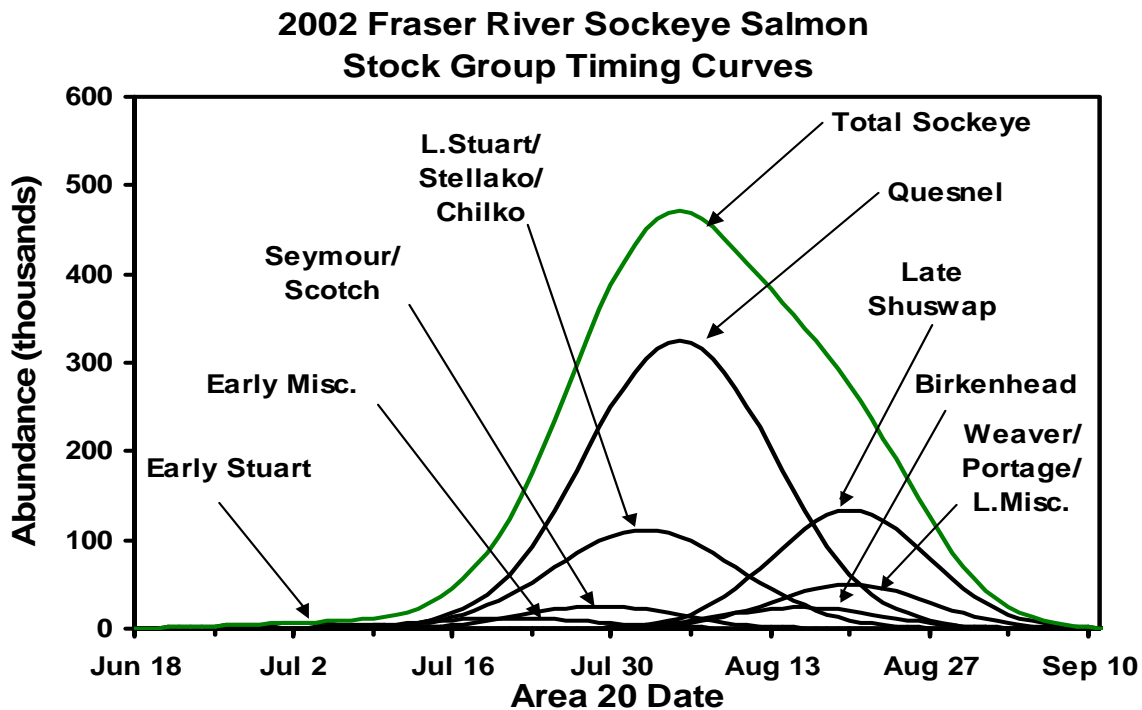


The Fraser River Panel (Panel) of the Pacific Salmon Commission has completed the management plans for 2002 Fraser River sockeye salmon fisheries in Panel Area waters. In February, Fisheries and Oceans Canada (DFO) provided forecasts of Fraser River sockeye salmon abundance to the Panel, as well as a schedule for calculating spawning escapement targets at different run sizes. Uncertainty about the forecast abundances for sockeye stocks led the Panel to develop fishery plans at two levels of return abundance: 7,911,000 fish (75% probability that the run will reach or exceed this number), and 13,365,000 fish (50% probability level forecast) were used in the planning. Abundance-timing curves (at the 50% probability level forecast) for Fraser River sockeye salmon in coastal areas (i.e., Juan de Fuca Strait or Area 20) using the long-term average timing for this cycle are shown below.



The Summer-run sockeye stocks (Quesnel, Chilko, Late Stuart and Stellako) predominate in the sockeye forecasts with cumulative returns of 5,204,000 and 9,006,000 fish under the 75% and 50% probability levels, respectively. Early Stuart and Early Summer-run sockeye are forecast to return at much lower abundances. Indications were that high temperatures in the Fraser watershed in July-August, 1998 contributed to high en route mortalities and lower-than-target spawning escapements of Early Stuart and Early Summer-run sockeye stocks to the upper Fraser watershed. High temperatures also contributed to poor spawning success for Early Stuart sockeye in 1998, which has led to low 2002 abundance forecasts (59,000 fish at the 75% level and 105,000 fish at the 50% probability level). Early Summer-run sockeye are forecast to return at abundance levels below average for the cycle (326,000 fish at the 75% level and 678,000 fish at the 50% level). High river temperatures also impacted Summer-run sockeye, however, spawning escapements were above target levels because the Panel agreed to increase

escapement targets by 25% to compensate for the potential mortalities due to high temperatures and because of conservation measures taken to protect Late-run stocks.

The 2002 cycle is the dominant cycle for Late Shuswap sockeye (which includes the Adams River). However, in 1998, early upstream migration of Late-run sockeye stocks (including Adams, Lower Shuswap, Weaver, Portage, Cultus, and Harrison, but excluding Birkenhead) led to apparent en route and pre-spawning mortality of these stocks. Of the 2,203,000 Late Shuswap sockeye estimated to have passed Mission in 1998, only 1,390,000 fish were estimated to reach the spawning grounds. Because of their early entry, the Late-run stocks also encountered high river temperatures. This was believed to further reduce their spawning success. As a result, the 50% probability forecast for the Late Shuswap stocks is less than one-third the average for the cycle (2,300,000; 1,678,000 fish at the 75% level). Management actions/objectives implemented in 2002 will be designed to preserve and maintain this stock.

The problem of early entry of Late-run stocks has continued every year since 1996 and it poses a serious threat to the future viability of Late-run sockeye. Therefore, the 2002 management plan was developed under the assumption that this abnormal upstream migration behavior would continue and the Panel has agreed to limit fishery impacts on Late-run sockeye (excluding Birkenhead) to 15% of the total return. Despite these strict conservation measures, if early upstream migration continues in 2002 and the en route and pre-spawn mortality rates are similar to recent past years (approximately 90%), the number of effective Late-run spawners would not be expected to exceed a few hundred thousand fish. Research has been initiated to determine the causes of early entry and subsequent mortality. Both Canada and the United States have contributed significant funds for tagging and research programs in 2002. For more information about this problem and the proposed research, you may access the Pacific Salmon Commission website at [www.psc.org](http://www.psc.org)

While Summer-run sockeye are expected to provide most of the catch in 2002, concerns for Early Summer-run escapement and conservation concerns for Late-run sockeye may force the Panel to constrain fishing on the Summer-runs. Commercial fisheries in Panel Areas are expected to be short in duration with approximately two to three weeks of fishing.

Commercial fishing times in Panel Area waters will be dependent on in-season estimates of abundances and run timing of sockeye salmon, and on their corresponding spawning escapement needs. If the abundance of Early Summer-run sockeye salmon in 2002 is approximately at the 50% probability level forecast (678,000 fish) and the abundance of Summer-run sockeye salmon is approximately at the 50% probability level forecast (9,006,000 fish) and the runs arrive at near normal dates, fisheries would be expected to commence as follows: United States Areas 4B, 5, and 6C – week of July 21-27; Areas 6, 7 and 7A week of July 28-August 3; Canadian Area 20 – week of July 28-August 3; Areas 18 and 29 – week of July 28-August 3.

If the abundance of Early Summer-run sockeye salmon is approximately at the 75% probability level forecast (326,000 fish) and the abundance of Summer-run sockeye salmon is approximately at the 75% probability level forecast (5,204,000 fish) and the runs arrive at near normal dates, fisheries would be expected to commence as follows: United States Areas 4B, 5, and 6C – week of July 28-August 3; Areas 6, 7 and 7A week of August 4-10; Canadian Area 20 – week of July 28-August 3; Areas 18 and 29 – week of July 28-August 3.

Pre-season forecasts of timing and the Johnstone Strait diversion rate will be provided to the Panel by DFO. 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.

Current snowpack levels throughout the Fraser River watershed are significantly above normal. Discharge levels in the Fraser River are presently approximately 9,000 cms at Hope. These levels have seriously impeded the migration of Fraser River sockeye in prior years and, if they continue, may cause substantial en route mortality of these fish again this year. The discharge levels in the Fraser River will be closely monitored to determine if specific management actions need to be taken during the period of migration to help achieve escapement goals.

Test fishing in Panel Area waters commenced on June 24 in Canadian Area 20 and the Fraser River. The Pacific Salmon Commission reports daily test fishing catches of sockeye salmon on its recorded message at (604) 666-8200 and on the Internet at: [www.psc.org/TestFish/](http://www.psc.org/TestFish/). In addition, Fraser River Panel news releases, fishery regulations, sockeye escapement data, and sockeye salmon stock status reports will be available on this website.

United States fishing schedules during the season will be available for Treaty Indian fisheries through the Northwest Indian Fisheries Commission at 1-800-562-6142. Non-Indian fishing schedules will be available through the National Marine Fisheries Service's Hotline in Seattle at 1-888-858-9319. Canadian fishing regulations will be announced on the Fisheries and Oceans Canada recorded message at (604) 666-2828 and via fishery notices.

The next in-season meeting of the Panel will be held July 5 by telephone conference. In-person meetings of the Panel will be held at the Richmond Inn, Richmond, B.C., beginning July 19. Periodic news releases in this series will be provided by the Panel through the Commission to help inform all those interested in the progress of the runs.