

2022 ANNUAL MANAGEMENT PLAN
RUTH BURNETT SPORT FISH HATCHERY

Alaska Department of Fish and Game

Division of Sport Fish

Region III

March 2022

OVERVIEW

The Ruth Burnett Sport Fish Hatchery (RBSFH), located in Fairbanks, will meet the sport fish stocking needs for Region III by providing rainbow trout, Arctic char, lake trout, king and coho salmon for stocking into lakes. Arctic char and rainbow trout eggs originate from captive broodstock housed within the William J. Hernandez Sport Fish Hatchery (WJHSFH) in Anchorage. The other species of fish will originate from local wild brood sources. Chinook and coho may be derived from WJHSFH if local stocks are unavailable. The RBSFH will use well water for all phases of production and utilize various recirculation technologies to conserve water and heat resources. On site boilers will heat water to accelerate fish growth and will allow the production of a catchable 7-10 inch fish in a single year. In addition to the catchable-sized fish, the production of fingerling and subcatchable sized fish at RBSFH will meet the current and future stocking needs for the Division of Sport Fish Management Region III. Hatchery objectives and performance measures for RBSFH are described in goal three of the *Division of Sport Fish Strategic Plan, 2015 – 2019*.

ADF&G Division of Sport Fish annually publishes a *Statewide Stocking Plan for Sport Fish*. This document contains specific release sites, sizes, and numbers of fish to be released over a 5-year period. All releases for the current year have received departmental and public review.

New this year:

There are three significant changes to this Annual Management Plan from the previous year:

- Lake trout subcatchables will be stocked in fall of 2022.
- Triploid Ship Creek stock King salmon will be stocked instead of Salcha or Chena River stocks used in the past because of continued low returns.
- Triploid Ship Creek stock coho salmon will be stocked instead of Delta Clearwater River stocks used in the past because of continued low returns.

PRODUCTION PLAN

Incubation Capacity:

Incubation is provided by 12 Heath stacks, with 14 usable trays per stack, for a total of 168 usable trays. Two Heath stacks are grouped with a common header tank with water supplied to each half-stack (7 trays).

Current incubation capacity by species:

- Rainbow trout: 1,176,000 eggs
- Arctic grayling: 210,000 eggs
- Arctic char: 336,000 eggs
- Lake trout: 276,000 eggs
- King salmon: 52,500 eggs
- Coho salmon: 280,000 eggs

Rearing Capacity:

Rearing is provided by four 1.3-m³ circular tanks, twenty 8-m³ circular tanks, and eight 145-m³ circular tanks. The 1.3-m³ tanks will be operated on flow-through only, serving as the initial start-up tanks for Arctic char, lake trout and Arctic grayling. The 8-m³ tanks will be operated on flow-through and reuse, up to 75%, depending on species and life stage. These tanks will serve as the start-up and early rearing tanks for rainbow trout, Arctic grayling, Arctic char, lake trout, king salmon and coho salmon as well as grow-out tanks for Arctic char. The 145-m³ tanks are operated at 95% + recirculation and serve as grow-out tanks for rainbow trout, Arctic grayling and king salmon catchable production. Wells provide water to all culture systems with a total capacity of 1,200 gallons per minute (gpm). Approximately 850 gpm is needed to run the facility at maximum design production. The average monthly demand is estimated to be 450–500 gpm at maximum production. An 8-inch well and a 16-inch well will provide water to the hatchery after passing through media filtration and degassing systems to remove iron, manganese, hydrogen sulfide, carbon dioxide, and nitrogen. The amount of water reuse within each culture system will vary depending on species, life stage, tank density, and system specific equipment. Maximum rearing capacity based on the bio-programming used for hatchery design is listed below. The anticipated production for 2021 is listed in Table 1.

Designed Maximum Rearing Capacity - RBSFH

- Rainbow trout
 - 336,400 fingerlings at 2 grams each
 - 178,000 catchables at 180 grams each
- Arctic char
 - 26,500 fingerlings at 4 grams each
 - 40,000 subcatchables at 20 grams each
 - 11,325 catchables at 120 grams each
- Lake trout
 - 100,000 subcatchables at 10 grams each
 - 850 catchables at 180 grams each
- Coho salmon
 - 222,000 fingerlings at 4 grams each
- King salmon
 - 29,600 catchables at 120 grams each
- Arctic grayling
 - 10,500 fingerlings at 2 grams each
 - 32,400 catchables at 120 grams each

PRODUCTION SYNOPSIS

Fish produced at the RBSFH will reduce pressure on wild fish stocks, increase sport fishing opportunity, and provide diversity in sport fisheries throughout Interior Alaska. The RBSFH will provide fish for 114 lakes located in Region III and seven lakes in Region II. Lakes are stocked primarily by truck, but other methods include ATVs, fixed wing aircraft, helicopter, and backpack. All production is for lake stocking; no anadromous releases are scheduled. Catchable fish stocked

from RBSFH in 2022 will be king salmon, Arctic char, and rainbow trout. Fingerling, coho salmon and rainbow trout will be stocked from RBSFH in 2022. Sub-catchable lake trout will be released in 2022. The appropriate number of rainbow trout, Arctic char, lake trout, king salmon, and coho salmon will be reared during 2022 to meet the 2023 stocking requests.

Lake Stocking

Rainbow Trout

General Information: Rainbow trout production is the largest component of the Division of Sport Fish's lake stocking program in Region III. A captive broodstock held in rearing tanks at WJHSFH supports the program. The broodstock originated from Swanson River rainbow trout wild stock on the Kenai Peninsula and has been held in captivity since 1982. To remain consistent with the *Statewide Stocking Plan for Sport Fish, 2022*, and the conditions of many fish transport permits (FTPs), the RBSFH will attempt to stock only all-female triploid rainbow trout. Triploid rainbow trout populations are usually all-female, but some mixed-sex triploid rainbow trout may be produced as well. If there is a shortage of all-female triploid eggs, mixed-sex triploid, all-female diploid, or mixed-sex diploid rainbow trout may be substituted in category one lakes. Catchable fish are stocked in early and midsummer, and fingerling fish are stocked in early summer.

Release Information: In June 2022, approximately 107,700 rainbow trout fingerling produced by RBSFH will be stocked in 22 lakes throughout Region III. Catchable stocking will begin in mid-May, and approximately 140,000 fish will be released into 70 Region III lakes. (Table 1). Specific release sites and numbers of fish to stock can be found in the *Statewide Stocking Plan for Sport Fish, 2022*.

Egg take and Rearing: In January 2022, approximately 574,980 eyed rainbow trout eggs (all-female triploid) were transported from WJHSFH in Anchorage to RBSFH (Table 2). Upon hatch, these fish will be ponded and reared in 8-m³ tanks until June when 2-gram fingerlings will be released into Region III area lakes. The remaining fingerlings will continue to be reared in the 8-m³ tanks until they reach 4-grams and then will be graded to remove underperforming and deformed fish before being transferred into 145-m³ tanks and raised for 2023 catchable stocking.

Arctic Char

General Information: Arctic char fingerling and sub-catchables are stocked in odd years with catchables being stocked annually. A captive Arctic char broodstock has been established at WJHSFH, eliminating the need to conduct remote egg takes to meet production goals. To remain consistent with the *Statewide Stocking Plan for Sport Fish, 2022*, and the conditions of many FTPs, the RBSFH will attempt to stock only mixed-sex triploid Arctic char. If there is a shortage of certified triploid Arctic char, noncertified, or diploid Arctic char may be substituted in category one lakes.

Release information: Starting in early May 2022, approximately 11,300 catchable Arctic char will be stocked into 10 Region III lakes.. (Table 1). Specific release sites and numbers of fish to stock can be found in the *Statewide Stocking Plan for Sport Fish, 2022*.

Egg take and Rearing: An estimated 30,100 green eggs were transferred from WJHSFH on December 29, 2021. These fish were be ponded into two 1.3-m³ tanks. In May, the Arctic char will be moved into 8-m³ tanks for catchable grow out. Approximately 93,000 eyed eggs will be transferred from the WJHSFH in December 2022 to support fingerling, sub-catchable and catchable production scheduled for release in 2023 (Table 2).

King Salmon

General Information: Catchable mixed-sex triploid king salmon will be released in twelve landlocked lakes in Region III primarily to provide winter ice fisheries. The RBSFH will not produce any king salmon for anadromous releases. Generally, hatchery king salmon used for lake stocking originate from eggs taken from wild stock adults returning to the Salcha or Chena River. Brood source is dependent on area management staff preferences given run strength, timing, and river conditions. In 2021, neither the Chena or Salcha Rivers met escapement goals and area managers requested an alternate broodstock be sourced. Eggs for 2022 catchable releases were collected from Ship Creek stock and then pressure shocked to induce triploidy as a condition of FTP permits.

Release Information: In fall 2022 RBSFH will stock 40,000 140-gram catchable king salmon in 12 lakes within Region III. (Table 1). Specific release sites and numbers of fish to stock can be found in the *Statewide Stocking Plan for Sport Fish, 2022*.

Egg take and Rearing: In mid-July, approximately 51,000 king salmon eggs will be collected from wild stock Salcha or Chena River broodstock for 2023 catchable production (Table 2). Adult king salmon will be collected at the remote egg-take site and held until the fish are ripe. The delayed fertilization technique will be used, with gametes being collected separately and transported back to the hatchery for fertilization. Kidney and ovarian fluid samples will be collected from all adult king salmon spawned and tested for bacterial and viral pathogens as part of the routine brood stock screening requirements. The fertilized eggs will be family tracked for BKD; and, if any female brood tests positive for BKD, the fertilized eggs from that incubation tray will be destroyed. If the Chena and Salcha rivers fail to achieve minimum escapement goals, eggs may be sourced from Ship Creek stock at the request of area managers. In late November to early December, king salmon fry will be ponded into 8-m³ tanks. Upon reaching approximately four grams in size, they will be transferred into a single 145-m³ tank for catchable production.

Coho Salmon

General Information: Mixed-sex triploid coho salmon fingerlings will be stocked in five lakes in Region III during 2022. Coho are primarily harvested in the winter ice fishery, but some are harvested in mid to late summer. The RBSFH will not produce any coho salmon for anadromous release. Hatchery coho salmon used for lake stocking originate from eggs taken from wild stock adults returning to the Delta Clearwater River. In 2021, wild coho returns to the Delta Clearwater River did not meet escapement goals and area managers requested we use an alternate brood source. Eggs were collected from Ship Creek stock and then pressure shocked to induce triploidy as a condition of FTP permits.

Release Information: The RBSFH will stock approximately 75,500 4-gram fingerling coho salmon into five Region III lakes in late May and early June of 2022 (Table 1). Specific lakes and stocking numbers can be found in the *Statewide Stocking Plan for Sport Fish, 2022*.

Egg take and Rearing: In mid-October, approximately 73,500 coho salmon eggs will be collected for 2022 fingerling production (Table 2). If the Delta Clearwater River fails to achieve minimum escapement goals, eggs may again be sourced from Ship Creek stock at the request of area managers. Kidney samples will be collected from all adult female coho salmon spawned and tested for BKD. The fertilized eggs will be family tracked, and if any female brood fish tests positive for BKD, the fertilized eggs from that incubation tray will be destroyed. Emergence will occur in January, and the fry will be transferred into 8-m³ tanks until release in late May and early June.

Lake Trout

General Information: In 2022, mixed-sex triploid sub-catchable lake trout will be released for in 12 Region III lakes and seven lakes in Region II. Lake trout are a long-lived species, with low exploitation rates by anglers, but do provide increased diversity in angling experiences. Wild brood from Seven Mile Lake are the donor stock and will provide all the eggs used for production. To limit the impacts on the wild population, only 50 females will be spawned every 2 years to meet statewide production requests. To remain consistent with the *Statewide Stocking Plan for Sport Fish, 2022*, and the conditions of many FTPs, the RBSFH will attempt to stock only mixed-sex triploid lake trout. If there is a shortage of certified triploid lake trout, noncertified, or diploid lake trout may be substituted within Region III lakes.

Release Information: The RBSFH will stock approximately 11,500 sub-catchable lake trout in 12 Region III lakes and 11,500 sub-catchable lake trout in seven Region II lakes in September 2022 (Table 1). Specific lakes and stocking numbers can be found in the *Statewide Stocking Plan for Sport Fish, 2022*.

Egg Take and Rearing: As lake trout are reared on alternate years, no lake trout egg take will occur in 2022. After emergence, the lake trout fry will be ponded into 1.3 m³ tanks for rearing until approximately 0.5 – 1g in size at which point they will be transferred into a single 8 m³ tank for rearing until release in the fall at a 20 g target size.

MANAGEMENT CONSIDERATIONS

Lake Stocking

Rainbow trout, Arctic grayling, lake trout, king and coho salmon, and Arctic char are stocked in lakes on a "put-and-take" or "put-and-grow" basis; no special management considerations are required. Sport fish season and bag limits generally provide for a maximum harvest of these stocked species. A small number of Region III lakes are managed to achieve longer residency times to recruit larger fish into the fishery. Specific objectives for these programs are provided in the *Statewide Stocking Plan for Sport Fish, 2022*.

2022 PROJECTED HARVESTS

Table 4 summarizes projected 2022 sport fish harvest rates for projects supported through fish production at the RBSFH. While lake trout are stocked, no lake trout harvest is attributed to hatchery production as it is not anticipated that this production has entered the fisheries due to slow intrinsic growth rates. The harvest rates are based on the average Division of Sport Fish Statewide Harvest Survey (SWHS) estimate for 2018-2020.

EVALUATION

Stocked lake fisheries are evaluated in one of three ways: fish population monitoring to determine basic population information, population monitoring to determine length–age structures, and two sample mark–recaptures to determine population abundance.

Sampling to determine basic population information is conducted on lakes in which managers only wish to determine if stocked fish are present, to visually assess their condition (robust or thin) and health, and/or to make a crude estimate of their length distribution. A single sampling event is used to collect this information. The quantity of gear used and soak times correspond to lake size.

Sampling for population length–age structure is conducted on lakes in which managers wish to determine if current stocking strategies have created the desired population structures and subsequently, the desired fisheries. A single sampling event is also used to collect this information. The quantity of gear used and soak times are dependent on lake size and are more intensive than sampling for basic population information.

Sampling to determine population abundance is conducted on lakes in which managers need more information about population parameters than single sampling can achieve. Managers often need to know the abundance of age/size cohorts, or different stocking groups to determine if stocking regimes are providing the number and size of fish necessary to support a fishery, or to compare different stocking methods. Two sample mark-recapture events are used to gather this information. The quantity of gear, soak times, and gear placement is study specific.

Sport fishery catch, harvest, and effort statistics are estimated annually by the Division of Sport Fish SWHS.

RESEARCH

Specific research will be conducted at the RBSFH in the future.

LITERATURE CITED

Alaska Sport Fishing Survey database [Internet]. 1996-. Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited May 4, 2022). Available from <http://www.adfg.alaska.gov/sf/sportfishingsurvey/>.

APPROVALS

Recommendation for Approval: Ruth Burnett Sport Fish Hatchery Annual Management Plan, 2022.

Travis Hyer, Ruth Burnett Sport Fish Hatchery 5/5/2022

Jeff Milton, Hatchery Program, Division of Sport Fish 5/5/2022

John Linderman, Region III Regional Supervisor, Division of Commercial Fisheries 5/11/2022

Jeff Estensen, Region III Regional Supervisor, Division of Sport Fish 5/11/2022

Lorraine Vercessi, PNP Hatchery Program Coordinator, Division of Comm. Fisheries 5/24/2022

Approval: The 2022 Annual Management Plan for the Ruth Burnett Sport Fish Hatchery is hereby approved.

Tom Taube, Deputy Director, Division of Sport Fish 5/26/2022

Peter Bangs, Assistant Director, Division of Commercial Fisheries 5/26/2022

Table 1.–Summary of Ruth Burnett Sport Fish Hatchery lake stocking releases, in 2021.

Species	Release Location	Number	Size ¹	Type ²	Number of Stocking Locations ³
Rainbow Trout	Region III	107,700	Fingerling	3N	22
		140,000	Catchable	3N	71
	Total				86
Arctic Char	Region III	11,300	Catchable	3N	10
	Total	11,300			10
King Salmon	Region III	40,000	Catchable	3N	12
	Total	40,000			12
Coho Salmon	Region III	75,500	Fingerling	3N	5
	Total	75,500			5
Lake Trout	Region III	11,500	Subcatchable	2N/3N	12
	Region II	11,400	Subcatchable	3N	7
	Total	22,900			21
	Grand Total	397,400			121

¹ Fingerling: 1 – 4 g, Subcatchable: 15 – 70 g, Catchable: greater than 70 g.

² 2N = Diploid; 3N = Triploid;

³ Grand total reflects total number of distinct stocked lakes. Some lakes are stocked with multiple species.

Table 2.–Summary of Division of Sport Fish lake stocking egg takes in 2022.

Species	Brood Stock	Females ¹	Number of Eggs
Rainbow Trout	WJHSFH (brood origin – Swanson River)	288	575,789 ²
Arctic Char	WJHSFH (brood origin – Lake Aleknagik)	18	93,082 ²
King Salmon	Salcha River	8	52,055 ³
Coho Salmon	Delta Clearwater River	20	73,541 ³
	Total	334	794,467

¹ The number listed reflects the estimated total number of females needed to produce the requested green egg allotment.

² The number listed is the estimated number of eyed eggs that will be taken into RBSFH, which are provided by WJHSFH in Anchorage.

³ The number listed reflects the estimated number of green eggs that will be taken into RBSFH.

Table 3. Fish Transport Permits (FTPs) for egg take, transports, and releases for the Ruth Burnett Sport Fish Hatchery.

Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Delta	Rainbow Trout	WJHSFH/ Swanson R.	14A-0022	12/31/2023	Backdown L., Bluff Cabin L., Bolio L., Bullwinkle L., Coal Mine #5, Craig L., Dick's Pond, Doc L., Donna L., Donnelly L., Forrest L., Four Mile L., Fourteen Mile L., Ghost L., Hidden L. (Tok), Jan L., Kenna L., Ken's Pond, Kenna L., Koole L., Lisa L., Little Donna L., Little Lost L., Mark L., Monte L., North Twin L., Paul's Pond, Quartz L., Rainbow L., Rangeview L, Rich 81, Shaw Pond, South Twin L., Weasel L.	1	Fingerling Subcatchable Catchable
Delta	Rainbow Trout	WJHSFH/ Swanson R.	14A-0023	12/31/2023	Chet L., Last L., Nickel L., Rapids L.	2	Fingerling Subcatchable Catchable
Delta	Rainbow Trout	WJHSFH/ Swanson R.	15A-0010	12/31/2023	Big "D" Pond	4	Fingerling Subcatchable Catchable
Fairbanks	Rainbow Trout	WJHSFH/ Swanson R.	14A-0025	12/31/2023	Ballaine L., Bathing Beauty Pond, Bear L., Cather's L., Chena HS #25, Chena HS #30, Chena L., Dune L., Geskakmina L., Grayling L., Harding L., Hidden L. (EAFB), Johnson Pit #2, Kid's Fishing Pond, Kimberly L., Little Harding L., Lundgren Pond, Monterey L., Moose Lake, Mosquito Creek L., Mullins Pit, N. Chena Pond, N. Pole Pond, Otto L., Parks Hwy 261, Parks Hwy 285, Polaris L., Pomeroy Pond, Pyrite Pond, Rich 28 Mile Pit, Rich 31 Mile Pit, Sansing L., Sirlin Dr. Pond, Steese Hwy 34.6, Stringer Rd. Pond, Triangle L. (Nen), Wainwright #6, Weigh Station #1, Weigh Station #2, West Iksgiza L.	1	Fingerling Subcatchable Catchable
Fairbanks	Rainbow Trout	WJHSFH Swanson R.	16A-0003	12/31/2023	Cushman L., Horseshoe L.	2	Fingerling Subcatchable

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Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
							Catchable
Fairbanks	Rainbow Trout	WJHSFH/ Swanson R.	14A-0026	12/31/2023	Birch L., Lost L., Manchu L.	3	Fingerling Subcatchable Catchable
Fairbanks	Rainbow Trout	WJHSFH/ Swanson R.	15A-0003	12/31/2023	Chena HS #45.5, Chena HS #47.9, Chena HS #56, Nenana City Pond, Nordale #2, Olnes Pond, Steese Hwy 28.8, Steese Hwy 29.5, Steese Hwy 31.6, Steese Hwy 33.5, Steese Hwy 35.8, Steese Hwy 36.6, Z Pit.	4	Fingerling Subcatchable Catchable
Glennallen	Rainbow Trout	WJHSFH/ Swanson R.	14A-0027	12/31/2023	Buffalo L., Junction L., North Jans L., Ryan L., South Jans L., Strelna L., Tolsona Mt. L.	1	Fingerling Subcatchable Catchable
Glennallen	Rainbow Trout	WJHSFH/ Swanson R.	14A-0028	12/31/2023	Gergie L., Old Road L., Peanut L., Pippin L., Round L., Silver L., Sculpin L., Tolsona L.	2	Fingerling Subcatchable Catchable
Glennallen	Rainbow Trout	WJHSFH/ Swanson R.	14A-0029	12/31/2023	Crater L., DJ L., Tex Smith L.	3	Fingerling Subcatchable Catchable
Glennallen	Rainbow Trout	WJHSFH/ Swanson R.	15A-0004	12/31/2023	Squirrel Ck. Pit	4	Fingerling Subcatchable Catchable
Glennallen	Rainbow Trout	WJHSFH/ Swanson R.	14A-0030	12/31/2023	Three Mile L., Two Mile L.	5	Fingerling Subcatchable Catchable
Mat-Su	Rainbow Trout	WJHSFH/ Swanson R.	19A-0026	12/31/2023	Finger L.	1	Fingerling
Yukon	Rainbow Trout	WJHSFH/ Swanson R.	16A-0004	12/31/2023	Nathaniel L.	1	Fingerling Subcatchable Catchable

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Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Delta	Arctic Char	WJHSFH/ Aleknagik L.	13A-0009	12/31/2024	Coal Mine #5	1	Fingerling Subcatchable Catchable
Delta	Arctic Char	WJHSFH/ Aleknagik L.	14A-0002	12/31/2024	Backdown L., Brodie L., Dick's Pond, Four Mile L., Ken's Pond, Quartz L., Rangeview L., Shaw Pond, Sheefish L.	1	Fingerling Subcatchable Catchable
Delta	Arctic Char	WJHSFH/ Aleknagik L.	14A-0003	12/31/2024	Chet L., Nickel L.	2	Fingerling Subcatchable Catchable
Delta	Arctic Char	WJHSFH/ Aleknagik L.	14A-0004	12/31/2024	J L.	3	Fingerling Subcatchable Catchable
Fairbanks	Arctic Char	WJHSFH/ Aleknagik L.	14A-0005	12/31/2024	Bathing Beauty Pond, Chena L., Grayling L., Harding L., Hidden L. (EAFB), Kids' Fishing Pond, Moose L., Polaris L.	1	Fingerling Subcatchable Catchable
Fairbanks	Arctic Char	WJHSFH/ Aleknagik L.	14A-0006	12/31/2024	Birch L., Lost L.	3	Fingerling Subcatchable Catchable
Glennallen	Arctic Char	WJHSFH/ Aleknagik L.	14A-0007	12/31/2024	Buffalo L., Dick L., Ryan L.	1	Fingerling Subcatchable Catchable
Glennallen	Arctic Char	WJHSFH/ Aleknagik L.	14A-0008	12/31/2024	Gergie L., John L.	2	Fingerling Subcatchable Catchable
Glennallen	Arctic Char	WJHSFH/ Aleknagik L.	14A-0009	12/31/2024	Crater L., Tex Smith L.	3	Fingerling Subcatchable Catchable
Glennallen	Arctic Char	WJHSFH/ Aleknagik L.	14A-0010	12/31/2024	Two Mile L.	5	Fingerling Subcatchable Catchable

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Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Delta	Arctic Grayling	Chena R./ Chena R.	10A-0052	12/31/2031	Bolio L., Brodie L., Koole L., Mark L. (Dlt), Paul's Pond, Rangeview L., Rich 81, Sheefish L.	1	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0067	12/31/2031	Bolio L., Brodie L., Koole, L., Mark L., Paul's Pond, Rangeview L., Rich 81, Sheefish L.	1	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Chena R./ Chena R.	10A-0053	12/31/2031	Chet L., Nickel L.	2	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0068	12/31/2031	Chet L., Nickel L.	2	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Chena R./ Chena R.	10A-0054	12/31/2031	J L.	3	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0069	12/31/2031	J L.	3	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Chena R./ Chena R.	10A-0055	12/31/2031	Big D Pond	4	Catchable
Delta	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0070	12/31/2031	Big D Pond	4	Catchable
Fairbanks	Arctic Grayling	Chena R./ Chena R.	10A-0058	12/31/2031	Ballaine L., Bathing Beauty, Bear L. (EAFB), CHSR 25.0, CHSR 30.0, Chena L., Dune L., Kid's Fishing Pond, Grayling L., Hidden L. (EAFB), Johnson Pit #2, Moose L., Mullins Pit, North Chena Pond, North Pole Pond, Rich 28, Rich 31, Steese Hwy 34.6, Wainwright #6	1	Fingerling Subcatchable Catchable
Fairbanks	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0073	12/31/2031	Ballaine L., Bathing Beauty, Bear L. (EAFB), CHSR 25.0, CHSR 30.0, Chena L., Dune L.,	1	Fingerling Subcatchable

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Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
					Kid's Fishing Pond, Grayling L., Hidden L. (EAFB), Johnson Pit #2, Moose L., Mullins Pit, North Chena Pond, North Pole Pond, Rich 28, Rich 31, Steese Hwy 34.6, Wainwright #6		Catchable
Fairbanks	Arctic Grayling	Chena R./ Chena R.	14A-0016	12/31/2031	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	Arctic Grayling	Goodpaster R./ Goodpaster R.	14A-0019	12/31/2031	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	Arctic Grayling	Chena R./ Chena R.	10A-0060	12/31/2031	Birch L., Lost L., Manchu L.	3	Catchable
Fairbanks	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0075	12/31/2031	Birch L., Lost L. Manchu L.	3	Catchable
Fairbanks	Arctic Grayling	Chena R./ Chena R.	10A-0061	12/31/2031	CHSR 42.8 (Red Squirrel Pit), CHSR 45.5, CHSR 47.9, Nordale #2, Olnes Pond, Steese Hwy. 29.5, Steese Hwy. 31.6, Steese Hwy. 33.5, Steese Hwy. 35.8, Steese Hwy. 36.6, Z Pit	4	Catchable
Fairbanks	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0076	12/31/2031	CHSR 42.8 (Red Squirrel Pit), CHSR 45.5, CHSR 47.9, Nordale #2, Olnes Pond, Steese Hwy. 29.5, Steese Hwy. 31.6, Steese Hwy. 33.5, Steese Hwy. 35.8, Steese Hwy. 36.6, Z Pit	4	Catchable
Glennallen	Arctic Grayling	Chena R./ Chena R.	10A-0048	12/31/2031	Arizona L., Connor L., Junction L., Ryan L.	1	Catchable
Glennallen	Arctic Grayling	Chena R./ Chena R.	19A-0001	12/31/2031	Squirrel Ck. Pit	4	Catchable
Glennallen	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0064	12/31/2031	Arizona L., Connor L., Junction L., Ryan L.,	1	Catchable
Glennallen	Arctic	Goodpaster R./	19A-0002	12/31/2031	Squirrel Ck. Pit	4	Catchable

Table 3. Fish Transport Permits (FTP) for egg take, transports, and releases for the Ruth Burnett Sport Fish Hatchery.

Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
	Grayling	Goodpaster R.					
Glennallen	Arctic Grayling	Chena R./ Chena R.	10A-0049	12/31/2031	Pippin L.	2	Catchable
Glennallen	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0065	12/31/2031	Pippin L.	2	Catchable
Delta	King Salmon	Salcha R./ Salcha R.	10A-0035	12/31/2029	Brodie L., Bolio L., Coal Mine #5, Jan L., Quartz L.	1	Fingerling Subcatchable Catchable
Delta	King Salmon	Chena R./ Chena R.	10A-0031	12/31/2029	Brodie L., Bolio L., Coal Mine #5, Jan L., Quartz L.	1	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Salcha R./ Salcha R.	10A-0036	12/31/2029	Bathing Beauty Pond, Chena L., Grayling L., Monterey L., Otto L., Mullins Pit, North Chena Pond, North Pole Pond.	1	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Chena R./ Chena R.	10A-0032	12/31/2029	Bathing Beauty Pond, Chena L., Grayling L., Monterey L., Otto L., Mullins Pit, North Chena Pond, North Pole Pond.	1	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Salcha R./ Salcha R.	15A-0002	12/31/2029	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Chena R./ Chena R.	15A-0001	12/31/2029	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Salcha R. Salcha R.	10A-0037	12/31/2029	Birch L., Lost L.	3	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Chena R./ Chena R.	10A-0033	12/31/2029	Birch L., Lost L.	3	Fingerling Subcatchable Catchable

Table 3. Fish Transport Permits (FTPs) for egg take, transports, and releases for the Ruth Burnett Sport Fish Hatchery.

Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Delta	King Salmon	Ship Creek/ Ship Creek	20A-0004	12/31/2029	Bolio L., Brodie L., Coal Mine #5, Jan L., Quartz L.	1	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Ship Creek/ Ship Creek	20A-0005	12/31/2029	Bathing Beauty Pond, Chena L., Grayling L., North Chena Pond., North Pole Pond., Otto L.	1	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Ship Creek/ Ship Creek	20A-0006	12/31/2029	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Ship Creek/ Ship Creek	20A-0007	12/31/2029	Birch L., Lost L.	3	Fingerling Subcatchable Catchable
Mat-Su	King Salmon	Ship Creek/ Ship Creek	21A-0003	12/31/2029	Finger L.	1	Catchable
Delta	Coho Salmon	Delta Clearwater R./ Delta Clearwater R.	10A-0040	12/31/2027	Koole L., Jan L., Lisa L., Quartz L.	1	Fingerling Subcatchable Catchable
Delta	Coho Salmon	Delta Clearwater R./ Delta Clearwater R.	17A-0001	12-31-2027	J L.	3	Fingerling Subcatchable Catchable
Fairbanks	Coho Salmon	Delta Clearwater R./ Delta Clearwater R.	10A-0041	12/31/2027	Dune L., Geskakmina L.	1	Fingerling Subcatchable Catchable
Fairbanks	Coho Salmon	Delta Clearwater R./ Delta Clearwater R.	16A-0053	12/31/2027	Harding L.	1	Fingerling

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Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Glennallen	Coho Salmon	Delta Clearwater R./ Delta Clearwater R.	10A-0042	12/31/2027	South Jans L., Strelna L.	1	Fingerling Subcatchable Catchable
Delta	Coho Salmon	Ship Creek/ Little Susitna R	20A-0010	12/31/2027	Koole Lake, Lisa L., Quartz L.	1	Fingerling
Delta	Coho Salmon	Ship Creek/ Little Susitna R	20A-0011	12/31/2027	J L.	3	Fingerling
Fairbanks	Coho Salmon	Ship Creek / Little Susitna R	20A-0012	12/31/2027	Dune l., Geskakmina l., Harding l.	1	Fingerling
Glennallen	Coho Salmon	Ship Creek/ Little Susitna R	20A-0013	12/31/2027	South Jans L., Strelna L.	1	Fingerling
Delta	Lake Trout	Sevenmile L./ Sevenmile L.	16A-0006	12/31/2030	Harding L.	1	Fingerling Subcatchable Catchable
Delta	Lake Trout	Glacier L./ Glacier L.	19A-0011	12/31/2030	Harding L.	1	Fingerling Subcatchable Catchable
Delta	Lake Trout	Sevenmile L./ Sevenmile L.	19A-0012	12/31/2030	Coal Mine #5 L., Craig L., North Twin L., Dick's Pond, Ken's Pond, Paul's Pond, Rangeview L., Donnelly L., Four Mile L.	1	Fingerling Subcatchable Catchable
Delta	Lake Trout	Sevenmile L./ Sevenmile L.	19A-0013	12/31/2030	Rapids L.	2	Fingerling Subcatchable Catchable
Delta	Lake Trout	Glacier L./ Glacier L.	19A-0014	12/31/2030	Coal Mine #5 L., Craig L., North Twin L., Dick's Pond, Ken's Pond, Paul's Pond, Rangeview L., Donnelly L., Four Mile L.	1	Fingerling Subcatchable Catchable
Delta	Lake Trout	Glacier L./ Glacier L.	19A-0015	12/31/2030	Rapids L.	2	Fingerling Subcatchable Catchable

Table 3. Fish Transport Permits (FTP) for egg take, transports, and releases for the Ruth Burnett Sport Fish Hatchery.

Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Fairbanks	Lake Trout	Glacier L./ Glacier L.	22A-0002	12/31/2030	Lost L. (Fbk)	3	Fingerling, Subcatchable Catchable
Fairbanks	Lake Trout	Sevenmile L./ Sevenmile L.	22A-0001	12/31/2030	Lost L. (Fbk)	3	Fingerling, Subcatchable Catchable
Kenai	Lake Trout	Sevenmile L./ Sevenmile L.	20A-0017	12/31/2030	Upper Summit L.	3	Fingerling Subcatchable Catchable
Mat-Su	Lake Trout	Sevenmile L./ Sevenmile L.	20A-0021	12/31/2030	Matanuska L., Long L. (Chick)	1	Subcatchable
Anchorage	Lake Trout	Sevenmile L./ Sevenmile L.	20A-0023	12/31/2030	Clunie L.	1	Fingerling Subcatchable Catchable
Anchorage	Lake Trout	Sevenmile L./ Sevenmile L.	20A-0024	12/31/2030	Sand L.	3	Fingerling, Subcatchable, Catchable
Resurrection Bay	Lake Trout	Sevenmile L./ Sevenmile L.	20A-0025	12/31/2030	Lost L (Rby).	3	Fingerling, Subcatchable, Catchable
Prince William Sound	Lake Trout	Sevenmile L./ Sevenmile L.	20A-0026	12/31/2030	Blueberry L.	5	Fingerling, Subcatchable, Catchable.
Fairbanks	Arctic Char	WJHSFH/ Aleknagik L.	14A-0015	12/31/2024	WJHSFH to RBSFH		Eggs/Fry Fingerling
Fairbanks	Arctic Grayling	Goodpaster R./ Goodpaster R.	10A-0063	12/31/2031	Egg take at Goodpaster R., brood returned to Goodpaster R, eggs to RBSFH		Brood, Egg
Fairbanks	Arctic Grayling	Chena R./ Chena R.	19A-0016	12/31/2031	Transfer adults at Chena R to Kids Fishing Pond and egg take, return brood to Chena R, incubate eggs at RBSFH		Brood, Egg

Table 3. Fish Transport Permits (FTPs) for egg take, transports, and releases for the Ruth Burnett Sport Fish Hatchery.

Area	Species	Donor Stock/ Ancestral stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Fairbanks	King Salmon	Chena R./ Chena R.	10A-0034	12/31/2029	Egg take at Chena R. and transfer of eggs to RBSFH for incubation and rearing		Brood, Egg, Fry, Fingerling
Fairbanks	King Salmon	Salcha R./ Salcha R.	10A-0038	12/31/2029	Egg take at Salcha R. and transfer of eggs to RBSFH for incubation and rearing		Brood, Egg, Fry, Fingerling
Fairbanks	King Salmon	Ship Creek/ Ship Creek	20A-0003	12/31/2029	WJHSFH to RBSFH		Egg, Fry, Fingerling
Fairbanks	Coho Salmon	Delta Clearwater R. / Delta Clearwater R.	10A-0043	12/31/2027	Egg take at Delta Clearwater R. and transfer of eggs to RBSFH		Brood, Egg
Fairbanks	Coho Salmon	Ship Creek/ L Susitna Cr	20A-0009	12/31/2027	WJHSFH to RBSFH		Egg, Fry, Fingerling
Fairbanks	Rainbow Trout	WJHSFH/ Swanson R.	13A-0007 ^a	12/31/2023	WJHSFH to RBSFH		Egg, Fry, Fingerling
Fairbanks	Lake Trout	Sevenmile L./ Sevenmile L.	16A-0005	12/31/2030	Egg take at Sevenmile L., transfer eggs to RBSFH, and rear at RBSFH		Egg
Fairbanks	Lake Trout	Glacier L./ Glacier L.	19A-0010	12/31/2030	Egg take at Glacier L. transfer eggs to RBSFH, and rear at RBSFH		Egg

^aIssued to William Jack Hernandez Sport Fish Hatchery.

Table 4. Projected 2021 harvest from Division of Sport Fish stocking projects.

Release Site	Rainbow Trout	Arctic Char	Arctic Graying	Landlocked Salmon
Lake Stocking ¹	13,653	810	272	2,092

¹ Harvest estimates for Arctic char, Arctic grayling, landlocked salmon, and rainbow trout is based on the average SWHS estimates for the years 2018-2020 as these years most represents current stocking levels and expected 2022 harvest levels.