2019 ANNUAL MANAGEMENT PLAN

RUTH BURNETT SPORT FISH HATCHERY

Alaska Department of Fish and Game

Division of Sport Fish

Region III

April 2019

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, Arctic grayling, 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. 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 five-year period. All releases for the current year have received departmental and public review.

New this year:

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

- A lake trout egg take is planned for the fall of 2019 to re-initiate Region II and III lake trout stocking projects in 2020.
- Collection of an additional 10,000 Arctic grayling eggs for the Michigan Department of Natural Resources (MNDNR)'s Arctic grayling reintroduction initiative.

Further details regarding this effort are described later in this document.

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 m^3 circular tanks, twenty 8 m^3 circular tanks, and eight 145 m^3 circular tanks. The 1.3 m^3 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 m^3 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 m^3 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 2019 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 104 lakes located in Region III. 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 2019 will

be King salmon, Arctic char, Arctic grayling, and rainbow trout. Fingerling Arctic char, Arctic grayling, coho salmon, and rainbow trout will be stocked from RBSFH in 2019. Sub-catchable Arctic char will also be released in 2019. The appropriate number of rainbow trout, Arctic char, King salmon, coho salmon, lake trout and Arctic grayling will be reared during 2019 to meet the 2020 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, 2019* 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 2019, approximately 101,800 rainbow trout fingerling produced by RBSFH will be stocked in 12 lakes throughout Region III. Catchable stocking will begin in mid-May and approximately 139,870 fish will be released into 68 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, 2019*.

Egg take and Rearing: In January 2019, approximately 645,619 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-m^3 tanks until June when two-gram fingerlings will be released into Region III area lakes. The remaining fingerlings will continue to be reared in the 8 m^3 tanks until they reach 4 grams and then will be graded to remove underperforming and deformed fish before being transferred into 145 m^3 tanks and raised for 2020 catchable stocking.

Arctic Char

General Information: Arctic char fingerling and subcatchables 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, 2019* 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 2019, approximately 10,500 catchable Arctic char will be stocked into five Region III lakes along with 7,000 fingerling Arctic char stocked in three Region III lakes. In September, 27,025 sub-catchable Arctic char will be released 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, 2019*.

Egg take and Rearing: An estimated 84,994 eyed eggs were transferred from WJHSFH on December 26, 2018. These fish were transferred in March 2019 into two 1.3 m^3 tanks. In May, the Arctic char will be moved into 8 m^3 tanks, with fingerlings released in June and sub-catchables stocked in September. No Arctic char will be reared for 2020 catchable releases as those fish will be reared by the WJHSFH. Approximately 22,000 eyed eggs will be transferred from the WJHSFH in December 2019 to support catchable production scheduled for release in 2021 (Table 2).

Arctic Grayling

General Information: Wild Chena River Arctic grayling serve as the sole brood source for eggs for the RBSFH, as well as providing green eggs to the WJHSFH in support of Region II Arctic grayling programs. In 2019, the RBSFH will provide up to 10,000 eggs to the Michigan Department of Natural Resources (MDNR) in support of the Arctic grayling reintroduction efforts in Michigan. To remain consistent with the *Statewide Stocking Plan for Sport Fish, 2019* and the conditions of many FTPs, the RBSFH will attempt to stock only mixed-sex triploid Arctic grayling. If there is a shortage of certified triploid Arctic grayling, noncertified, or diploid Arctic grayling may be substituted in category one lakes. All eggs provided to MDNR will be mixed-sex diploid.

Release information: Beginning in mid-May 2019, approximately 26,000 Arctic grayling catchables will be stocked into 42 Region III lakes (Table 1). Specific release sites and numbers of fish to stock can be found in the *Statewide Stocking Plan for Recreational Fisheries, 2018.*

Egg take and Rearing: In early May, adult Arctic grayling will be collected from the Chena River and held until fish are ready to spawn. Approximately 130,000 eggs will be collected (Table 2). To meet the genetic diversity requirements for Michigan, females will not be pooled, but individually spawned with milt from two males. Post fertilization, a small sample of approximately 100 eggs per female with be set aside for the production of diploid eggs to be sent to Michigan at the eyed stage. These eggs will be allowed to water harden and surface disinfected in iodophore before being transferred to the incubation trays. The remaining fertilized eggs are then pressure shocked onsite, surface disinfected, and transferred to incubators within the RBSFH. Pressure shocked green eggs will be shipped to the WJHSFH to meet Region II stocking goals. Four days post hatch, grayling fry will be ponded into 1.3 m^3 tanks. After one to two months, they will be transferred into a single 8 m^3 tank for rearing until reaching a fingerling size. At that point, approximately 29,000 Arctic grayling will be transferred into a 145 m^3 tank for 2019 catchable production.

King Salmon

General Information: Catchable mixed-sex diploid King salmon are released in eleven landlocked lakes in Region III primarily to provide winter ice fisheries. The RBSFH will not produce any King salmon for anadromous releases. Hatchery King salmon used for lake stocking originate from eggs taken from wild stock adults returning to the Salcha or Chena rivers. Brood source is dependent on area management staff preferences given run strength, timing, and river conditions.

Release Information: In fall 2019 RBSFH will stock 140 gram catchable King salmon in 11 lakes within Region III. The majority of the fish, 37,000, will be stocked in September and October. An additional 3,000 will be stocked in November to support winter fishing opportunities in the Fairbanks area (Table 1). Specific release sites and numbers of fish to stock can be found in the *Statewide Stocking Plan for Sport Fish, 2018*.

Egg take and Rearing: In mid-July, approximately 59,000 King salmon eggs will be collected from wild stock Salcha or Chena river broodstock for 2020 catchable production (Table 2). Adult King salmon will be collected at the remote egg-take site, eggs fertilized and transported to the RBSFH. 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. In late November to early December, King salmon fry will be ponded into 8 m^3 tanks. Upon reaching approximately four grams in size, they will be transferred into a single 145 m^3 tank for catchable production.

Coho Salmon

General Information: Mixed-sex diploid coho salmon fingerlings will be stocked in four lakes in Region III during 2019. These fish 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.

Release Information: The RBSFH will stock 80,000 4 gram fingerling coho salmon into four Region III lakes in late May and early June of 2019 (Table 1). Specific lakes and stocking numbers can be found in the *Statewide Stocking Plan for Sport Fish, 2019*.

Egg take and Rearing: In mid-October, approximately 85,000 coho salmon eggs will be collected for 2020 fingerling production (Table 2). 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 m^3 tanks until release in late May and early June of 2020

Lake Trout

General Information: In 2019, mixed-sex triploid sub-catchable lake trout will be reared for the first time in the RBSFH. These fish will be released in five Region III lakes and a number of lakes in Region II, currently being determined by Region II area management staff. 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. In order to limit the impacts on the wild population, only 50 females will be spawned every four years to meet statewide production requests. To remain consistent with the *Statewide Stocking Plan for Sport Fish, 2019*, 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 in category one lakes.

Release Information: There are no scheduled lake trout releases for 2019. Fish reared during 2019 will be released as sub-catchables in September 2020.

Egg Take and Rearing: In mid-September, gametes will be extracted from 50 pair using live spawning techniques, resulting in an estimated 60,000 eggs (Table 2). The delayed fertilization technique will be utilized with eggs and milt being transported back to the RBSFH for fertilization. Once fertilized, the eggs will be pressure shocked to induce triploidy and then surface disinfected with iodophor. Kidney and ovarian samples will be taken to meet the requirements for routine broodstock screening. After emergence, the lake trout fry will be ponded into 1.3 m^3 tanks for rearing until approximately 0.5 – 1 g in size at which point they will be transferred into a single 8 m^3 tank for rearing until release.

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, 2019*.

2019 PROJECTED HARVESTS

Table 4 summarizes projected 2019 sport fish harvest rates for projects supported through fish production at the RBSFH. The harvest rates are based on the Division of Sport Fish Statewide Harvest Survey (SWHS) estimate for 2017. The 2019 stocking rate and angler fishing patterns are most comparable to 2017 and should most accurately project 2019 harvests.

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 are 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 [Intranet]. 1996– . Anchorage, AK: Alaska Department of Fish and Game, Division of Sport Fish (cited April 1, 2015). Available from: https://intra.sf.adfg.state.ak.us/swhs_est/

APPROVALS

Recommendation for Approval: Ruth Burnett Sport Fish Hatchery Annual Management Plan, 2019.

Approved via email 6/10/2019
Travis Hyer, Ruth Burnett Sport Fish Hatchery

Approved via email 6/10/2019
Jeff Milton, Hatchery Program, Division of Sport Fish

Approved via email 6/10/2019
John Linderman, Region III Regional Supervisor, Division of Commercial Fisheries

Approved via email 6/10/2019
Tim Viavant, Region III Regional Supervisor, Division of Sport Fish

Approved via email 6/10/2019
Lorraine Vercessi, PNP Hatchery Program Coordinator, Div. of Commercial Fisheries

Approval: The 2019 Annual Management Plan for the Ruth Burnett Sport Fish Hatchery is hereby approved.

Approved via email 6/11/2019
Tom Taube, Deputy Director, Division of Sport Fish

Approved via email 6/11/2019
Peter Bangs, Assistant Director, Division of Commercial Fisheries

Table 1.–Summary of Ruth Burnett Sport Fish Hatchery lake stocking releases, in 2019.

Species	Release Location	Number	Size [1]	Type [2]	Number of Stocking Locations
Rainbow Trout	/Region III	101,800	Fingerling	3N	12
		139,870	Catchable	3N	68
	Total	241,670			80
Arctic Char	Region III	7,000	Fingerling	3N	3
		27,025	Subcatchable	3N	10
		10,500	Catchable	3N	5
	Total	45,325			18
Arctic Grayling	Region III	26,000	Catchable	3N	42
	Total	26,000			42
King Salmon	Region III	40,420	Catchable	2N	11
	Total	40,420			11
Coho Salmon	Region III	80,000	Fingerling	2N	4
	Total	80,000			4
	Grand Total	433,415			155

[1] Fingerling: 1 – 4 g, Subcatchable: 15 – 70 g, Catchable: greater than 70 g.
[2] 2N = Diploid; 3N = Triploid.

Table 2.–Summary of Division of Sport Fish lake stocking egg takes, in 2019.

Species	Brood Stock	Females[1]	Number of Eggs
Rainbow Trout	WJHSFH (brood origin – Swanson River)	323	645,619[2]
Arctic Char	WJHSFH (brood origin – Lake Aleknagik)	4	22,000[2]
Arctic Grayling	Chena River	20	59,019[3]
Lake Trout	Seven Mile Lake	50	60,000[3]
King Salmon	Chena River	8	58,311[3]
Coho Salmon	Delta Clearwater River	21	85,331[3]
	Total	426	930,280

[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 fish releases and egg transports for the Ruth Burnett Sport Fish Hatchery.

Area	Species	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, Koole L., Lisa L., Little Donna L., Little Lost L., Mark L., Monte L., North Twin L., Paul's Pond, Quartz L., Rainbow 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., Hidden L. (EAFB), Johnson Pit #2, Kid's Fishing Pond, Kimberly L., Little Harding, Lundgren Pond, Monterey L., Moose Lake, Mosquito Creek L., Mullins Pit, N. Chena Pond, N. Pole Pond, Otto L., Parks Hwy 261, Polaris L., Pomeroy Pond, Pyrite Pond, Rich 28 Mile Pit, Rich 31 Mile Pit, Sirlin Dr. Pond, Steese Hwy 34.6, Stringer Rd. Pond, Triangle L., Wainwright #6, West Iksgiza L.	1	Fingerling Subcatchable Catchable
Fairbanks	Rainbow Trout	WJHSFH Swanson R.	16A-0003	12/31/2023	Cushman L.	2	Fingerling Subcatchable Catchable

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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., Pippin L., Round L., Silver L., Tolsona L.	2	Fingerling Subcatchable Catchable
Glennallen	Rainbow Trout	WJHSFH Swanson R.	14A-0029	12/31/2023	Crater L., DJ L., Sculpin 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	Peanut L., Three Mile L., Two Mile L.	5	Fingerling Subcatchable Catchable
Yukon	Rainbow Trout	WJHSFH Swanson R.	16A-0004	12/31/2023	Nathaniel L.	1	Fingerling Subcatchable Catchable
Delta	Arctic Char	WJHSFH Aleknagik L.	13A-0009	12/31/2024	Coal Mine #5	1	Fingerling Subcatchable Catchable

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Area	Species	Stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
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
Delta	Arctic Grayling	Chena R.	10A-0052	12/31/2021	Bolio L., Brodie L., Jan L., Koole, L., Luke L., Mark L., N Twin L., Paul's Pond, Rangeview L., Rich 81, Sheefish L.	1	Fingerling Subcatchable Catchable

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

Area	Species	Stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Delta	Arctic Grayling	Goodpaster R.	10A-0067	12/31/2021	Bolio L., Brodie L., Jan L., Koole, L., Luke L., Mark L., N Twin L., Paul's Pond, Rangeview L., Rich 81, Sheefish L.	1	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Chena R.	10A-0053	12/31/2021	Chet L., Nickel L.	2	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Goodpaster R.	10A-0068	12/31/2021	Chet L., Nickel L.	2	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Chena R.	10A-0054	12/31/2021	J L.	3	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Goodpaster R.	10A-0069	12/31/2021	J L.	3	Fingerling Subcatchable Catchable
Delta	Arctic Grayling	Chena R.	10A-0055	12/31/2021	Big D Pond	4	Catchable
Delta	Arctic Grayling	Goodpaster R.	10A-0070	12/31/2021	Big D Pond	4	Catchable
Fairbanks	Arctic Grayling	Chena R.	10A-0058	12/31/2021	Ballaine L., Bathing Beauty, Bear L., CHSR 25.0, CHSR 30.0, Chena L., Dune L., Kid's Fishing Pond, Grayling L., Hidden L, (EAFB), Johnson Pit #2, Long Pond, Monterey L., Moose L., Mullins Pit, North Chena Pond, North Pole Pond, Rich 28, Rich 31, Round Pond, Steese Hwy 34.6, Wainwright #6	1	Fingerling Subcatchable Catchable

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

Area	Species	Stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Fairbanks	Arctic Grayling	Goodpaster R.	10A-0073	12/31/2021	Ballaine L., Bathing Beauty, Bear L., CHSR 25.0, CHSR 30.0, Chena L., Dune L, Kid's Fishing Pond, Grayling L., Hidden L, (EAFB), Johnson Pit #2, Long Pond, Monterey L., Moose L., Mullins Pit, North Chena Pond, North Pole Pond, Rich 28, Rich 31, Round Pond, Steese Hwy 34.6, Wainwright #6	1	Fingerling Subcatchable Catchable
Fairbanks	Arctic Grayling	Chena R.	14A-0016	12/31/2021	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	Arctic Grayling	Goodpaster R.	14A-0019	12/31/2021	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	Arctic Grayling	Chena R.	10A-0060	12/31/2021	Birch L., Lost L.	3	Catchable
Fairbanks	Arctic Grayling	Goodpaster R.	10A-0075	12/31/2021	Birch L., Lost L.	3	Catchable
Fairbanks	Arctic Grayling	Chena R.	14A-0017	12/31/2021	Manchu L.	3	Fingerling Subcatchable Catchable
Fairbanks	Arctic Grayling	Goodpaster R.	14A-0020	12/31/2021	Manchu L.	3	Fingerling Subcatchable Catchable
Fairbanks	Arctic Grayling	Chena R.	10A-0061	12/31/2021	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

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

Area	Species	Stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Fairbanks	Arctic Grayling	Goodpaster R.	10A-0076	12/31/2021	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.	10A-0048	12/31/2021	Arizona L., Buffalo L., Connor L., Dick L., Junction L., Little Junction L., Ryan L.	1	Catchable
Glennallen	Arctic Grayling	Goodpaster R.	10A-0064	12/31/2021	Arizona L., Buffalo L., Connor L., Dick L., Junction L., Little Junction L., Ryan L.,	1	Catchable
Glennallen	Arctic Grayling	Chena R.	10A-0049	12/31/2021	Pippin L., Round L., Tolsona L.	2	Catchable
Glennallen	Arctic Grayling	Goodpaster R.	10A-0065	12/31/2021	Pippin L., Round L., Tolsona L.	2	Glennallen
Glennallen	Arctic Grayling	Chena R.	19A-0001	12/31/2021	Squirrel Ck. Pit	4	Catchable
Glennallen	Arctic Grayling	Goodpaster R.	19A-0002	12/31/2021	Squirrel Ck. Pit	4	Catchable
Glennallen	Arctic Grayling	Chena R.	14A-0018	12/31/2021	Three Mile L.	5	Fingerling Subcatchable Catchable
Glennallen	Arctic Grayling	Goodpaster R.	14A-0021	12/31/2021	Three Mile L.	5	Fingerling Subcatchable Catchable
Delta	King Salmon	Salcha R.	10A-0035	12/31/2019	Brodie L., Bolio L.	1	Catchable
Delta	King Salmon	Chena R.	10A-0031	12/31/2019	Brodie L., Bolio L.	1	Catchable
Delta	King Salmon	Salcha R.	13A-0014	12/31/2019	Coal Mine #5, Quartz L.	1	Fingerling Subcatchable Catchable
Delta	King Salmon	Chena R.	13A-0010	12/31/2019	Coal Mine #5, Quartz L.	1	Fingerling Subcatchable Catchable

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

Area	Species	Stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Delta	King Salmon	Salcha R.	13A-0015	12/31/2019	Jan L.	1	Fingerling Subcatchable
Delta	King Salmon	Chena R.	13A-0011	12/31/2019	Jan L.	1	Fingerling Subcatchable
Fairbanks	King Salmon	Salcha R.	10A-0036	12/31/2019	Bathing Beauty Pond, Chena L., Grayling L., Monterey L., Otto L., Mullins Pit, North Pole Pond, Polaris L.	1	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Chena R.	10A-0032	12/31/2019	Bathing Beauty Pond, Chena L., Grayling L., Monterey L., Otto L., Mullins Pit, North Pole Pond, Polaris L.	1	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Salcha R.	13A-0016	12/31/2019	Dune L., Geskakmina L., Koole L.	1	Fingerling Subcatchable
Fairbanks	King Salmon	Chena R.	13A-0012	12/31/2019	Dune L., Geskakmina L., Koole L.	1	Fingerling Subcatchable
Fairbanks	King Salmon	Salcha R.	15A-0002	12/31/2019	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Chena R.	15A-0001	12/31/2019	Cushman L.	2	Fingerling Subcatchable Catchable
Fairbanks	King Salmon	Salcha R.	10A-0037	12/31/2019	Birch L., Lost L.	3	Catchable
Fairbanks	King Salmon	Chena R.	10A-0033	12/31/2019	Birch L., Lost L.	3	Catchable
Glennallen	King Salmon	Salcha R.	13A-0017	12/31/2019	South Jans L., Strelna L.	1	Fingerling Subcatchable Catchable
Glennallen	King Salmon	Chena R.	13A-0013	12/31/2019	South Jans L., Strelna L.	1	Fingerling Subcatchable Catchable

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

Area	Species	Stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Delta	Coho Salmon	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.	17A-0001	12/31/2027	J L.	3	Fingerling Subcatchable Catchable
Fairbanks	Coho Salmon	Delta Clearwater R.	10A-0041	12/31/2027	Dune L., Geskakmina L.	1	3N Fingerling Subcatchable Catchable
Fairbanks	Coho Salmon	Delta Clearwater R.	16A-0053	12/31/2027	Harding L.	1	2N Fingerling
Glennallen	Coho Salmon	Delta Clearwater R.	10A-0042	12/31/2027	South Jans L., Strelna L.	1	Fingerling Subcatchable Catchable
Delta	Lake Trout	Seven Mile L.	16A-0006	12/31/2020	Harding L.	1	Fingerling Subcatchable Catchable
Delta	Lake Trout	Glacier L.	19A-0011	12/31/2020	Harding L.	1	Fingerling Subcatchable Catchable
Delta	Lake Trout	Seven Mile L.	19A-0012	12/31/2020	Coal Mine #5 L., Craig L., North Twin L.	1	Fingerling Subcatchable Catchable
Delta	Lake Trout	Glacier L.	19A-0014	12/31/2020	Coal Mine #5 L., Craig L., North Twin L.	1	Fingerling Subcatchable Catchable

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

Area	Species	Stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Delta	Lake Trout	Seven Mile L.	19A-0013	12/31/2020	Rapids L.	2	Fingerling Subcatchable Catchable
Delta	Lake Trout	Glacier L.	19A-0015	12/31/2020	Rapids L.	2	Fingerling Subcatchable Catchable
Fairbanks	Arctic Char	WJHSFH Aleknagik L.	14A-0015	12/31/2024	From WJHSFH to RBSFH		Eggs/Fry Fingerling
Fairbanks	Arctic Grayling	Chena R.	10A-0047	12/31/2021	Adults Chena R to Spafford Pond and back to Chena. Egg take at Spafford Pond and transfer of eggs to RBSFH		Adults/Eggs
Fairbanks	Arctic Grayling	Chena R.	19A-0016	12/31/2021	Adults Chena R to Kid's Fishing Pond and back to Chena. Egg take at Kid's Fishing Pond and transfer of eggs to RBSFH		Adults/Eggs
Fairbanks	Arctic Grayling	Goodpaster R.	10A-0063	12/31/2021	Egg take at Goodpaster R. and transfer of eggs to RBSFH		Eggs
Fairbanks	King Salmon	Chena R.	10A-0034	12/31/2019	Egg take at Chena R. and transfer of eggs to RBSFH		Eggs
Fairbanks	King Salmon	Salcha R.	10A-0038	12/31/2019	Egg take at Salcha R. and transfer of eggs to RBSFH		Eggs
Fairbanks	King Salmon	Salcha R.	12A-0013	12/31/2019	From WJHSFH to RBSFH		Fry Fingerling
Fairbanks	King Salmon	Chena R.	13A-0004	12/31/2019	From WJHSFH to RBSFH		Fry Fingerling
Fairbanks	Coho Salmon	Delta Clearwater R.	10A-0043	12/31/2027	Egg take at Delta Clearwater R. and transfer of eggs to RBSFH		Eggs

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

Area	Species	Stock	FTP	Expiration Date	Release Site	Lake Category	Life Stage
Fairbanks	Rainbow Trout	Swanson R.	13A-0007	12/31/2023	From WJHSFH to RBSFH		Eggs/Fry Fingerling
Fairbanks	Lake Trout	Sevenmile L.	16A-0005	12/31/2020	Egg take at Sevenmile L. and transfer of eggs to RBSFH		Eggs
Fairbanks	Lake Trout	Glacier L.	19A-0010	12/31/2020	Egg take at Glacier L. and transfer of eggs to RBSFH		Eggs

Table 4. Projected 2019 harvest from Division of Sport Fish stocking projects.

Release Site	Rainbow Trout	Arctic Char	Arctic Graying	Landlocked Salmon
Lake Stocking[1]	12,441	972	154	3704

[1] Harvest estimates for Arctic char, Arctic grayling, landlocked salmon, and rainbow trout are based on the SWHS estimates for the year 2017 as this year most represents current stocking levels and expected 2019 harvest levels.