Electoral Area C Official Community Plan Bylaw No. 725

2.3 Shoreline Environment

Shorelines are among the most sensitive natural environments, as they are where two ecosystems merge — an aquatic ecosystem and a terrestrial ecosystem. Shoreline environments experience a significant amount of pressure from human activity, including the impacts from watercraft use. Private boat docks are common throughout the South Shuswap.

Though much of the upland of Shuswap and White Lake is privately owned, the Provincial Crown owns nearly all areas located between the high and low watermarks of lakes, streams and rivers. Individuals cannot build on, or develop, aquatic Crown land without the Province's authorization. If an owner of the adjacent upland property proposes to construct moorage, a licence of occupation for moorage is required from the Integrated Land Management Bureau.

2.3.1 Objectives

- .1 To maintain the unique physical and biological characteristics of the shoreline environment.
- .2 To maintain shoreline habitats to protect them from undesirable development.
- .3 To manage the foreshore to ensure appropriate use and prevent overdevelopment.

2.3.2 Policies

- .1 Non-moorage uses other than passive recreation are not acceptable on the foreshore. These include facilities such as beach houses, storage sheds, patios, sun decks, and hot tubs. Additionally, no commercial uses, including houseboat storage or camping, are acceptable on the foreshore.
- .2 Land owners must not alter the natural habitat and shoreline processes unless specifically authorized. The placement of fill and the dredging of aquatic land are not generally acceptable.
- .3 Encourage the Integrated Land Management Bureau, when carrying out reviews of foreshore tenure applications, to take the foregoing objectives and policies into consideration, with emphasis on the environmental sensitivity of the foreshore areas, as well as ensuring an appropriate relationship with upland areas.
- .4 Private moorage owners and builders will comply with the Ministry of Environment's Best Management Practices for Small Boat Moorage on Lakes, and minor works policies published by Transport Canada, Navigable Waters Protection Division prior to construction of any foreshore moorage (works).
- .5 Encourage Government agencies with mandates for protecting the environmental integrity of lakes in the South Shuswap to carry out scientific research and water quality testing to determine whether the quality of lake water near the shoreline is deteriorating, and if it is, to determine the cause(s) of the deterioration, and take steps toward correcting the situation.

The Regional District will:

- .6 Assess and strive to protect sensitive fish habitat when implementing the boat launching facilities provisions of the Electoral Area C Parks Plan;
- .7 Encourage waterfront owners to consider shared docks in the interests of having one larger dock that extends into deep water, rather than a number of individual docks that are in relatively shallow water with higher fish habitat values;
- .8 Advise and expect property owners to replace older, on-site sewage systems with newer technology to prevent potential contamination of the shoreline;
- .9 Advise and expect property owners not to remove vegetation along the shoreline that could result in erosion, loss of food and nutrients for fish, and loss of shade for young fish; landowners must refer to the Ministry of Environment's Best Management Practices for Hazard Tree and Non Hazard Tree Limbing, Topping or Removal; and
- .10 Implement Lakes Zoning Bylaw 900 which sets out regulations pertaining to the placement of docks and buoys

3.7 Foreshore Water (FW) (Moorage)

3.7.1 Objective

.1 To acknowledge existing permitted private moorage uses and commercial marinas and provide limited opportunities for future moorage associated with residential development.

3.7.2 Policies

- .1 Moorage, including docks, private moorage buoys and boat lifts, may be considered only for new fee-simple waterfront parcels.
- .2 New development proposals on the waterfront parcel will provide a maximum of 1 moorage space per:
 - a) New waterfront parcel created; or
 - b) 30m of water frontage of the parent parcel; and
 - c) Each moorage space shall be calculated as 10 m linear length of dock that may be used for mooring a single vessel.
- .3 Dry land boat storage solutions are strongly preferred over floating or fixed docks for all new or redeveloped waterfront properties.
- .4 Moorage proposals will be located away from or redesigned to avoid negative impacts on adjacent structures and uses, including other docks, marinas, beach access points, parks, utilities, water intakes, etc.
- .5 Support for new waterfront proposals should consider the provision of related public amenities such as dedicated moorage spaces and facilities for public use, dedicated public

accesses to the foreshore (including boat launches), waterfront park dedication, or similar amenities which enable greater public access and use of the foreshore and water.

.6 Moorage should be located away from or be designed to have minimal impact on fish and riparian habitat. The Shuswap Watershed Mapping Project data, as updated from time to time on the Community Mapping Network (www.cmnbc.ca), should be referenced to help determine habitat values (other government data sources may also be utilized).

12.2 Foreshore and Water Development Permit Area

.1 Purpose

The Foreshore and Water Development Permit Area is designated under the *Local Government Act* for the protection of the natural environment, its ecosystems and biological diversity.

.2 Justification

The Foreshore and Water Development Permit Area arises from the growing impact that structures, including (but not limited to) docks, swimming platforms, and private mooring buoys, are having on the lakes in the Electoral Area. Evidence of these impacts is documented in the Shuswap Watershed Mapping Project, which was completed in conjunction with Fisheries & Oceans Canada, the BC Ministry of Environment and environmental consultants.

The intent of the Foreshore and Water Development Permit Area is to:

- .1 Allow for the proper siting of structures on the foreshore and swimming platforms in the water to prevent or minimize negative impacts on lake ecology, including fish habitat; and,
- .2 Complement the Riparian Areas Regulation (RAR) and Shuswap Lake 100 m Development Permit Areas, recognizing the important and sensitive interrelationship of these shoreline areas.

.3 Area

The Foreshore and Water Development Permit Area extends from the lake's natural boundary across the entire area of Shuswap Lake, White Lake and Little White Lake. In the case of Shuswap Lake, the DPA extends to the Electoral Area 'C' boundary.

.4 Exemptions

A Foreshore and Water DPA is not required for the following:

- .1 Structures and works associated with a public park use;
- .2 Installation and maintenance of utilities and utility corridors;
- .3 Subdivision;
- .4 Commercial and multi-family moorage facilities, including marinas and strata moorage structures, requiring Provincial tenure. (*Rationale: these facilities undergo Provincial*

review and are referred to other government agencies, including Fisheries and Oceans Canada, through that process, thus satisfying the intent of this Development Permit Area);

- .5 Maintenance and alterations of existing structures, except:
 - a. alterations which increase the size of the existing structures;
 - b. removal and reconstruction of existing structures; or
 - c. replacement docks and swimming platforms, as defined by the guidelines below; or,
- .6 Land alterations that will demonstrably increase environmental values (e.g. creation of additional fish habitat).

.5 Guidelines

For all relevant guidelines, the Shuswap Watershed Atlas, based on the Shuswap Watershed Mapping Project, will be referenced to determine an area's Aquatic Habitat Index Rating, known fish rearing and spawning areas, natural features such as stream deltas and vegetation, etc.

.1 For new and replacement docks and for new and replacement swimming platforms

These guidelines apply to the first-time placement of a dock or to the replacement of an existing dock or swimming platform. Docks will be considered 'replacement docks' and 'replacement swimming platforms' if more than 75% of the materials will be replaced within a 3 year period.

Docks and swimming platforms shall:

- a. minimize impact on the natural state of the foreshore and water whenever possible;
- b. <u>not</u> use concrete, pressure-treated wood (i.e. creosote), paint or other chemical treatments that are toxic to many aquatic organisms, including fish, and severely impact aquatic environments;
- use untreated materials (e.g. cedar, tamarack, hemlock, rocks, plastic, etc.) as supports for structures that will be submerged in water. Treated lumber may contain compounds that can be released into the water and become toxic to the aquatic environment;
- d. use only treated lumber that is environmentally-friendly for structures that are above water:
- e. be made by cutting, sealing and staining all lumber away from the water using only environmentally-friendly stains. All sealed and stained lumber should be completely dry before being used near water;
- f. have plastic barrel floats that are free of chemicals inside and outside of the barrel before they are placed in water;

- g. avoid the use of rubber tires as they are known to release compounds that are toxic to fish;
- h. be sited in a manner which minimizes potential impacts on fish spawning and rearing habitat areas;
- i. be sited in a manner which minimizes potential impacts on water intakes and other utilities; and,
- j. avoid aquatic vegetation and minimize disturbance to the lakebed and surrounding aquatic vegetation by positioning the dock or swimming platform in water deep enough to avoid grounding and to prevent impacts by prop wash in the case of docks. A minimum 1.5 m (4.92 ft) water depth at the lake-end of the dock is recommended at all times.

.2 For new private mooring buoys

These guidelines apply to the first-time placement of a private mooring buoy, including its anchoring system.

Private mooring buoys shall:

- a. avoid aquatic vegetation and minimize disturbance to the lakebed and surrounding aquatic vegetation;
- b. use helical (versus block) anchors whenever possible;
- c. use only materials intended for boot moorage, such as rigid plastic foam or rigid molded plastic, which do not contain chemicals that are toxic to aquatic organisms;
- d. be sited in a manner which minimizes potential impacts on fish spawning and rearing habitat areas; and,
- e. be sited in a manner which minimizes potential impacts on water intakes and other utilities.

.3 For other land alterations

Proposed land alterations not listed in the exemptions section and not including new and replacement docks and new private mooring buoys shall be accompanied by a written submission from a qualified environmental professional outlining the proposed alteration, expected impacts on the foreshore or water environment and any mitigation efforts which should accompany the proposed alterations.