

Taku Province

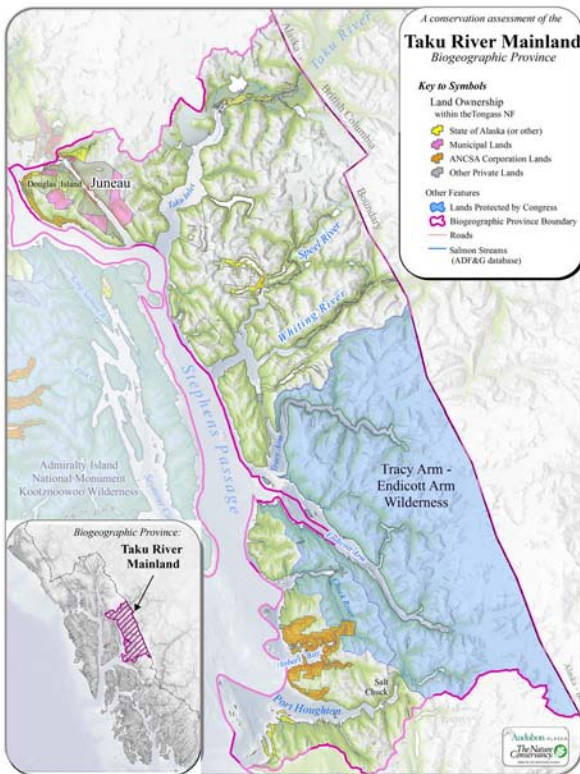


FIG 1. Taku Province.

The Taku Province occupies the steep mainland coast from the inlet of the Taku River to Cape Fanshaw in the south, and is characterized by deep fiords, tidewater glaciers and active glacial rivers (Fig 1). In this steep mountainous province, wildlife populations are isolated by fiords and the Coast Ranges defining the boundary with Canada. The transboundary Taku River, which slices through the mountains, is a key feature of this province and provides a critical corridor for the migration of fish, birds and mammals. The Taku River drains about 5,000 mi² (12,800 km²) of British Columbia, a watershed roughly equal in size to

the combined Alsek/Tatshenshini, and exceeded only by the Stikine watershed (~19,000 mi² [48,640 km²]). Just to the south, the Whiting River drains 650 mi² (1,664 km²). The Whiting differs from the Taku in that the basin is separated by high mountains from other lowland areas of interior BC, and therefore is less significant than the Taku as a corridor for wildlife.

Across the Coast Ranges the Taku River quickly transitions into the Boreal Mountains and Plateaus Ecoregion of British Columbia. Composition of flora and fauna change in this transitional zone, with the coastal blue grouse (*Dendragapus obscurus*) replaced with interior ruffed grouse (*Bonasa umbellus*); Steller's jays (*Cyanocitta stelleri*) with gray jays (*Perisoreus canadensis*); coastal Sitka spruce replaced by interior white spruce (*Picea glauca*). The Taku Province has 36 mammal species, and ranks second only to the Chilkat Province in mammal species richness. Douglas Island is the only island in the archipelago with marmots (*Marmota caligata*) and northern red-backed voles (*Clethrionomys rutilus*) (S. MacDonald, vertebrate taxonomist, Albuquerque, NM, personal communication, 2006).

Several songbirds of deciduous forests that are uncommon elsewhere in Southeast Alaska can be found on the Taku and in similar environments like the Stikine River: American redstart (*Setophaga ruticilla*), warbling vireo (*Vireo gilvus*), and western tanager (*Piranga ludoviciana*) are examples. The greater Juneau-Taku River area may have Southeast's highest bird diversity according to local birders (P. Suchanec, Juneau, AK, personal communication, 2004). Although a few deer are found along the shores of Lynn Canal and on Sullivan Island, Taku Province is essentially the northern limit for deer along the northern mainland. Even here, snowier winters and wolf predation keep deer numbers low compared to adjacent Admiralty Province. Douglas Island has the

highest density deer population within the Taku Province. Because of easy access from Juneau, this small island is very important to local hunters, contributing an average annual harvest of 195 deer (Flanders et al.1998). Thus, protection of high quality winter-habitat for deer on Douglas Island should remain a conservation priority in the context of likely expansion of development in the Juneau area. A planned golf course on north Douglas will remove one of the last large-tree alluvial forest near the Juneau road system.

Within this province, the Taku River is the top-ranked watershed based on amount of freshwater salmon habitat, and is among the most productive salmon fisheries in Southeast. Indeed, the Taku contains all five species of Pacific salmon as well as steelhead, and the large watershed contains extensive and diverse lake and wetland systems. Other highly ranked watersheds for salmon include the Whiting River, Port Houghton, the Speel River, and the Chuck River in Windham Bay. Indeed, for pink salmon Windham Bay had the 5th highest escapement (143,800 fish) of all surveyed watersheds in Southeast (Flanders et al. 1998). Sandborn Canal in Port Houghton also had high pink escapement (80,300 fish).

Based on this conservation assessment, the large Taku River watershed ranks third in Southeast for its bear habitat values. Both black and brown bear occur in this mainland watershed. The Taku Watershed also ranks in Southeast's top 10 (#7) for its estuary values.

The province's highest elevations near the Canadian border are underlain by resistant granitic bedrock, which grades to sedimentaries and volcanics with greater productivity in the lower hills along Stephens Passage. The Taku Province currently contains approximately 343,467 acres (139,000 hectares) of POG. The highest ranked watersheds for both upland and riparian forests include those in Port Houghton and Cape Fanshaw. Although divided between the Taku and Stikine provinces, the Port Houghton / Cape Fanshaw area was consistently identified within the highest tier of irreplaceable ecological values, both at the watershed (Chapter 2, Fig 20) and sub-watershed scales (Chapter 2, Fig 28), and represents the largest such area currently lacking landscape-scale conservation within the Tongass National Forest (Chapter 2, Fig 20).

Ninety-four percent of the original productive forest in this province remains intact (Chapter 2, Table 5). Thirty-nine percent of the large-tree forest occurs within development lands and only 18% are protected



FIG 2. Alpine ridgetop between Snettisham and Taku valleys, August 9, 2005. Throughout this chapter on biogeographic provinces, the majority of aerial and ground-based photos illustrate lowland habitats of greatest conservation concern. A glance at the shaded relief maps, however, will confirm that highland scenes like this one are more representative of the Taku and other mainland provinces.

Highland habitats are used year-round by species like ptarmigan and mountain goats, and seasonally by mobile grazers such as deer and bear. But short growing season and lack of tree cover renders it of relatively low value to most Southeast wildlife. (John Schoen photo)

within watershed-scale reserves. Because productive forest ecosystems such as Port Houghton / Cape Fanshaw along the mainland coast are isolated from similar habitats by deep fiords, glaciers and mountains, populations may be more sensitive to local declines resulting from environmental variability, habitat alteration or other factors. As a consequence, we believe that a precautionary approach to management of these lands is warranted. Indeed, Port Houghton / Cape Fanshaw may provide among the best opportunities for additional protection of large, productive watersheds that still retain pristine ecosystem values in the entire Coastal Forests Ecoregion. The large Tracy Arm-Fiords Terror Wilderness contains a low proportion of POG and only very limited large-tree stands.

It is estimated that brown and black bear summer habitat represent 85% of their original value within the Taku Province (Chapter 2, Table 15). Fifty-five percent of bear habitat is protected in watershed-scale reserves, 11% is sub-watershed reserves and 34% occurs on development lands. The Taku Province is estimated to have the fifth highest habitat capability for nesting marbled murrelets in Southeast and the province maintains 93% of its original habitat value (Chapter 2, Table 10). Forty-two percent of murrelets nesting

habitat occurs in watershed reserves, 19% in sub-watershed reserves, and 36% on lands managed for development. The Taku Province has 574 mi (919 km) of anadromous fish streams (Chapter 2, Table 11). Fifteen percent of riparian forests associated with anadromous fish have been harvested in this province, 41% occur in watershed reserves, 8% in sub-watershed reserves, and 51% on lands managed for development (Chapter 2, Table 12).

Forest types, historical logging, and roads are mapped within the Taku Province in Figure 6. Refer to the Arc Reader GIS database in Appendix C of this report to review detailed mapped information on location of large-tree stands, past timber harvest, roads, forest reserves, protected areas, and regions of core ecological values.



FIG 3. Productive lowlands in Hobart Bay. With exception of the right foreground, all of the lowlands were logged by Goldbelt Corporation up to the dotted line. Pre-logging air photos suggest Hobart had the most extensive lowland large-tree forest in Taku Province. (John Schoen photo)

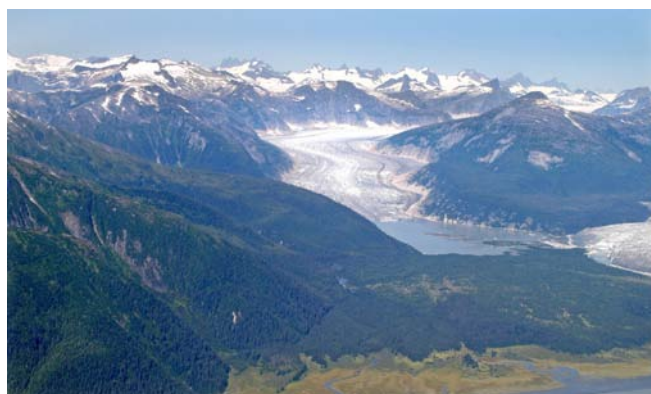


FIG 4. Receding Norris Glacier in center, and a lobe of the advancing Taku Glacier on the right. Grizzly Bar in foreground. This outwash flat supports a sparse woodland on excessively drained coarse sediment. Subalpine fir—an interior conifer species—extends down the Taku to Grizzly Bar, one of its few lowland occurrences in Southeast.

Along with the Alsek and Stikine, Taku River is one of just three primary lowland corridors from BC into Southeast. Secondary corridors such as the Chilkat and Whiting originate in higher elevation passes and do not conduct species requiring more productive lowland habitat. (John Schoen photo)



FIG 5. View northwest across entry to the salt chuck at the head of Port Houghton. Scattered trees grow on former tidal flats rising at about 0.3 inches (.7 cm) per year. Salt marsh is colonized first by herbaceous meadow, and eventually by young spruce forest. (John Schoen photo)

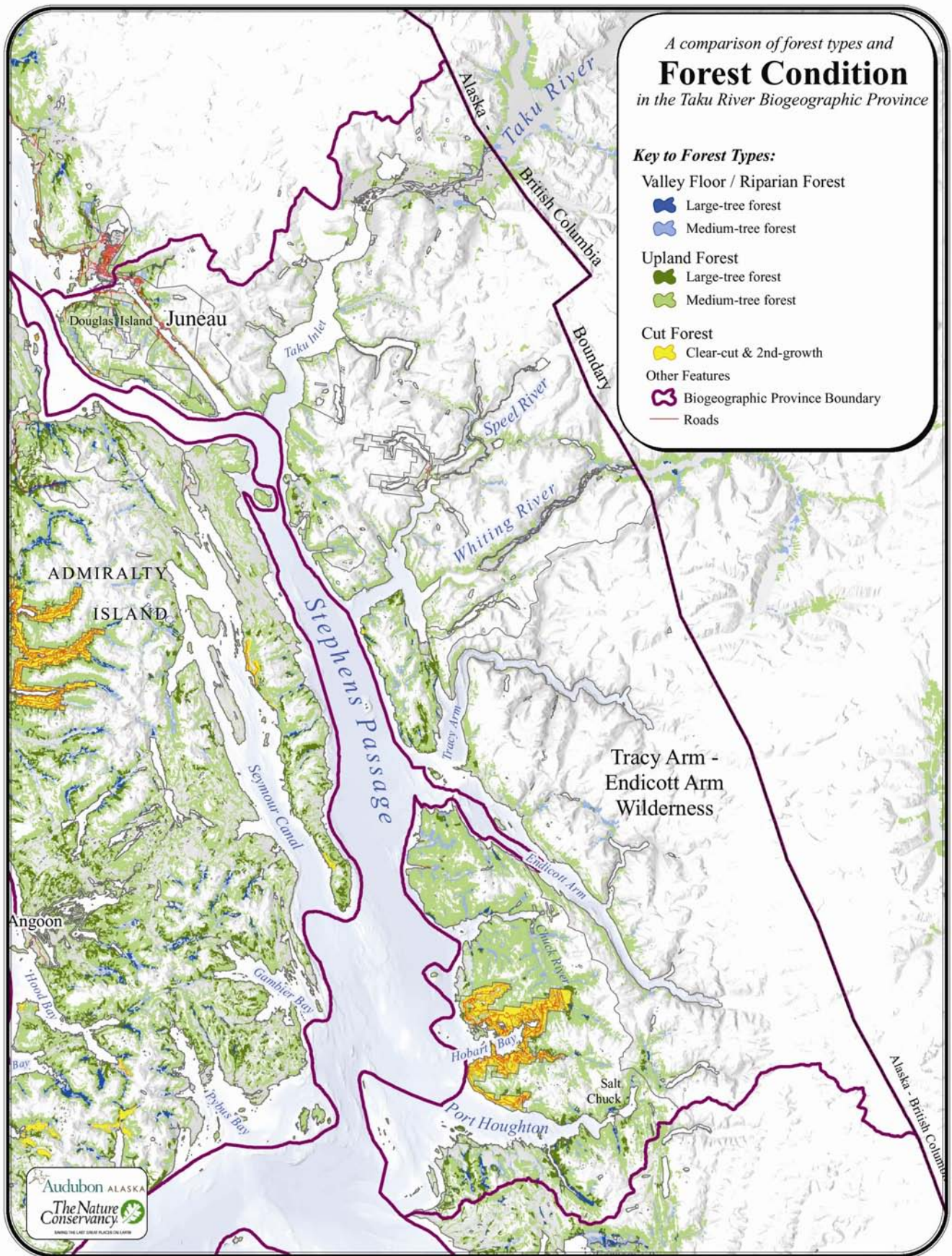


Fig 6. A comparison of forest types and forest condition within the Taku Province of southeastern Alaska.