

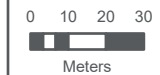
## District of Summerland 2017 Flood Recovery Dock Restoration

Legend

Notes:  
- Notes go here



The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.



Coordinate System:  
NAD 1983 UTM Zone 11N

Scale:  
Scale 1:2,000  
(When plotted at 8.5"x11")

Data Sources:  
- Data provided by

Project #: 0872.0065.01  
 Author: RB  
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 Revision: A  
 Date: 2018 / 1 / 31

**URBAN**  
systems

**FIGURE 2**

# Dock 'F'



DOCK F (left) – PRE-2017 EVENT



Existing DOCK F (damage following flood)  
OCTOBER 23<sup>RD</sup>, 2017



# Dock 'I'



DOCK I (right) – PRE-2017 EVENT



Existing DOCK I (damage following flood)  
OCTOBER 23<sup>RD</sup>, 2017

## Okanagan Lake Dock Standards

### HABITAT STANDARDS

In a no-colour, yellow, non-shore spawning red zone, or water body not identified in Okanagan Large Lake Foreshore Protocol, all of the conditions listed in the Standard Dock Conditions (below) must be adhered to.

#### *Standard Dock Conditions*

1. Least risk timing window should be followed for all works. Variances can occur in no colour and yellow zones if they are assessed by a qualified professional and risks are avoided or mitigated
2. In areas with known shore spawning kokanee, all works associated with private moorage construction must occur during the least risk timing window

**EXCEPTION:** The timing window for works involving only decking/ re-decking has been modified by the Habitat Officer. These works can occur in kokanee spawning areas between January 15 and September 30 if all works are accessed from shore, works are done above the water and no significant vibration occurs.

3. Avoid construction or placement of your dock in areas of known fish spawning habitat
4. Locate your dock to avoid native aquatic vegetation
5. Position the dock and lift in deep enough water to avoid grounding of the dock and or impacts from propeller wash
  - A minimum of 0.8 meters of water depth at low water is required in no color, yellow & red non shore spawning sites.
  - A minimum of 1.5 meters of water depth at low water is required in red (shore spawning) & black zones
6. The area of the dock (platform) beyond the end of the walkway must be no larger than 24m<sup>2</sup>

**NOTE:** The 24m<sup>2</sup> size requirement refers to the structure beyond walkway access. Walkway accesses are to be no more than 1.5m wide and extend to a minimum depth of 0.8m at low water level. The 24m<sup>2</sup> starts being measured where the dock widens beyond 1.5 meters.

7. Use untreated materials where they will be submerged in water
8. Avoid the use of rubber tires
9. If a concrete abutment is needed to secure your dock to land, install it entirely on your private land above the high water mark
10. In a no-colour, yellow, non-shore spawning red zone, or water body not identified in the Okanagan Large Lake Foreshore Protocol, a floating structure may be constructed if the structure is built with discontinuous floats and is located in enough depth of water to ensure it will not ground at low water
11. To construct a boat or personal water craft lift in a no colour, yellow, and non-shore spawning red zone, the boat lift must be placed so a minimum of 0.8m of water depth is maintained at low water.

12. If you are undertaking an activity in a **red zone** based on known Rocky Mountain ridged mussel (*Gonidea angulata*) occurrences, mussels must be salvaged and relocated to an area with similar site conditions. Salvage must be undertaken by a qualified professional and must be consistent with the Department of Fisheries and Oceans (DFO) Salvage Protocol ([The Protocol for the Detection and Relocation of Freshwater Mussel Species at Risk in Ontario Great Lakes Area](http://www.dfo-mpo.gc.ca/Library/332071.pdf) <http://www.dfo-mpo.gc.ca/Library/332071.pdf> ). Follow-up monitoring is to be conducted for 2 years post-relocation and reports provided to the Habitat Officer annually.
13. If some of the conditions listed above (1-12) cannot be met, then you must engage a qualified professional (fish biologist) to assist in your design and construction to ensure serious harm to fish does not occur (Federal Fisheries Act). The qualified professional must complete the checklist found in the Large Lake Foreshore Protocol and submit it with the Section 11 Application. A full Environmental Impact Assessment is not required.

## SHORE SPAWNING RED ZONE

In a Shore Spawning Red Zone, all conditions listed in the Standard Dock Conditions (above) must be met (except Condition 3—“Avoid construction or placement of your dock in areas of known fish spawning habitat”). Additionally, all of the Design Criteria listed below must also be met.

Due to the high values identified in this zone, **if you are unable to meet all Standard Dock Conditions and Design Criteria, a Change Approval is required under the *Water Sustainability Act***. You will therefore need to reapply for your project through the **Approvals process**—the current document does not provide you the authority to proceed with your works. Please note, however, that ***Water Sustainability Act* Change Approvals are not often provided in these circumstances**.

### *Design Criteria*

1. Qualified Professional familiar in fish biology required to determine spawning area;
2. Piles are not to be placed within known or potential spawning substrates;
3. The spanning structure (gangway) of spawning area must be no greater than 1.5m in width;
4. The spanning structure (gangway) over the spawning area must be made with light penetrating materials;
5. Dock must be no less than 0.5m above the high water mark, or the Geodetic Survey of Canada datum (if available);
6. Batter boards must not be used on the dock; and
7. No floating structures.
8. To construct a boat lift in a Red Zone (shore spawning zone) or a rebuild in a black zone the boat lift must be placed so a minimum of 1.5m of water depth is maintained at low water

## BLACK ZONE

### **Rebuilding or repairing an existing private moorage**

You must follow all of the conditions and processes outlined for a shore spawning red zone (above).