of alternatives, there are a number of different options. Among these is the possibility for the City to provide more guidelines for shore zone development while leaving administrative functions with the Province. Another option is for the City to obtain approval authority over shore zone structures.

OPTION A: PROVINCE RETAINS APPROVING/ENFORCEMENT POWERS OVER FORESHORE STRUCTURES AND ACTIVITIES, WITH CITY PROVIDING MORE GUIDELINES AND REGULATORY CONTROL

The City has the option of obtaining more influence over the shore zone, without assuming powers currently within provincial jurisdiction. For example, provisions within regulatory documents such as the zoning bylaw and Official Community Plan can be expanded to provide more guidance for shore zone activities. The Province has indicated willingness to honour such additional development guidelines (but cannot be bound to do so). Enforcement of any City bylaws would continue to rest with the City.

Extending Zoning Bylaw to Cover Water within City's Boundaries

The Zoning Bylaw governs land use and the form, siting, height and density of all development within the City boundaries to provide for the orderly development of the community and to avoid conflicts between incompatible uses. The Bylaw divides the City into different residential, commercial, agricultural, institutional, and industrial zones. Each of these zones has its own specific regulations.

Currently, the zoning that is applied to upland uses extends to the highwater mark. At present, there is no zoning applied to the *water* that falls within the City boundaries. Local governments do, however, have the authority to designate and zone water for both use and density. The Ministry of Environment, Lands and Parks, has expressed a strong desire to see the City introduce zoning and structure by-laws for the foreshore.

With regard to zoning of the water, it is important to state that in no way can the authority of the senior governments be usurped.

Official Community Plan

The Official Community Plan (OCP) is a comprehensive statement of a City's broad objectives and policies respecting the form and character of existing and proposed land use. The policies contained in the OCP provide a framework for more detailed plans. Once an OCP is adopted, all bylaws enacted and works undertaken by Council must be consistent with the OCP.

Kelowna's OCP (1994-2013) includes a number of statements and policies regarding the Shore Zone. Among the most directly relevant are the following:

1. The City will cooperate with the Ministry of Environment, Lands and Parks to preserve natural vegetation along the foreshore, regulate further filling and maintain the quality of the lake. (Policy 2.29.2)
2. The City will continue to use the Ministry of Environment, Lands, and Parks "Private Moorage Guidelines" as a policy for the consideration of applications for moorage facilities. (Policy 2.29.9)
3. The City will seek public routes of access when

applications (Development Permits, rezoning or subdivision) are made for commercial, multi-family, industrial and institutional uses along the shore zone. (Policy 2.29.3)

4. The public route of access along the shoreline shall generally average 10 m from the normal high water mark. The access route shall be used for flood control, lake conservation, lake maintenance and public access. (Policy 2.29.4)
5. The City may negotiate to purchase land in excess of the 10 m wide public route of access. (Policy 2.29.6)
6. The City will initiate a Shore Zone Plan. (Policy 2.29.1)
7. The height of buildings shall increase as the distance from the lake front increases, except in circumstances where a landmark development is proposed and a total comprehensive site development can occur (Policy 3.2.2).
8. Waterfront development will be sited so as to minimize visual impact on adjacent developments (Policy 3.2.4.)
9. The City will work with CORD to prepare a Water Management Plan for the Okanagan Lake Basin. The Plan will address both water quantity and quality (Policy 2.17.1).
10. The City will regularly sample and analyze water to ensure the City Utility is providing a good quality product. The City must strive to control and improve the quality of the Lake, by controlling all discharges into the Lake which might affect water quality (Section 11.10).
11. The City will pursue stormwater treatment

options that may protect and improve the quality of Lake Okanagan (Policy 11.17.3).

12. The City will commit to an on-going valley-wide effort to protect the water supply and quality of Okanagan Lake and other water bodies/courses (Section 14.4).

Additional policies identified through the Shore Zone Plan could ultimately be integrated into the OCP. It may also be necessary to change some policies in the OCP if a need for refinement is identified.

Development Permits

The Municipal Act empowers local governments to designate Development Permit (DP) areas to achieve a number of objectives. Among these objectives is the protection of the natural environment and protection of development from hazardous conditions. Local government is empowered to establish guidelines to regulate development and construction within portions of the City that the OCP designates as Development Permit areas. It is important to note, however, that Development Permit regulations cannot be used to alter either the permitted use or the density of development.

The OCP designates the entire shore zone as being a Development Permit area for multi-family, commercial and industrial development. Parts of the shore zone are designated as Natural Environment/Hazardous Condition areas. Development of single family homes outside those areas designated “Natural Environment/Hazardous Condition” do not currently require a Development Permit. The OCP notes that the Shore Zone Plan will explore the issue of designating the *entire* Shore Zone area as a Natural Environment/Hazardous Condition Development Permit area.

The Shore Zone could be designated as a Hazardous Condition DP area on the grounds that it could be exposed to flooding, which is considered a hazardous condition. Protection from flooding can, however, also be dealt with by establishing appropriate setbacks through the Zoning Bylaw, or appropriate building elevations at the Building Permit stage. If establishing setbacks or minimum elevations through the other processes provides sufficient protection, then it would seem that there is little point in burdening applicants and City staff with the additional paperwork and costs associated with Development Permits.

The Shore Zone could also be designated as a DP area on the grounds that measures are needed to protect the natural environment. The DP designation would allow the City to specify that areas of land remain

free of development, except in accordance with any conditions contained in the permit. Where requested by the Minister of Environment, the City may also require that vegetation or trees be planted or retained in order to control erosion, protect banks, or protect fisheries. Until a DP is issued, land in the designated area may not be altered. In order to designate the Shore Zone as a DP area, the City must describe the special conditions that justify the designation and specify guidelines respecting the manner by which the conditions will be alleviated, as well as identify how objectives will be achieved.

Tree Protection By-Law

A draft Tree Protection By-Law states that no person shall cut down or damage a protected tree without first obtaining a permit. There are certain exemptions provided in the bylaw (i.e. removal of dead or diseased trees, emergency removal etc.). Protected trees include all those that are located along streams, watercourses and steep slopes within Development Permit (DP) areas. Since most of the shore zone is not currently within a designated DP area, the Tree Protection By-Law does not provide protection for most lakeshore trees. If, however, the entire shore zone were to be designated as a DP area, then the Bylaw would apply to shore zone trees. Another alternative would be to extend the Tree Protection By-Law to apply beyond Development Permit areas.

OPTION B: OBTAINING A HEAD LEASE FROM CROWN LANDS

In addition to the above actions, the City has the option of requesting a foreshore headlease.

What is a head lease?

A head lease is an agreement that transfers regulatory and management control of a foreshore area from the Ministry of Environment, Lands and Parks, to a local government. Generally the areas subject to the lease are well defined. Head leases are, as a rule, issued only in cases where local government has a vested interest in management. A head lease permits the tenure holder (usually local government) to sublet or issue licenses to third parties (usually property owners). The legal basis for these agreements is set out in Section 35 of the Land Act. Head lease documents are drafted by the Legal Services Branch, Ministry of the Attorney General.

BC Lands has authority to enter into head lease agreements in cases where doing so will result in improved management of Crown land and service to the public.

The main benefit associated with a head lease is that it devolves the

decision making framework and management to the local level. The drawbacks include increased administrative, planning, and enforcement time and resources with minimal revenues to compensate the City for assuming this role.

Have other cities obtained head leases?

West Vancouver, Peachland and Summerland have obtained head leases.

What would the City have to do to obtain a head lease?

Head leases are issued by direct offer pursuant to individual applications received by BC Lands. They normally involve prior negotiations between the Province and the applicant and, in all cases require Executive Committee approval. The province has the power to stipulate that certain conditions be met before a head lease is approved. For example, BC Lands has indicated that a head lease could not be negotiated with Kelowna unless the water within the City's boundaries is zoned.

Lease Terms

Lease terms are negotiated between the Province and local government. The maximum term of a head lease is 60 years (West Vancouver has a 30 year lease. Peachland has a 20 year lease). Provisions can be made for terminating the lease upon notice by either party. Certain defaults may result in the Province taking action to terminate a lease. A lessee may apply to obtain a replacement head lease at mid-term of the existing tenure.

Administrative Costs

Costs to be incurred by the City would depend on the extent of the lease assumed, as well as on the requirements imposed by the Province.

Revenue Sharing Arrangements

BC Lands would likely retain a portion of the fees collected from licenses. The exact amount is negotiated for each lease. In the case of West Vancouver, the province retained the right to 50% of future revenues. In the case of Peachland, this percentage was 65%.

If the City were to assume a lease, would it have control over the permit fees charged, or would these still be controlled by BC Lands?

The City could control permit fees, but would not be allowed to charge fees lower than those now in effect.

The most common form of tenure available for private moorage facilities is a license of occupation. Normally the area of a license will not exceed 600 square metres. A license is available for a ten year term for

a prepaid license fee of \$400 plus an application fee of \$100 and a documentation fee of \$150. Where the license area exceeds 600 square metres, an additional \$1.00 per square metre is charged. The total charge for a 10 year dock license would typically be \$695.50.

Where the applicant is intending to make a substantial investment in a moorage facility that might include improvements such as a breakwater or fill, a lease may be issued. Normally the area of a lease will not exceed 2000 square metres. The maximum term for a lease is 20 years at a rental of \$200 per year. Where the area of the lease exceeds 2000 square metres, an additional charge of \$1.00 per square metre will be charged to a maximum total of \$400.

Under a headlease, Peachland charges \$100 per dock per year for a license. Buoys are charged \$50 per year.

RECOMMENDED SHORE ZONE MANAGEMENT DIRECTION

Public desire for improved shore zone enforcement cannot be achieved under the current system unless the Province agrees to increase enforcement. If the Province cannot or will not agree to devote more resources to this area, then it is suggested that the City pursue other alternatives including head lease arrangements.

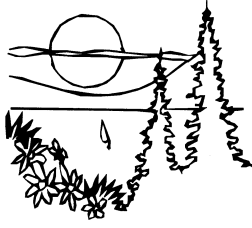
Recommended Action:

- 10.1 **Extension of Municipal Boundary.** Request extension of Kelowna's municipal boundary to the centre line of Lake Okanagan.
- 10.2 **Lake Zoning.** Apply zoning to that portion of the lake that falls within City of Kelowna boundaries.
- 10.3 **Head Lease Negotiations.** Pursue negotiations toward obtaining a head lease for the Okanagan Lake foreshore within Kelowna's boundaries. The agreement would be predicated on arriving at acceptable revenue-sharing arrangements and upon taking over a system that has been fully surveyed to determine legal status of all existing foreshore structures. Non-conforming structures would have to be addressed by the Province before the City

assumes any administrative responsibilities.

- 10.4 **Municipal Contributions.** Until a head lease is implemented, the City should provide only limited municipal contribution to shore zone monitoring and enforcement activities.

IMPLEMENTATION



CHAPTER 11: FIVE YEAR IMPLEMENTATION PLAN

CONTENTS Implementation Strategy

Planning Department

- process amendments to the OCP to incorporate the major directions of the Shore Zone Plan
- prepare report for Council consideration regarding inclusion of the shore zone in the OCP Natural Environment/Hazardous Condition Development Permit areas
- prepare report for Council consideration regarding amendment of present Council Policy #10, to allow the City to consider some beach access points as “walkways” and as such make adjacent property owners eligible for City cost-sharing of fences at these locations
- prepare a detailed study of the Downtown portion of the shore zone
- prepare a Plan for Sutherland Bay Park which will provide a major new opportunity for expansion of the public waterfront system, including a potential beach park component
- request extension of municipal boundary to lake’s centre line
- apply zoning to that portion of the lake that falls within City of Kelowna boundaries
- incorporate Provincial Private Moorage Guidelines into Zoning Bylaw
- periodically review the dock guidelines of the zoning bylaw
- encourage the Downtown Kelowna Business Association to expand “Biz Patrol” litter removal coverage to Downtown beach areas
- lobby the province for more Crown Lands enforcement on Okanagan Lake
- request that the Provincial Crown Lands Branch intensify efforts to ensure that public access along the foreshore is unimpeded
- monitor Provincial progress regarding dock authorization and remedial action regarding unauthorized docks
- monitor progress of senior government initiatives in regulating boating activities
- develop a strategy to minimize intrusion of houseboats and motorized personal watercraft
- promote community involvement in foreshore “clean-up” days, with

municipality cooperating by providing garbage pick-up at designated points

- request media publicity to inform the public when the lake level in spring-time reaches the high-water point

Leisure Services

- set aside funds for beach acquisition/development purposes
- work towards increasing the amount of public land available for year-round shore zone access, in accord with the directions set out on Maps 8-12 of the Shore Zone Plan
- pursue beach expansions and acquisitions as outlined in the Shore Zone Plan

Parks Department

- monitor usage of Waterfront Park, and, if necessary, initiate a publicity campaign to increase awareness of the beach
- if warranted, provide for additional shaded areas at Waterfront Park using natural vegetation that could be planted in such a way as to deter goose usage of the park
- ensure availability of garbage containers at all major City beaches
- consider permitting a concession stand to be located at Rotary Park
- improve wheelchair access to Rotary Park by providing a ramp or other access from the parking lot to the grass/beach area
- consider adding gas BBQ stands at City Park
- improve washroom cleanliness at Strathcona, Rotary, and Sarsons beaches
- monitor effectiveness of beach maintenance schedules and revise if necessary
- post signs at all beach washrooms that indicate the name and phone number of the company responsible for facility maintenance. The sign should also give some indication of when the washroom was last cleaned.
- ensure that all beach access points are clearly identified with appropriate signage
- survey and mark the location of high water mark at high traffic beach access points
- place signs at high-traffic beach access points that will inform the public of the rights and responsibilities associated with foreshore usage (e.g. no trespassing on private property, no littering etc.)
- provide signage at high-use beach access points that give direction to the nearest major beach with washrooms, parking, and other facilities

- close beach access points between dusk and dawn
- monitor usage of beach access points for swimming and request demarcation with buoys if necessary
- consider recommendations of the Shore Zone Plan when developing new beaches/waterfront parks
- address beach access parking or adjacent on-street parking at those beach access points that have generated problematic parking patterns

Bylaw Enforcement

- enforce against littering to discourage gull usage of City Parks
- ensure that all beach access points are available for public use by taking action against those adjoining property owners who have infringed on the public access points by planting vegetation, storing goods, or otherwise obstructing access
- discourage inappropriate usage of beach access points by only allowing for usage of these areas between dawn and dusk

Works and Utilities Department

- initiate efforts to raise awareness of appropriate shore zone horticultural practices
- help raise awareness of the Ministry of Environment's and Department of Fisheries and Ocean's Land Development Guidelines for the Protection of Aquatic Habitat
- require that all waterfront service lines be placed in such a way as to minimize encouragement of weed growth and in such a way that service lines would not be subject to contact and damage by derooting or harvesting machines
- encourage pedestrian, bicycle, and transit access to beaches to reduce parking demands
- encourage the federal government to update the Okanagan Basin Study that was prepared in 1972; continue funding of research on freshwater environmental issues; and to advance policies and increase enforcement to prevent dumping in Lake Okanagan

Inter-Departmental Initiatives

- initiate negotiations toward obtaining a head lease for the Okanagan Lake foreshore within Kelowna's boundaries