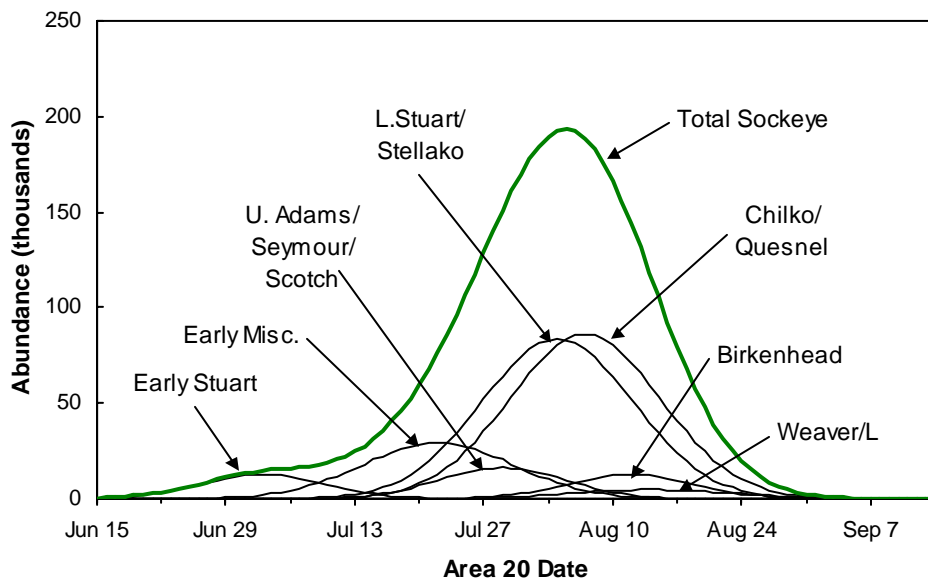


The Fraser River Panel (Panel) of the Pacific Salmon Commission has completed the management plan for 2004 Fraser River sockeye salmon fisheries in Panel Area waters. Fisheries and Oceans Canada (DFO) provided forecasts of Fraser River sockeye abundance to the Panel, as well as a schedule for calculating sockeye spawning escapement targets at different run sizes. The Panel discussed three levels of forecasted return abundance: 8,663,000 fish (25% probability that the run will reach or exceed this number), 4,920,000 fish (50% probability level forecast), and 2,872,000 fish (75% probability level forecast). However, fishery planning primarily focused on the 50% probability level forecasts of abundance of Fraser stocks. Abundance-timing curves (at the 50% probability level forecast) for Fraser River sockeye salmon in coastal areas (i.e., Juan de Fuca Strait, Area 20) using the long-term average timing for this sockeye cycle are shown below.



Forecasts at the 50% p level are as follows: Early Stuart, 216,000 fish; Early Summer-run sockeye, 885,000 fish; Summer-run sockeye stocks (Quesnel, Chilko, Late Stuart and Stellako) 3,501,000 fish;

Birkenhead sockeye, 218,000 fish; “true” Late-run sockeye (Weaver, Portage, Late Shuswap, Cultus, but excluding Birkenhead sockeye) 100,000 fish.

The Early Stuart 2004 cycle line is the second off cycle following the dominant (2001) and subdominant line (2002). Early Stuart sockeye returning to their spawning grounds in the brood year (2000) were adversely impacted by high flows in the Fraser River, although the spawning escapement was the highest on this cycle line since 1988. The forecasted return of Early Summer-run and Summer-run sockeye is higher than the recent cycle-year average because of large escapements in the brood year. Birkenhead sockeye are forecast to return at approximately half of the recent cycle-year average because of low escapement in the brood year.

The 50% p level forecast of true Late-run sockeye abundance is about one sixth of the recent cycle-year average because there were few successful spawners in the brood year (2000). Although it was estimated that over 300,000 true Late-run sockeye migrated into the Fraser River in 2000, the associated en route and pre-spawning mortality of these fish was approximately 90%. The high in-river mortality of Late-run sockeye in 2000 was associated with their abnormally early entry timing into the Fraser River (approximately six to seven weeks earlier than average for Weaver sockeye) and subsequent mortalities induced by infection from the parasite *Parvicapsula minibicornis*. Research is continuing on identifying the cause(s) of the early entry behavior of Late-run sockeye.

The problem of early entry of Late-run sockeye stocks has continued every year since 1996. It continues to adversely impact their productivity and substantially reduce harvest opportunities on these stocks (as well as other co-migrating Fraser River sockeye stocks). Over the past four years, the en route mortality rate of Late-run sockeye was highest in 2000 and 2001, followed by 2003, and lowest in 2002. This early entry behavior and en route mortality is a significant concern. Therefore, as in recent years, fishery planning in 2004 has proceeded under the assumption that the abnormal upstream migratory behavior of Late-run sockeye will continue and that substantial in-river mortality of these sockeye will occur. As a result, the Panel agreed to a maximum allowable exploitation rate on true Late-run sockeye of 15%.

Canada has identified additional concerns for Cultus Lake sockeye (a Late-run stock) and Sakinaw sockeye. Returns and escapements of these stocks have declined over recent decades. In December 2003, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) requested that the Cultus and Sakinaw sockeye salmon populations be added to the SARA legal list as endangered on an emergency basis. After considering the management actions planned for these populations in 2004 and consulting with the Minister of Fisheries and Oceans, the Minister of Environment decided that an

emergency listing of these two sockeye populations was not warranted at this time. In addition to substantial measures being taken by Fisheries and Oceans to reduce fishing pressures on the Cultus and Sakinaw populations, and other activities such as habitat restoration, predator control, and fish passage improvements and monitoring, are underway to reduce the threat to their survival and increase their numbers (http://www.dfo-mpo.gc.ca/media/backgrou/2004/salmon_e.htm). These two sockeye salmon populations will therefore be considered for addition to the SARA legal list through the normal consultation and listing decision-making process. Cultus and Sakinaw sockeye migrate through the marine waters of southern British Columbia. In addition to the 15% bi-laterally agreed harvest rate limit on Late-run sockeye, Canadian fishery plans are being developed to ensure a overall harvest rate of 10 to 12 per cent on Cultus and Sakinaw Lake sockeye populations is not exceeded in 2004.

While Summer-run sockeye are expected to provide most of the catch in 2004, the need to achieve escapement targets for Early-Summer run sockeye, and address conservation concerns for Late-run sockeye will limit the harvest of Summer-run fish due to the overlap of these run-timing groups. Commercial fishery openings in Panel Area waters in 2004 will depend on Fraser sockeye abundance estimates and run-timing assessments, and on their spawning escapement requirements. If the abundance of Early Summer-run sockeye salmon is approximately at the 50% probability level (885,000 fish) and the abundance of Summer-run sockeye salmon is approximately at the 50% probability level (3,501,000 fish) and the runs arrive at near normal dates in marine areas, fisheries are expected to commence as follows: United States Areas 4B, 5, and 6C – week of July 18-24; Areas 6, 7 and 7A week of July 25- 31; and Canadian Panel Waters – week of July 25-31. Due to the need to minimize the harvest of Late-run sockeye, commercial fisheries are very unlikely to occur after approximately mid-August.

DFO's pre-season forecast of the proportion of Fraser sockeye diverting through Johnstone Strait is 78%, indicating an expected low relative abundance of sockeye in U.S. waters, especially after August 1. Forecasts of the marine migration timing of Fraser sockeye will be provided by DFO at a later date. These forecasts along with environmental data collected in the Fraser River watershed, will be included in weekly, in-season news releases from the Pacific Salmon Commission. The expected fishery commencement dates noted above could be affected by changes in the proportion of Fraser River sockeye diverting through Johnstone Strait.

Early Stuart sockeye have been migrating through the marine approach areas over the past two weeks and the escapement of Early Stuart sockeye past Mission has now reached 46,000 fish. Based on the progress of the Early Stuart sockeye migration to date, and under the assumption that the 50% arrival timing in Area 20 occurred on July 3, the Panel adopted a provisional run size estimate for Early Stuart sockeye of 137,000 fish (the 75% p level forecast).

The low snowpack levels in the Fraser River watershed are projected to result in lower than normal flows in 2004, and may result in periodic high water temperatures in the Fraser River this summer. This could result in elevated, in-river mortality of migrating sockeye. The Fraser River discharge rate at Hope is currently 4,400 cms and the water temperature at Qualark Creek is currently 16.9⁰ C, which is almost 3⁰ C higher than normal for this date. Fraser River discharge levels and water temperatures will be monitored closely to determine if specific management actions are required during the in-river migratory period to help achieve sockeye escapement goals.

Test fishing in Panel Area waters commenced on June 22 in Canadian Area 20 (Juan de Fuca Strait). The Pacific Salmon Commission (PSC) reports daily test fishing catches of sockeye salmon on its recorded message at (604) 666-8200 and on the Internet at: <http://www.psc.org/TestFish/>. The PSC has provided information on Late-run Fraser River sockeye migration behavior, en route mortality, and research results and plans on the Internet at: <http://www.psc.org/Pubs/LateRun/Index.htm/>. In addition, Fraser River Panel news releases, fishery regulations, sockeye escapement data and stock status reports are available on the Internet at: www.psc.org. United States fishing schedules during the season are available for Treaty Indian fisheries through the Northwest Indian Fisheries Commission at 1-800-562-6142. Non-Indian fishing schedules are available through the National Marine Fisheries Service's Hotline in Seattle at 1-888-858-9319. Canadian commercial fishing regulations will be announced on the Fisheries and Oceans Canada recorded message at (604) 666-2828, on the Internet at: <http://www.pac.dfo-mpo.gc.ca/> and via fishery notices. Consult the appropriate regulatory agency regarding fisheries regulations pertaining to species other than sockeye and pink salmon in the Fraser River Panel Management Area.

As in recent years, assessment fisheries will be conducted with the long-term goal of improving the accuracy of in-season Fraser River sockeye run-size estimates. These assessment fisheries are being conducted by the following user groups in the areas indicated: Canadian Area B purse seine assessment fishery in Areas 12 and 20; Canadian Area D gillnet assessment fishery and Round Island gillnet conversion study in Area 12; Canadian Area E gillnet assessment fishery in the Fraser River in Areas 29-9 and 29-17; Canadian First Nations' FSC (Food Social and Ceremonial) purse seine assessment fishery in Areas 12, and 20; and United States reef net assessment fishery in Area 7.

All commercial fisheries in Panel Area waters remain closed to fishing.

The next in-season meeting of the Panel is scheduled to occur on July 13. Periodic news releases in this series will be provided by the Panel through the Commission to inform those interested in the progress of the Fraser River sockeye salmon runs.