

Location: South Marina  
 Purpose: Amend Existing Lease  
 Program: Marina and Yacht Club

### Management Plan

#### Section A – Project Overview

<b>Project and Purpose</b>	<ul style="list-style-type: none"> <li>• Project - Expansion of existing South Marina and related facilities to support the development of SweetWater.</li> <li>• Purpose – Amend the existing lease to facilitate the expansion of the marina within the existing boundaries.</li> </ul>
<b>Location, Size and Main Features</b>	<ul style="list-style-type: none"> <li>• Located at the south end of the property</li> <li>• Existing lease (Lot 1 NEP 65010)</li> <li>• Current marina has 66 boat slips</li> <li>• Expansion will increase the number of slips to 577</li> <li>• Gangways allow for fluctuation of lake levels</li> <li>• Gangways, docks and slips with separate access for the hotel</li> <li>• Resident and public boat launching</li> <li>• Parking for trailers and vehicles</li> <li>• Marina office to provide supplies and services located at the village centre side of the marina.</li> </ul>
<b>Access Plans</b>	<ul style="list-style-type: none"> <li>• Current access to be reconfigured to provide direct link to the south marina from Kikomun/Newgate Road.</li> <li>• Public access provided across the terrace to the Community Centre and the North Marina.</li> </ul>
<b>Construction Schedule</b>	<ul style="list-style-type: none"> <li>• Project to commence late in 2008 with most of the work scheduled for 2009 when water levels are at their lowest.</li> <li>• Construction will be ongoing for several years but the marina is a priority for development.</li> </ul>

#### Section B – Project Description

<b>Requirements for filling, dredging, breakwater</b>	<ul style="list-style-type: none"> <li>• Filling and dredging are not proposed.</li> <li>• Excavation of materials when water levels are at their lowest.</li> <li>• A breakwater has already been installed.</li> </ul>
<b>Current/proposed moorage rate(s)/foot/month on average</b>	<ul style="list-style-type: none"> <li>• Current moorage rate(s)/foot/month on average:           <ul style="list-style-type: none"> <li>○ 20'-\$500/month</li> <li>○ 24'-\$600/month</li> <li>○ 30'-\$700/month</li> </ul> </li> <li>• Proposed moorage rate(s)/foot/month on average:           <ul style="list-style-type: none"> <li>○ 20'-\$500-\$600/month</li> <li>○ 24'-\$600-\$700/month</li> <li>○ 30'-\$700-\$800/month</li> </ul> </li> </ul> <p>Note: proposed rates are approximate until the costs of expanding the marina are determined.</p>
<b>The number of months the marina will operate</b>	<ul style="list-style-type: none"> <li>• 7-8 months</li> </ul>
<b>List of ancillary uses (i.e. fuel docks, boat charters, boathouses, etc)</b>	<ul style="list-style-type: none"> <li>• A double-walled fuel tank would be on the ground above the shoreline (not within the amended lease).</li> <li>• Fuelling and pumping equipment would be located within the dock area and a small kiosk would be installed to facilitate fuel sales.</li> <li>• Pumps would be available to pump sewage from boats to a</li> </ul>

	<ul style="list-style-type: none"> <li>holding tank (also above the shoreline).</li> <li>The docks will be electrified and a potable water supply will be available within the dock area.</li> <li>Waste receptacles and recycling bins would be above the shoreline adjacent to the marina office.</li> <li>No boathouses are proposed.</li> <li>Watercraft rentals will be available.</li> </ul>
<b>Level of business operation in the period of closure</b>	<ul style="list-style-type: none"> <li>Minimal business in the off-season.</li> <li>Possible activities associated with water rescue and rescue training.</li> <li>Operations could be extended as development progresses and permanent populations are established. However, there would be less desire to use the lake in the winter months.</li> </ul>

Provide a description (using text and the Site Plan of how you are proposing to use the Crown Land). Address the following information as a minimum:

<b>The lineal footage of moorage space proposed</b>	<ul style="list-style-type: none"> <li>Existing moorage space – 110 m.</li> <li>Moorage space proposed: 923 m.</li> </ul>
<b>Positioning and configuration of improvements</b>	<ul style="list-style-type: none"> <li>Site plan provides the layout of gangways, docks and slips.</li> <li>Positioning and configuration of marina facilities, boat launch and hotel are indicated.</li> </ul>
<b>Location of all existing and/or proposed improvements in relation to the boundaries of the application area</b>	<ul style="list-style-type: none"> <li>Please see attached master plan</li> </ul>

## Section C – Additional Information

### I. Environmental

<b>Land Impacts</b>	<ul style="list-style-type: none"> <li>The current condition includes: existing marina, beach, and a filled and level area seeded to grass.</li> <li>The expansion of the marina will disturb the area that was previously filled.</li> <li>Excavation will occur when reservoir is at its lowest level.</li> <li>Existing marina building to be relocated</li> <li>Negative visual impact is expected during construction as heavy equipment will move throughout the site.</li> <li>Positive visual impacts are anticipated following the completion of construction in terms of the Village, boardwalk, and facilities associated with the marina.</li> <li>An archaeological site is located further south and will not be impacted by the expansion.</li> </ul>
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The following table outlines the materials to be used and the construction methods:

No.	Activity	Construction Method	Materials	Equipment to be Used
1	Relocate marina office	Prepare new site – jack, load and haul building to new site	None	Trailer, front end loader, hand tools

2	Excavation and grading	Remove excavate, grade and regrade backslope	None	Backhoe, grader, front end loader, dump trucks
3	Install bulkheads at seawall end	Pile drive bulkheads and backfill. Place rock rip rap.	Sheet metal, backfill, rock	Pile driver, backhoe, welding equipment
4	Erosion protection	Install rip rap adjacent to boat ramp	Rock	Front end loader
5	Site clean-up and restoration	Clean-up site, apply topsoil and seed as required	Seed and topsoil	Front end loader, grader and Bobcat
6	Install directional, pedestrian warning and launch use signage	Install operational signage upon completion	Signage	Hand tools

<b>Atmospheric Impacts</b>	<ul style="list-style-type: none"> <li>Noise and dust from the operation of heavy equipment.</li> <li>Odours from exhaust fumes emitted by heavy equipment.</li> <li>Potential for long and short term pollutants.</li> </ul>
<b>Aquatic Impacts</b>	<ul style="list-style-type: none"> <li>Impacts could include fuel spills and contamination, and sedimentation</li> <li>An Erosion Control Plan to be implemented to manage sedimentation.</li> <li>Majority of work will occur when water is at its lowest level.</li> <li>Water quality is expected to return to normal following construction.</li> <li>Riparian areas are described as unremarkable as they consist of boulders and cobbles immediately adjacent to the water and blue joint grass along the top (Summit Environmental Consultants).</li> <li>HWL is 749.5 metres, and is called the "Normal Full Pool Elevation".</li> <li>Means to minimize adverse impacts: minimize equipment working in or near the water; ensure all equipment is in good working order; ensure all refuelling occurs at a minimum distance of 100m from the water.</li> <li>Contractor will provide fuel spill contingency plan.</li> </ul>
<b>Fish and Wildlife Habitats</b>	<ul style="list-style-type: none"> <li>Badger dens are located on site.</li> <li>These dens are not near the existing marina or within the proposed expansion area.</li> <li>Assessment states there are no federally or provincially listed rare vegetation species located in the area.</li> <li>Englishman Creek Campground, located to the South has been identified, by the Ministry of Forests, as an ecologically sensitive area.</li> <li>Douglas Fir Gully (located on site) has been identified as a sensitive habitat.</li> <li>Habitat protection measurements include: designating no disturb buffers to maintain the natural movement of animals through the property to ensure the health and capability of the habitat; develop roadways away from these areas; reduce speeds on any new and present roadways; erect signage to alert drivers to the potential of wildlife crossings.</li> </ul>

**II. Socio-Community**

<b>Land Use</b>	<ul style="list-style-type: none"> <li>There are relatively few parcels of privately owned land around Lake Koocanusa.</li> <li>A moratorium on the sale of Crown Land is pending the resolution of land claims unless a release is secured from Knuaxta First Nations.</li> <li>Subject property is unzoned, but not unregulated.</li> </ul>
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	<ul style="list-style-type: none"> <li>• A Zoning bylaw is being prepared to control the use of land for the subject property.</li> <li>• Public access will increase after the completion of the project.</li> <li>• The Public will be offered more points of access and have use of the south marina.</li> <li>• Recreational uses include: all types of watercraft use, swimming, mountain biking on adjacent Crown Lands, horseback riding, and fishing.</li> <li>• The marina will operate according to green marina principles.</li> <li>• A water rescue service has been proposed to operate primarily in the summer months.</li> </ul>
<b>Socio-Community Conditions</b>	<ul style="list-style-type: none"> <li>• No community water or wastewater treatment systems presently exist in the area. A septic system has been developed on site.</li> <li>• The existing external roadway system provides access to the site through Crown Land.</li> <li>• Roadway components include: existing main access road and a proposed access to the Ridge/Upper Terrace area and a proposed EVA access to the north property boundary.</li> <li>• Access to the boat launch and Village will be by public roads.</li> <li>• A population of approximately 3,000 anticipated (at high use times)</li> <li>• Current status of services: RCMP from Cranbrook; Health Services – Fernie and Cranbrook</li> </ul>
<b>Public Health</b>	<ul style="list-style-type: none"> <li>• On site recycling to be encouraged, to be picked up by a recycling firm from Cranbrook.</li> <li>• Household waste to be collected on site and taken to the transfer station at Newgate.</li> <li>• Contamination on site has been remediated.</li> <li>• Community Health Care Centres near Lake Koocanusua: <ul style="list-style-type: none"> <li>○ Elkford Community Health Centre (urgent care)</li> <li>○ Kimberley Health centre (no urgent care)</li> <li>○ Sparwood Community Health Centre</li> </ul> </li> </ul>
<b>First Nations</b>	<ul style="list-style-type: none"> <li>• A meeting was held with the Tribal Council to describe the project and the Knuaxta were made aware of the public meeting at Baynes Lake where the SweetWater Master Plan was presented.</li> <li>• Certain Crown Lands were necessary for the success of the project. These were identified and information was submitted to ILMB. ILMB circulated the pertinent information where the Knuaxta reviewed it and released the required Crown Lands from the moratorium.</li> </ul>

A more detailed Archaeological Overview Assessment and Stewardship Plan is in preparation, which will provide more context to the findings. For the present, it is concluded that significant archaeological values are present in the vicinity of the proposed SweetWater project, within and immediately adjacent to the Koocanusua Reservoir. On the subject property itself, the precontact archaeological remains are encompassed within a 50 m zone of High Archaeological Potential along the reservoir shoreline. Any further subsurface disturbance in this zone will require more detailed archaeological oversight to ensure compatibility with conservation of the archaeological values. It is noted that the intensity and stratigraphic context of the archaeological deposits within this zone are variable, so that some land uses are possible here depending upon their specific character and siting. The remainder of the property to the west of this zone is predominantly either highly disturbed or steeply sloping. No precontact archaeological materials have been observed there and it is considered to have low potential for containing significant archaeological remains.