

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING, LAND AND WATER

# PRELIMINARY DECISION

**ADL 217591**

**Alaska Department of Fish and Game**

Amendment No.1 to Lease

AS 38.05.810 (a)

This Preliminary Decision (PD) is the initial determination on a proposed disposal of interest in State land and is subject to comments received during the public notice period. The public is invited to comment on this PD. The deadline for commenting is **5:00 PM May 21, 2017**. Please see the Comments section on page 6 of this decision for details on how and where to send comments for consideration. Only the applicant and those who comment have the right to appeal the Final Finding and Decision (FFD).

**Proposed Action:**

The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Office (SCRO) has received a request from Alaska Department of Fish and Game (ADF&G) to amend their current 25-year lease by increasing the acreage from 8.61 acres to 10.87 acres +/- . The lease is in the Moose Pass/Trail Lakes area. The location of the project area is further described as being Tracts A & B, Alaska State Land Survey (ASLS) 96-42, within Sections 22 & 27 of Township 5 North, Range 1 West of the Seward Meridian. The lessee is currently using the site as a state-owned fish hatchery. The current lease will expire on February 25, 2025.

SCRO is considering amending the current lease which will increase the acreage and allow the proposed improvements at the Trail Lakes Fish Hatchery.

**Scope of Review:**

The scope of this decision is to determine if it is in the State's best interest to amend lease ADL 217591, increasing the acreage and allowing the proposed improvements.

**Authority:**

This lease amendment is being adjudicated pursuant to AS 38.05.810 (a) as the lease is currently issued under that authority and AS 38.05.035 (e) Powers and Duties of the Director; AS 38.05.070 (b) Generally; and AS 38.05.945 Notice.

The authority to execute the FFD and the Amendment to the lease has been delegated to the Regional Managers of DMLW.

**Administrative Record:**

Case file ADL 217591 constitutes the administrative record for the ADF&G lease.

**Legal Description, Location, and Geographical Features:**

The State land where this proposed lease site is located is described as follows:

- **Legal description:** Tracts A & B, ASLS 96-42, within Sections 22 & 27 T. 5N., R. 1W., S.M.
- **Geographical location:** Moose Pass/Trail Lakes Area.
- **Approximate Lat/Long:** 60° 30' 10" N, 149° 25' 48" W.
- **Area geographical features:** Upper Trail Lakes, Moose Pass, Cooper Landing.
- **Existing surveys:** Alaska State Land Survey (ASLS) 96-42 Tracts A & B.
- **Municipality/Borough:** Kenai Peninsula Borough.
- **Native Corporations/Federally Recognized Tribes:** Cook Inlet Region Inc.
- **Size:** 8.61 acres with a proposal to amend to approximately 10.87 acres.

**Title:**

The State of Alaska holds fee title to the subject land under U. S. Patent # 50-92-0639 dated September 21, 1992 and U.S. Patent # 50-97-0226 dated April 29, 1997. A DNR Title Report (RPT-9633) issued on March 13, 2017, from DMLW's Realty Services Section attests that aside from the usual reservations for ditches, canals, railroads, telegraph and telephone lines, and water rights, there are four other reservations within the proposed lease site:

- To the lands described below, those segments 1,000 feet in width, for the Iditarod National Historic Trail, reserved under the authority of Sec. 7(h) of the National Trails System Act of October 2, 1968, 82 Stat. 919, as amended November 10, 1978, 92 Stat. 3511, and Sec. 906(l)(2) of the Alaska National Interest Lands Conservation Act of December 2, 1980, 94 Stat. 2371, 2442, 43 U.S.C. 1635.
- Special Use Permit for well and pipeline (#1003.25) located in NW¼NE¼ Sec. 27, granted December 22, 1983 to State of Alaska, Department of Fish & Game (FRED Division), 333 Raspberry Road, Anchorage, Alaska 99502. Authority for grant, Act of June 4, 1897.
- Special use permit for a powerline (#1000.09) located within Sec. 27 to the City of Seward, PO Box 127, Seward, Alaska 99664 on November 8, 1990 and amended on April 30, 1993 and August 15, 1994. Authority for the grant, Act of February 15, 1901.
- Special use permit for telephone cable (#4164.01) located within Sec. 27 to GTE Alaska Inc. 4300 B Street, Suite 300, Anchorage, Alaska 99503. Authority for permit, Act of October 21, 1976.

**Third Party Interests:**

Alaska Department of Transportation Highway (Seward Highway).

**Classification and Planning:**

The project area is subject to the Kenai Area Plan, Region 2, Management Unit 376 & 384: Moose Pass (map number 2B). The classifications for this site are Forest Land, Water Resource Land, Wildlife Habitat Land and Public Recreation Land. The current use is consistent with the classification as the area surrounding the hatchery has multiple trails, fishing, camping, photography, canoeing, access to multiple water sports activities and public viewing and rest stops.

**Access:**

Access to the lease is by the Seward Highway.

**Access Along Navigable and Public Waters:**

Nearly all shore and tide lands in the State of Alaska are subject to an Along easement (AS 38.05.127 and 11 AAC 51.045). The purpose of this easement is to uphold the constitutional right of the public to have free access to, and use of, the State's waterways. At this site, the Along easement is 50 above and 50 feet below ordinary water line.

**Public Trust Doctrine:**

Pursuant to AS 38.05.126, all authorizations for this site will be subject to the principles of the Public Trust Doctrine; specifically, the right of the public to use navigable waterways and the land beneath them for: navigation, commerce, fishing, hunting, protection of areas for ecological studies, and other purposes. These rights must be protected to the maximum extent practicable while allowing for the development of this project. As such, SCRO is reserving the right to grant other authorizations to the subject area consistent with the Public Trust Doctrine.

**Agency Review:**

An agency review was conducted on March 9, 2017. The deadline for agency comments was March 29, 2017.

The following agencies were included in the review:

- DNR DMLW - Mining
- DNR DMLW - Water
- DNR Office of History and Archaeology/SHPO
- DNR Contract Administration
- DNR Division of Oil and Gas
- DNR Natural Resource Conservation and Development Board
- DNR Division of Parks & Recreation/Kenai River Center
- Department of Fish and Game - Habitat
- Department of Fish and Game - Wildlife Conservation
- Department of Environmental Conservation
- Department of Transportation and Public Facilities (DOT)
- Department of Community, Commerce & Economic Development/ Regional Affairs
- Environmental Protection Agency
- National Oceanic & Atmospheric Administration

- Kenai Peninsula Borough
- U.S. Army Corp of Engineers (USACE)
- U.S. Coast Guard
- U.S. Fish & Wildlife Service
- City of Kenai
- City of Seward
- Kenai Soil & Water Conservation District

ADF&G Habitat responded that they had no concerns.

USACE responded that if there will be fill effecting wetlands or waters of the federal government, a USACE permit will be needed.

No other comments were received.

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**Lease Discussion:**

The Amendment No. 1 will amend the lease ADL 217591 to include acreage relinquished by the DOT on July 19, 2016. The 2.26 acres of Right of Way (ROW) acreage was deemed to be “in excess” by the DOT and relinquished to provide the necessary acreage for the ADF&G to use allocated State Legislative Grant funds to build a new wastewater treatment system at the Trail Lakes Hatchery on leasehold ADL 217591. This relinquishment was completed via a Commissioner’s Deed of Vacation as recorded in the Seward Recording District, document number 2016-001325-0, on November 16, 2016. As this is a time sensitive project involving multiple state agencies, the completion of this Amendment will be prioritized.

ADL 217591 is an 8.61-acre lease described as Tracts A and B, ASLS 96-42, within Sections 22 & 27 of Township 5 North, Range 1 West of the Seward Meridian. This land was initially managed by a Special Use Area Permit between ADF&G and the U.S. Forest Service issued on May 24, 1979. On August 9, 1979, the DOT authorized an Encroachment Permit to ADF&G for the 80 feet they were encroaching into the DOT ROW for the Seward Highway.

On August 16, 1985, the ADF&G submitted an application to lease the site formerly permitted by the U.S. Forest Service. On February 15, 2000, a twenty-five year lease for 9.61 acres (actual correct acreage is 8.61) was issued to the ADF&G under the authority of AS 38.05.810 (a). The lease is due to expire on February 14, 2025.

SCRO recently received a request from ADF&G to add 2.26 acres to the lease site that DOT relinquished in support of the new wastewater treatment system. The new treatment plant will separate the domestic waste from the fish waste, routing the domestic waste to a holding tank/septic field system and processing the fish waste for return to the lake.

The hatchery is permitted to incubate approximately 30,000,000 Sockeye, 6,000,000 Coho and 4,000,000 Chinook fry a year. These fry are released into the wild rivers of the Kenai Peninsula for the commercial and publics enjoyment.

Based on a review of the file the lease is in compliance and as no fees are collected for this lease there are no monetary defaults.

**Development Plan:**

The Development Plan (DP) attached to this decision (Attachment A) and dated November 2016 is under consideration by SCRO. Should the proposed Amendment be granted, it is anticipated that the DP will need to be updated throughout the life of the lease as activities and/or infrastructure are added or subtracted. All updates must be approved, in writing, by SCRO before any construction, deconstruction, replacement of infrastructure, or change in activity will be permitted. SCRO reserves the right to require additional agency review and/or public notice for changes that are deemed by SCRO to be beyond the scope of this decision.

**Hazardous Materials and Potential Contaminants:**

There are two 5,000 gallon fuel tanks on site for the storage of diesel fuel used for the back-up generator. Both tanks are double-walled and are above ground, all underground fuel piping is double-walled. Up to (4) 50-gallon drums of Formalin (anti-fungal agent) is stored in heavy duty polyurethane drums in an approved room with secondary containment. Small amounts of gasoline (maximum 50-gallon) are stored in approved containers with secondary containment for the use for small pumps, lawnmowers, snowblowers etc. Domestic human waste is also generated and processed on the lease site. Fish waste is treated and returned to the lake. All trash is removed to a local land fill.

The use and storage of all hazardous substances must be done in accordance with existing federal, state, and local laws. Debris (such as soil) contaminated with used motor oil, solvents, or other chemicals may be classified as a hazardous substance, and must be removed from the site and disposed of in accordance with state and federal law.

**Lease Performance Guaranty:**

As the lease ADL 217591 is issued to the Department of Fish and Game there is no additional requirement for bonding.

**Insurance:**

As lease ADL 217591 is issued to the Department of Fish and Game there is no additional requirement for insurance.

**Survey:**

ASLS 96-42 describes the current lease site as Tracts A & B. This request for lease amendment will effectively increase the lease size by 2.26 acres, for this reason the State of Alaska is requiring a new ASLS be completed creating a new parcel. The new parcel will combine both Tract A and the 2.26 acres to reflect the increased acreage granted by the DOT relinquishment. ASLS 96-42 Tract B will remain separate. The survey shall show all applicable right of ways, public access easements and setbacks. The survey shall provide public access to and across the old highway bridge over Moose Creek. Under AS 38.05.127, a 50 foot public access easement will be depicted both above and below the ordinary high water line of Trail Lake and along both sides of Moose Creek where it intersects with the new parcel. A building setback of 100 feet on all land upwards of the ordinary high water of anadromous waters shall be maintained as per the Kenai Area Plan. All current public access to public lands, trails and waters will be maintained.

**Compensation/Appraisal:**

There are no fees associated with this lease as the lease is with another state agency pursuant to AS 38.05.810(a).

**Subleasing:**

Subleasing is permissible through AS 38.05.095, if the proposed amended lease is approved. All potential subleases must first be approved in writing by SCRO. Depending on the activity of any potential subleases, SCRO is reserving the right to reevaluate the need for further agency review and/or public notice before making a determination on the appropriateness of the proposed sublease. Sublease compensation to the State will be determined by SCRO according to AS 38.05.073(m), under the authority of AS 38.05.075(a) Leasing Procedures. In any case, the sublease fee for commercial activities will not be less than 25% of the annual fee paid to ADF&G by the sublessee. The lease will not be subleased to an entity if that entity does not meet the statutory requirements of the lease.

**Assignment of Lease:**

The proposed amended lease, if issued, may be transferred or assigned to another individual or corporation only with written approval from the State of Alaska. A lease will not be assigned to an entity if that entity does not meet the statutory requirements of the lease, or if the assignor or assignee are considered not to be in "good standing" with this or any other agency authorization.

**Reclamation:**

In accordance with AS 38.05.090 (b), all lessees must restore their leased sites to a "good and marketable condition" within a 120 days after the termination of the lease. What level of reclamation constitutes as being "good and marketable" is at the discretion of SCRO.

**Public Notice of the Preliminary Decision:**

Pursuant to AS 38.05.945, this PD will be advertised for a 30-day public comment period, starting on **April 20, 2017**. Courtesy notices will also be mailed or emailed to neighboring property owners, permit/lease holders, and other interested parties on **April 18, 2017**.

In addition, the post offices located near the site (Seward, Moose Pass, and Kenai) will be requested to post the notice per AS 38.05.945(b)(3)(B). The notice will also be posted on the State of Alaska's Online Public Notice website located at <https://aws.state.ak.us/OnlinePublicNotices/default.aspx>.

**Comment(s):**

This decision is subject to both public and agency comments, and all comments received by the comment deadline will be addressed in the FFD. Only those who comment and the applicant have the right to appeal this decision.

**Written comments about this project must be received in this office no later than  
5:00 PM on May 21, 2017 to be considered.**

To submit comments, please choose one of the following methods:

Postal: Department of Natural Resources  
Division of Mining, Land and Water  
Southcentral Region Office  
ATTN: John Cotenass  
550 West 7<sup>th</sup> Avenue, Suite 900C  
Anchorage, AK 99501-3577  
Email: john.cotenas@alaska.gov  
Fax: (907) 269-8913

Questions about the lease portion of this project can be directed to John Cotenass at (907) 269-8479.

If public comments result in significant changes to the Preliminary Decision, additional public notice will be given. To be eligible to appeal the Final Finding and Decision, a person must provide written comments during the Preliminary Decision comment period per AS 38.05.035(i)-(m).

*Signature page follows:*

**Recommendation:**

DMLW has completed a review of the information provided by the lessee, examined the relevant land management documents, and has found that this project is consistent with all applicable statutes and regulations. This decision considers goals and management intent of the Kenai Area Plan, improvements noted in the Development Plan as well as any comments submitted by interested parties. It is recommended that ADL 217591 be amended to include the additional 2.26 acres relinquished by the Department of Transportation on July 19, 2016.



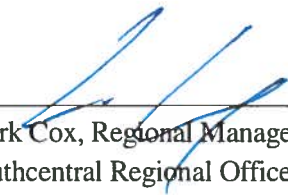
John Cotenas, Natural Resource Specialist II

4 17 2017

Date

**Preliminary Decision:**

It is the determination of the Division of Mining, Land and Water that it may be in the State's best interest to amend lease ADL 217591 to include the 2.26 acres relinquished by Department of Transportation on July 19, 2016 as described above. This application shall now proceed to public notice.



Clark Cox, Regional Manager

Southcentral Regional Office, Division of Mining, Land and Water

4-17-17

Date

**Attachments**

Attachment A – Development Plan

Attachment B – Location Map

Attachment C - Relinquishment Plat



# Attachment A Development Plan

## 1.0 Introduction

### Cook Inlet Aquaculture Association

Cook Inlet Aquaculture Association (CIAA) is a private, non-profit, 501(c)(3), corporation organized under the laws of the State of Alaska and has been operating since 1976. The corporation is engaged in salmon enhancement and rehabilitation efforts throughout the Cook Inlet region. CIAA operates salmon hatcheries in the Cook Inlet area and performs other monitoring and rehabilitation efforts such as smolt and adult enumeration, water quality monitoring, lake fertilization, removal of beaver dams, harvest and control of invasive northern pike and plants, and construction of fish ladders and fishways.

CIAA is funded through three different sources. Firstly, CIAA is allowed by statute to license the harvest of returning adult salmon within designated hatchery Special Harvest Areas. Secondly, Cook Inlet (Area H) commercial fishermen elected to establish a tax of 2% on their salmon landings. This tax, known as the salmon enhancement tax (SET) is allocated to CIAA through a state monitored program. Finally, CIAA applies for and receives a number of grants and contracts to perform a variety of monitoring and research projects.

CIAA operates two state-owned hatcheries (Trail Lakes Hatchery and Tutka Bay Lagoon Hatchery) and two CIAA-owned hatcheries (Eklutna Salmon Hatchery and Port Graham Hatchery). Trail Lakes Hatchery is permitted for 30 million green sockeye salmon eggs, 6 million green coho salmon eggs and 4 million green Chinook salmon eggs. Tutka Bay Lagoon Hatchery is permitted for 125 million green pink salmon eggs. Port Graham Hatchery is also permitted for 125 million green pink salmon eggs. Eklutna Salmon Hatchery is currently permitted to rear 20 million green sockeye salmon eggs and 1.1 million coho salmon eggs.

### Trail Lakes Hatchery

CIAA operates the Trail Lakes Hatchery (TLH) located near Moose Pass, Alaska, on the Kenai Peninsula (Figure 1 and 2) under the Private Non-Profit (PNP) permit no. 27. CIAA has been operating this facility since 1988. Appendix 1 illustrates the fish production history during this time. This facility is unique in that all releases occur to satellite locations both in the Upper and Lower Cook Inlet regions.

CIAA operates the Trail Lakes Hatchery under a 20 year renewable contract with the Alaska Department of Fish and Game (ADF&G) (IHP 88-228( expires 2028); PNP #27). The land which the hatchery sits on is leased from the Alaska Department of Natural Resources (ADNR) by ADF&G (ADL 217591) which expires on February 14, 2025 with an option to renew. There is an Alaska Department of Transportation (ADOT) Right-Of-Way (ROW) (R/W ID#318.108) which the hatchery also resides on.

A land survey completed by Henning Johnson Surveying in 1997, discovered and made ADNR aware that Plat No. 81-7 was incorrect and several improvements including a large portion of the Hatchery Building were located within the ROW. Internal correspondence to ADNR from ADOT suggested ADOT would be agreeable to permit all improvements/encroachments rather than entertain a vacation of the ROW. ADOT opinion at this time was to retain the old Highway alignment easement for a potential rest area at the Hatchery site.

In 2016, TLH began investigating methods to improve the handling of both domestic and fish waste at the facility. The best location for a wastewater treatment system due to suitable soil conditions is located within the ROW. CIAA approached ADOT to discuss the vacation of the ROW. In July 2016, ADOT issued a Decisional Summary indicating that the ROW is in excess and it is in the best interest to create a parcel to relinquish approximately 2.26 acres to DNR for management. This will require an amendment to ADL 217591.

## 2.0 Legal Description

The parcel of land is described as Township 5 North, Range 1 West, Sections 22 & 27 Seward Meridian.

## 3.0 Terrain/Ground Cover

The Trail Lakes Hatchery lease consists of two tracts (Tract A and B) as per Alaska State Land Survey No. 96-42 which are separated by the Seward Highway. Kenai Peninsula Borough records the two tracts as 19.037 acres minus the 5.829 as Highway ROW leaving a net of 13.208 acres.

Development of the hatchery already includes the following: (1) a main building that encompasses the office, aeration towers, incubation, indoor raceways, boiler, generator, fuel tanks, storage/shop and current wastewater treatment system ; (2) outdoor raceways; (3) an expansion building housing fish rearing troughs; (4) a road that enters

off Seward Highway and encompasses all sides of the hatchery complex and to the hatchery residences, (5) five developed wells; (6) a small storage shed and (8) two houses for staff to live on site (see Figure 1, 2 and 3).

Planned new development (Figure 4) will begin the phase-in replacement of the current wastewater treatment system. Phase 1 will separate the domestic waste from the fish effluent. Phase 2 will upgrade the current wastewater treatment system located within the hatchery building. Phase 2 is not yet engineered but it is expected that all upgrades will take place within the current building's footprint.

#### 4.0 Access

Access to the hatchery occurs off the Seward Highway. Access is open but the main hatchery building and secondary buildings are locked during non-working hours. The outdoor raceways are fenced.

Public access to the facility is restricted and monitored for disease control (preventing the spread of pathogens which may harm the fish).

#### 5.0 Buildings and Other Structures

The TLH building and office complex is a 14,300 square foot structure that includes offices, bathrooms, employee break room, incubation modules, aeration tower, mechanical rooms, workshops, some inside rearing capabilities and all hatchery and housing waste treatment equipment. The hatchery is wood frame construction on a concrete foundation.

In 2004-2005, a 2,750 square foot un-insulated expansion building was constructed to house additional rearing troughs (18 tanks approximately 12' long x 3.5' wide). Outside and adjacent to the building in a fenced area lies 32 outdoor raceways approximately 22' long x 4' wide and 6 longer raceways measuring 50' long x 4' wide.

There is one small storage shed and two identical 1,750 square foot, 3 bedroom, 1 bathroom, single floor residences on site.

There are also five developed groundwater wells on site located on 2 well pads which supply the hatchery process water. These well pads are located on Tract B of the ALS 96-42 across the Seward Highway from the hatchery (see Figure 1).

## 6.0 Power Source

Electrical service enters the hatchery in the mechanical room adjacent to the office. It is 800 amp, 277/480 volt, three phase 4 wire service fed from a 300 KVA transformer provided by Chugach Electric Association just outside the hatchery. The service enters the main distribution panel (MDP) where it provides power to the two well pads, A & B, to two high voltage panels (HVP 1 & 2) and to two low voltage panels (LVP 1 & 2).

The power supplied is sufficient for any planned upgrades to electrical demands during the planned renovation.

## 7.0 Waste Types, Waste Sources and Disposal Methods

The following waste types will be generated at the Hatchery:

- waste water from hatchery operations
- human waste (septic and garbage) including that generated from the two residences.

Currently, all hatchery effluent is discharged through one 24-inch pipe along the western shore of Upper Trail Lake. All incubation and raceway drain water and treated domestic wastewater combine into one main pipe that is designed to be passed through drum filters and UV disinfection before discharge. The filter backwash is designed to be routed through a Parkson Lamella Gravity Settler, where solids can be removed and disposed of at a public landfill.

Domestic wastewater from the hatchery building and two residences is treated by a secondary treatment plant. The treatment process includes influent screening, primary settling, aeration and secondary settling. The treated waste is combined with the hatchery effluent and designed to be routed through the drum filters and UV system before discharge to Upper Trail Lake.

Proposed construction will separate the domestic and fish waste and improve and upgrade the treatment of both waste sources. Phase 1 of the construction consists of collecting all domestic waste from the hatchery and houses and directing it to a new 400 gallon septic tank/lift station. Waste will then be transferred from the lift station to a 2,000 gallon recirculation tank before entering an Orenco AX-100 Treatment pod. After treatment wastewater will be discharged to a septic leach field.

Garbage is removed weekly to the nearby transfer station.

## 8.0 Hazardous Wastes

There are two fuel tanks (10,000 gallons) on site for the storage of diesel fuel used for the back-up generator. Both tanks are double-walled and are above ground. Fuel is pumped to a 275-gallon day tank in the main mechanical room that serves all the systems. All underground piping is double-wall and above ground piping is single-wall, with containment sumps where piping changes from single- to double-wall.

Formalin (anti-fungal agent) is stored in 50 gallon drums (heavy duty polyurethane drums) in an approved room with secondary containment. A maximum of four barrels are stored on site in a separate ventilated room with controlled access. Distribution of formalin for incubation is completed using a peristaltic pump and manifold distribution center.

Small amounts of gasoline (maximum 50 gallon) are stored in approved containers with secondary containment for the use for small pumps, lawnmowers, snowblowers etc.

## 9.0 Water Source

Water rights have already been permitted (ADL 201554). This water is distributed to the hatchery operations using five drilled wells. Domestic water is taken from the main hatchery water supply.

## 10.0 Parking Areas and Storage Areas

Company and staff vehicles are parked in front of the hatchery building and access is currently available for this. Most storage requirements are encompassed into the existing hatchery building (feed storage, equipment storage) and an outside gravel pad.

## 11.0 Number of People on Site

Staff will be on site from the start of fish production operations every day of the week for at least an eight hour time period. Two staff members reside in provided residences to respond to alarms outside of normal working hours. Up to four full time staff will be employed, with up to one more being required seasonally for stocking and eggtake/egg picking tasks.

During phase 1 and 2 of the wastewater treatment renovation, additional contractors will be on site during normal working hours.

## 12.0 Maintenance and Operations

Day-to-day operations (feeding, cleaning, removal of mortalities, water quality monitoring) and some routine maintenance will be performed by CIAA staff members. On occasions, contractors will be hired to perform more in-depth repairs and technical service to the generators, boilers and UV systems. Approximately every year, a well will be redeveloped on a rotational basis requiring well drillers to be on site for 7 to 10 days.

## 13.0 Closure/Reclamation Plan

In the event that CIAA determines Trail Lakes Hatchery is no longer viable for its operations, CIAA will coordinate the transition with ADF&G to minimize the impact on the hatchery operation. All aspects of the lease with ADNR are described in ADL No. 217591 Attachment B Section 18. Renewal of Leasehold; Reclamation Plan.

## FIGURES

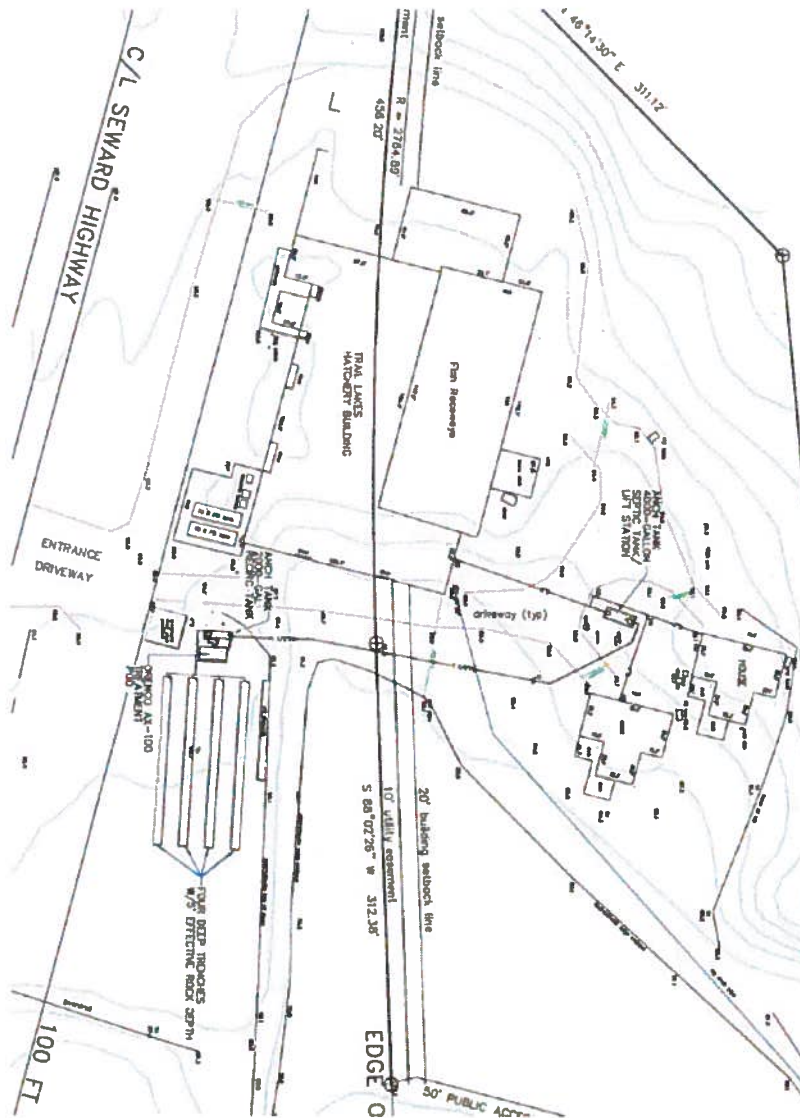


**Figure 1. Google Earth overview of Trail Lakes Hatchery.**



**Figure 2. Overview of Trail Lakes Hatchery.**





**Figure 4 - Proposed Phase 1 Wastewater Treatment System Renovation**

# APPENDIX

## Appendix 1. Summary of Fish Releases from Trail Lakes Hatchery.

Sockeye Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2015	Bear Lk.	2,374,000	Fry	2016	Bear Lk.
		TBD	Smolt	2017	Resurrection Bay
2014	Bear Lk.	2,415,000	Fry	2015	Bear Lk.
		1,680,165	Smolt	2016	Resurrection Bay
2013	Bear Lk.	2,405,000	Fry	2014	Bear Lk.
		1,758,000	Smolt	2015	Resurrection Bay
2012	Bear Lk.	2,548,000	Fry	2013	Bear Lk.
		1,742,000	Smolt	2014	Resurrection Bay
2011	Bear Lk.	2,490,000	Fry	2012	Bear Lk.
		2,090,000	Smolt	2013	Resurrection Bay
2010	Bear Lk.	2,488,000	Fry	2011	Bear Lk.
		1,305,000	Smolt	2012	Resurrection Bay
2009	Bear Lk.	2,200,000	Fry	2010	Bear Lk.
2008	Bear Lk.	2,543,000	Fry	2009	Bear Lk.
		1,650,000	Smolt	2010	Resurrection Bay
2007	Bear Lk.	2,400,000	Fry	2008	Bear Lk.
		1,675,000	Smolt	2009	Resurrection Bay
2006	Bear Lk.	2,437,000	Fry	2007	Bear Lk.
		1,600,000	Smolt	2008	Resurrection Bay
2005	Bear Lk.	2,414,000	Fry	2006	Bear Lk.
		619,000	Smolt	2007	Bear Lk.
2004	Bear Lk.	2,416,000	Fry	2005	Bear Lk.
		604,000	Fall Fry	2005	Bear Lk.
		979,000	Smolt	2006	Bear Lk.
2003	Bear Lk.	2,409,000	Fry	2004	Bear Lk.
		603,000	Fall Fry	2004	Bear Lk.
		402,000	Smolt	2005	Bear Lk.
2002	Bear Lk.	1,467,000	Fry	2003	Bear Lk.
2001	Bear Lk.	2,408,000	Fry	2002	Bear Lk.
		802,000	Fall Fry	2002	Bear Lk.
		334,000	Smolt	2003	Bear Lk.
2000	Bear Lk.	145,000	Fry	2001	Bear Lk.
1999	Bear Lk.	1,796,000	Fry	2000	Bear Lk.
1998	Bear Lk.	1,380,000	Fry	1999	Bear Lk.
1997	Bear Lk.	265,000	Fry	1998	Bear Lk.
1996	Bear Lk.	788,000	Fry	1997	Bear Lk.
1995	Bear Lk.	781,000	Fry	1996	Bear Lk.
1994	Bear Lk.	330,000	Fry	1995	Bear Lk.
1993	Bear Lk.	170,000	Fry	1994	Bear Lk.
1992	Bear Lk.	44,000	Fry	1993	Bear Lk.
1992	S. Fork Big R.	1,766,000	Fry	1993	Bear Lk.
1991	S. Fork Big R.	878,000	Fry	1992	Bear Lk.
		565,000	Smolt	1992	Bear Lk.
1991	U. Russian Lk.	917,000	Fry	1992	Bear Lk.
1990	S. Fork Big R.	75,000	Smolt	1991	Bear Lk.
1990	U. Russian Lk.	1,530,000	Fry	1991	Bear Lk.
1989	S. Fork Big R.	2,191,000	Fry	1990	Bear Lk.
		191,000	Fry	1990	S. Fork Big R.
		159,000	Smolt	1990	Bear Lk.
1989	U. Russian Lk.	20,000	Fry	1990	Bear Lk.

Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.

Sockeye Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2015	Hidden Lk.	1,231,000	Fry	2016	Hidden Lk.
2014	Hidden Lk.	1,497,000	Fry	2015	Hidden Lk.
2013	Hidden Lk.	1,540,000	Fry	2014	Hidden Lk.
2012	Hidden Lk.	860,000	Fry	2013	Hidden Lk.
2011	Hidden Lk.	948,000	Fry	2012	Hidden Lk.
2010	Hidden Lk.	1,044,000	Fry	2011	Hidden Lk.
2009	Hidden Lk.	880,000	Fry	2010	Hidden Lk.
		255,000	Fry	2010	Kirschner Lk.
		1,933,000	Fry	2010	Leisure Lk.
		1,218,000	Fry	2010	Hazel Lk.
2008	Hidden Lk.	911,000	Fry	2009	Hidden Lk.
		1,225,000	Fry	2009	Leisure Lk.
		1,186,000	Fry	2009	Hazel Lk.
		278,000	Smolt	2010	Tutka Bay Lagoon
2007	Hidden Lk.	917,000	Fry	2008	Hidden Lk.
		300,000	Fry	2008	Kirschner Lk.
		2,053,000	Fry	2008	Leisure Lk.
		1,161,000	Fry	2008	Hazel Lk.
		301,000	Smolt	2009	Tutka Bay Lagoon
2006	Hidden Lk.	658,000	Fry	2007	Hidden Lk.
		254,000	Fry	2007	Kirschner Lk.
		2,315,000	Fry	2007	Leisure Lk.
		1,411,000	Fry	2007	Hazel Lk.
		480,000	Smolt	2008	Tutka Bay Lagoon
2005	Hidden Lk.	582,000	Fry	2006	Hidden Lk.
		680,000	Fry	2006	Leisure Lk.
		144,000	Smolt	2007	Tutka Bay Lagoon
2004	Hidden Lk.	573,000	Fry	2005	Hidden Lk.
		316,000	Fry	2005	Kirschner Lk.
		2,252,000	Fry	2005	Leisure Lk.
		1,558,000	Fry	2005	Hazel Lk.
		260,000	Smolt	2006	Tutka Bay Lagoon
2003	Hidden Lk.	646,000	Fry	2004	Hidden Lk.
		96,000	Smolt	2005	Tutka Bay Lagoon
2002	Hidden Lk.	629,000	Fry	2003	Hidden Lk.
2001	Hidden Lk.	980,000	Fry	2002	Hidden Lk.
2000	Hidden Lk.	906,000	Fry	2001	Hidden Lk.
1999	Hidden Lk.	1,242,000	Fry	2000	Hidden Lk.
1998	Hidden Lk.	1,507,000	Fry	1999	Hidden Lk.
1997	Hidden Lk.	1,035,000	Fry	1998	Hidden Lk.
1996	Hidden Lk.	1,051,000	Fry	1997	Hidden Lk.
1995	Hidden Lk.	1,600,000	Fry	1996	Hidden Lk.
1994	Hidden Lk.	1,700,000	Fry	1995	Hidden Lk.
1993	Hidden Lk.	1,800,000	Fry	1994	Hidden Lk.
1992	Hidden Lk.	1,901,000	Fry	1993	Hidden Lk.
1991	Hidden Lk.	1,716,000	Fry	1992	Hidden Lk.
1990	Hidden Lk.	1,600,000	Fry	1991	Hidden Lk.
1989	Hidden Lk.	1,748,000	Fry	1990	Hidden Lk.

Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.

Sockeye Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2014	English Bay Lakes	200,200	Fall Fry	2015	English Bay Lakes
		531,625	Smolt	2016	Tutka Bay Lagoon
2013	English Bay Lakes	209,000	Fall Fry	2014	English Bay Lakes
		523,500	Smolt	2015	Tutka Bay Lagoon
		217,000	Fry	2014	Kirschner Lk.
		725,000	Fry	2014	Hazel Lk.
2012	English Bay Lakes	211,000	Fall Fry	2013	English Bay Lakes
2011	English Bay Lakes	1,240,000	Fry	2012	Hazel Lk.
		213,000	Fall Fry	2012	English Bay Lakes
		511,000	Smolt	2013	Tutka Bay Lagoon
		102,000	Smolt	2013	Port Graham Bay
2010	English Bay Lakes	160,000	Fry	2011	Kirschner Lk.
		203,300	Fall Fry	2011	English Bay Lakes
		371,300	Smolt	2012	Tutka Bay Lagoon
2009	English Bay Lakes	202,000	Fall Fry	2010	English Bay Lakes
		58,200	Smolt	2011	Tutka Bay Lagoon
2007	English Bay Lakes	246,000	Fall Fry	2008	English Bay Lakes
		112,000	Smolt	2009	Port Graham Bay
2004	English Bay Lakes	203,000	Fall Fry	2005	English Bay Lakes
		499,000	Smolt	2006	Port Graham Bay
2015	Tutka Bay Lagoon (EBL)	185,000	Fry	2016	Kirschner
		TBD	Smolt	2017	Tutka Bay Lagoon
		TBD	Smolt	2017	Tutka Bay Lagoon
2014	Tutka Bay Lagoon (EBL)	237,000	Fry	2015	Kirschner Lk.
		621,000	Fry	2015	Hazel Lk.
		1,051,000	Fry	2015	Leisure Lk.
2013	Tutka Bay Lagoon (EBL)	725,000	Fry	2014	Hazel Lk.
		1,353,000	Fry	2014	Leisure Lk.
2012	Tutka Bay Lagoon (HL)	1,450,000	Fry	2013	Hazel Lk.
		1,800,000	Fry	2013	Leisure Lk.
2011	Tutka Bay Lagoon (HL)	2,074,000	Fry	2012	Leisure Lk.
2010	Tutka Bay Lagoon	1,244,000	Fry	2011	Hazel Lk.
		1,415,000	Fry	2011	Leisure Lk.
2009	Tutka Bay Lagoon	26,600	Smolt	2011	Tutka Bay Lagoon
2008	Tutka Bay Lagoon				
2012	Shell Lake	80,000	Smolt	2014	Shell Lake

Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.

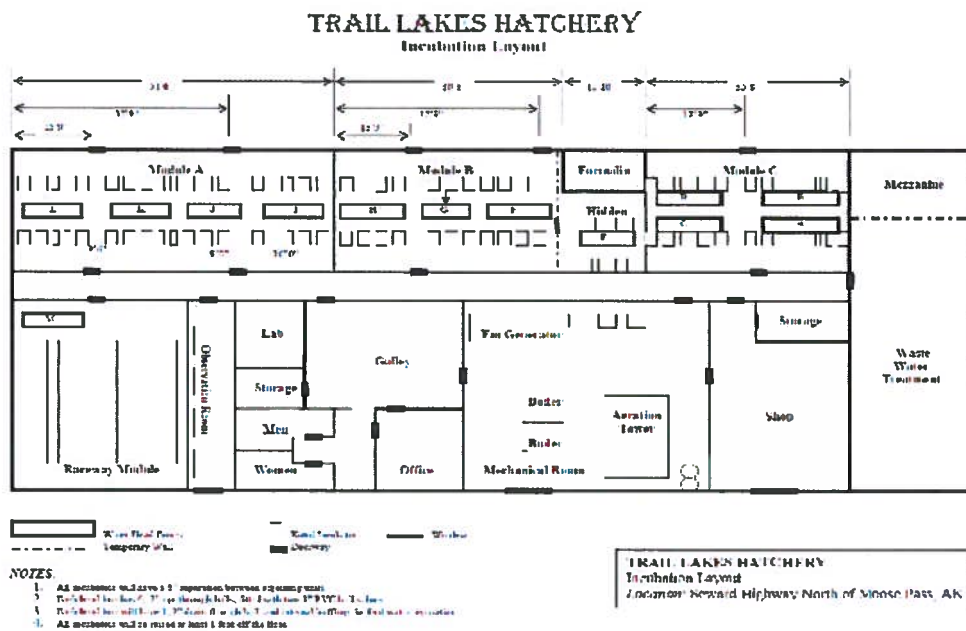
Sockeye Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2007	Big Lk.	3,610,000	Fry	2008	Big Lk.
2006	Big Lk.	3,812,000	Fry	2007	Big Lk.
		703,000	Fall Fry	2007	Big Lk.
2005	Big Lk.	444,000	Fry	2006	Big Lk.
		426,000	Fall Fry	2006	Big Lk.
		316,000	Smolt	2007	Big Lk.
2004	Big Lk.	1,742,000	Fry	2005	Big Lk.
2003	Big Lk.	5,004,000	Fry	2004	Big Lk.
2002	Big Lk.	3,589,000	Fry	2003	Big Lk.
2001	Big Lk.	4,316,000	Fry	2002	Big Lk.
2000	Big Lk.	0	Fry	2001	Big Lk.
1999	Big Lk.	846,000	Fry	2000	Big Lk.
1998	Big Lk.	197,000	Fry	1999	Big Lk.
1995	Chelatna Lk.	1,042,000	Fry	1996	Chelatna Lk.
1994	Chelatna Lk.	1,806,000	Fry	1995	Chelatna Lk.
1993	Chelatna Lk.	1,330,000	Fry	1994	Chelatna Lk.
1992	Chelatna Lk.	1,003,000	Fry	1993	Chelatna Lk.
1991	Chelatna Lk.	1,138,000	Fry	1992	Chelatna Lk.
1990	Chelatna Lk.	635,000	Fry	1991	Chelatna Lk.
1989	Chelatna Lk.	503,000	Fry	1990	Chelatna Lk.
1997	Packers Lk.	0			Grouse Lk.
1996	Packers Lk.	500,000	Eggs	1996	Tutka Hatchery
1996		247,000	Fry	1997	Packers Lk.
1996		381,000	Fall Fry	1997	Packers Lk.
1996		609,000	Smolt	1998	Grouse Lk.
1995	Packers Lk.	246,000	Fry	1996	Packers Lk.
1995		442,000	Fall Fry	1996	Packers Lk.
1995		1,170,000	Smolt	1997	Grouse Lk.
1994	Packers Lk.	511,000	Fry	1995	Packers Lk.
1994		1,041,000	Fall Fry	1995	Packers Lk.
1993	Packers Lk.	2,779,000	Fry	1994	Packers Lk.
1993		710,000	Smolt	1995	Grouse Lk.
1992	Packers Lk.	3,266,000	Fry	1993	Packers Lk.
		570,000	Smolt	1994	Grouse Lk.
1991	Packers Lk.	3,172,000	Fry	1992	Packers Lk.
1990	Packers Lk.	2,505,000	Fry	1991	Packers Lk.

**Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.**

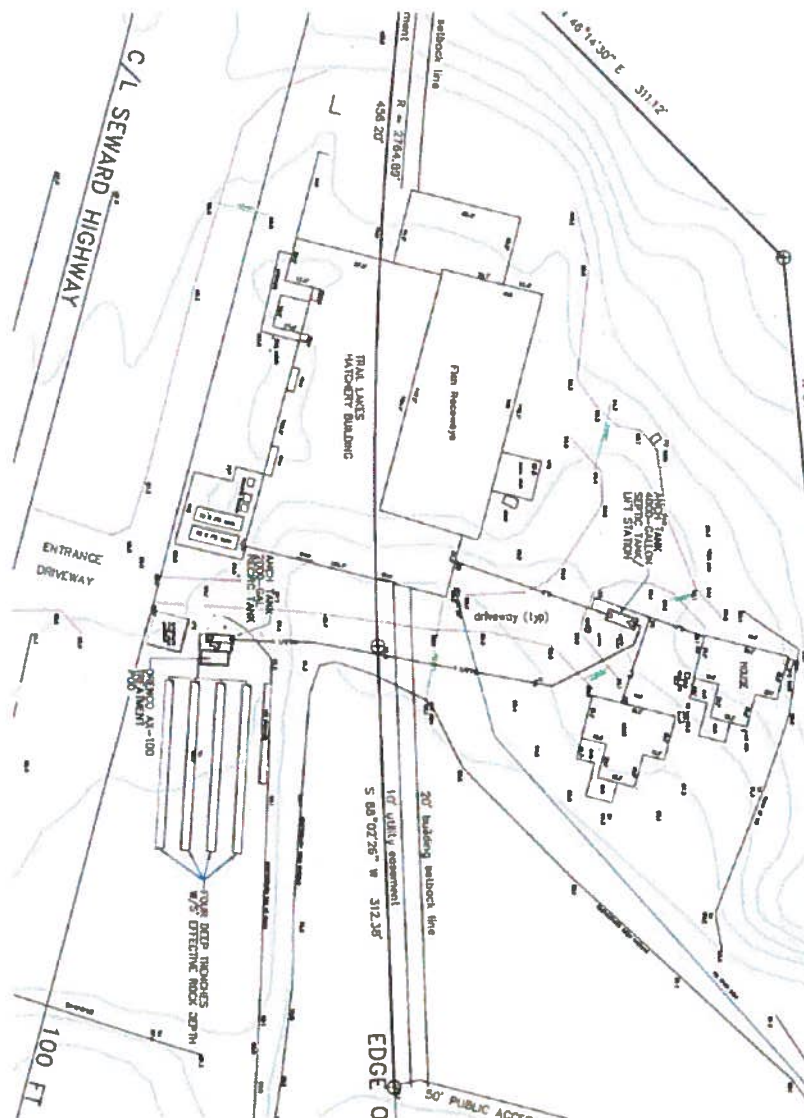
<b>Sockeye Salmon</b>					
<b>Brood Year</b>	<b>Brood Stock</b>	<b>Number Released</b>	<b>Life Stage</b>	<b>Release Year</b>	<b>Release Site</b>
2003	Tustumena Lk.	6,006,000	Fry	2004	Tustumena Lk.
		251,000	Fry	2004	Kirschner Lk.
		2,002,000	Fry	2004	Leisure Lk.
		351,000	Fry	2004	Hazel Lk.
2002	Tustumena Lk.	6,024,000	Fry	2003	Tustumena Lk.
		298,000	Fry	2003	Kirschner Lk.
		2,240,000	Fry	2003	Leisure Lk.
		1,547,000	Fry	2003	Hazel Lk.
2001	Tustumena Lk.	6,065,000	Fry	2002	Tustumena Lk.
		302,000	Fry	2002	Kirschner Lk.
		2,246,000	Fry	2002	Leisure Lk.
		1,280,000	Fry	2002	Hazel Lk.
		508,000	Fall Fry	2002	U. Paint Lk.
2000	Tustumena Lk.	89,000	Fry	2001	Leisure Lk.
1999	Tustumena Lk.	5,432,000	Fry	2000	Tustumena Lk.
		249,000	Fry	2000	Kirschner Lk.
		1,708,000	Fry	2000	Leisure Lk.
		1,248,000	Fry	2000	Hazel Lk.
1998	Tustumena Lk.	5,948,000	Fry	1999	Tustumena Lk.
		173,000	Fry	1999	Kirschner Lk.
		265,000	Fry	1999	Leisure Lk.
		453,000	Fry	1999	Hazel Lk.
1997	Tustumena Lk.	4,558,000	Fry	1998	Tustumena Lk.
1996	Tustumena Lk.	6,013,000	Fry	1997	Tustumena Lk.
		679,000	Smolt	1998	Grouse Lk.
		507,000	Smolt	1998	Bear Ck.
1995	Tustumena Lk.	796,000	Smolt	1997	Grouse Lk.
1994	Tustumena Lk.				Grouse Lk. & Coal Ck.
1993	Tustumena Lk.	151,000	Smolt	1995	Coal Ck.
		83,000	Smolt	1995	Grouse Lk.
1991	Tustumena Lk.				Coal Ck.
1990	Tustumena Lk.	66,000	Smolt	1992	Coal Ck.

Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.

Coho Salmon					
Brood Year	Brood Stock	Number Released	Lift Stage	Release Year	Release Site
2015	Bear Lk.	446,600	Fry	2016	Bear Lk.
		TBD	Smolt	2017	Bear Ck.
2014	Bear Lk.	448,000	Fry	2015	Bear Lk.
		100,000	Smolt	2016	Bear Ck.
2013	Bear Lk.	468,000	Fry	2014	Bear Lk.
		98,000	Smolt	2015	Bear Ck.
2012	Bear Lk.	405,000	Fry	2013	Bear Lk.
		55,000	Smolt	2014	Bear Ck.
2011	Bear Lk.	222,000	Fry	2012	Bear Lk.
2010	Bear Lk.	437,000	Fry	2011	Bear Lk.
		93,000	Smolt	2012	Bear Ck.
2009	Bear Lk.	435,000	Fry	2010	Bear Lk.
2008	Bear Lk.	270,000	Fry	2009	Bear Lk.
2007	Bear Lk.	360,000	Fry	2008	Bear Lk.
		68,000	Smolt	2009	Bear Ck.
		111,000	Smolt	2009	Homer Spit
2006	Bear Lk.	521,000	Fry	2007	Bear Lk.
		142,000	Smolt	2008	Bear Ck.
		95,000	Smolt	2008	Homer Spit
		88,000	Smolt	2008	Seldovia
2005	Bear Lk.	447,000	Fry	2006	Bear Lk.
		237,000	Smolt	2007	Bear Ck.
		101,000	Smolt	2007	Homer Spit
		97,000	Smolt	2007	Seldovia
2004	Bear Lk.	405,000	Fry	2005	Bear Lk.
		115,000	Smolt	2006	Bear Ck.
		324,000	Smolt	2006	Homer Spit
		114,000	Smolt	2006	Seldovia
		146,000	Smolt	2006	Lowell Falls
2003	Bear Lk.	406,000	Fry	2004	Bear Lk.
		488,000	Smolt	2005	Bear Ck.
		95,000	Smolt	2005	Homer Spit
2002	Bear Lk.	405,000	Fry	2003	Bear Lk.
		285,000	Smolt	2004	Bear Ck.
		192,000	Smolt	2004	Res. Bay
		113,000	Smolt	2004	Homer Spit
2001	Bear Lk.	405,000	Fry	2002	Bear Lk.
		233,000	Smolt	2003	Bear Ck.
		153,000	Smolt	2003	Homer Spit
2000	Bear Lk.	311,000	Fry	2001	Bear Lk.
		124,000	Smolt	2002	Bear Lk.
1999	Bear Lk.	316,000	Fry	2000	Bear Lk.
		121,000	Smolt	2001	Bear Ck.
1998	Bear Lk.	306,000	Fry	1999	Bear Lk.
		102,000	Smolt	2000	Bear Ck.
1997	Bear Lk.	409,000	Fry	1998	Bear Lk.
		51,000	Smolt	1999	Bear Ck.
1996	Bear Lk.	449,000	Fry	1997	Bear Lk.
		177,000	Smolt	1998	Bear Ck.
1995	Bear Lk.	350,000	Fry	1996	Bear Lk.
		153,000	Smolt	1997	Bear Ck.
1994	Bear Lk.	330,000	Fry	1995	Bear Lk.
		75,000	Smolt	1996	Bear Ck.
1993	Bear Lk.	335,000	Fry	1994	Bear Lk.
		7,000	Smolt	1995	Bear Ck.
1992	Bear Lk.	621,000	Fry	1993	Bear Lk. & Bear Ck.
1991	Bear Lk.	204,000	Fry	1992	Bear Ck.
1990	Bear Lk.	390,000	Fry	1991	Bear Lk.
		52,000	Smolt	1992	Bear Ck.
1989	Bear Lk.	333,000	Fry	1990	Bear Lk.



**Figure 3. Main Hatchery Building - layout details**



# APPENDIX

## Appendix 1. Summary of Fish Releases from Trail Lakes Hatchery.

Sockeye Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2015	Bear Lk.	2,374,000	Fry	2016	Bear Lk.
		TBD	Smolt	2017	Resurrection Bay
2014	Bear Lk.	2,415,000	Fry	2015	Bear Lk.
		1,680,165	Smolt	2016	Resurrection Bay
2013	Bear Lk.	2,405,000	Fry	2014	Bear Lk.
		1,758,000	Smolt	2015	Resurrection Bay
2012	Bear Lk.	2,548,000	Fry	2013	Bear Lk.
		1,742,000	Smolt	2014	Resurrection Bay
2011	Bear Lk.	2,490,000	Fry	2012	Bear Lk.
		2,090,000	Smolt	2013	Resurrection Bay
2010	Bear Lk.	2,488,000	Fry	2011	Bear Lk.
		1,305,000	Smolt	2012	Resurrection Bay
2009	Bear Lk.	2,200,000	Fry	2010	Bear Lk.
2008	Bear Lk.	2,543,000	Fry	2009	Bear Lk.
		1,650,000	Smolt	2010	Resurrection Bay
2007	Bear Lk.	2,400,000	Fry	2008	Bear Lk.
		1,675,000	Smolt	2009	Resurrection Bay
2006	Bear Lk.	2,437,000	Fry	2007	Bear Lk.
		1,600,000	Smolt	2008	Resurrection Bay
2005	Bear Lk.	2,414,000	Fry	2006	Bear Lk.
		619,000	Smolt	2007	Bear Lk.
2004	Bear Lk.	2,416,000	Fry	2005	Bear Lk.
		604,000	Fall Fry	2005	Bear Lk.
		979,000	Smolt	2006	Bear Lk.
2003	Bear Lk.	2,409,000	Fry	2004	Bear Lk.
		603,000	Fall Fry	2004	Bear Lk.
		402,000	Smolt	2005	Bear Lk.
2002	Bear Lk.	1,467,000	Fry	2003	Bear Lk.
2001	Bear Lk.	2,408,000	Fry	2002	Bear Lk.
		802,000	Fall Fry	2002	Bear Lk.
		334,000	Smolt	2003	Bear Lk.
2000	Bear Lk.	145,000	Fry	2001	Bear Lk.
1999	Bear Lk.	1,796,000	Fry	2000	Bear Lk.
1998	Bear Lk.	1,380,000	Fry	1999	Bear Lk.
1997	Bear Lk.	265,000	Fry	1998	Bear Lk.
1996	Bear Lk.	788,000	Fry	1997	Bear Lk.
1995	Bear Lk.	781,000	Fry	1996	Bear Lk.
1994	Bear Lk.	330,000	Fry	1995	Bear Lk.
1993	Bear Lk.	170,000	Fry	1994	Bear Lk.
1992	Bear Lk.	44,000	Fry	1993	Bear Lk.
1992	S. Fork Big R.	1,766,000	Fry	1993	Bear Lk.
1991	S. Fork Big R.	878,000	Fry	1992	Bear Lk.
		565,000	Smolt	1992	Bear Lk.
1991	U. Russian Lk.	917,000	Fry	1992	Bear Lk.
1990	S. Fork Big R.	75,000	Smolt	1991	Bear Lk.
1990	U. Russian Lk.	1,530,000	Fry	1991	Bear Lk.
1989	S. Fork Big R.	2,191,000	Fry	1990	Bear Lk.
		191,000	Fry	1990	S. Fork Big R.
		159,000	Smolt	1990	Bear Lk.
1989	U. Russian Lk.	20,000	Fry	1990	Bear Lk.

Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.

Sockeye Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2015	Hidden Lk.	1,231,000	Fry	2016	Hidden Lk.
2014	Hidden Lk.	1,497,000	Fry	2015	Hidden Lk.
2013	Hidden Lk.	1,540,000	Fry	2014	Hidden Lk.
2012	Hidden Lk.	860,000	Fry	2013	Hidden Lk.
2011	Hidden Lk.	948,000	Fry	2012	Hidden Lk.
2010	Hidden Lk.	1,044,000	Fry	2011	Hidden Lk.
2009	Hidden Lk.	880,000	Fry	2010	Hidden Lk.
		255,000	Fry	2010	Kirschner Lk.
		1,933,000	Fry	2010	Leisure Lk.
		1,218,000	Fry	2010	Hazel Lk.
2008	Hidden Lk.	911,000	Fry	2009	Hidden Lk.
		1,225,000	Fry	2009	Leisure Lk.
		1,186,000	Fry	2009	Hazel Lk.
		278,000	Smolt	2010	Tutka Bay Lagoon
2007	Hidden Lk.	917,000	Fry	2008	Hidden Lk.
		300,000	Fry	2008	Kirschner Lk.
		2,053,000	Fry	2008	Leisure Lk.
		1,161,000	Fry	2008	Hazel Lk.
		301,000	Smolt	2009	Tutka Bay Lagoon
2006	Hidden Lk.	658,000	Fry	2007	Hidden Lk.
		254,000	Fry	2007	Kirschner Lk.
		2,315,000	Fry	2007	Leisure Lk.
		1,411,000	Fry	2007	Hazel Lk.
		480,000	Smolt	2008	Tutka Bay Lagoon
2005	Hidden Lk.	582,000	Fry	2006	Hidden Lk.
		680,000	Fry	2006	Leisure Lk.
		144,000	Smolt	2007	Tutka Bay Lagoon
2004	Hidden Lk.	573,000	Fry	2005	Hidden Lk.
		316,000	Fry	2005	Kirschner Lk.
		2,252,000	Fry	2005	Leisure Lk.
		1,558,000	Fry	2005	Hazel Lk.
		260,000	Smolt	2006	Tutka Bay Lagoon
2003	Hidden Lk.	646,000	Fry	2004	Hidden Lk.
		96,000	Smolt	2005	Tutka Bay Lagoon
2002	Hidden Lk.	629,000	Fry	2003	Hidden Lk.
2001	Hidden Lk.	980,000	Fry	2002	Hidden Lk.
2000	Hidden Lk.	906,000	Fry	2001	Hidden Lk.
1999	Hidden Lk.	1,242,000	Fry	2000	Hidden Lk.
1998	Hidden Lk.	1,507,000	Fry	1999	Hidden Lk.
1997	Hidden Lk.	1,035,000	Fry	1998	Hidden Lk.
1996	Hidden Lk.	1,051,000	Fry	1997	Hidden Lk.
1995	Hidden Lk.	1,600,000	Fry	1996	Hidden Lk.
1994	Hidden Lk.	1,700,000	Fry	1995	Hidden Lk.
1993	Hidden Lk.	1,800,000	Fry	1994	Hidden Lk.
1992	Hidden Lk.	1,901,000	Fry	1993	Hidden Lk.
1991	Hidden Lk.	1,716,000	Fry	1992	Hidden Lk.
1990	Hidden Lk.	1,600,000	Fry	1991	Hidden Lk.
1989	Hidden Lk.	1,748,000	Fry	1990	Hidden Lk.

**Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.**

<b>Sockeye Salmon</b>					
<b>Brood Year</b>	<b>Brood Stock</b>	<b>Number Released</b>	<b>Life Stage</b>	<b>Release Year</b>	<b>Release Site</b>
2014	English Bay Lakes	200,200	Fall Fry	2015	English Bay Lakes
		531,625	Smolt	2016	Tutka Bay Lagoon
2013	English Bay Lakes	209,000	Fall Fry	2014	English Bay Lakes
		523,500	Smolt	2015	Tutka Bay Lagoon
		217,000	Fry	2014	Kirschner Lk.
		725,000	Fry	2014	Hazel Lk
2012	English Bay Lakes	211,000	Fall Fry	2013	English Bay Lakes
2011	English Bay Lakes	1,240,000	Fry	2012	Hazel Lk
		213,000	Fall Fry	2012	English Bay Lakes
		511,000	Smolt	2013	Tutka Bay Lagoon
		102,000	Smolt	2013	Port Graham Bay
2010	English Bay Lakes	160,000	Fry	2011	Kirschner Lk
		203,300	Fall Fry	2011	English Bay Lakes
		371,300	Smolt	2012	Tutka Bay Lagoon
2009	English Bay Lakes	202,000	Fall Fry	2010	English Bay Lakes
		58,200	Smolt	2011	Tutka Bay Lagoon
2007	English Bay Lakes	246,000	Fall Fry	2008	English Bay Lakes
		112,000	Smolt	2009	Port Graham Bay
2004	English Bay Lakes	203,000	Fall Fry	2005	English Bay Lakes
		499,000	Smolt	2006	Port Graham Bay
2015	Tutka Bay Lagoon (EBL)	185,000	Fry	2016	Kirschner
		TBD	Smolt	2017	Tutka Bay Lagoon
		TBD	Smolt	2017	Tutka Bay Lagoon
2014	Tutka Bay Lagoon (EBL)	237,000	Fry	2015	Kirschner Lk
		621,000	Fry	2015	Hazel Lk
		1,051,000	Fry	2015	Leisure Lk.
2013	Tutka Bay Lagoon (EBL)	725,000	Fry	2014	Hazel Lk
		1,353,000	Fry	2014	Leisure Lk.
2012	Tutka Bay Lagoon (HL)	1,450,000	Fry	2013	Hazel Lk
		1,800,000	Fry	2013	Leisure Lk.
2011	Tutka Bay Lagoon (HL)	2,074,000	Fry	2012	Leisure Lk.
2010	Tutka Bay Lagoon	1,244,000	Fry	2011	Hazel Lk
		1,415,000	Fry	2011	Leisure Lk.
2009	Tutka Bay Lagoon	26,600	Smolt	2011	Tutka Bay Lagoon
2008	Tutka Bay Lagoon				
2012	Shell Lake	80,000	Smolt	2014	Shell Lake

Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.

Sockeye Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2007	Big Lk.	3,610,000	Fry	2008	Big Lk.
2006	Big Lk.	3,812,000	Fry	2007	Big Lk.
		703,000	Fall Fry	2007	Big Lk.
2005	Big Lk.	444,000	Fry	2006	Big Lk.
		426,000	Fall Fry	2006	Big Lk.
		316,000	Smolt	2007	Big Lk.
2004	Big Lk.	1,742,000	Fry	2005	Big Lk.
2003	Big Lk.	5,004,000	Fry	2004	Big Lk.
2002	Big Lk.	3,589,000	Fry	2003	Big Lk.
2001	Big Lk.	4,316,000	Fry	2002	Big Lk.
2000	Big Lk.	0	Fry	2001	Big Lk.
1999	Big Lk.	846,000	Fry	2000	Big Lk.
1998	Big Lk.	197,000	Fry	1999	Big Lk.
1995	Chelatna Lk.	1,042,000	Fry	1996	Chelatna Lk.
1994	Chelatna Lk.	1,806,000	Fry	1995	Chelatna Lk.
1993	Chelatna Lk.	1,330,000	Fry	1994	Chelatna Lk.
1992	Chelatna Lk.	1,003,000	Fry	1993	Chelatna Lk.
1991	Chelatna Lk.	1,138,000	Fry	1992	Chelatna Lk.
1990	Chelatna Lk.	635,000	Fry	1991	Chelatna Lk.
1989	Chelatna Lk.	503,000	Fry	1990	Chelatna Lk.
1997	Packers Lk.	0			Grouse Lk.
1996	Packers Lk.	500,000	Eggs	1996	Tutka Hatchery
1996		247,000	Fry	1997	Packers Lk.
1996		381,000	Fall Fry	1997	Packers Lk.
1996		609,000	Smolt	1998	Grouse Lk.
1995	Packers Lk.	246,000	Fry	1996	Packers Lk.
1995		442,000	Fall Fry	1996	Packers Lk.
1995		1,170,000	Smolt	1997	Grouse Lk.
1994	Packers Lk.	511,000	Fry	1995	Packers Lk.
1994		1,041,000	Fall Fry	1995	Packers Lk.
1993	Packers Lk.	2,779,000	Fry	1994	Packers Lk.
1993		710,000	Smolt	1995	Grouse Lk.
1992	Packers Lk.	3,266,000	Fry	1993	Packers Lk.
		570,000	Smolt	1994	Grouse Lk.
1991	Packers Lk.	3,172,000	Fry	1992	Packers Lk.
1990	Packers Lk.	2,505,000	Fry	1991	Packers Lk.

Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.

Sockeye Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2003	Tustumena Lk.	6,006,000	Fry	2004	Tustumena Lk.
		251,000	Fry	2004	Kirschner Lk.
		2,002,000	Fry	2004	Leisure Lk.
		351,000	Fry	2004	Hazel Lk.
2002	Tustumena Lk.	6,024,000	Fry	2003	Tustumena Lk.
		298,000	Fry	2003	Kirschner Lk.
		2,240,000	Fry	2003	Leisure Lk.
		1,547,000	Fry	2003	Hazel Lk.
2001	Tustumena Lk.	6,065,000	Fry	2002	Tustumena Lk.
		302,000	Fry	2002	Kirschner Lk.
		2,246,000	Fry	2002	Leisure Lk.
		1,280,000	Fry	2002	Hazel Lk.
		508,000	Fall Fry	2002	U. Paint Lk.
2000	Tustumena Lk.	89,000	Fry	2001	Leisure Lk.
1999	Tustumena Lk.	5,432,000	Fry	2000	Tustumena Lk.
		249,000	Fry	2000	Kirschner Lk.
		1,708,000	Fry	2000	Leisure Lk.
		1,248,000	Fry	2000	Hazel Lk.
1998	Tustumena Lk.	5,948,000	Fry	1999	Tustumena Lk.
		173,000	Fry	1999	Kirschner Lk.
		265,000	Fry	1999	Leisure Lk.
		453,000	Fry	1999	Hazel Lk.
1997	Tustumena Lk.	4,558,000	Fry	1998	Tustumena Lk.
1996	Tustumena Lk.	6,013,000	Fry	1997	Tustumena Lk.
		679,000	Smolt	1998	Grouse Lk.
		507,000	Smolt	1998	Bear Ck.
1995	Tustumena Lk.	796,000	Smolt	1997	Grouse Lk.
1994	Tustumena Lk.				Grouse Lk. & Coal Ck.
1993	Tustumena Lk.	151,000	Smolt	1995	Coal Ck.
		83,000	Smolt	1995	Grouse Lk.
1991	Tustumena Lk.				Coal Ck.
1990	Tustumena Lk.	66,000	Smolt	1992	Coal Ck.

Appendix 1 continued. Summary of Fish Releases from Trail Lakes Hatchery.

Coho Salmon					
Brood Year	Brood Stock	Number Released	Life Stage	Release Year	Release Site
2015	Bear Lk.	446,600	Fry	2016	Bear Lk.
		TBD	Smolt	2017	Bear Ck.
2014	Bear Lk.	448,000	Fry	2015	Bear Lk.
		100,000	Smolt	2016	Bear Ck.
2013	Bear Lk.	468,000	Fry	2014	Bear Lk.
		98,000	Smolt	2015	Bear Ck.
2012	Bear Lk.	405,000	Fry	2013	Bear Lk.
		55,000	Smolt	2014	Bear Ck.
2011	Bear Lk.	222,000	Fry	2012	Bear Lk.
2010	Bear Lk.	437,000	Fry	2011	Bear Lk.
		93,000	Smolt	2012	Bear Ck.
2009	Bear Lk.	435,000	Fry	2010	Bear Lk.
2008	Bear Lk.	270,000	Fry	2009	Bear Lk.
2007	Bear Lk.	360,000	Fry	2008	Bear Lk.
		68,000	Smolt	2009	Bear Ck.
		111,000	Smolt	2009	Homer Spit
2006	Bear Lk.	521,000	Fry	2007	Bear Lk.
		142,000	Smolt	2008	Bear Ck.
		95,000	Smolt	2008	Homer Spit
		88,000	Smolt	2008	Seldovia
2005	Bear Lk.	447,000	Fry	2006	Bear Lk.
		237,000	Smolt	2007	Bear Ck.
		101,000	Smolt	2007	Homer Spit
		97,000	Smolt	2007	Seldovia
2004	Bear Lk.	405,000	Fry	2005	Bear Lk.
		115,000	Smolt	2006	Bear Ck.
		324,000	Smolt	2006	Homer Spit
		114,000	Smolt	2006	Seldovia
		146,000	Smolt	2006	Lowell Falls
2003	Bear Lk.	406,000	Fry	2004	Bear Lk.
		488,000	Smolt	2005	Bear Ck.
		95,000	Smolt	2005	Homer Spit
2002	Bear Lk.	405,000	Fry	2003	Bear Lk.
		285,000	Smolt	2004	Bear Ck.
		192,000	Smolt	2004	Res. Bay
		113,000	Smolt	2004	Homer Spit
2001	Bear Lk.	405,000	Fry	2002	Bear Lk.
		253,000	Smolt	2003	Bear Ck.
		153,000	Smolt	2003	Homer Spit
2000	Bear Lk.	311,000	Fry	2001	Bear Lk.
		124,000	Smolt	2002	Bear Lk.
1999	Bear Lk.	316,000	Fry	2000	Bear Lk.
		121,000	Smolt	2001	Bear Ck.
1998	Bear Lk.	306,000	Fry	1999	Bear Lk.
		102,000	Smolt	2000	Bear Ck.
1997	Bear Lk.	409,000	Fry	1998	Bear Lk.
		51,000	Smolt	1999	Bear Ck.
1996	Bear Lk.	449,000	Fry	1997	Bear Lk.
		177,000	Smolt	1998	Bear Ck.
1995	Bear Lk.	350,000	Fry	1996	Bear Lk.
		153,000	Smolt	1997	Bear Ck.
1994	Bear Lk.	330,000	Fry	1995	Bear Lk.
		75,000	Smolt	1996	Bear Ck.
1993	Bear Lk.	335,000	Fry	1994	Bear Lk.
		7,000	Smolt	1995	Bear Ck.
1992	Bear Lk.	621,000	Fry	1993	Bear Lk. & Bear Ck.
1991	Bear Lk.	204,000	Fry	1992	Bear Ck.
1990	Bear Lk.	390,000	Fry	1991	Bear Lk.
		52,000	Smolt	1992	Bear Ck.
1989	Bear Lk.	333,000	Fry	1990	Bear Lk.

## Attachment B Location Map

