

SUMMARY OF WEST COAST CHINOOK SALMON MASS MARKING PROGRAMS AND SELECTIVE FISHERIES

Introduction

The Salmon Technical Team (STT) was asked by the Council to report on the magnitude and release locations of mass marked chinook salmon, the likely ocean distribution of mass marked stocks, and on any anticipated or ongoing selective fisheries on those fish. For the purposes of this report, a mass marked fish is defined to be a fish with an adipose fin clip, but without a coded-wire tag (CWT).

Oregon Coast

Tillamook Spring Chinook: About 250,000 Trask spring chinook smolts are released annually from Trask Hatchery. The release has been fully mass marked beginning with the 1998 brood except for 50,000 adipose fin clipped fish with CWT released annually. The Tillamook spring chinook fishery is selective. Trask River spring chinook are a north migrating stock not typically encountered in Council fisheries.

Umpqua River Spring Chinook: About 400,000 Umpqua spring chinook smolts are released annually from Rock Creek Hatchery. The release has been fully mass marked beginning with the 1998 brood except for 50,000 adipose fin clipped fish with CWT released annually. The Umpqua River spring chinook fishery is non-selective; mass marking is used to facilitate hatchery/wild accounting. Umpqua spring chinook are a south/local migrating stock encountered in Council fisheries, primarily between Cape Falcon and Horse Mt.

Rogue River Spring Chinook: About 1.9 million Rogue River spring chinook smolts are released annually from Cole M. Rivers Hatchery. The stock has been fully mass marked beginning with the 1998 brood except for 50,000 non-adipose fin clipped fish with CWT and 110,000 adipose fin clipped fish with CWT as a Double Index Tag (DIT) group. Selective fishery regulations for the Rogue River spring chinook fishery will be considered for 2004. Rogue River spring chinook are a south/local migrating stock encountered in Council fisheries, primarily between Cape Falcon and Horse Mt.

Oregon Coast Summary: Fall chinook production is not mass marked, and fall chinook freshwater fisheries are all non-selective. Spring chinook hatchery production is mass marked and most spring chinook freshwater fisheries are selective. Mass marking and selective fisheries for north migrating stocks have been or are being reviewed through the Pacific Salmon Commission process. Mass marking and selective fisheries for south/local migrating stocks (Umpqua and Rogue spring chinook) were discussed in the Klamath Fishery Management Council forum, and an analysis of contribution rates and expected no tag rates in Oregon and California fisheries was presented.

Columbia River

Willamette River Hatchery Spring Chinook: Five to six million spring chinook smolts are released annually. The stock has been fully mass marked with adipose fin clips beginning with the 1997 brood except for up to 100,000 non-adipose fin clipped fish with CWT and up to 700,000 adipose fin clipped fish with CWT released annually as DIT groups. Two stocks are identified for DIT: Clackamas yearlings and MacKenzie yearlings. All freshwater fisheries (recreational and commercial) operate under mark selective regulations as required by the Oregon Department of Fish and Wildlife (ODFW) Fishery Management and Evaluation Plan (FMEP) approved by the National Marine Fisheries Service. Selective fisheries targeting this stock were initiated in 2000, and currently occur in the lower Columbia River mainstem below the I-5 Bridge and in the Willamette River. Willamette River spring chinook are a north migrating stock not typically encountered in Council fisheries.

Lower Columbia River Youngs Bay Spring Chinook: About one million Willamette stock spring chinook smolts are released in Youngs Bay annually. The releases have been fully mass marked

beginning with the 1999 brood except for up to 125,000 adipose fin clipped fish with CWT released each year. Terminal area fisheries are expected to be selective in 2004. Willamette stock spring chinook are a north migrating stock not typically encountered in Council fisheries.

Lewis River Spring Chinook: About one million Lewis River spring chinook smolts are released annually. The releases have been fully mass marked beginning with the 1998 brood except for up to 150,000 adipose fin clipped fish with CWT each year. Selective fishery regulations have been in effect for spring chinook in the Columbia River mainstem recreational fisheries since 2001, and in lower Columbia River mainstem commercial fisheries since 2002. Lewis River stock spring chinook are a north migrating stock not typically encountered in Council fisheries.

Kalama River Spring Chinook: About 250,000 Kalama River spring chinook smolts are released annually. The releases have been fully mass marked beginning with the 1998 brood. Selective fishery regulations have been in effect for spring chinook in the Columbia River mainstem recreational fisheries since 2001, and in lower Columbia River mainstem commercial fisheries since 2002. Kalama River stock spring chinook are a north migrating stock not typically encountered in Council fisheries.

Cowlitz River Spring Chinook: About 1.4 million Cowlitz River stock spring chinook smolts are released annually. The releases have been fully mass marked beginning with the 1998 brood. Selective fishery regulations have been in effect for spring chinook in the Columbia River mainstem recreational fisheries since 2001, and in lower Columbia River mainstem commercial fisheries since 2002. Cowlitz River stock spring chinook are a north migrating stock not typically encountered in Council fisheries.

Upriver Spring Chinook (including Mid Columbia River, Upper Columbia River and Snake River Spring Chinook): Over 20 million Carson, Little White Salmon, Umatilla, Leavenworth, Entiat, Methow, Wenatchee, Klickitat, Deschutes, Yakima and Snake River spring chinook are released annually from the U.S. Fish and Wildlife Service (USFWS), Washington Department of Fish and Wildlife (WDFW), Tribal, and Idaho Department of Fish and Game (IDFG) hatcheries. The percentage of the releases with adipose fin clips is lower for 1999 brood (20%) than the 1998 brood (63%). However, none are DIT. IDFG began mass marking spring chinook in the Clearwater drainage prior to 1990. All hatchery spring chinook originating in Idaho have been mass marked since the 1995 releases. WDFW and ODFW began mass marking with the 1998 brood. USFWS began mass marking Deschutes river spring chinook with the 2000 brood. Selective fishery regulations have been in effect for spring chinook in the Clearwater recreational fisheries since 1992, the Snake River recreational fisheries since 1997, the Columbia River mainstem recreational fisheries since 2001, and in lower Columbia River mainstem commercial fisheries since 2002. Upriver spring chinook stocks are not typically encountered in Council fisheries.

Upper Columbia River and Snake River Summer Chinook: Over 2 million Wells, Methow, Okanogan, Wenatchee, and Snake River summer chinook are released annually from the WDFW and IDFG hatcheries. Most of these releases are adipose fin clipped. There no DIT groups for summer chinook. Summer chinook stocks in Idaho have been 100% mass marked since the 1995 release. WDFW began mass marking with the 2000 brood. Selective fishery regulations for summer chinook have been in effect for recreational fisheries in the Snake River since 1997 and in the Columbia River mainstem since 2002. Upper Columbia River summer chinook stocks are north migrating stocks. Neither Columbia River nor Snake River summer chinook are typically encountered in Council fisheries.

Columbia River Summary: Fall chinook production is not currently mass marked, and fall chinook freshwater fisheries are all non-selective. Most spring and summer chinook production is mass marked, and most spring/summer chinook freshwater fisheries are selective. Mass marking of Columbia River stocks and Columbia River selective fisheries have been or are being reviewed through the Pacific Salmon Commission process.

Puget Sound

Puget Sound Chinook: About 46.2 million spring, summer, and fall chinook are released annually from various WDFW Puget Sound hatcheries. Most stocks are mass marked with the following exceptions: 5.9 million adipose fin clipped fish with CWT, 2.6 million non-adipose fin clipped fish with CWT as a DIT

group, and 7.2 million unmarked/untagged fish. An additional 10.5 million chinook are released from Tribal and cooperative hatchery programs in Puget Sound. Of those, most stocks are mass marked except 1.5 million adipose fin clipped fish with CWT, 970,000 non-adipose fin clipped fish with CWT as DIT groups, and 1.7 million unmarked/untagged fish. Most stocks have been mass marked beginning with the 2000 brood. Mark-selective recreational fisheries will be considered for 2003 in Areas 5-6 and the Skykomish River. Puget Sound chinook stocks are north migrating stocks not typically encountered in Council fisheries. Mass marking of Puget Sound stocks and selective fisheries have been or are being reviewed through the Pacific Salmon Commission process.

PFMC
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