

3.14 MARINE AND ESTUARINE RESOURCES

3.14.a Background and Current Status

Fish: Hoos and Vold (1974) report 42 species of fish from the Squamish estuary including the anadromous species discussed in section 0 as well as marine species. In addition to salmon fisheries, Howe Sound supports lingcod, rockfish and flounder fisheries. There have not been any recent stock or sport fishing assessments for the groundfish and flounder fisheries in Howe Sound (MWLAP). In the majority of Howe Sound, the salmon sport fishery is closed between June 1 and September 25, except for a limited fishery for pink salmon. During this time fishing pressure switches from salmon to groundfish (MWLAP). The number of users fishing for rockfish in Howe Sound has increased (MWLAP). Main areas for flounder harvest are along the shore near Furry Creek and Britannia Beach (MWLAP).

Shellfish: There are commercial and recreational fisheries for Dungeness crab in upper Howe Sound. Closures and dioxin concerns in other parts of the Sound do not extend north into the Sea-to-Sky planning area (DFO 2000).

- Prawns (*Pandalus platyceros*) are the largest of the *Pandalus* (shrimp) species and have been fished commercially in Howe Sound and, to a lesser extent, in Indian Arm for most of this century. In recent decades, there has also been a sport fishery. Octopus (*Octopus dofleini*) which occupy similar deepwater habitats are harvested in a related fishery.
- There are about twenty euphausiid (shrimp) species which are caught in British Columbia waters although the biomass is dominated by four species: *Euphausia Pacifica*, *Thysanoessa Spinifera*, *T.inspinata*, *T.longpipes*, and *T.rashii*. There is a commercial fishery in Howe Sound. However, the population is depressed and the quota for 2000 –2001 has been set at 0 tons (DFO 2000).
- Clams are harvested from the intertidal waters of Howe Sound although there are permanent closures due to coliform contaminations in localized areas and near wharves. There is a permanent closure on clam harvest from the waters of Burrard Inlet and Indian Arm including the Indian River estuary. The closure results from sewage concerns.

3.14.b Anticipated Trends

All marine species in Howe Sound and Indian Arm are under intense harvest pressure due to the proximity of major population centres. In the Squamish estuary, as well as Woodfibre and Britannia, the problem is exacerbated by habitat degradation. It will be difficult to return marine populations to their former levels in these areas.

3.15 RARE OR ENDANGERED AQUATIC SPECIES

The BC Conservation Data Centre maintains two lists: red and blue. The Red List includes any indigenous species or subspecies (taxa) that have, or are candidates for, Extirpated, Endangered, or Threatened status in British Columbia. Extirpated taxa no longer exist in the wild in British Columbia, but do occur elsewhere. Endangered taxa are facing imminent extirpation or extinction. Threatened taxa are likely to become endangered if limiting factors are not reversed. Not all Red-listed taxa will necessarily become formally designated. Placing taxa on these lists

flags them as being at risk and requiring investigation.

The Blue List includes any indigenous species or subspecies considered to be Vulnerable in British Columbia. Vulnerable taxa are of special concern because of characteristics that make them particularly sensitive to human activities or natural events. Blue-listed taxa are at risk, but are not Extirpated, Endangered or Threatened.

Fish species of concern in the Sea-to-Sky planning area are listed in below.

Table 53: Rare or endangered Species in the Sea-to-Sky Planning area.

Common Name	Scientific Name	Status
Bull Trout	<i>Salvelinus confluentus</i>	Blue
Dolly Varden	<i>Salvelinus malma</i>	Blue
Coastal Cutthroat trout	<i>Oncorhynchus clarki clarki</i>	Blue
Eulachon	<i>Thaleichthys pacificus</i>	Blue
White Sturgeon ⁷¹	<i>Acipenser transmontanus</i>	Red

Source: Conservation Data Centre: file data.

⁷¹ Sturgeon are not on the CDC list for the Squamish Forest District but are listed in other areas of the province.