PROPOSAL 105 – 5 AAC 15.357. Chignik Area Salmon Management Plan.

PROPOSED BY: Alaska Department of Fish and Game.

<u>WHAT WOULD THE PROPOSAL DO?</u> Amend the *Chignik Area Salmon Management Plan* to reflect the Chignik River sockeye salmon escapement goal changing from separate early and late run goals to a single goal. Suggested changes are as follows:

5 AAC 15.357. Chignik Area Salmon Management Plan

- (a) The department shall manage the commercial salmon fishery in the Chignik Area in accordance with the guidelines set out in the management plan under this section, The goal of this management plan is to allow traditional fisheries in the area to be conducted on Chignik Area salmon stocks, and to achieve the department's biological escapement **goal** [GOALS] for the **Chignik River system** [BOTH BLACK LAKE (EARLY-RUN) AND CHIGNIK LAKE (LATE-RUN)] sockeye salmon and local stocks of pink, chum, coho, and king salmon.
- (b) In the Chignik Bay and Central Districts, and the Inner Castle Cape Subsection of the Western District, the commercial salmon fishery shall open concurrently based on escapement objectives for the Chignik [LAKES' SYSTEM] **River system** sockeye salmon runs, except that
 - (1) the commissioner may open, by emergency order, the commercial salmon fishery when 20,000 sockeye salmon have escaped into the Chignik River; however, if the department determines that a strong buildup of sockeye salmon exists in Chignik Lagoon and that 20,000 sockeye salmon will escape into the Chignik River, the commissioner may open, by emergency order, the commercial salmon fishery before 20,000 sockeye salmon have escaped into the Chignik River;
 - [(2) DURING THE PERIOD OF TRANSITION FROM THE PREDOMINANCE OF THE EARLY-RUN SOCKEYE SALMON TO THAT OF THE LATE-RUN SOCKEYE SALMON, USUALLY LATE JUNE THROUGH MID-JULY, THE COMMISSIONER SHALL OPEN AND CLOSE, BY EMERGENCY ORDER, FISHING PERIODS TO HARVEST **SURPLUS EARLY-RUN** SOCKEYE **SALMON** WITHOUT **JEOPARDIZING** THE LATE-RUN SOCKEYE SALMON **ESCAPEMENT** OBJECTIVES;]
 - [(3) FROM THE END OF THE TRANSITION PERIOD, DESCRIBED IN
 - (2) OF THIS SUBSECTION UNTIL SEPTEMBER 14,]

(2) from June 1 until September 14,

- (A) the commissioner shall open and close, by emergency order, fishing periods in the Chignik Bay and Central Districts, and the Inner Castle Cape Subsection of the Western District, based on the Chignik [Lakes'] <u>River</u> system sockeye salmon escapement [GOALS] <u>goal</u>;
- (B) the department shall manage the commercial fishery to allow for the passage of at least 20,000 sockeye salmon above the Chignik River weir, in addition to [LATE RUN] <u>Chignik River system</u> sockeye salmon escapement needs, to provide an inriver harvestable surplus above the Chignik River weir in August and September

- of at least 10,000 fish in August and 10,000 fish from September 1 through September 30;
- (C) the commissioner may take additional emergency order actions to protect or harvest local pink, chum, king, and coho salmon runs; and
- [4] (3) beginning September 15, fishing periods in the Chignik Bay and Central Districts, and the Inner Castle Cape Subsection of the Western District, may be no more than 48 hours per week, and shall be based on the department's evaluation of the sockeye salmon run strength and the subsistence needs for [CHIGNIK LAKE LATE-SEASON] Chignik River System sockeye salmon.
- (c) In the Eastern District,
 - (1) during June, the commercial salmon fishery shall open concurrently with the Chignik Bay and Central Districts, and the Inner Castle Cape Subsection of the Western District, and the openings shall be based on achieving [THE BLACK LAKE] <u>Chignik River system</u> sockeye salmon escapement goals;
 - [(2) FROM APPROXIMATELY JUNE 26 THROUGH JULY 8,
 - (A) THE DEPARTMENT SHALL EVALUATE THE STRENGTH OF THE SOCKEYE SALMON LATE RUN; AND
 - (B) IN ORDER TO CONTINUE MANAGING THE BLACK LAKE SOCKEYE SALMON HARVEST AND ESCAPEMENT, WHILE ASSESSING THE CHIGNIK LAKE SOCKEYE SALMON RUN STRENGTH, COMMERCIAL SALMON FISHING IN THE EASTERN DISTRICT WILL, IN THE DEPARMENT'S DISCRETION, BE DISALLOWED OR SEVERLY RESTRICTED;]
 - [3] (2) [FROM THE END OF THE TRANSITION PERIOD, DESCRIBED IN (b)(2) OF THIS SECTION,] from July 1, until July 31, the department shall manage the commercial salmon fishery based on its evaluation of local pink and chum salmon runs, and the strength of the Chignik [LAKES'] River system sockeye salmon;
 - [4] (3) after July 31, the department shall manage the commercial salmon fishery based on its evaluation of local pink, chum, and coho salmon runs or the strength of the Chignik [LAKE] **River system** sockeye salmon run.
- (d) From June 1 through July 5, in the Western District, excluding the Inner Castle Cape Subsection, and in the Perryville District, the department may open the commercial salmon fishery concurrently with the Chignik Bay and Central Districts and the Inner Castle Cape Subsection of the Western District; during this time period the Perryville District may open for no more than three 48-hour fishing periods with a minimum closure of 48 hours between each period; beginning July 6, the department may open the commercial salmon fishery in the Western District, excluding the Inner Castle Cape Subsection, and in the Perryville District, except that,
 - [(1) FROM APPROXIMATELY LATE JUNE TO MID-JULY (TRANSITION PERIOD),
 - (A) THE DEPARTMENT SHALL EVALUATE THE STRENGTH OF THE SOCKEYE SALMON LATE RUN; AND

- (B) IN ORDER TO ALLOW THE DEPARTMENT TO ASSESS THE CHIGNIK LAKE RUN STRENGTH, THE DEPARMENT MAY KEEP CLOSED OR SEVERLY RESTRICT COMMERCIAL SALMON FISHING IN THE WESTERN DISTRICT, EXCEPT THE INNER CASTLE CAPE SUBSECTION, AND IN THE PERRYVILLE DISTRICT;]
- [2] (1) from [THE END OF THE TRANSITION PERIOD, DESCRIBED IN (b)(2) OF THIS SECTION] July 6 until July 31, fishing periods shall be based on the department's evaluation of local pink and chum salmon runs, and its evaluation of the Chignik [Lake] River system sockeye salmon run; from July 22 through July 31,
 - (A) repealed 3/29/2008;
 - (B) the commissioner may, by emergency order, open fishing in the following terminal harvest areas:
 - (i) those portions of the Western and Perryville Districts north of a line from Cape Ikti at 56° 00.32' N. lat., 158° 32.02' W. long., to Coal Cape at 55° 53.42' N. lat., 159° 00.45' W. long., to Cape Alexander at 55° 47.22' N. lat., 159° 24.57 W. long.;
 - (ii) waters in the Ivanof Bay Section of the Perryville District that are north of the latitude from Alexander Point at 55° 47.37' W. long., to Kupreanof Peninsula; and
 - (iii) those portions of the Chignik Bay and Central Districts known locally as Jack's Box, which consists of those waters east of 158° 15.36' W. long., south of 56° 20' N. lat., and west of 158° 10' W. long.;
- [3] (2) after July 31, the fishing periods shall be managed based on the department's evaluation of local pink, chum, and coho salmon runs or the strength of the Chignik [LAKE] **River system** sockeye salmon run.
- (e) Repealed 5/31/2019

WHAT ARE THE CURRENT REGULATIONS? See 5 AAC 15.357 and previous section.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED? The Chignik Area Salmon Management Plan (5 AAC 15.357) would be amended to reference the new single escapement goal. Management and board generated allocative criteria would remain unchanged. This would primarily alter periods of fishing from late June to mid-July during what was considered the transition period where closures were often necessary at the start of the late run even when the early run sockeye salmon was meeting or exceeding escapement objectives or vice versa. Managing for a single run goal using average run timing (Figure 105-1) ensures adequate sockeye salmon escapement to both Black Lake and Chignik Lake.

BACKGROUND: Each stock of Chignik sockeye salmon has maintained its own escapement goal since 1968. When these goals were initially established, the majority of early-run fish spawned and reared in Black Lake and the majority of late-run fish spawned and reared in Chignik Lake. However, morphological changes to the Chignik watershed that occurred around the 1960s have irrecoverably reduced the volume of Black Lake. While the changes to Black Lake are not indicative of poorer rearing conditions, Black Lake habitat may prove more variable for juvenile sockeye salmon. Recent findings by the US Army Corps of Engineers have indicated the watershed stabilized in 2000, yet studies initiated in 2011 identified that early-run juvenile sockeye salmon from Black Lake are driven to rear throughout the entire watershed in response to climate. Similarly, late-run juveniles can outcompete early-run juveniles when both stocks co-occur in Chignik Lake. With watershed morphology stabilized and greater variability in recent climatic conditions, it is likely that early-run juvenile sockeye salmon will continue to utilize the entire Chignik watershed in response to dynamic rearing conditions in Black Lake. The 2020 assessment of spawner-recruit relationships indicated increased density dependence and lower productivity for both runs since watershed stabilization, suggesting the adaptive rearing strategies of early-run juveniles may have increased intraspecific competition in Chignik Lake, and possibly throughout lower reaches of the watershed, systemically influencing productivity. Because of the broadscale freshwater habitat use of early-run fish and increased mixed-stock interactions between juvenile Chignik sockeye salmon, the department determined productivity would be better measured by a single Chignik River sockeye salmon escapement goal. A single escapement goal reflects the productivity of the Chignik watershed as a connected habitat network for sockeye salmon.

<u>DEPARTMENT COMMENTS:</u> The department submitted and **SUPPORTS** this proposal. There are management plans in both the Kodiak and Alaska Peninsula Management Areas that reference the current Chignik River sockeye salmon escapement goals. These plans also need to be amended to reflect the escapement goal change.

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for the department or a private person to participate in this fishery.

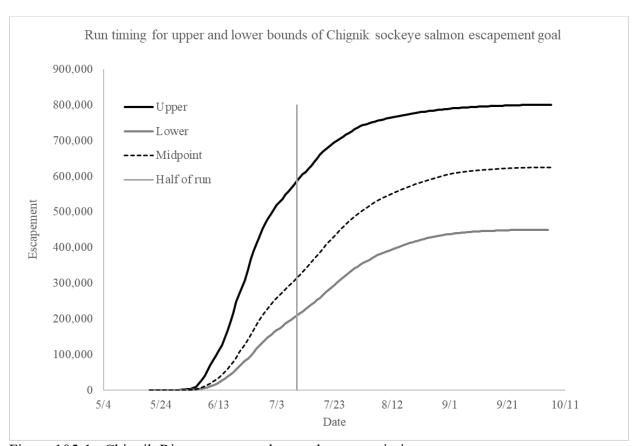


Figure 105-1.—Chignik River system sockeye salmon run timing curve.

PROPOSAL 132 – 5 AAC 09.360. Southeastern District Mainland Salmon Management Plan.

PROPOSED BY: Alaska Department of Fish and Game.

WHAT WOULD THE PROPOSAL DO? During the current Board of Fisheries cycle, the Alaska Department of Fish and Game made changes to the Chignik River sockeye salmon management by shifting from being managed by two escapement goals to management by a single escapement goal. This proposal seeks to address the language in the *Southeastern District Salmon Management Plan* that reference the two escapement goal regime for Chignik River sockeye salmon.

Regulations for 5AAC 09.360 would read as follows:

5AAC 09.360. Southeastern District Mainland Salmon Management Plan. (a) The purpose of this management plan is to provide guidelines to the department for the management of the interception of Chignik River sockeye salmon caught in the Southeastern District Mainland fishery conducted in the East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections. Except as specified in 5 AAC 09.330(f)(3), before July 11, only set gillnet gear may be used in these sections. For the purpose of the management plan in this section, local runs include only those salmon in the waters

- (1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f);
- (2) in the Stepovak Flats Section described in 5 AAC 09.200(f).
- (b) In years when a harvestable surplus for the [FIRST (BLACK LAKE) AND SECOND (CHIGNIK LAKE) RUNS OF] Chignik River system sockeye salmon is expected to be less than 600,000 fish, a commercial salmon fishery is not allowed in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and in the Northwest Stepovak Section, excluding Orzinski Bay north of a line from Elephant Point 55° 41.92′ N. lat., 160° 03.20′ W. long. to Waterfall Point at 55° 43.18′ N. lat., 160° 01.13′ W. long. until the department projects that a harvest of 300,000 sockeye salmon in the Chignik Area described in 5 AAC 15.100. After July [8]10, if at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if the escapement goal is [GOALS ARE] being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 fish and the number of sockeye salmon destined for the Chignik River that are harvested in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, approaches as near as possible 7.6 percent of the sockeye salmon harvest in the Chignik Area.
- (c) In years when a harvestable surplus beyond the escapement **goal**[GOALS] for [THE FIRST AND SECOND RUNS OF] Chignik River sockeye salmon is expected to be more than 600,000 fish but [FIRST RUN] fails to develop as predicted and it is determined that a total sockeye salmon harvest in the Chignik Area of 600,000 or more fish may not be achieved, the commercial salmon fishery in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and in the Northwest Stepovak Section, excluding Orzinski Bay north of a line from Elephant Point 55° 41.92′ N. lat., 160° 03.20′ W. long. to Waterfall Point at 55° 43.18′ N. lat., 160° 01.13′ W. long., shall be curtailed until the department projects a harvest in the Chignik Area of at least 300,000 sockeye salmon through July [8] 10 if that number of fish are determined to be surplus

to the escapement goals of the Chignik River system. After July [8]10, if at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area is at least 600,000 fish and the number of sockeye salmon destined for the Chignik River that are harvested in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, approaches as near as possible 7.6 percent of the sockeye salmon harvest in the Chignik Area.

(d) In years when a harvestable surplus beyond the escapement **goal**[GOALS] for [THE FIRST AND SECOND RUNS OF] Chignik River system sockeye salmon is expected to be more than 600,000 fish and the department determines that the **run is**[RUNS ARE] as strong as expected, the department shall manage the fishery so that the number of sockeye salmon destined for the Chignik River that are harvested in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, approaches as near as possible 7.6 percent of the sockeye salmon harvest in the Chignik Area.

(e) Beginning July 1,

- (1) in the Northwest Stepovak Section, excluding Orzinski Bay north of a line from Elephant Point at 55 ° 41.92' N. lat., 160 ° 03.20' W. long. to Waterfall Point at 55 ° 43.18' N. lat., 160 ° 01.13' W. long., commercial fishing may not be open for more than an aggregate of 96 hours during a seven-day period;
- (2) if the Orzinski Bay escapement <u>is expected to reach or</u>[REACHES OR] <u>exceed</u> [EXCEEDS] <u>the upper bound of the sockeye salmon escapement goal range</u>[25,000 SOCKEYE SALMON], the commissioner may, by emergency order, open the Northwest Stepovak Section, including all of Orzinski Bay with fishing periods as follows:
- (A) set gillnet gear will be allowed to operate continuously through 12:00 midnight July 25;
- (B) purse seine and hand purse seine gear will be allowed to operate as specified in (1) of this subsection.
- (3) if the department determines that the sockeye salmon escapement goal objectives are being met or exceeded then the waters of Orzinski Bay may be open to commercial salmon fishing continuously to set gillnet gear only through July 10 and both set gillnet gear and purse seine gear from July 11 through July 25.
- (f) The estimate of sockeye salmon destined for the Chignik River has been determined to be 80 percent of the sockeye salmon harvested in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section. Beginning July 1, all sockeye salmon taken in the Northwest Stepovak Section are considered to be destined for Orzinski Bay.
- (g) The percentage of sockeye salmon destined for the Chignik River that are harvested in the Southeastern District Mainland fishery may be permitted to fluctuate above or below 7.6 percent of sockeye salmon harvest in the Chignik Area at any time before July 25.
- (h) The allocation method described in (a) (g) of this section is in effect through July 25. The commissioner may not open the first fishing period of the commercial salmon fishing season in

the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, before the first fishing period of the commercial salmon fishing season in the Chignik Area. After July 25, the commissioner may open, by emergency order, commercial salmon fishing in the entire Southeastern District Mainland area for local stocks.

- (i) DURING THE PERIOD FROM APPROXIMATELY JUNE 26 THROUGH JULY 8, THE STRENGTH OF THE SECOND RUN OF THE CHIGNIK RIVER SYSTEM SOCKEYE SALMON CANNOT BE EVALUATED. IN ORDER TO PREVENT OVERHARVEST OF THE SECOND RUN, THE DEPARTMENT MAY DISALLOW OR SEVERELY RESTRICT COMMERCIAL SALMON FISHING IN THE EAST STEPOVAK, STEPOVAK FLATS, SOUTHWEST STEPOVAK, BALBOA BAY, AND BEAVER BAY SECTIONS DURING THIS PERIOD, AND FROM JUNE 26 THROUGH JUNE 30 IN THE NORTHWEST STEPOVAK SECTION.]
- (j) The commissioner shall open all commercial fishing periods by emergency order. Before commencement of the first commercial salmon fishing period of the season, the department shall give at least 24 hours' notice. For subsequent fishing periods, the department shall give at least 12 hours' notice. If an existing fishing period is extended, the department shall give notice of the extension as soon as possible before the end of the existing fishing period.
- (k) Notwithstanding any other provision of this section, from July 1 through July 10, if the department determines that the Orzinski Lake sockeye salmon escapement objectives have been exceeded, in addition to set gillnet gear, the commissioner may open, by emergency order, the waters of Orzinski Bay west of 160_04.25' W. long. to fishing with purse seine and hand purse seine gear.
 - (1) From July 26 through October 31,
- (1) the department shall manage the fishery based on the abundance of local pink, chum, and coho salmon stocks;
- (2) there shall be at least one closed 36-hour period within a seven-day period, <u>excluding</u> Orzinski Bay when the department is managing for local sockeye salmon.

WHAT ARE THE CURRENT REGULATIONS? 5 AAC 09.360(a)—(d) and (i) of the Southeastern District Salmon Management Plan contains provisions that reference two escapement goals for Chignik River sockeye salmon that must be modified to comport with the new escapement goal for Chignik River sockeye salmon.

WHAT WOULD BE THE EFFECT IF THE PROPOSAL IS ADOPTED? No change in fishing time or area. Adoption would align regulation with the new escapement goal for Chignik River sockeye salmon. This will assist managers in the South Alaska Peninsula by clarifying language in the *Southeastern District Management Plan* that is tied to having two escapement goals for Chignik River sockeye salmon.

BACKGROUND: Beginning in October of 2020, a department interdivisional team reviewed existing Pacific salmon *Oncorhynchus* spp. escapement goals for Registration Area L (Chignik) and Registration Area M (Alaska Peninsula and Aleutian Islands). The team found revising the

two separate Chignik River sockeye salmon escapement goals to a single BEG of 450,000–800,000 fish was appropriate. Management of the Southeastern District Mainland (SEDM) of the Southeastern District within the South Alaska Peninsula (Registration Area M) is tied to the escapement and harvest that occurs within Registration Area L. Therefore, it is necessary to modify the *Southeastern District Mainland Salmon Management Plan* to reflect changes to the Chignik River sockeye salmon escapement goal to clarify the management of SEDM.

<u>**DEPARTMENT COMMENTS:</u>** The department submitted this proposal and **SUPPORTS** amending the *Southeastern District Mainland Salmon Management Plan*.</u>

COST ANALYSIS: Approval of this proposal is not expected to result in an additional direct cost for the department or a private person to participate in this fishery.