#### 2025 ANNUAL MANAGEMENT PLAN

#### **CANNERY CREEK HATCHERY**

#### **Prince William Sound Aquaculture Corporation**

This Annual Management Plan (AMP) is prepared to fulfill the requirements of 5 AAC 40.840. This plan is prepared to guide hatchery operation in accordance with the hatchery permit. The plan must be developed with consideration of the hatchery's production cycle and must organize and guide the hatchery's operations regarding production goals, broodstock management, and harvest management of hatchery-produced salmon. The production cycle begins with adult returns, that lead to egg takes and end with fish releases. Action may be taken outside of the management plan if allowed under the hatchery permit or modified by emergency order. In-season assessments and project alterations by Prince William Sound Aquaculture Corporation (PWSAC) or Alaska Department of Fish and Game (ADF&G or department) may result in changes to this AMP in order to reach or maintain program objectives. PWSAC will notify the ADF&G private nonprofit (PNP) hatchery program coordinator in a timely manner of any departure from the AMP. The ADF&G PNP coordinator will advise as to whether an amendment, exception report, or other action is warranted. No variation or deviation will be implemented until an AMP amendment has been approved or waived by both the department and PWSAC. This policy applies to all hatchery operations covered under the AMP.

#### I. OPERATIONAL PLAN

1.1 Egg-Take Goals by Species

**Pink Salmon:** The pink salmon egg-take goal is 187 million. Anticipated broodstock requirements to achieve the egg-take goal are approximately 202,0000 females and 324,000 males, and 58,000 additional fish (to account for an assumed 10% loss to sea lion predation) for a total of 584,000 fish, assuming:

- (a) Average fecundity of 1,284 eggs/female
- (b) 38% historic 5 odd-year average female %
- (c) 15% holding mortality
- (d) 15% green/over-mature spawners

#### 1.2 Broodstock

The expected broodstock collection schedule is derived from the historic run curve for Cannery Creek Hatchery (CCH) pink salmon. The run curve is an aggregate of all odd years (2011-2023) SHA hatchery harvests and the Cannery Creek Subdistrict commercial fishery catch data from the ADF&G annual management reports and preliminary in-season estimates. The adult return summary includes the projected total return, hatchery escapement schedule, and fish available for common property fishery harvest (Table 3).

To ensure that run timing is proportionally represented in broodstock, a hatchery escapement schedule that includes the broodstock acquisition schedule will be implemented based on run timing percentages by date in the AMP tables to establish a hatchery escapement goal by week. These goals will be measured according to the total number of fish estimated in the hatchery SHAs.

If in-season catch data indicate the return is earlier or later than the historic run curve would suggest, PWSAC will consult with the department prior to altering the hatchery escapement schedule, accordingly, to match the actual return. The hatchery escapement exclusion zone (HEEZ), outlined in section 3.4, protects potential broodstock fish staging directly in front of the hatchery from being harvested in the common property fisheries. These fish include those that will eventually become broodstock along with those needed to ensure a high quality, efficient, and successful egg collection process.

Any fish collected beyond those utilized as broodstock will be sold for cost recovery to fund PWSAC's salmon fisheries enhancement program. Historically, PWSAC has carried forward revenues from the hatchery raceway fish sales and full-utilization programs to the following year as a reduction in the cost-recovery revenue goal calculation. This provides benefits to the commercial common property fisheries (CCPF) with a decreased PWSAC salmon harvest and potentially an earlier timed CCPF.

Broodstock fish will be collected by volitional entry through the fishway leading to the brood holding pond and raceways located just above the tidal influence at the hatchery.

#### 1.3 Egg-Take Schedule and Data Reporting

Ultimately, the egg-take schedule depends upon broodstock recruitment and the maturation rate of the broodstock in salt and fresh water. The table below summarizes an anticipated egg-take schedule based on the average historical egg-take percent completion (1998–2024). All data associated with egg take and broodstock collection will be provided to the department by November 1. Data will be provided in electronic format (Excel file) and include all the categories presented in the template attached as Table 7. Data to be collected specifically includes the numbers of green and over-ripe females from the broodstock and associated cost recovery.

Anticipated Egg-take Schedule					
Percent Complete	Pink Salmon				
25%	September 3				
50%	September 7				
75%	September 11				
100%	September 17				

Anticipated	Egg-take	Schedule
Аписирании	Egg-takt	Scheuhe

For a complete listing of all PWSAC hatchery egg-take schedules see Table 4. PWSAC's planned egg takes are shown in Table 2.

### 1.4 Egg-Take Transport and Carcass Disposal Plans

No eggs will be transported off-station.

During egg take, PWSAC may sell broodstock carcasses and inviable eggs if a market is available. The carcass of a salmon from which milt or eggs are extracted for lawful use as broodstock may be disposed of in accordance with Alaska Department of Environmental Conservation (DEC) requirements. If carcasses are not sold, inviable eggs and carcasses will be disposed of in accordance with Alaska DEC requirements. If an additional broodstock carcass disposal log is required by ADF&G, all disposals will be logged on the carcass disposal form and reported to the department within 30 days after egg take and disposals are completed.

#### 1.5 Incubation Plans

fratenery i roduction Summary							
Species	Green Eggs	Eyed Eggs	Fry Released				
Pink Salmon	187,000,000	176,700,000	168,800,000				
Pink Salmon	187,000,000	176,700,000	168,800,				

#### **Hatchery Production Summary**

The above table was generated with the following assumptions:

- 1) 94.5% survival from green to eyed stage;
- 2) 96.0% survival from eyed stage to emergent; and
- 3) 99.5% survival from emergence to release.

All eggs will be incubated at CCH. During the fall incubation period, 100% of pink salmon production will be thermally otolith-marked at the eyed stage.

#### 1.6 Rearing and Release Plans

Pink salmon fry will emerge volitionally from incubators, pass via floor troughs through electronic counters, and then move into a collection box. A fry pump attached to the collection box will pump the fry through a six-inch pipeline to net pens anchored in Unakwik Inlet. The saltwater net pen rearing complex consists of 18 12.2 m x 12.2 m x 3.0 m rearing pens. Maximum loading densities will be  $11 \text{ kg/m}^3$ .

Approximately 169 million pink salmon fry will be released in 2025. Based on predicted outmigration curve and zooplankton bloom timing, all pink salmon fry will be reared for an average of 28 days and released in three groups into the zooplankton bloom. PWSAC's anticipated salmon releases are shown in Table 5.

#### 1.7 Fry Transport Methods

No CCH pink salmon fry will be transported off-station for release.

#### 1.8 Permitted Capacity

CCH was issued PNP Hatchery Permit #26 in 1988 after assuming operations from the State of Alaska. It is permitted to incubate 187 million pink salmon eggs. All permitted releases are from the CCH facility.

	Tish Hansport I Crimit Summary					
FTP Number	Expiration Date	Purpose				
PINK SALMON						
		Allows the egg take, incubation, and resultant release of				
96A-0040	4/30/26	187 million Cannery Creek stock pink salmon eggs.				

#### Fish Transport Permit Summary

#### II. DONOR STOCK MANAGEMENT – N/A

#### III. HATCHERY RETURN MANAGEMENT

PWSAC operates five facilities: Armin F. Koernig Hatchery (AFK), CCH, Gulkana Hatchery (GH), Main Bay Hatchery (MBH), and Wally Noerenberg Hatchery (WNH). The corporation generates revenues for annual operations from a 2% enhancement tax and the sale of hatchery produced salmon returning to the facilities.

In 1997, the PWSAC Board of Directors (BOD) elected to have hatchery cost recovery based upon revenue goals specific to the seine and gillnet salmon fisheries rather than a goal of harvesting a fixed percentage of the returning adults. This results in each gear group paying for the enhanced production from which they benefit. PWSAC calculates these revenue goals by allocating production costs between the seine-caught and gillnet-caught salmon fisheries.

On March 19, 2025, the PWSAC BOD approved the annual corporate budget for Fiscal Year 2026 detailing potential sources of revenue and expenditures. The pink salmon cost-recovery revenue goal is \$10,894,412. The WNH chum and MBH sockeye salmon cost-recovery revenue goals are \$3,549,355 and \$2,200,000 respectively. Additional revenue may be generated through PWSAC's raceway fish sales during its egg-take full utilization program.

PWSAC uses preseason assumptions for the number of returning fish, price per pound, and average adult weight to calculate the total projected value of the returning hatchery-produced salmon. Based on these assumptions, PWSAC estimates that approximately 20% of the total run will be required to meet the revenue goal in the Fiscal Year 2026 financial plan.

Hatchery escapement means all fish that escape the common property fishery and includes two categories of escapement: (a) the number of brood to meet production objectives; and (b) the number of hatchery produced fish taken for the hatchery harvest requirement, are to be used to pay for the hatchery's reasonable operating and capital costs (5 AAC 40.990(6)).

**Pink Salmon Returns:** AFK, CCH, and WNH pink salmon runs will be managed collectively through openings and closures of nearby subdistricts or hatchery management areas. Managing the enhanced pink salmon runs in aggregate may result in site-specific common property fishery (CPF) contribution rates being above or below the approximate target of 82% CPF pink salmon harvest.

**WNH Chum and MBH Sockeye Salmon Runs:** The WNH chum salmon and MBH sockeye salmon returns will be managed collectively through openings and closures of nearby subdistricts or hatchery management areas. The collective management will be managed concurrently for the WNH chum and MBH sockeye salmon revenue goal. Managing the returns in aggregate may result in site-specific CPF contribution rates being above or below the approximate targets of 35% and 73% for the WNH chum and MBH sockeye salmon harvest, respectively.

The AFK Hatchery and Port Chalmers remote-release chum salmon runs are expected to have a 100% CPF harvest.

Reductions of CPF opportunity in hatchery subdistricts may be necessary to ensure hatchery escapement objectives are met. PWSAC will work closely with local ADF&G management biologists to achieve the seine and gillnet fisheries revenue goals as rapidly as possible to allow for an orderly and consistent CPF.

#### 3.1 Hatchery Fish Migration Routes and Timing

Data indicate that CCH pink salmon enter Prince William Sound through island passes of southwest PWS and follow a complex path predominantly through the eastern side of Knight Island and other sections of the northwestern part of the sound. Hatchery stocks pass through both purse seine and gillnet fisheries in the Southwestern, Eshamy, Northwestern, Coghill, Northern, and Unakwik districts at about the same time as wild stocks in these districts and should be exploited at approximately the same rate. The CCH pink salmon run peaks about August 11 (Table 3).

#### 3.2 Special Harvest Area

The boundaries of the CCH SHA and terminal harvest area (THA) are illustrated in Figure 1. The SHA is used by the hatchery operator to harvest hatchery fish for cost recovery. The THA is normally closed to commercial and subsistence fishing and provides a buffer between the hatchery SHA and open waters of the Cannery Creek Subdistrict except during subsistence only openers. The THA may be opened for cost recovery by emergency order (EO). After reaching broodstock and sales fish goals, the SHA may be opened to the CPF until the end of the run. All latitude and longitude coordinates are based on the North American Datum of 1983.

Harvest of salmon in the SHA by sport anglers and personal use fishermen is managed by the ADF&G Division of Sport Fish in accordance with regulations as provided in 5 AAC 47–5 AAC 75. Emergency orders may be issued to liberalize or restrict sport fisheries based on achievement of broodstock goals.

The SHA consists of waters of Unakwik Inlet in the Northern District north and east of a line from

 $61^{\circ}00.97'$ N lat.,  $147^{\circ}32.62'$ W long., southward to a point on the shore at  $60^{\circ}59.96'$ N lat.,  $147^{\circ}31.48'$ W long.

The THA consists of water of Unakwik Inlet in the Northern District north and east of a line from 61°00.97'N lat., 147°33.12'W long., southward to a point on the shore at 60°59.79'N lat., 147°32.40'W long., excluding the CCH SHA.

The department is willing to permit cost-recovery operations in waters outside of the SHA/THA boundaries to maintain fish quality. The department views PWSAC achieving its revenue goals in a timely and efficient manner as being beneficial for maintaining fish quality and providing for increased CPF opportunity.

There is concern over the harvest of wild stock salmon outside of the prescribed cost-recovery SHAs and THAs. The following requirements must be adhered to for cost-recovery operations to be conducted outside the SHA/THA:

- PWSAC will agree to pay all costs associated with sampling, otolith preparation, and reading of otoliths from permitted cost-recovery harvest(s).
- PWSAC will notify the department, with reasonable time, prior to any cost-recovery operation(s) to request an EO permitting the activity and to provide notice for scheduling of sampling personnel.
- All EOs issued permitting cost-recovery operations will be for discrete dates.
- Cost-recovery harvest(s) from these areas will not be mixed with any other harvest at any time until after sampling. No sorting of cost-recovery harvest(s) is permitted until after sampling.
- No further EOs permitting cost-recovery operations outside the SHA will be issued until the previous harvest has been evaluated for wild stock interception.
- The department may discontinue permitted cost-recovery operations outside the SHA at any time.

#### 3.3 Hatchery Returns to the Special Harvest Area

**Pink Salmon:** PWSAC's anticipated 2025 adult return of pink salmon to CCH is 10,800,000 fish, assuming a 6.52% marine survival (5 odd-year average), from the BY23 fry release of 165.7million (Table 1). Assuming a hatchery broodstock goal of 584,000 fish and approximately 1,421,000 pink salmon sold for cost recovery, the hatchery escapement will be 19%.

	l			
Total Return	Broodstock	<b>Cost Recovery</b>	Total	<b>CPF Harvest<sup>1</sup></b>
10,800,000	584,000	1,421,000	2,005,000	8,795,000
% of Total	5%	13%	19%	81%

**Pink Salmon Projected Return Summary** 

<sup>1</sup>Terminal and non-terminal.

#### 3.4 Separation of Hatchery Escapement

The hatchery escapement goal of 2,005,000 pink salmon is the midpoint of the special harvest area (SHA) escapement goal range 1,735,000 - 2,360,000 to provide for the broodstock and cost-recovery requirements based on these variables; sex ratio of fish available for broodstock, fecundity, holding mortality percentage, immature and over-mature spawner percentage, average fish size, and price per pound.

In 2006, PWSAC designated a HEEZ within the SHA as an alternative to using a barrier net (Figure 2). The HEEZ consists of the waters of the CCH SHA north and east of a line from 61.00.97N lat, 147.32.62W long southward to a point on the shore at 61.00.444N lat, 147.31.497W long.

#### 3.5 Special Management Strategies

The CCH is located in Unakwik Inlet in the Northern District. Returning hatchery pink salmon will influence management of traditional fisheries, particularly in the Northern District. Present management strategies for the remaining seine districts are based on escapement observations of wild stocks of pink and chum salmon throughout the Sound. Poor wild stock escapement will require closures or reduced fishing time in the remaining districts, which, in turn, may shift harvest of hatchery returns to the terminal areas of Unakwik Inlet (including the CCH THA and SHA).

Conversely, a strong wild-stock return could result in a heavy interception of the hatchery return in other fishing districts and result in an insufficient return to meet broodstock and cost-recovery goals. Selected closures of the waters of Unakwik Inlet may be necessary to permit sufficient escapement to meet cost-recovery and broodstock needs. The principal tool available to manage the hatchery fishery is EO manipulation.

Fishing in the SHA and THA is expected to be limited to cost-recovery operations from the start of the pink salmon return in the Northern District, and is expected to remain so throughout the completion of the cost-recovery harvest. However, if significant numbers of fish build up in excess of hatchery needs, then these areas, or portions of them, could be opened to the commercial fleet. If the hatchery return requires additional protection to meet broodstock or cost-recovery goals, the Cannery Creek Subdistrict may be closed. During periods when the Cannery Creek Subdistrict closure is in effect to provide protection to cost-recovery fish, ADF&G may allow the hatchery operator to harvest fish in Unakwik Inlet outside the SHA boundaries (Figure 2) to maintain fish quality. This will occur only if escapement of local wild stocks is adequate. When Unakwik Inlet is open to the CPF, the SHA will not be expanded. Performance of the hatchery return is evaluated by comparison of daily harvest to the predicted run entry (Table 3). In addition, daily sex ratios in the hatchery harvest predict, by a regression equation, what percentage of the total run has accumulated to date. PWSAC will provide these two types of data from the cost-recovery harvest to ADF&G management staff on a daily basis during the season so the area management biologist can make estimates of the number of salmon left in the fish run. Once egg-take operations commence at the hatchery, progress towards the hatchery's final goal could determine future SHA openings, dependent upon SHA fish abundance estimates. PWSAC will provide daily estimates of fish abundance inside the barrier seine (if applicable), within the HEEZ, and in the SHA outside of the HEEZ, along with egg take progress updates to ADF&G management staff. If hatchery escapement problems occur at the hatchery, subdistrict closures will be made based upon the magnitude of the shortfall and the stage of the run.

The effective management of mixed-stock fisheries is difficult. It is the intent of the ADF&G to provide the stated PWSAC hatchery escapement goals by species. Achieving the target revenue goal will depend upon the timing and magnitude of the PWSAC salmon returns, average fish size, and price per pound PWSAC receives. It will also depend upon precise in-season assessments of both wild and hatchery run strengths. Depending upon the precision of in-season run assessments, actual percentages of PWSAC total returns by species, which provide hatchery escapement may fall above or below the stated goals. If precise and timely stock identification data are available, ADF&G will use them to manage the fisheries in season for an allocation of PWSAC-produced pink, chum, and sockeye salmon between the CPF and PWSAC. Pink salmon will be managed for PWSAC hatchery escapement after July 20.

PWSAC will submit written management recommendations to the department with clear justifications as to how the recommendations support achieving cost-recovery and/or broodstock collection goals. Each recommendation, in the form of a brief email, will include, but not be limited to, current cost-recovery harvest data, HEEZ and outer SHA estimates, actual and anticipated run entry, and actual and anticipated cost-recovery progress. Each recommendation will also include a summary of actual and anticipated hatchery escapement and broodstock collection progress as it relates to the weekly goals established in this AMP. For this reporting hatchery escapement will be defined as fish in the HEEZ and outer SHA; fish in the raceways or brood holding ponds will be defined as broodstock.

To ensure accurate and clear reporting, the AMP Adult Return Summary table for each hatchery and species will be submitted to the department, in association with written management recommendations.

It will be the responsibility of PWSAC staff, with written consent of the PWSAC Executive Committee, to advise ADF&G of any desired in-season adjustments to the preseason hatchery escapement goals and/or significant changes to the preseason management strategy. Recognizing the imprecision of preseason forecasts and in-season assessment of wild stock and hatchery contribution estimates, ADF&G will assess PWSAC's requested changes based upon the best available information. If, based on the assessment of ADF&G, the total hatchery return will be less than or greater than the original PWSAC forecasted return, then ADF&G will adjust openings,

as necessary, to best provide for wild stock, hatchery escapement, and CPF harvests. Total hatchery and wild stock returns will be estimated after a thorough postseason analysis of all available data. Postseason estimates may not coincide with ADF&G's or PWSAC's in-season estimates.

#### 3.6 Sport Fish Harvest

Sport fisheries will be managed in accordance with regulations as provided in 5 AAC 47–5 AAC 75. Emergency orders may be issued to liberalize or restrict sport fisheries based on achievement of broodstock goals. Due to the remote location of CCH and the species involved, no significant sport fishery has developed to date, nor is anticipated.

#### 3.7 Subsistence Harvest

The CCH facility is within the Prince William Sound general subsistence area. Alaska residents may harvest fish for subsistence using the legal gear type for the Northern District.

#### 3.8 Avoidance of Nontarget Species

No particular problem is anticipated at CCH. By mid-July, when harvest and brood collection begins, the Cowpen Lake sockeye salmon run is over. The Miners Lake sockeye salmon run is later, but adults do not appear to migrate through the hatchery SHA. There is also no evidence suggesting chum salmon from the Siwash and Jonah systems migrate through the SHA. When surplus hatchery production warrants CPF openings beyond those permitted by wild-stock strength, fishing will be restricted to portions of Unakwik Inlet that will minimize interception of Jonah and Siwash wild-stock pink and chum salmon. Exact areas to be opened will be determined in season and detailed in EOs.

#### **IV. EVALUATION STUDIES**

#### 4.1 Otolith Marking

During the fall incubation period (October–December 2025), 100% of pink salmon production will be marked at the eyed-egg stage. The table below summarizes the 2025 thermal otolith mark assignment by the ADF&G Mark, Tag, and Age Lab (MTAL). Voucher samples are collected and submitted, along with data as per the ADF&G MTAL sampling protocol. Planned otolith marks may change with confirmation from the North Pacific Anadromous Fish Commission Mark Coordinator for Alaska.

Species	Number of Eyed Eggs	Thermal Otolith Mark	Intended Release Location
Pink Salmon	176,700,000	3,3Н	CCH (Unakwik Inlet)

#### 4.2 Otolith Recovery in Returning Adults and Data Reporting

Returning adult pink salmon will be sampled for otolith mark recoveries. Recovery efforts will be directed at the commercial CPF and cost recovery fisheries, and will be performed by field personnel at processing locations.

Otolith mark data will be used by ADF&G and PWSAC to measure fishery contribution and marine survival of salmon. ADF&G will provide PWSAC preliminary otolith mark–recovery data from fishery samples by December 1 each year and any additional otolith data from straying studies and other projects by April 1 each year. Similarly, PWSAC will provide ADF&G independently-collected otolith mark recovery data by April 1 each year. These data are to be the individual specimen otolith mark results.

### V. ATTACHMENTS

FIGURE 1. CCH Fishery Management Areas FIGURE 2. CCH Hatchery Escapement Exclusion Zone

TABLE 1. 2025 PWSAC Hatchery Return Forecast

TABLE 2. 2025 Planned Egg Takes

 TABLE 3. 2025 CCH Adult Return Summary

 TABLE 4. 2025 PWSAC Hatchery Egg-Take Schedules

 TABLE 5. 2025 PWSAC Estimated Salmon Releases

 TABLE 6. 2026 PWSAC Estimated Salmon Releases

TABLE 7. Egg-take Data Template for Each Species at Each Hatchery

# VI. APPROVAL

Recommendation for Approval: Cannery Creek Hatchery Annual Management I	Plan, 2025
Geoff Clark, PWSAC, General Manager	5/21/2025
Brittany Blain-Roth, Area Management Biologist, Division of Sport Fish	7/2/2025
Heather Scannell, Area Management Biologist, Division of Commercial Fisheries	7/10/2025
Jason Dye, Acting Regional Supervisor, Division of Sport Fish	7/1/2025
Bert Lewis, Regional Supervisor, Division of Commercial Fisheries	5/21/2025
Ethan Ford, Regional Resource Development Biologist, Div. of Commercial Fisheries	5/21/2025
Lorna Wilson, PNP Program Assistant Coordinator, Div. of Commercial Fisheries	7/10/2025
The 2025 Cannery Creek Hatchery Annual Management Plan is hereby approved	1:
Jason Dye, Deputy Director, Division of Sport Fish	7/16/2025
Forrest Bowers, Operations Manager, Division of Commercial Fisheries	7/16/2025

# Recommendation for Approval: Cannery Creek Hatchery Annual Management Plan, 2025



Figure 1. CCH Fishery Management Areas



Figure 2. CCH Escapement Exclusion Zone, Special Harvest Area, Terminal Harvest Area

# TABLE 1. 2025 PWSAC Hatchery Return Forecast

# PRINCE WILLIAM SOUND AQUACULTURE CORPORATION 2025 HATCHERY RETURN FORECAST

SITE/		RUN	ADULT RET	URN ESTIMATI	E	EST. MARINE
LOCATION	SPECIES	TIME	LOW	POINT	HIGH	SURVIVAL

#### **RETURNS TO THE HATCHERIES**

AFK	PINK	JUL 19 -	5,700,000	8,400,000	11,100,000	4.92%
		SEP 05				
			-			
	CHUM	JUN 1 -	180,000	210,000	240,000	1.13%
		JUL 27				

ССН	PINK	JUL 23 -	8,100,000	10,800,000	13,500,000	<b>6.52</b> %
		SEP 07				

WNH	PINK	JUL 19 -	2,800,000	8,800,000	14,900,000	6.57%
		SEP 05				
	CHUM	JUN 1 -	1,290,000	1,450,000	1,610,000	<b>2.01</b> %
		JUL 27				
	СОНО	AUG 01 -	2,000	6,000	11,000	0.76%
		SEP 20				

MBH	COGHILL	JUN 15 -	700,000	1,000,000	1,360,000	10.43%
	SOCKEYE	AUG 01				

GH	CROSSWIND LAKE	128,000	144,000	161,000	2.44%
	SOCKEYE				
	PAXSON LAKE - GI	46,800	55,400	63,900	<b>1.09</b> %
	SOCKEYE				
	PAXSON LAKE - GII	15,100	17,400	19,600	1.46%
	SOCKEYE				
	SUMMIT LAKE	0	0	0	0.00%
	SOCKEYE				

#### **RETURNS TO REMOTE RELEASE LOCATIONS**

PORT CHALMERS	CHUM	JUN 1 -	680,000	780,000	870,000	1.93%
		JUL 27				
CORDOVA	СОНО	AUG 01 -	1,200	1,800	2,500	3.25%
		SEP 20				

WHITTIER	СОНО	AUG 01 -	200	800	1,300	0.76%
		SEP 20				

CHENEGA	СОНО	AUG 01 -	100	400	700	0.76%
		SEP 20				
CHENEGA	CHINOOK	MAY 25 -	410	530	660	1.42%
		JULY 10		-		

#### TOTAL PWSAC RETURNS

PINK	16,600,000	28,000,000	39,500,000	6.00%			
СНИМ	2,150,000	2,440,000	2,720,000	1.69%			
СОНО	3,500	9,000	15,500	0.76%			
СНІΝООК	410	530	660	1.42%			
SOCKEYE -SOUND, MBH	700,000	1,000,000	1,360,000	10.43%			
SOCKEYE - GH,COPPER RIVER	189,900	216,800	244,500 1.66%				

# PRINCE WILLIAM SOUND AQUACULTURE CORPORATION

# 2025 EGG-TAKE GOALS

			<b>EGG-TAKE</b>	EGG-TAKE
SPECIES	HATCHERY	ORGINAL DONOR STOCK	LOCATION	GOAL
CHUM	WALLY NOERENBERG	WELLS RIVER	WNH	153,000,000
SOCKEYE	MAIN BAY	COGHILL LAKE	MBH	12,400,000
	<b>GULKANA I</b>	<b>GULKANA RIVER</b>	GHI	35,000,000
	<b>GULKANA II</b>	<b>GULKANA RIVER</b>	GHII	1,750,000
. <u></u>			TOTAL	49,150,000
PINK	<b>ARMIN F. KOERNIG</b>	LARSEN, EWAN, GALENA	AFK	190,000,000
	CANNERY CREEK	CANNERY CREEK	ССН	187,000,000
	WALLY NOERENBERG	LARSEN, EWAN, GALENA	WNH	148,000,000
			TOTAL	525,000,000
СОНО	WALLY NOERENBERG	CORBIN CREEK	WNH	3,750,000
		POWER CREEK/FLEMING SPIT	CDV	250,000
			TOTAL	4,000,000
CHINOOK	WALLY NOERENBERG	WJHSFH	WNH	50,000
			TOTAL PWSAC	731,200,000

# TABLE 3. 2025 CCH Adult Return Summary.

	PROJECTED											ADULT	RETUR	NSUMMARY						
RETURN:	10,800,000																			
BROODSTK:	584,000											HATCHERY:								
FISH SALES:	1,421,000											SPECIES:								
HAT. TOTAL:	2,005,000											YEAR:	2025							
CPF TOTAL:	8,795,000																			
% EXPLOIT .:	81.4%	6 CPF																		
	Proiected	Projected	Actual	S Actual	Fishway	SHA HATCHERY ESCA INSIDE Barrier Seine	HEEZ	OUTSIDE HEEZ		BROOD		HERY ESCAPEMENT SO		SALES		C.P.F. H/	ARVEST	-	TOTAL RET	IIRN
Date	% Cum.	% Female	% Cum.	% Female	Estimate	Estimate	Estimate	Estimate	Proj. Cum. I			Act. Daily Proj. Cum.		Act. Cum. Act. Dail	y Proj. Cum.		Act. Cum. Act. Daily	Proj. Cum.		ct. Cum. Act. Dail
7-Jul 8-Jul	0.0%								0	0	0	0	0		0	0	0	0	0	0 0
o-Jul 9-Jul	0.0%								0	0	0	0			0	-	0	0	0	0 0
10-Jul	0.0%								0	0	0	0		0 0	0		0	0	0	0
11-Jul	0.0%								0	0	0	0		0 0	0	0	0	0	0	0 (
12-Jul	0.0%								0	0	0	0	(	0 0	0	0	0	0	0	0 (
13-Jul	0.0%								93	93	0	0		0 0	1,625		0	1,718	1,718	0 (
14-Jul	0.2%								1,423	1,330	0	0		0 0	24,886		0	26,308	24,591	0 0
15-Jul	0.2%								1,423	0	0	0	0	0 0	24,886	0	0	26,308	0	0 0
16-Jul	0.3%								1,888	465	0	0	(		33,021	8,135	0	34,908	8,600	
17-Jul	0.3%								1,888 2,706	0 810	0	0	(		33,021	14 222	0	34,908 50,049	15 140	0 0
18-Jul 19-Jul	0.5%								2,706	819 351	0	0		0 0	47,343	14,322	0	50,049	15,140 6,498	0 0
20-Jul	0.5%								3,000	618	0	0			64,295	10,805	0	67,970	11 423	0 0
21-Jul	1.2%								7,149	3,473	0	60,762	60,762		64,295	0	0	132,205	64,236	0 0
22-Jul	1.2%								7,149	0	0	60,762	(		64,295	0	0	132,205	0	0 0
23-Jul	1.5%								8,633	1,484	0	86,727	25,968		64,295	0	0	159,655	27,449	0 0
24-Jul	1.5%								8,806	172	0	89,744	3,01		64,295	0	0	162,844	3,189	0 0
25-Jul	2.5%	15.9%							14,890	6,084	0	196,173	106,429		64,295		0	275,357	112,513	0 0
26-Jul 27-Jul	2.8%	15.9% 18.9%							16,329 24,100	1,439 7,771	0	221,348 357,292	25,174 135,944		64,295 64,295	0	0	301,971 445,686	26,614 143,715	0 0
27-Jul 28-Jul	4.1%	26.5%							24,100	1,694	0	357,292 386,927	29,630		64,295	0	0	445,686	31,330	0 0
28-Jul	5.4%	25.9%							31,704	5,910	0	490,305	103.37		64,295	0	0	586 303	109.287	- 0
30-Jul	6.2%	22.1%							36,473	4,769	0	573,729	83,425		64,295	0	0	674,496	88,194	0 0
31-Jul	7.9%	23.2%							46,196	9,723	0	743,820	170,09		64,295	0	0	854,310	179,814	0 (
1-Aug	9.0%	24.3%							52,719	6,523	0	857,927	114,10	7 0	64,295	0	0	974,941	120,630	0 (
2-Aug		27.7%							61,889	9,170	0	1,018,345	160,41		64,295	0	0	1,144,528	169,587	0 0
3-Aug		26.7%							74,335	12,446	0	1,236,059	217,714		64,295		0	1,374,688	230,160	0 0
4-Aug 5-Aug	14.6%	25.6%							84,998 101,553	10,663	0	1,422,591	186,532		64,295	0	0	1,571,883	197,195 306,158	0 (
5-Aug 6-Aug	20.0%	25.9%							101,553	15,204	0	1,712,193	289,602		64,295	0	0	2,159,214	281,173	0 0
7-Aug	23.0%	32.8%							134,446	17,689	0	1,981,314	3,152		370,578	306.283	0	2,135,214	327,124	
8-Aug	26.3%	34.4%							153,307	18,861	0	1,981,314	0,10		700,514		0	2,835,134	348,797	0 0
9-Aug	29.3%	34.6%							171,117	17,810	0	1,981,314		0 0	1,012,064	311,550	0	3,164,494	329,360	0 0
10-Aug	33.0%	32.7%							192,612	21,495	0	1,981,314	(	0 0	1,388,086	376,021	0	3,562,011	397,517	0 (
11-Aug	36.2%	34.3%							211,675	19,063	0	1,981,314		0 0	1,721,557	333,472	0	3,914,546	352,535	0 0
12-Aug	40.0%	35.7%							233,466	21,791	0	1,981,314	(	0 0	2,102,744		0	4,317,523	402,977	0 (
13-Aug	43.1%	39.7%							251,720	18,254	0	1,981,314	0	0 0	2,422,060		0	4,655,093	337,571	0 (
14-Aug 15-Aug	46.9%	40.8%							274,002 294,654	22,282	0	1,981,314 1,981,314			2,811,851	389,791 361,263	0	5,067,167 5,449,081	412,074 381,914	0 (
15-Aug 16-Aug		43.2%							316,336	20,652	0	1,981,314	0		3,173,114	361,263	0	5,449,081	400,972	0 0
17-Aug		44.3%							334,427	18,091	0	1,981,314	0	0 0	3,868,876		0	6,184,616	334,563	0
18-Aug	61.7%	45.2%							360,563	26,136	0	1,981,314	i i	0 0	4,326,072		ō	6,667,948	483,332	0
19-Aug	65.2%	46.4%							380,865	20,302	0	1,981,314	(	0 0	4,681,222		0	7,043,401	375,453	0 (
20-Aug	69.0%	50.5%							402,965	22,100	0	1,981,314	(	0 0	5,067,813		0	7,452,092	408,691	0 0
21-Aug	71.7%	49.3%							418,544	15,579	0	1,981,314	(	0 0	5,340,332		0	7,740,189	288,097	
22-Aug	74.1%	49.7%							432,470	13,927	0	1,981,314	0	0 0	5,583,956		0	7,997,739	257,550	0(
23-Aug 24-Aug	76.8%	45.6% 53.2%							448,497 460,838	16,027 12,341	0	1,981,314	0		5,864,315		0	8,294,126 8,522,345	296,386 228,219	0 0
24-Aug 25-Aug		53.2%							460,838	5,912	0	1,981,314		0 0	6,183,613		0	8,522,345	109,332	0 1
25-Aug 26-Aug		60.8%							400,750	7,9912	0	1,981,314		0 0	6,323,397	139,784	0	8,779,451	109,332	0
20-Aug 27-Aug	82.6%	60.6%	1						482.333	7,591	0	1,981,314	0		6.456.213		õ	8,919,859	140,408	0
28-Aug	85.0%	60.6%							496,414	14,081	0	1,981,314	i i	0 0	6,702,539		0	9,180,267	260,408	0 0
29-Aug	86.4%	60.6%							504,683	8,268	0	1,981,314	(	0 0	6,847,175	144,636	0	9,333,171	152,904	0 (
30-Aug	90.5%	60.6%							528,479	23,796	0	1,981,314	(	0 0	7,263,443	416,268	0	9,773,235	440,064	0 0
31-Aug	92.6%								540,543	12,065	0	1,981,314	(	0 0	7,474,491	211,048	0	9,996,347	223,112	
1-Sep	93.9%								548,202	7,658	0	1,981,314	(	0 0	7,608,460	133,969	0	10,137,975	141,627	
2-Sep	95.2%			-					556,246 562,397	8,045	0	1,981,314			7,749,184	140,724	0	10,286,743	148,769 113 742	(
3-Sep 4-Sep									565,690	6,150 3,294	0	1,981,314		0 0	7,856,775		0	10,400,485	113,742 60,911	0 (
4-Sep 5-Sep	96.9%								565,690	3,294	0	1,981,314			7,914,393	33,208	0	10,461,396	35,106	0 1
6-Sep									568,689	1,090	0 0	1,981,314	0		7,966.851	19,250	0	10,490,303	20.350	0
7-Sep	97.5%		1			1			569,620	931	0	1,981,314		0 0	7,983,132	16,281	0	10,534,065	17,212	0
8-Sep	97.9%								571,942	2,322	0	1,981,314	(	0 0	8,023,752	40,621	0	10,577,007	42,943	0 (
9-Sep	98.2%								573,227	1,286	0	1,981,314	(	0 0	8,046,241	22,488	0	10,600,781	23,774	0 0
10-Sep									574,825	1,597	0	1,981,314		0 0	8,074,182		0	10,630,319	29,538	0 (
11-Sep	100.0%								584,000	9,175	0	1,981,314	(	0 0	8,234,688	160,505	0	10,800,000	169,681	0 0

# TABLE 4. 2025 PWSAC Hatchery Egg-Take Schedules

### PRINCE WILLIAM SOUND AQUACULTURE CORPORATION

# 2025 EGG-TAKE SCHEDULE

									DATE											
SITE	SPECIES	30-Jun	07-Jul	14-Jul	21-Jul	28-Jul	04-Aug	11-Aug	18-Aug	25-Aug	01-Sep	08-Sep	15-Sep	22-Sep	29-Sep	06-Oct	13-Oct	20-Oct	27-Oct	03-Nov
AFK	PINK									24-Aug			15-Sep							
ССН	PINK									24-Aug			17-Sep							
GHI	SOCKEYE							15-Aug									15-Oct	]		
GH II	SOCKEYE					25-Jul			10-Aug											
MBH	SOCKEYE																			
WDT	MBH-COGHILL					01-Aug			20-Aug	]										
WNH	CHUM	01-Jul					01-Aug													
	PINK									24-Aug			15-Sep	]						
	СОНО																19-Oct			11-Nov

#### PRINCE WILLIAM SOUND AQUACULTURE CORPORATION

#### 2025 ANTICIPATED SALMON RELEASES

			BROOD	RELEASE	ESTIMATED FRY/
SPECIES	HATCHERY	ORGINAL DONOR STOCK	YEAR	LOCATION	SMOLT RELEASE
СНИМ	WALLY NOERENBERG	WELLS RIVER	2024	WNH	73,400,000
			2024	PORT CHALMERS	40,700,000
			2024	AFK	19,500,000
				TOTAL	133,600,000
SOCKEYE	MAIN BAY	COGHILL LAKE	2023	МВН	7,600,000
	<b>GULKANA I</b>	<b>GULKANA RIVER</b>	2024	PAXSON LAKE	4,700,000
		GULKANA RIVER	2024	SUMMIT LAKE	C
		GULKANA RIVER	2024	CROSSWIND LAKE	8,800,000
	GULKANA II	GULKANA RIVER	2024	PAXSON LAKE	1,300,000
				TOTAL	22,400,000
PINK	ARMIN F. KOERNIG	LARSEN, EWAN, GALENA	2024	AFK	172,400,000
	CANNERY CREEK	CANNERY CREEK	2024	ССН	169,200,000
	WALLY NOERENBERG	LARSEN, EWAN, GALENA	2024	WNH	134,800,000
				TOTAL	476,400,000
соно	WALLY NOERENBERG	CORBIN CREEK	2023	WNH	2,700,000
		POWER CREEK	2023	CORDOVA	100,000
		CORBIN CREEK	2023	WHITTIER	100,000
		CORBIN CREEK	2023	CHENEGA	50,000
				TOTAL	2,950,000
СНІΝООК	WALLY NOERENBERG	SHIP CREEK	2023	CHENEGA	43,500
				GRAND TOTAL	635,393,500
				GRANDIOTAL	000,000,000

#### TABLE 6. 2026 PWSAC Estimated Salmon Releases

### PRINCE WILLIAM SOUND AQUACULTURE CORPORATION

			BROOD	RELEASE	ESTIMATED FRY/
SPECIES	HATCHERY	ORGINAL DONOR STOCK	YEAR	LOCATION	SMOLT RELEASE
r					
сним	WALLY NOERENBERG	WELLS RIVER	2025	WNH	73,200,000
			2025	PORT CHALMERS	40,800,000
			2025	AFK	19,400,000
				TOTAL	133,400,000
SOCKEYE	MAIN BAY	COGHILL LAKE	2024	MBH	11,080,000
	GULKANA I	GULKANA RIVER	2025	PAXSON LAKE	6,000,000
		GULKANA RIVER	2025	SUMMIT LAKE	4,700,000
		GULKANA RIVER	2025	CROSSWIND LAKE	10,000,000
	<b>GULKANA II</b>	<b>GULKANA RIVER</b>	2025	PAXSON LAKE	1,300,000
	<b>GOLIUTIA</b>		2020	TOTAL	33,080,000
PINK	ARMIN F. KOERNIG	LARSEN, EWAN, GALENA	2025	AFK	171,600,000
	CANNERY CREEK	CANNERY CREEK	2025	ССН	168,800,000
	WALLY NOERENBERG	LARSEN, EWAN, GALENA	2025	WNH	133,600,000
				TOTAL	474,000,000
соно	WALLY NOERENBERG	CORBIN CREEK	2024	WNH	2,500,000
		POWER CREEK	2024	CORDOVA	200,000
		CORBIN CREEK	2024	WHITTIER	100,000
		CORBIN CREEK	2024	CHENEGA	50,000
				TOTAL	2,850,000
CHINOOK	WALLY NOERENBERG	SHIP CREEK	2024	CHENEGA	38,000
				GRAND TOTAL	643,368,000

#### 2026 ANTICIPATED SALMON RELEASES

TARIE 7	Egg-take Data	Template fo	r Fach Sn	vecies at Fac	h Hatchery
IADLL /.	Egg-lake Dala	1 cmplate 10	i Lacii Sp	iccles at Lac	II I latellel y

able 7.																								
gg Take D	ata for eacl	h species	at each hat	chery																				
																								<u> </u>
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Brood Year	MthDay	Date	Hatchery	Species	Stock	Lot #	Egg Grams	Eggs/gram	Green Eggs		Sample Fecundity	y Fertility	Good Female	e Grn Female	e Bad Female	Mort Female	Good Male	Mort Male	Excess Male	% Green				
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