

# Hagerman National Fish Hatchery

## Facility Security Plan

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Submitted By:

\_\_\_\_\_  
Bryan Kenworthy, Project Leader

\_\_\_\_\_  
Date

Approved By:

\_\_\_\_\_  
Richard Johnson, Fisheries Supervisor

\_\_\_\_\_  
Date

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## **Introduction**

The Hagerman NFH (Hatchery) is a large and complex facility comprised of approximately 300 acres with a real property value at over \$26M. The Hatchery annually rears 1.36 million summer steelhead smolts under the authority of Lower Snake River Compensation Plan. These smolts are brought on station as eggs in May and June and are released the following year in April and May. Approximately 750,000 of these smolts (Sawtooth stock) are reared for release at the Idaho Department of Fish and Game (IDFG) Sawtooth Fish Hatchery weir located in Stanley, Idaho on the Salmon River. The Hatchery is the sole supplier of this stock for this release location. Adults returning to this location provide eggs for the Hatchery program, part of the IDFG Magic Valley Fish Hatchery program, and for the Shoshone-Bannock Tribes' smolt and eggbox programs in the Yankee Fork and various other locations in the Salmon River drainage. The Hatchery also rears rainbow trout from January until October under the Dworshak Reservoir mitigation program for Dworshak National Fish Hatchery. The Hatchery has fish on the facility 365 days per year and 24 hours a day.

The Hatchery facility consists of numerous water control structures, egg incubation and fish rearing facilities (Figure 1), and sophisticated support equipment to administer the Hatchery, ensure security, and to conduct fish culture operations. The facility is located in a rural area five miles south of the village of Hagerman, Idaho. The surrounding area receives heavy public use, consisting of general recreation, tourism, fishing and hunting activities occurring on Service and State lands adjacent to the Hatchery's Administrative Site. In addition, the University of Idaho's, Hagerman Fish Culture Experimentation Station (HFCES) is located in close proximity to the Hatchery on two, 2-acre parcels of property, land-locked within the Service property. Approximately 35 employees work at the HFCES. This facility receives a high incidence of traffic throughout the day, and at times into the late evening, for its research activities, various cooperator's meetings, and education and outreach activities.

The Government Furnished Quarters (GFQ) at the Hatchery consists of four circa 1954 concrete block, three bedroom houses designated as Q 4,5,6,&7. All four GFQ's are documented to be in fair condition on the Government Quarters Inventory. All four GFQ's are reserved for personnel who are required to live on station which is a condition of employment. This includes the Assistant Hatchery Manager, Staff Fish Biologist, Maintenance Mechanic, and one Fish Culturist.

Required occupancy of the GFQ provides immediate availability of trained individuals to respond to water flow and operational emergencies, and provides protection of government property by providing a deterrent to poaching, property theft, and vandalism (Appendix 1).

Under the Fair Labor Standards Act, employees cannot be required to be at home in government owned quarters without compensation. Since there is no viable mechanism for compensating the employees, the presence of someone at home in GFQ and available to respond immediately to a water alarm or other emergency is left to chance. To reduce the element of chance, the Hatchery has taken a proactive rather than reactive approach to fish and facility security. Hatchery employees required to live on station participate in a year round rotation of scheduled overtime which requires the employee to return to duty outside of their normal tour of duty and accomplish a list of inspections to ensure facility operation and security.

The scheduled overtime policy requires employees to conduct an inspection of the Hatchery facility to ensure protection and security of the premises and the fishery resource (Appendix 2). Additional duties are assigned depending on seasonal needs including, but not limited to: grounds irrigation; multiple intake screen cleaning for leaf and debris accumulation; watering-up distribution tankers; additional hatchery feeding; and emergency repairs. The employee conducts inspections between the hours of 8:00 PM and 10:00 PM. Two hours of overtime are authorized for each night of scheduled duty performed. The required night inspection serves as an additional deterrent to predatory birds and mammals around the rearing facilities. The individual assigned scheduled overtime is also assigned the scheduled overtime cell phone and is designated as the Hatchery's initial point of contact if the security alarm in the Administration Building is set off. This alarm is tied into the phone system which, under a cooperative agreement, calls the Federal Protection Service, Department of Homeland Security (DHS), which in turn calls the aforementioned cell phone. If the cell phone fails, the DHS operator has a sequential list of employee land lines to call. The Shop and old Maintenance office and the garage in Hatchery II have loud audible alarms which are not connected to the phone system, but are loud enough to be detected at the Hatchery residences. The Shop and old Maintenance office were removed from the DHS system when policy changes required each alarm station to have its own dedicated phone line.

## **Facility Security**

### **Facility Security Officer**

The Assistant Project Leader (Required Occupant) is designated as the Facility Security Officer (FSO) for the Hatchery. The FSO is responsibilities include:

- 1) Compliance with Physical Security policies (Regional Director's Order Number 09-03)
- 2) Annual review and update of the Facility Security Plan
- 3) Review of construction projects for compliance with physical security policy
- 4) Complete security inspections annually
- 5) Ensure security deficiencies are corrected in a timely manner
- 6) Complete the RSF-212 Security Survey annually and maintain a copy for 5 years
- 7) Meet requirements for Facility Security Level specified in 432 FW 1
- 8) Ensure security of assets by means of a locked cabinet or locking device when not in use
- 9) Maintain building key control log (recorded by Fisheries Program Assistant on employee entrance and exit forms)

- 10) Provide annual physical security training

### **Building Security Committee**

- 1) The Station Safety Committee will serve as the Building Security Committee.

### **Employees and Volunteers**

- 1) Observe and follow all Facility Security Program procedures required.
- 2) Ensure their actions do not compromise the physical security of the Hatchery
- 3) Use appropriate physical security procedures as required
- 4) Report all criminal incidents and security issues to appropriate supervisors immediately
- 5) Inform supervisor whenever you intend to access or remain at the workplace outside of normal working hours. Such notification can be for a period of days.
- 6) Safeguard Government property from damage, loss, and destruction.
- 7) Not use personally-owned property in performing official duties without specific authority from the Director in accordance with 310 FW 1.

### **Facility Security Level**

The Hatchery is considered a Level 1 facility. The Facility Level Determination Matrix was completed March 3, 2009 and reviewed in February 2011. Level 1 facilities have 10 or fewer employees, up to 2500 square feet of office space, and a low volume of public contact or contact with a limited segment of the public. Level 1 facilities must meet the following requirements:

- 1) Lighting with emergency power backup.
  - a. Emergency lighting is available in the Chiller Building. All other buildings have windows or sky lights to provide lighting during daytime power outages. Normal business and building hours are conducted during daylight hours.
- 2) Written receiving and shipping procedures that are reviewed and updated annually:
  - a. Shipments and deliveries must be delivered within business hours
  - b. Deliveries will report to the administrative office located at front of Administrative building before offload
  - c. Deliveries will only be accepted from known vendors that have pending deliveries and the appropriate personnel will be notified
  - d. Deliveries for unknown entities will not be accepted
  - e. Large deliveries shall be unloaded at loading dock or shop area away from the Administrative building site
  - f. Chemical deliveries will be unloaded at the appropriate containment area. This area should be away from storm drains. A good off-loading site is on the gravel pad near the chiller building. Spill containment kits are available in the chiller building in case of accidents.

- 3) Facility compliance with current Life Safety Code Standards for fire detection and suppression. Facility managers should contact Regional Safety Managers to confirm compliance.
  - a. Hatchery maintains smoke detectors and fire alarms in office spaces. Fire extinguishers are available throughout the facility and are checked monthly by Hatchery staff and inspected annually by a certified vendor.
- 4) Installation of high security locks for which keys cannot be commercially duplicated.
  - a. Shop, Admin building, Flammables building, chiller building, and Hatchery 1 building utilize high security locks.
- 5) Emergency power to critical systems such as alarm systems, radio communications, and computer systems.
  - a. Alarm system has battery back-up and automatically notifies Federal Protection Service, Department of Homeland Security
- 6) Annually test, review and update of facility Continuity of Operations Plan and Occupant Emergency Plan or Station Safety Plan.
  - a. Continuity of Operations and Station Safety Plans are reviewed annually.
- 7) Establishment and maintenance of liaisons with local law enforcement organizations.
  - a. The Hatchery maintains phone directories for the Gooding County Sheriff and Idaho State Police. EMERGENCY CALL 911. Gooding County Sheriff 208-934-4421. Gooding County Sheriff Dispatch 208-934-5515. Idaho State Police 1-800-736-3060.
- 8) Employee orientation to facility security procedures and annual security awareness training.
  - a. Provided during annual safety training
  - b. During new employee orientation

### **Facility Security**

The Hatchery's large amount of infrastructure spread over the 80 acre administrative site is susceptible to burglary and vandalism. This area is not fenced. Incidents of burglary and vandalism have occurred at the Hatchery. The following measures have been implemented to maintain security of station facilities:

1. The entrance road to the Hatchery is guarded by a steel entrance gate that closes from 6pm until 7am. Brush and terrain preclude vehicles from passing around the gate (The perimeter of the area is not fenced and the University of Idaho leaves their entry gate open after their normal hours of operation).
2. Employees are instructed to be aware of any suspicious activities during the work day and after work hours.
3. The Administration Building is protected by an electronic security alarm system that trips a siren and notifies, via telephone, the Federal Protection Service, Department of Homeland Security. This system utilizes individual room motion detectors. The security

alarm system is activated at the end of each work day and checked during scheduled overtime night rounds.

4. The Shop, Hatchery 2 storage garage, and the old Maintenance Office are protected by electronic security systems that activate a loud siren. This siren can be heard from the Hatchery housing. These systems utilize individual room motion detectors. The security alarm systems in these three buildings are activated at the end of each work day and checked during scheduled overtime night rounds. The Shop and the old Maintenance Office were originally included in the cooperative agreement with the Federal Protective Service, Department of Homeland Security. However, a change in their regulations required separate telephone lines for each alarm panel. The cost of a retrofit to address this requirement is prohibitive.
5. The Hatchery buildings are not alarmed, but checked at the end of the work day (3:30 PM) to be sure all visitors have left and doors are locked.
6. Gas pumps (diesel & gas) are turned off and locked.
7. All water control valves are locked when not in use.
8. During weekend duty, all doors are locked except for those allowing access to the Hatchery visitor areas.

While Hatchery employees occupying government furnished quarters are not trained law enforcement officers, their presence on-site in government housing serves as a deterrent to criminal activity.

### **Fish Production Security**

The Hatchery does not utilize an alarm system for fish production security. During the Hatchery's expansion to accommodate the LSRCP steelhead program, the Corp of Engineers installed an elaborate alarm system. However, it was immediately plagued with a myriad of operational problems and frequent power outages resulting in its discontinued use. Rather than rely on the vagaries of a mechanical system, the Hatchery has instituted a system of scheduled overtime and daily maintenance checks as a proactive approach to fish security. The scheduled overtime ensures that a responsible employee is available to respond to storm events or emergency situations. Although the Hatchery utilizes gravity feed water for fish production, it relies on two electric pump stations to deliver water to other water users under agreement. There are no standby power units for these pump stations.

### **Summer Steelhead**

#### **May and June**

The Hatchery generally receives Steelhead eggs during May and June each year. Eggs are hatched in upwelling incubators in two hatchery buildings. Water for egg incubation in Hatchery

1 is diverted from Spring 13, however water for tank rearing is diverted from Main Spring. The Hatchery 1 incubation lines plug infrequently because of the minimal vegetation load from the covered Spring 13 collection box. However, the Hatchery 1 tank supply lines can be prone to clogging and debris, especially when elm tree seeds blow down in mid-May to early June. The water supply for the Hatchery 2 incubator and tank supply lines is collected at the Brailsford Intake. The Brailsford Intake collects water from Spring 13, Spring 15, and the Len Lewis Spring. These springs have significant amounts of vegetation both in the riparian area and in the littoral zone. Watercress is a particular problem in the Len Lewis Spring. To alleviate clogging problems in Hatchery 2, the watercress is removed just prior (within one week) to incubator start-up. However, the Hatchery 2 incubator and the tank supply lines remain vulnerable to obstruction by vegetative matter.

Water flow to both Hatchery buildings is checked a minimum of three times daily. Water flow is checked at 7:00 am and 3:00pm during the normal Hatchery Tour of Duty and checked again between 8-10:00 pm on scheduled overtime rounds. Incubators and tanks are visually checked for adequate water flow during these checks. In addition, water intake screens at the Brailsford Intake, Brailsford Ditch, Mainspring, Bickel Lake, and Riley Lake are checked twice daily at 7:00 am and from 8-10:00 pm during scheduled overtime rounds. The checks of these spring diversions are increased during stormy weather both during and after the normal tour of duty.

#### July and August

Steelhead are reared in the Hatchery tanks during July and August. All Hatchery tanks are inspected a minimum of three times daily. Hatchery 2 remains more susceptible to vegetation clogging problems especially in the end two tanks, 65 and 66. Employees visually compare the water flow in these tanks to the others to determine if water supply problems have occurred. Any questionable visual inspections are further investigated by taking water flow measurements.

#### September through December

Steelhead are reared in the steelhead raceways during this time period. Intake screens at the Brailsford Intake, Brailsford Ditch, Main Spring, Bickel Lake, and Riley Lake are checked a minimum of twice daily at 7:30 am and between 8-10:00 pm during scheduled overtime rounds. However, during storm events, employees on scheduled overtime must check intake screens at additional times during the night depending on wind and leaf conditions. The steelhead raceways intake slots are usually clear because the intake screens catch most of the debris. However, the intake slots are visually inspected at least twice daily between 7:30 am and 4:00 pm and between 8-10:00 pm. Nets and crowd racks are stored indoors after hours.

Upon startup of the steelhead raceways, the gravity flow supply from Main Spring to the Bickel Ditch, which supplies the Oster Lakes, is switched to pump station (blue pumps) located on the bottom deck of steelhead raceways. These pumps are checked for clogging and power twice daily. In the event of an extreme power outage (greater than 12 hours), the Hatchery coordinates with the manager for the Idaho Fish and Game, Hagerman Wildlife Management Area, or alternatively supplies water via gravity feed from Main Spring to the Bickel Ditch.

### January through April

Steelhead are reared in the steelhead raceways during this time period. All screen and slot intakes continue to be checked twice daily. Crowder racks and nets are stored indoors to limit the potential for poaching and to prolong their service life. The fish crowder racks are allowed to remain outside overnight on the raceway walls during distribution activities in April when the bird curtains and access doors are closed. These items are checked on scheduled overtime rounds.

The blue pumps are also checked during this time period. The screens on the blue pumps are prone to clogging with aquatic vegetation in February through April especially during cleaning operations when the bottom tailrace water levels are lower.

### **Rainbow Trout**

#### December through February

Rainbow trout are reared in the Hatchery 2 building from December until February. The Hatchery 2 building is less prone to problems during freezing weather including condensation and frozen lines. Still, it is important to keep some water running through all incubation lines to prevent freezing. The Hatchery 2 incubation and tank lines are still prone to plugging from debris entering at the Brailsford Intake. The tanks and incubators are checked three times daily, once at 7:30 am, once at 3:30 pm, and once between 8-10:00 pm on scheduled overtime rounds. Intake screens are already checked for steelhead production.

#### February through May

Rainbow trout are reared in the rainbow trout raceways from February through May. These raceways can be susceptible to pipeline or collection box failures at Spring 17. The most recent failure occurred in February 2008. In case of a complete failure of Spring 17, water can be diverted from the Main Spring collection box to save the fish in the rainbow trout raceways. Spring 17 is checked twice daily, once at 7:30 am and again between 8-10:00 pm on scheduled night rounds. Raceway intake slots are also checked twice daily for plugs or debris.

Spring fingerling (5") rainbow trout are generally released in mid-May after steelhead distribution. 40,000 rainbow trout are retained on station for release as fall catchables (9") in late September or early October.

#### June through October

Rainbow trout are reared in the rainbow trout raceways from June through October. During this period, the trout raceways are supplied with water from the covered Spring 17 and the Main Spring collection box. Spring 17 and intake slots are checked twice daily and Main Spring intake screen is checked for steelhead production.

## **Biosecurity**

The purpose of this biosecurity plan is to prevent, control, and eradicate aquatic animal diseases. The Hatchery has already implemented many sound biosecurity practices and this document will list those practices and procedures and provide a written record that can be used to implement a biosecurity program. Since water is the most likely vehicle for the transmission of pathogens to fish, water and any item that comes in contact with water will command the most attention in this biosecurity plan.

### **External Barriers**

External barriers are barriers that should be applied to the prevention and spread of diseases onto and off the Hatchery.

### **Eggs**

The Hatchery receives steelhead eggs from Sawtooth Fish Hatchery and rainbow trout eggs from Hayspur Fish Hatchery. Eggs are disinfected from the receiving hatchery for 10 minutes in a 100ppm Argynyne solution (380 ml of Argynyne per 10 gallons of water). Disinfection and rinsing water is taken from the Hatchery's spring water supply. Argynyne disinfection is prepared no more than 30 minutes before the eggs are scheduled to be received.

### **Water Source**

The Hatchery's water supply flows from numerous springs located on the grounds. Only two of the springs are covered. Three of the springs are large pools open to terrestrial and avian wildlife. The Shoshone sculpin (*Cottus greenei*), a species of special concern in Idaho and the Bliss Rapids Snail (*Taylorconcha serpenticola*), a federally listed threatened species, can be found in the springs located on the Hatchery. Due to the occurrence of these species, modification or sterilization of the springs would be difficult. Any wildlife found on the springs should be harassed off and visitors kept out to help reduce the chance of introducing pathogens or invasive species into the springs.

The springs flow from the Eastern Snake Plain Aquifer (ESPA). Over the past 10 years the hatchery has observed an annual spring flow decline of 1 cfs. There is an aquifer recharge effort for the ESPA. This recharge effort has the potential to contaminate the Hatchery's water supply. The Hatchery monitors water quality of the springs, taking monthly nitrate and quarterly phosphorous samples and an annual analysis using the Water Check from National Testing Laboratories LTD (440-449-2525) which also includes an analysis of volatile organic compounds.

### **Wild Animal Vectors**

The steelhead raceways are enclosed in wildlife exclusion netting. The west ends, both sides and top are chicken wire screening. The west ends (entrances to each deck raceways) are netting material suspended from a wire allowing the net to be slid open and closed as needed. This netting is maintained and repaired as needed to ensure the nettings exclusion abilities of keeping wildlife away from the raceways. Moderate to heavy wind blow the netting exposing access by avian predators. Attempts to secure the footing of the net have hastened its deterioration. The rainbow trout raceways are all enclosed by chicken wire screening. Entrances into the raceways should remain closed at all times unless fish culture operations are being performed.

### Visitors

Tourists to the Hatchery are a key component of the Service's goal to connect people with nature. There is a self guided trail throughout the Hatchery for tourists to follow. Signs are posted for tourists to stay off raceway walls and not to feed the fish. Signs are in the hatchery buildings for tourists to keep their hands out of the water and to use foot baths upon entering the building.

Various federal, state, university, and other organizations come to the Hatchery for scientific sampling, viewing the unique hydrologic and geological features of the Hatchery, and observation of the natural flora and fauna found on Hatchery grounds. If at all possible, Hatchery equipment is provided for sampling activities. If it is not possible to use Hatchery equipment, then all equipment brought to the Hatchery should be disinfected before arriving at the Hatchery. If this equipment is not disinfected before arrival, the 1.75% iodine solution found in Hatch I or Hatch II (for general disinfection) will be used to disinfect this equipment with a 10 minute contact time. If waders are to be used, felt soles are to be avoided to prevent the spread of invasive snail species. If individuals sampling on the Hatchery only have felt sole waders, then spare waders kept in the hatchery garage will be used.

### Vehicles

Vehicle access will be restricted around the raceways and throughout the Hatchery to prevent contamination from outside sources. Only vehicles critical for fish culture operations will be permitted around the raceways. Only vehicles necessary for normal Hatchery operation will be allowed throughout the grounds. Visitors shall park in the designated parking area. Visitors with obviously wet boats shall park next to the entrance of the Hatchery across from Quarters 4.

The transport trailers will be disinfected by rinsing after distribution and allowed to desiccate for a minimum of 3 months before being used again. Trailers will be cleaned of pathogen harboring materials (dead fish, aquatic vegetation, etc.) before the desiccation process is commenced. The transport trailers can be disinfected with Bleach by using 3.6 gallons of liquid bleach (5.25% active ingredient) per compartment (to reach a concentration of 200 ppm) and then neutralizing with 75 pounds of Sodium Thiosulfate. This process can be used if time does not allow for desiccation.

Hauling trucks that are not part of the Hatchery's fleet should be disinfected following their respective agencies standard operating procedures before entering the Hatchery. If they are not

disinfected before arrival, they will be disinfected with a 200 ppm bleach solution then, neutralized with 75 pounds of Sodium Thiosulfate. This is accomplished next to the screen cleaning pad before entering the raceway areas.

### Marking Crew

Pacific States Marine Fisheries Commission (PSMFC) currently marks Hatchery steelhead. PSMFC should follow their standard operating procedure for disinfecting prior to arriving at the Hatchery and before leaving the Hatchery after all marking events.

### *Internal Barriers*

Internal barriers are barriers that will prevent the introduction and spread of disease organisms within the Hatchery or between the fish rearing units on the Hatchery.

### Fish Health

The Hatchery staff performs fish culture activities according to established SOP's to minimize stress on the fish. Fish in a less stressful environment are less prone to disease outbreaks. Water quality is measured regularly during peak loading times during the rearing cycle to ensure all parameters are within established limits for the fish. Fish are fed a commercial diet specified under FWS contract to ensure adequate nutrition. Fish feed is stored according to established SOP's. Mortalities and sick fish are removed from the raceways to reduce pathogen loads. Mortalities are buried, and not flushed down effluent pipes.

### Equipment

There are separate nets designated for use for steelhead and rainbow trout. Nets and buckets should be left out in the sun after use for drying and UV sterilization. If time does not allow for sun drying, nets and buckets will be disinfected with a 1.75% iodine solution left wet for ten minutes of contact time.

Gloves worn for handling mortalities shall not be worn during feeding operations. Separate gloves should be worn if working between the steelhead and rainbow trout raceways.

### Raceways

The steelhead raceway decks have two sets of brooms and mort pickers. One set will be used for each half of the deck. If a disease outbreak occurs, a separate set of brooms and mort pickers will be used for the infected raceways. Raceways will be cleaned and desiccated for several weeks between brood years. If times does not allow for desiccation, the raceways will be sprayed with a 200 ppm bleach solution.

One person will be responsible for daily care of the rainbow trout to further reduce the possibility of contamination between the two species reared on station. Rainbow trout culture operations

will be performed after all steelhead culture operations are completed during weekend operations when only one staff member is available.

When sampling events, tagging, maintenance, or any other reason to handle fish occurs, fish in the top deck will be handled first, followed by the middle deck, and the bottom deck will be handled last to prevent the spread of pathogens throughout the decks. If multiple age classes occur, the youngest fish will be handled first followed by progressively older fish.

### Hatchery Buildings

Hatchery buildings will be posted as “Biosecure Area”. Foot bathes and hand sanitizer dispensers are located at the entrances of both hatchery buildings. Everyone entering hatchery building shall step on foot bathes. Everyone working in the hatchery building shall use the hand sanitizer before starting to work. There is a brush for every pair of hatchery tanks in both hatchery buildings. If a disease outbreak occurs in a tank, separate brushes will be used to clean those tanks. Incubators and associated components are disinfected with a 1.75% iodine solution after each hatching event and before storage. Incubators will be re-disinfected with the iodine solution prior to use. Staff handling mortalities or working in the Off Line Settling Basin will not work in the hatchery buildings in the same day.

## Appendix 1. Occupancy Plan

**1. Purpose.** The purpose of this plan is to describe station policy and the requirements and guidelines for tenants occupying government furnished quarters (GFQ). It is the goal of the Hagerman NFH (Hatchery) to maintain a quarters policy to ensure accomplishment of the Hatchery's mission, occupant safety, and a reasonable quality of life for employees and tenants. To this end, the Hatchery will perform routine maintenance or improvements to the GFQ based on funds available and at the discretion of the Project Leader. It is expected that employees and other tenants occupying GFQ will make a reasonable effort to ensure that the dwelling and any government supplied furnishings, appliances and equipment are operated appropriately and used with care.

- 1.2 **Policy.** Government furnished quarters policy is established under the Federal Employees Quarters Facilities Act (5 U.S.C. Section 5911). The Department of Interior supplements this policy incorporating the Department Manual (400 DM), and the Department Quarters Handbook. The Fish and Wildlife Service supplements DM 400 under its Policies and Responsibilities (371 FW 1 and 371 FW2 FWS Manual) section of the Fish and Wildlife Service Manual (Quarters Management). The Hatchery supplements these policies with this document. It is the Hatchery policy that the Hatchery and all occupants of GFQ adhere to the guidelines established by DOI, FWS and the guidelines outlined below. Occupants of the GFQ will sign a Quarters Agreement (DI 1881).
- 1.3 **Authority.** As the senior staff position, the Project Leader will administer the hatchery housing policy under Chapter 8 of 400 Department Manual, Part 371 of the Fish and Wildlife Manual and appropriate Region 1 and Fisheries programmatic guidelines. Moreover, the Project Leader will:

1.3a. Determine which positions will be required to occupy GFQ.

1.3b Approve all expenditures of funds for maintenance and repair of GFQ.

1.3c Assignment of Quarters

The assignment of quarters shall be done in accordance with Chapter 8, Department of the Interior Departmental Quarters Handbook (DQM)(400 DM Addition to IPMR 06/02/94).

Assignment Priorities: Assignment of quarters shall follow the priorities in the order listed below.

1. Required Occupants.
2. Other Station Personnel, including contractors and essential cooperators.

3. Volunteers. Must meet requirements of paragraph 8.1C DQH 400 DM.
4. Other Bureaus. Employees of other Interior Bureaus.
5. Other Agencies. Employees of other Federal Agencies.
6. Non-Federal Tenants. See paragraph 5.2 DQH.

**2. Maintenance, Inspections and Responsibilities.** Maintenance needs will be established by the annual inspection of each quarters, or by written or verbal request of the occupant to the Project Leader. Quarters deficiencies affecting safety or health are given top priority, followed by weatherization and structural needs. Items that need to be replaced under normal wear, or that have exceeded their useful life will be replaced using station quarters funds. The Project Leader will determine who performs the maintenance or repairs. The Hatchery will conduct an inspection at the time of initial occupancy to establish baseline status of each quarters. At time of departure, the Hatchery will conduct an exit inspection to establish maintenance needs. If discrepancies are noted in the condition of the quarters, the Project Leader will determine cause and assess costs accordingly. Quarter's renovation, and installation or replacement of appliances, furnishings and fixtures are management actions and, are not subject to prior tenant approval, even if the actions result in rental increases. Every effort should be made to avoid inconvenience to the tenants (i.e., scheduling maintenance, painting, carpet cleaning, etc., during periods of vacancy), however, this may not always be possible.

- 2.1. **Fire Protection.** The Hagerman Rural Fire District will provide fire protection for structures. Each Quarters will have **five** functional hard wired fire alarms with battery back-up capability. Each residence will be supplied the appropriate batteries annually. Each Quarters will have **two** functional and certified fire extinguishers. Tenants will be trained to conduct monthly inspections of the extinguishers. The annual required inspections of the fire extinguishers will be provided by the Hatchery through an authorized service. In addition, the Hatchery will maintain a perimeter irrigation system which is to be used in case of an approaching wild fire. Training on its operation will be conducted annually.
- 2.2. **Electrical Service.** Each quarters will have functional electrical wiring and operable GFC outlets or breakers for the receptacles in the garage and next to the kitchen and bathroom sinks. No modification of the electrical service by the tenants is authorized. Tenants will be required to notify the Idaho Power Company upon occupancy/vacancy of the dwelling to ensure prompt transfer of billing responsibility.
- 2.3. **Telephone Service.** A single telephone line service is provided to each residence. Tenants will be required to notify the Qwest Co. upon occupancy/vacancy of the dwelling to ensure proper billing. Tenants must obtain prior approval before the installation of extension lines within the residence or for the installation of any additional service lines brought into the dwelling by an outside service provider.

- 2.4. **Plumbing.** Each quarters will have functional plumbing and plumbing fixtures. This includes the toilet, sinks, shower/tub, drains, laundry hook-ups, water heater, and water softener. The Hatchery will conduct periodic testing of the domestic water system as required by regulation. The Hatchery will provide salt for the water softener, however, it will be the responsibility of the tenant to replenish the salt reservoir. The Hatchery will periodically reset water softeners and conduct a yearly cleaning/disinfection. The Hatchery will pump the septic system periodically.
- 2.5. **Heating and Cooling.** Each Quarters will have functional water circulating heat pumps with supplemental electric heat. Tenants will be provided four disposable air filters annually. The hatchery will service the heat pumps annually. At no time will wood stoves or fireplaces be used for supplemental heat. Complete cleaning of the duct work will occur no sooner than every five years. To ensure proper ventilation during hot weather, attic fan must remain operational. The small fan in the Quarters #7 garage must remain on to mitigate radon gas in basement. It is imperative that the heat pumps remain on at all times to ensure proper operation during all seasons. Employees must maintain sufficient year round temperature control so as not to cause pipes to freeze or heat damage to occur.
- 2.6. **Appliances.** Each Quarters will have a functional dish washer, stove, refrigerator, garbage disposal, and satellite dish/receiver.
- 2.7. **Draperies/Floor Covering.** Each Quarters will have functional curtains and or window blinds provided. Tenants must keep these items clean and functional. The Hatchery will periodically contract the cleaning of the carpets.
- 2.8. **General Appearance.** Each Occupant will be responsible for keeping their Quarters in a reasonably neat and clean condition. This includes regular cleaning of the exterior and interior of the quarters, and lawn care. During a tenants extended vacation or TDY assignment off station, the Hatchery may assume lawn care responsibilities. The tenant is expected to coordinate this activity with the appropriate Hatchery personnel. Adult members of the tenant=s family are authorized to use the Hatchery lawn care equipment after receiving and completing the operational and safety training provided by the Maintenance Mechanic. Employee's or tenant's minor children are not authorized to operate government furnished lawn care equipment. Burning is not allowed for the disposal of yard waste or other domestic refuse. In an effort to preclude leaf debris from accumulating in the raceways, Hatchery personnel will periodically remove fallen leaves from the lawns around the quarters. Tenants are requested to remove lawn furniture and yard toys to assist the Hatchery crew in the removal of leaves in their yards.
- 2.9. **Smoking:** Tenants are required to smoke outside the residences.  
<http://www.fws.gov/policy/242fw13.html>

2.10. **Pets/Livestock.** Occupants can have a reasonable number of pets, but will be responsible for their actions. The Project Leader will determine what is reasonable. Occupants must be sensitive to the needs of visitors and their Hatchery neighbors. Barking and loose dogs are annoying. Loose dogs can be intimidating to young children and vectors of fish disease if they enter Riley Creek , Oster lakes, Bickel Ditch or the open springs . Occupants must keep their dogs under leash or control at all times. During times when the gate is open for visitors, Occupants must keep dogs on a leash if walking on Hatchery grounds. Occupants must clean up after their dogs when walking them on Hatchery grounds.

2.11. Occupancy of GFQ will be limited to immediate family only. A request for an exception must be made in writing to the Project Leader or his designee.

3. **Annual Safety Check List.** The Hatchery and tenant will jointly conduct the annual Single Family Checklist.

4. **Scheduled Overtime.** Employees required to occupy GFQ will, providing funding is available, participate in a schedule of nightly inspections to ensure protection and security of the Hatchery and the fishery resource. The scope of work to be accomplished will be provided by the Project Leader.

## **Appendix 2. Scheduled Overtime**

This policy serves as guidance regarding scheduled overtime for employees required to occupy government furnished quarters. The policy requires these employees to conduct an inspection of the Hatchery facility to ensure protection and security of the premises and the fishery resource. The attached scheduled overtime work plan describes the specifics for the inspection. Additional duties may be assigned depending on seasonal needs including, but not limited to: grounds irrigation; multiple screen cleaning for leaf and woody debris accumulation; watering-up distribution tankers; additional hatchery feeding; and emergency repairs. The employee will conduct the inspection between the hours of 8:00 PM and 10:00 PM. Two hours of overtime will be authorized for each night of scheduled duty performed. The individual who has the assignment for a particular night will be responsible for the callback cell phone, dedicated for the Hatchery's initial contact for the Federal Protection Service.

The Assistant Project Leader will be responsible for developing and updating the schedule on a periodic basis (quarterly or every six months) and will provide a copy to each employee involved. The schedule will also be posted in the break room. The basic schedule is every fourth night, Monday through Thursday, and every fourth weekend. However, this may be adjusted. The frequency may increase during periods of staffing shortages, and in order to accommodate personal needs, vacations, or official travel away from the Hatchery, employees involved in the schedule may work amongst themselves to make changes or exchange assigned time periods. These changes must be coordinated with the Assistant Project Leader and a final tally of each employee's scheduled overtime performed for each pay period will be provided to the Time Keeper.

## **SCHEDULED OVERTIME WORK PLAN**

- Administration Building:     Ensure all locking doors are secure.  
                                      Ensure all windows are closed and secured with window stops.  
                                      Visually inspect keypad alarm through window, set if necessary  
                                      Inspect visitor center for problems or vandalism.
- Old Maintenance Office:     Ensure all locking doors are secure.  
                                      Ensure all windows are closed and secured with window stops.  
                                      Visually inspect keypad alarm through window, set if necessary.  
                                      Test security light and inspect screen at display pond.
- Oil House & Flammable  
Building:                     Check door  
                                      Test security light  
                                      .
- Shop:                         Ensure all locking doors are secure.  
                                      Ensure all windows are closed and secured with window stops.  
                                      Visually inspect keypad alarm through side window,  
                                      Test security light.
- Fuel Tanks:                    Ensure that locks are secured at pump nozzles and fill ports.
- Hatchery #1:                  Ensure all locking doors are secure.  
                                      Ensure all windows are closed and secured.  
                                      Test security light and fuel tanks.
- Hatchery #2:                  Ensure all locking doors are secure.  
                                      Visually inspect keypad alarm, set if necessary.
- Wood Barn:                    Ensure all locking doors are secure.
- All Rearing Facilities:        Visually inspect all facilities holding eggs or fish (incubators,  
                                      tanks, ponds, and raceways).
- Water Control Structures:    Visually inspect all drop screen intakes and clean as needed.  
                                      Cleaning is very important during the leaf season and storms
- Entry Gates:                  Check to see if front gate closed properly.  
                                      Check to see if back gate is locked.
- General Guidance:            Water should be flowing in and draining out without restriction.  
                                      All doors and windows should be locked.  
                                      All alarms should be set.  
                                      Problems that can wait, report at the next day's morning meeting.

## **Appendix 3. 432 FW 1 Physical Security in Service Facilities Policy**

**1.1 What is the purpose of this chapter?** This chapter establishes requirements for physical security in all Service-owned facilities and space that we lease through the General Services Administration (GSA). Physical security encompasses people, personal property, and buildings and their contents. As used in this chapter, the term "We" refers to the Fish and Wildlife Service.

**1.2 What is Service policy regarding physical security?** We will manage all Service facilities to minimize loss, damage, and destruction to Government property, and to provide a safe and secure working environment for all employees and visitors.

### **1.3 What are the authorities for this chapter?**

**A.** 41 CFR Part 101-20.1, Federal Property Management Regulations (Buildings Operations, Maintenance, Protection, and Alterations) establishes procedures for maintenance, operation, protection, and management of Government-owned and leased buildings and grounds under the assignment responsibility of GSA.

**B.** [444 DM 1](#) (General Program Requirements - Physical Protection and Building Security) establishes Departmental requirements for bureau physical security programs. This chapter incorporates the U.S. Department of Justice study entitled, "Vulnerability Assessment of Federal Facilities," June 28, 1995.

### **1.4 Who is responsible for physical security?**

**A. Assistant Director - Business Management and Operations (AD-BMO)** is the principal advisor to the Director regarding security of Service facilities. Through the Division of Contracting and General Services, Washington Office (CGS-WO), the Assistant Director oversees development and maintenance of policies and procedures to adequately protect Service facilities, equipment, and personnel and to ensure the establishment of building security committees.

**B. Regional Directors** will (1) ensure compliance with all provisions of this chapter, (2) designate a Regional point of contact for physical security related information and provide his or her name, telephone number, and fax number to Chief, CGS-WO, and (3) ensure the establishment of building security committees.

**C. Managers** will ensure adherence to physical security procedures for facilities and will:

**(1)** Work with both Service and non-Service facility managers to address Service concerns, including all elements identified in paragraph [1.4D](#). To meet your specific needs, you may develop physical security procedures apart from those for the facility, if they do not conflict with the facility procedures. However, you should make every effort to work with the facility manager to address Service concerns.

- (2) Ensure that your areas are secure at the end of each work day.
- (3) Ensure that visitors have access to your work areas only as needed.
- (4) Conduct security surveys of your work areas in accordance with paragraph 1.5.
- (5) Inform the Assistant Regional Director for Budget and Administration of significant security incidents or threats and any corrective action that you take to prevent recurrence. In the Washington Office, advise the AD-BMO through the Chief, CGS-WO. Consider a security incident or threat significant if it is potentially life-threatening, has potential for public and/or employee outcry, or affects Service or Departmental interests in such a manner that it is likely to require a Service or Departmental response.
- (6) Account for access keys to your work areas in the same manner as personal property assigned to the custody and care of an employee. To establish a chain of custody, obtain a signed Receipt of Property ([DI-105](#)) or some other written record from each employee who has an access key.
  - (a) Make available access keys, including electronic entry keys or proximity reader cards, to buildings and individual offices to employees on an as-needed basis. Employees must not give access keys to friends or family members. We may deny or retrieve access keys from employees for inappropriate use or failure to safeguard Service facilities and property.
  - (b) Report immediately lost or stolen access keys.
- (7) Keep items with high theft potential (e.g., cameras, binoculars, power tools, televisions, video cassette recorders, laptop computers, postage stamps) in a locked cabinet or otherwise secured by a locking device within the office when not in use.

**D. Facility Managers of Service-owned or Leased Facilities.** As the facility manager of a Service-owned or GSA-leased facility, you should establish and maintain written facility security procedures that address applicable components of the Minimum Security Standards for Service Facilities contained in [paragraph 1.6](#) and [Exhibit 1](#). Review or ensure review of security surveys and records at least annually to identify current security conditions and any changes needed to maintain an effective security program.

- (1) Service-owned facility or facility not leased through GSA.** As a facility manager of a Service-owned facility or a facility not leased through GSA, you are not required to follow Federal Protective Service (FPS) guidance or comply with FPS security alerts. However, you should follow FPS guidance appropriate for your facility. Station safety committees may serve as building security committees and a physical security representative from GSA is not required.
- (2) GSA-leased facilities.** If you are the facility manager of a GSA-leased facility, you should:
  - (a) Ensure compliance with FPS security alerts. The FPS issues security alerts within specific FPS regions as appropriate. FPS regional offices are available to provide assistance to Service

GSA-leased facilities. The CGS-WO will advise Service Regional Offices of pertinent security alerts and other information and guidance received from FPS.

(b) Ensure that a building security committee evaluates and applies the appropriate minimum standards identified in [paragraph 1.6](#). The committee should determine which of the minimum requirements need to be implemented and identify any additional requirements. The committee should document reasons for variance with the minimum standards. The committee should be comprised of a physical security representative from GSA and a representative from each agency at the facility. An existing station safety committee may serve as a building security committee, and a committee may cover more than one building.

**E. Employees should:**

(1) Safeguard Government property from damage, loss, and destruction by adhering to the facility security procedures.

(2) Not use personally-owned property in performing official duties without specific authority from the Director in accordance with [310 FW 1](#).

(3) Report any personal or physical security incident or threat to your immediate supervisor.

(4) Inform your supervisor whenever you intend to access or remain at the workplace outside of normal working hours. Such notification can be for a period of days.

**1.5 What is the role of the manager regarding physical security surveys?**

A. The facility manager should conduct security surveys of the workplace at least annually to determine the effectiveness of the physical security safeguards. Note deficiencies and any corrective action instituted as soon as possible. Surveys should include procedural security safeguards as well as physical safeguards. [Exhibit 2](#) (Department of the Interior Physical Security Survey Data) will assist managers in completing the survey. All data items will not be appropriate for all stations.

B. For Service-owned facilities, the facility manager, manager, or supervisor, as appropriate, will discuss security needs with the building contractor and engineers while the project is still in the planning stage. After construction, conduct an onsite security survey prior to occupancy of the facility to make sure security requirements have been met.

C. In facilities leased through GSA, the appropriate manager should work with the servicing Regional CGS Office and the GSA-leasing office to make sure that appropriate safeguards are in place prior to occupancy.

**1.6 Are there minimum security standards for Service facilities?** The Department of Justice has established minimum security standards for all Federal facilities based on facility size, activities, and public access. The standards are designed to minimize loss and injury to life and property resulting from workplace violence, vandalism and terrorism or from unauthorized

access. There are five security levels for assignment to Federal facilities and security requirements associated with each security level (see subparagraphs A through E below). Facility security programs should meet minimum standards appropriate for the facility's size and scope of operations as identified below, except as modified by building security committees. You may modify minimum requirements if the building security committee (1) determines that the requirement is not necessary, (2) identifies alternative measures to meet the intent of the standard, or (3) documents the need for additional or enhanced requirements. Safety committees may serve as building security committees in accordance with [paragraph 1.4D](#). (See item 23, [Exhibit 2](#), to determine low, moderate, and high volumes of public contact.)

**A. Level I facilities** have 10 or fewer employees, up to 2,500 square feet of office space, and a low volume of public contact or contact with a limited segment of the public. Level I facilities must meet the following requirements:

- (1) Lighting with emergency power backup.
- (2) Written receiving and shipping procedures that are reviewed and updated annually.
- (3) Facility compliance with current Life Safety Code Standards for fire detection and suppression. Facility managers should contact Regional Safety Managers to confirm compliance.
- (4) Installation of high security locks for which keys cannot be commercially duplicated.
- (5) Emergency power to critical systems such as alarm systems, radio communications, and computer systems.
- (6) Annual test, review, and update of facility Continuity of Operations Plan and Occupant Emergency Plan or Station Safety Plan.
- (7) Establishment and maintenance of liaisons with local law enforcement organizations.
- (8) Employee orientation to facility security procedures and annual security awareness training.

**B. Level II facilities** have from 11 to 150 employees, up to 80,000 square feet of office space and a moderate volume of public contact. In addition to the security requirements for Level I facilities, the following apply:

- (1) A system for visitor control and accountability.
- (2) An evaluation of the threat to the day care center where day care centers exist at the facility.

**C. Level III facilities** have from 151 to 450 employees, up to 150,000 square feet of space, and a moderate to high volume of public contact. In addition to the security requirements for Level II facilities, the following apply:

(1) Control of facility parking area if part of the facility (below, above, or attached as part of the structure), including posting signs to identify the area, providing placards or other identifiers for authorized access, arranging for towing of unauthorized vehicles, and adequately lighted parking areas.

(2) Procedures to prevent unauthorized access to utility areas.

**D. Level IV facilities** have over 450 employees, more than 150,000 square feet of space, a high volume of public contact, and tenant agencies that may include high-risk law enforcement and intelligence agencies, courts, judicial offices, and highly sensitive Government records. (At this time the Service has no Level IV facilities.) In addition to security requirements applicable for Level III facilities, the following apply:

(1) Closed circuit television monitoring with time lapse video recording.

(2) X-Ray screening of all incoming mail and packages.

(3) Agency photo identification cards displayed at all times.

**E. Level V facilities** house mission functions critical to national security. The Pentagon and the CIA Headquarters are examples of two Level V facilities. The Service has no Level V facilities.

**1.7 Should I report criminal activity?** You should report criminal activity to local law enforcement organizations. If you are in a GSA facility, provide a copy of all police reports to the FPS.

**1.8 Can an individual be denied access to a Service facility or Service controlled space?** We may deny a person access to Service facilities or Service controlled areas of a facility when managers/supervisors have reason to believe they pose a threat to Service employees, resources, or property. Service managers should coordinate denials of access with the facility manager and consult the servicing personnel office to ensure that denials of access comply with applicable labor-management agreements and existing personnel policy.

**1.9 What actions are necessary to deny access of an employee?** The manager must document in writing the reason(s) for denying access and present such documentation to the individual. The letter denying access should include conditions, if any, under which we will grant the individual temporary access to the facility, including contact persons. Do not delay denial of access to the facility or area when the individual poses an immediate threat. In such instances, provide the denial letter to the individual as soon as possible, but no later than 48 hours after denying access.

**1.10 What about terminated employees?** Retrieve Government identification cards from employees and contract personnel when they are no longer employed with the Service. Treat terminated employees and contract employees as visitors when they request entrance to the facility. Supervisors will collect the identification card (as well as keys, badges, or any item that provides access to Service space or systems) of an employee who is suspended from active duty or placed on administrative leave with pay, goes on IPA, or in any situation where the supervisor

feels it is necessary to protect the safety of employees or the public or to protect Government property (see [210 FW 1](#)).

**1.11 Are there any required records or reports?**

**A.** Make facility security procedures, security programs, or plans available to all employees. Security procedures may be a part of the occupant emergency plan or station safety plan or other station or facility plan, provided the procedures are a distinguishable component and can be made available separately. Security procedures should contain a date of the most recent review and evidence of employee awareness. Dated employee signatures appended to the procedures or plan easily provide evidence of this requirement.

**B.** Maintain documentation of all security surveys and results at the facility for at least 5 years.

**C.** Facility security procedures and surveys are subject to inspection by the Assistant Regional Director for Budget and Administration and the Assistant Director - Business Management and Operations or their representatives on request.

## Appendix 4. Farm Biosecurity Audit Questionnaire

**Facility:** Hagerman National Fish Hatchery  
**Location:** 3059-D National Fish Hatchery Rd., Hagerman, ID 83332  
**Date of Audit:** January 21, 2010, reviewed February 8, 2011  
**Primary Contact:** Bryan Kenworthy, Project Leader  
**Auditor:** In-house

### I. General Background

- a. Is someone specifically designated at the facility to develop and implement biosecurity-related protocols?
  - i. Yes, the Fish Biologist position develop protocols that are implemented by the Hatchery crew
- b. Is a disease surveillance program in place at the farm?
  - i. Yes, the Idaho Fish Health Center examines samples at least monthly. Fish health sampling has been in place for 15+ years. Fish health is examined through basic necropsy. Samples of skin mucus and gill filaments will be examined for external parasites and bacteria or the presence of other abnormalities. The fish will be opened and examined for visual signs of parasites or other indications of bacterial or viral disorders. Kidney imprints will be taken from fish that exhibited signs that varied from 'normal' (swollen and inflamed hindgut, pink fat, anemia, swollen kidney). Imprints, when gram stained, show the presence of *N.Salmonis* spores and/or bacteria. Kidney samples will be collected and then combined into two-fish pools in tissue lysis buffer for Polymerase Chain Reaction (PCR) assays. Individual kidneys will be streaked onto Tryptic Soy Agar and Tryptone Yeast Extract plus Salts Agar to isolate bacteria, primarily *Flavobacterium psychrophilum* (causes Coldwater Disease) and *Aeromonas salmonicida* (causes Furunculosis). Pre-release samples are taken of at least 60 fish from each lot
- c. Number of Employees
  - i. 8 FTE
- d. Cumulative Years of Experience
  - i. 95
- e. Average Experience
  - i. 12 years
- f. Average annual Continuing Education
  - i. 40 hours required training
- g. Computerized Records/Database
  - i. Hatchery records are kept on in-house spreadsheets with back-up system and also reported to the Fisheries Information System, the Columbia River Information System, and the Idaho Department of Fish and Game.
- h. Clothing Provided

- i. Waders, steel-toed work boots (leather), rain gear, uniforms, gloves, PPE etc.
  - i. Do any employees/visitors have clothing/equipment that isn't disinfected?
    - i. Yes, visitors are allowed to access the raceway area without disinfecting clothing.
  - j. Do employees have a written protocol for clothing/equipment disinfection?
    - i. No
- II. Physical Plant
  - a. Age of Facility
    - i. 27 years
  - b. Construction Type
    - i. Concrete Raceways
  - c. Number of Tanks
    - i. 40 Fiberglass Reiff tanks, 16 x 4 x 3'
    - ii. 20 Pre-cast concrete tanks, 15 x 3 x 2'
  - d. Number of Raceways
    - i. 66 Concrete Raceways, 10 x 103 x 3'
    - ii. 12 Concrete Raceways, 8 x 70 x 3'
  - e. Other Fish Containers on Site
    - i. 15 Temporary Fiberglass Research Tanks, 2x2x2'
    - ii. 9 Temporary Aluminum Research Tanks
  - f. Condition of Physical Facilities
    - i. Good
  - g. Number of Species at Facility
    - i. Sawtooth Stock Steelhead
    - ii. East Fork Natural Steelhead
    - iii. Hayspur Rainbow Trout
  - h. Number of Lots
    - i. Sawtooth and Yankee For Release = 10 lots each
    - ii. East Fork = 10 lots each
    - iii. Hayspur Rainbow Trout = 1 lot
  - i. Location of Lots
    - i. Sawtooth = Hatchery 1 and 2, Steelhead Raceways
    - ii. East Fork = Hatchery 2, Steelhead Raceways
    - iii. Rainbows = Hatchery 2, Trout Raceways
  - j. Number of Fish per Lot
    - i. 25,000 to 200,000
  - k. Typical Stocking Density
    - i. Hatchery Tanks < 0.8 D.I.
    - ii. Steelhead Raceways < 0.2 D.I.
    - iii. Trout Raceways < 0.5 D.I.
  - l. Predator Control
    - i. Bird Netting around raceways
    - ii. Enclosed Hatchery buildings
  - m. Types of Predation

- i. Overall predation is very low
  - ii. Kingfisher, Herons (Great blue, Night Crowned), Pelicans, magpies
  - iii. Mink, raccoons, otters
- III. Disinfection
  - a. Disinfectants Used
    - i. Yes
  - b. Disinfectant Types
    - i. 1.75% Iodine
    - ii. Chlorine (5.25%)
    - iii. Virkon
    - iv. Desiccation for 3 weeks
  - c. Typical Concentrations
    - i. 1.75% Iodine = 3 oz per gallon
    - ii. Chlorine = 200 ppm (15 ml chlorine per gallon)
    - iii. Virkon = 1% or 1.2 oz per gallon
  - d. Footbath sizes and locations
    - i. Footbaths at each main entrances to Hatchery buildings
  - e. Brush for footgear
    - i. No – facility is asphalt and concrete, generally low amounts of organic material on footwear
  - f. Disinfectant Changed How often
    - i. As needed (runs low or looks dirty)
  - g. Are footbaths dirty/contain organic material
    - i. No
  - h. How is disinfectant concentration measured
    - i. Not measured after initial mixing
  - i. Hand Disinfection stations in Place
    - i. Yes, Purell hand sanitizers in each Hatchery building
  - j. Hand Cleaning Protocols
    - i. Wash hands and use sanitizer before working in Hatchery buildings
    - ii. Wash hands after handling mortalities
  - k. Equipment cleaning/disinfection protocols
    - i. Waders or Equipment must be disinfected (with Chlorine or Iodine) if moved up this list or between trout and steelhead:
      - 1. Springs
      - 2. Upper Deck Steelhead Raceways
      - 3. Middle Deck Steelhead Raceways
      - 4. Bottom Deck Steelhead Raceways
      - 5. Display Pond
      - 6. Off-Line Settling Pond
      - 7. Riley Creek
    - ii. Hauling trucks must be desiccated for a minimum of 3 weeks or disinfected with a 200 ppm chlorine solution
    - iii. Separate brooms for each pair of Hatchery tanks
    - iv. Separate brooms and mort pickers for each deck and half of steelhead raceways

- v. Separate brooms for trout raceways
  - l. Are hand-cleaning and equipment protocols practiced/effective
    - i. Yes
  - m. Specificity of equipment
    - i. By tank and or raceway
    - ii. Separate brooms for each pair of Hatchery tanks
    - iii. Separate brooms and mort pickers for each deck and half of steelhead raceways
    - iv. Separate brooms for trout raceways
- IV. Water Specifics
  - a. Water Sources
    - i. 17 spring locations
  - b. Flow Rate
    - i. Steelhead Raceways = 60 cfs
    - ii. Rainbow Trout Raceways = 2.8 cfs (Spring 17)
  - c. Water Quality Parameters
    - i. Temperature
      - 1. 15 C
    - ii. PH
      - 1. 7.8
    - iii. DO
      - 1. 8.75 ppm
    - iv. Gas Saturation
      - 1. 100 – 102%
    - v. Hardness
      - 1. 140 ppm
    - vi. Ammonia
      - 1. 0.004 ppm
    - vii. Metals
      - 1. Trace
    - viii. Clarity
      - 1. Very high
    - ix. Types of WQ Instrumentation
      - 1. YSI DO meter (2)
      - 2. Weiss Saturometer (3)
      - 3. Campbell Scientific DO Logger
      - 4. Hanna PH meter
      - 5. Hanna Conductivity Meter
    - x. How Frequently is WQ checked
      - 1. DO
        - a. Continuously with Logger, spot checked bi-weekly in March
      - 2. Saturation
        - a. Weekly
      - 3. Conductivity
        - a. Monthly to correspond with Nitrate testing

- 4. Ammonia
      - a. Bi-monthly from January to March
  - xi. Are Raceway/tanks cleaned
    - 1. Yes
  - xii. Frequency
    - 1. Tanks
      - a. Daily
    - 2. Raceways
      - a. Weekly from August until December
      - b. Bi-weekly from January until release (April to May)
    - 3. Disinfectant
      - a. N/A
    - 4. Concentration
      - a. N/A
    - 5. Fallowed
      - a. Steelhead Raceways
        - i. 6 to 10 weeks between Brood Years
      - b. Hatchery Tanks
        - i. 2 to 9 months between groups
      - c. Trout Raceways
        - i. 2 months between Brood Years
  - xiii. Average Highest Water Temp
    - 1. 16 C
      - a. August
  - xiv. Average Lowest Water Temp
    - 1. 13 C
      - a. January
- V. Fish Specifics
  - a. Origin of Individual Lots
    - i. Source
      - 1. Sawtooth Fish Hatchery (Steelhead)
      - 2. Hayspur Fish Hatchery (Trout)
    - ii. Type
      - 1. Eyed Eggs
    - iii. Is a fish health certificate obtained for every group of fish imported to the farm?
      - 1. Yes, coordinated through Idaho Fish and Game and Idaho Fish Health Center
    - iv. Quarantine Procedures
      - 1. None
    - v. Quarantine Facilities
      - 1. None
    - vi. Survival Rate per Species
      - 1. Sawtooth Stock Steelhead
        - a. 94%
      - 2. East Fork Stock Steelhead

- a. 92 %
    - 3. Rainbow Trout
      - a. 90%
  - vii. Frequency of Grading
    - 1. N/A
  - viii. Average Age at Transfer/sale
    - 1. 11 months
  - ix. Average Weight at Transfer/sale
    - 1. 4.5 fish per pound
  - x. Transfer Protocols
    - 1. Feed
      - a. Off feed for minimum of 3 days prior to transfer
    - 2. Transport Specifics
      - a. Salt
        - i. None
      - b. Oxygen
        - i. Liquid O2 and back-up gas system
      - c. Aeration
        - i. Fresh Flow Agitators on each compartment (2 ea)
      - d. Buffers
        - i. None
- VI. Pathogens/Diseases
  - a. Pathogens/Parasites/Diseases Routinely Screened For:
    - i. Coldwater Disease
    - ii. Furunculosis
    - iii. Gyrodactylus
    - iv. Ich
    - v. Whirling Disease
    - vi. Nucleospora salmonis
    - vii. Trichodina
    - viii. Enteric Redmouth
    - ix. Columnaris
  - b. Screening Done by whom
    - i. Idaho Fish Health Center
  - c. Types of Screening Tests
    - i. Fish health is examined through basic necropsy. Samples of skin mucus and gill filaments will be examined for external parasites or the presence of other abnormalities. The fish will be opened and examined for visual signs of parasites or other indications of bacterial or viral disorders. Kidney imprints will be taken from fish that exhibited signs that varied from 'normal' (swollen and inflamed hindgut, pink fat, anemia, swollen kidney). Imprints, when gram stained, show the presence of N.Salmonis spores and/or bacteria. Kidney samples will be collected and then combined into two-fish pools in tissue lysis buffer for Polymerase Chain Reaction (PCR) assays. Individual kidneys will be streaked onto Tryptic Soy Agar and Tryptone Yeast Extract plus Salts Agar to isolate bacteria,

primarily *Flavobacterium psychrophilum* (causes Coldwater Disease) and *Aeromonas salmonicida* (causes Furunculosis). Pre-release samples are taken of at least 60 fish from each lot

- d. Equipment at Facility
  - i. Microscope
  - ii. Dissecting Scope
  - iii. Centrifuge
  - iv. TSA and TYSE slants
- e. Number of Fish Usually Tested
  - i. 40 monthly
  - ii. 60 per stock for pre-release (30 days prior)
- f. Is fin rot or frayed fins seen at the facility
  - i. Yes
- g. What percentage of fish are affected
  - i. The majority of steelhead exhibit some dorsal fin erosion
  - ii. A small percentage (<2%) exhibit soreback symptoms
- h. Pathogens encountered at the Facility
  - i. Furunculosis
  - ii. Coldwater Disease
  - iii. Gyrodactylus
  - iv. Trichodina
  - v. Nucleospora salmonis
- i. Specify Temperature/conditions when usually seen
  - i. Furunculosis
    - 1. After tagging operations more prevalent in B stock
  - ii. Coldwater Disease
    - 1. After tagging operations more prevalent in B stock
  - iii. Gyrodactylus
    - 1. Periodically throughout rearing, more prevalent later in raceway rearing
  - iv. Trichodina
    - 1. Periodically, more prevalent during peak production periods (March and April)
  - v. Nucleospora salmonis
    - 1. In all life stages
- j. Preventative parasitic treatments
  - i. N/A
- k. Prophylactic antibiotic treatments
  - i. N/A
- l. Therapeutic antibiotic treatments
  - i. Type
    - 1. Romet
      - a. Concentration
        - i. 50 mg/kg fish
      - b. Frequency
        - i. 1-3 times annually



- iii. Constituents
  - 1. See Hagerman Diet Specifications
- iv. Sizes

<b>Feed Size</b>	<b>FPP</b>
<i>Salmon starter</i>	900
<i>Salmon #1</i>	350
<i>Salmon #2</i>	200
<i>Salmon #3</i>	100
<i>1.5 mm Floating</i>	60
<i>2.5 mm Floating</i>	30
<i>3.5 mm Floating</i>	8
<i>4.5 mm Floating</i>	4.2

- v. Average shelf life
  - 1. 4 weeks
- vi. Feed analysis performed periodically
  - 1. Yes, quarterly
- vii. Feeding rate per lot
  - 1. Satiation to 100 fpp
  - 2. Above a HC of 7.0 to reach 4.5 fpp
- viii. Feed Conversion Rates
  - 1. 1.05

IX. Broodstock Designation Specifics

- a. Origin
  - i. Sawtooth Fish Hatchery
- b. Genetic Variation
  - i. Selected throughout the run
  - ii. 1:1 male to female ratio (Sawtooth stock)
- c. Type of Spawning performed
  - i. Unknown
- d. Water quality parameters at spawning
  - i. Unknown
- e. Photoperiod manipulation
  - i. None
- f. Prophylactic antimicrobial treatments of broodstock
  - i. None
- g. Reproductive hormone manipulations
  - i. N/A
- h. Feed protocols at spawning
  - i. N/A
- i. Clean room for spawning
  - i. Yes
- j. Egg disinfection protocols
  - i. Disinfected at Sawtooth Hatchery
  - ii. Disinfection at Hagerman NFH
    - 1. Disinfectant Used

- a. Argyntyne (Iodophor)
  - 2. Concentration
    - a. 380 ml/10 gallons water for 10 minutes
  - 3. Sequence
    - a. Immediately upon receipt before enumeration
- iii. Incubation Techniques
  - 1. Sawtooth : Heath Stacks
  - 2. Hagerman: Upwelling incubators
- iv. Frequency of Pick-off
  - 1. Unknown
- v. Percent eye-up
  - 1. 80-90%
- vi. Usual cause of initial mortality to eye-up
  - 1. Unknown
- vii. Percent Survival to hatch
  - 1. 85-95%
- viii. Usual cause of mortality between eye-up and hatch
  - 1. Unknown
- ix. Percent survival post-hatch to swim-up
  - 1. 99%
- x. Usual cause of mortality between hatch and swim-up
  - 1. Birth defects
- xi. Percent survival to fingerling
  - 1. 95%

**Appendix 5. Facility Security Plan Risk Analysis**

<b>Activity Description</b>	
Facility: Hagerman National Fish Hatchery	
Project Leader: Bryan Kenworthy	

<b>Program Description</b> <b>i.e. Who; What; Where; When; How; Why</b>
<p>The Hagerman NFH (Hatchery) is a large and complex facility comprised of approximately 300 acres with a real property value at over \$26M. The Hatchery annually rears 1.36 million summer steelhead smolts under the authority of Lower Snake River Compensation Plan. These smolts are brought on station as eggs in May and June and are released the following year in April and May. Approximately 750,000 of these smolts (Sawtooth stock) are reared for release at the Idaho Department of Fish and Game (IDFG) Sawtooth Fish Hatchery weir located in Stanley, Idaho on the Salmon River. The Hatchery is the sole supplier of this stock for this release location. Adults returning to this location provide eggs for the Hatchery program, part of the IDFG Magic Valley Fish Hatchery program, and for the Shoshone-Bannock Tribes’ smolt and eggbox programs in the Yankee Fork and various other locations in the Salmon River drainage. The Hatchery also rears rainbow trout from January until October under the Dworshak Reservoir mitigation program for Dworshak National Fish Hatchery. The Hatchery has fish on the facility 365 days per year and 24 hours a day.</p>

## Facility Security Plan – Step 2

**Flow diagram outlining the sequence of systems needed to complete the hatchery program described in Step 1. (To be transferred to column 1 of Step 3)**

System 1	Water intake
System 2	Effluent Systems
System 3	Buildings/Security Alarms
System 4	Chiller
System 5	Fish Culture
System 6	Visitors

### Facility Security Plan – Step 3

(This information will be transferred to columns 1 and 2 of Security Plan Step 4 – Risk Analysis Worksheet)

<b>1 System</b>	<b>2 Potential Risks</b>
<b>Water Intake</b>	<ol style="list-style-type: none"> <li>1) Leaf Blockage</li> <li>2) Flooding</li> <li>3) Watershed Disruption</li> <li>4) Pipe Ruptures</li> <li>5) Contamination (upstream spill events)</li> <li>6) Vegetation blockage</li> </ol>
<b>Effluent Systems</b>	<ol style="list-style-type: none"> <li>1) Pipe Ruptures</li> </ol>
<b>Buildings/Security Alarms</b>	<ol style="list-style-type: none"> <li>1) Break-in/Vandalism</li> <li>2) Fire (Wildfire or Building Fire)</li> <li>3) Earthquake</li> <li>4) Flood</li> <li>5) Security Alarm Failure</li> </ol>
<b>Chiller</b>	<ol style="list-style-type: none"> <li>1) Power Outage</li> <li>2) Mechanical Failure</li> <li>3) Vandalism</li> </ol>
<b>Fish Culture</b>	<ol style="list-style-type: none"> <li>1) Biosecurity – Disease transmission or invasive species via boots, boats, or equipment</li> <li>2) Predation</li> <li>3) Poaching</li> <li>4) Human Error</li> <li>5) Sabatoge</li> </ol>
<b>Visitors</b>	<ol style="list-style-type: none"> <li>1) Biosecurity</li> <li>2) Vandalism</li> </ol>

### Facility Security Plan – Step 4

<b>1</b> <b>System</b> From SP Step 3 flow diagram	<b>2</b> <b>Potential Risks</b> identified in SP Step 2	<b>3</b> Are risks <b>probable?</b> (yes/no)	<b>4</b> <b>Justify</b> evaluation for column 3	<b>5</b> What <b>control</b> <b>measures</b> can be applied to prevent undesirable result?	<b>6</b> Is this a <b>significant</b> <b>risk to a critical</b> <b>system</b> for the production program (yes/no)
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Water intake	Leaf Blockage	Yes	Occurs during the Fall between October 1 <sup>st</sup> and December 1st	Check intakes a minimum of twice during work hours and again during callback. Additional checks necessary during storms or high leaf volume.	No
	Flooding	No	Spring Flows are relatively consistent. Hatchery elevation is well above Snake River flood plain.	n/a	No
	Watershed Disruption	No	Watershed disruption would likely be caused by a large seismic event. Watershed disruption has not occurred in the Hatchery's history	Consider watershed disruption impacts of new construction projects near spring discharges.	No

			(1934 to present)		
	Pipe Ruptures	Yes	Hatchery pipelines are aging. Spring 17 pipeline ruptured in 2007 and 2008. Bickle Ditch pipeline ruptured in 2005.	Inspect pipelines when possible. Schedule replacement for pipes that are over 40 years old.	Yes
	Contamination	Yes	Hatchery spring sources are uncovered and can be accessed by vehicle. Bickle and Riley springs can be accessed by the University of Idaho access road that is not routinely locked.	Regular checks of spring ponds and presence of Hatchery residents to deter vandalism.	No
	Vegetation Blockage	Yes	In 2009 an incubator line to Hatchery 2 was plugged off by aquatic vegetation. The Hatchery lost an entire tank of East Fork Natural steelhead (23,000)	Routine removal of aquatic vegetation before Hatchery building start-up. Brailsford Intake and Spring 13 water sources were covered in 2010.	Yes
Effluents Systems	Pipe Ruptures	Yes	Hatchery pipelines are aging. Spring 17 pipeline ruptured in 2007 and 2008. Bickle Ditch pipeline ruptured in 2005.	Inspect pipelines when possible. Schedule replacement for pipes that are over 40 years old.	No
Buildings/Security Alarms	Break-in/Vandalism	Yes	Break-ins and vandalism have occurred in the past.	Occupants at residences to deter vandals. Security	No

			The Hatchery receives 5-10,000 visitors annually. Co-located University of Idaho access road is not routinely locked.	alarms on admin, shop, old office, and fire bay buildings.	
	Fire (Wildfire or Building Fire)	Yes	Oster Lakes WildFire in 2001 severely burned Hatchery property. Smaller wildfires in 2009 (local fire department) and 2007 (local fire department) and fire in 2005 (BLM and local fire departments). Neighboring land owners continue to burn brush during high fire danger times.	Disc fire line around Hatchery property. Maintain sprinkler systems. Maintain contacts with local, BLM, and FWS fire crews. Maintain working agreements with South Central Idaho Interagency Dispatch Center (SCIIDC). Remove and chip dead trees when practical.	No
	Earthquake	No	No major earthquakes have been recorded recently. Buildings are maintained to earthquake standards for the area.	Ensure new constructions complies with Earthquake standards.	No
	Flood	No	Hatchery elevation is well above Snake River flood plain. Floods from broken pipelines would be relatively minor.	Inspect pipelines when possible. Schedule replacement for pipes that are over 40 years old.	No

	Security Alarm Failure	Yes	Power outages are relatively frequent in the area.	Back-up battery system notifies Federal Police. Federal Police call stand-by phone for on-the-ground notification.	No
Chiller	Power Outage	Yes	Power outages are frequent.	Chill water up to 24 hours before use in distribution trucks. If power outage occurs, water can be chilled after power is restored.	No
	Mechanical Failure	Yes	Chiller has numerous pumps, condensers, and parts that could fail.	Test and inspection by maintenance mechanic prior to distribution season. Additional inspection or repairs by Callen Refrigeration if needed.	No
	Vandalism	No	Chiller is housed in locked building. External tank could be vulnerable, but no incidences have occurred.	Keep building locked when not in use.	No
Fish Culture	Biosecurity	Yes	Close proximity to other fish hatcheries increase risk of disease transmission on facility.	Hatchery specific equipment used for hatchery vats, raceways, settling ponds, springs, and Riley Creek. Iodine or chlorine disinfection used on equipment before cross-	Yes

				contamination.	
	Predation	Yes	Large numbers of birds, raccoons, mink inhabit the area.	Bird netting excludes most birds except kingfishers. Mink and raccoon predation is smaller, but risk of disease transmission is higher.	No
	Poaching	Yes	Break-ins and vandalism have occurred in the past. The Hatchery receives 5-10,000 visitors annually. Co-located University of Idaho access road is not routinely locked.	Store nets inside locked building. Front gate blocks vehicle access after hours.	No
	Human Error	Yes	Standpipes could be left out or valves could be inadvertently turned off causing catastrophic fish loss.	Fish culture areas checked before locking for the day. Callback rotation to check on fish and security after hours (8-10 pm)	No
	Sabotage	Yes	Break-ins and vandalism have occurred in the past. The Hatchery receives 5-10,000 visitors annually. Co-located University of Idaho access road is not routinely locked.	All water supply valves and buildings locked when not in use. Front gate blocks vehicle access after hours. Presence of Hatchery residents to deter vandalism	No

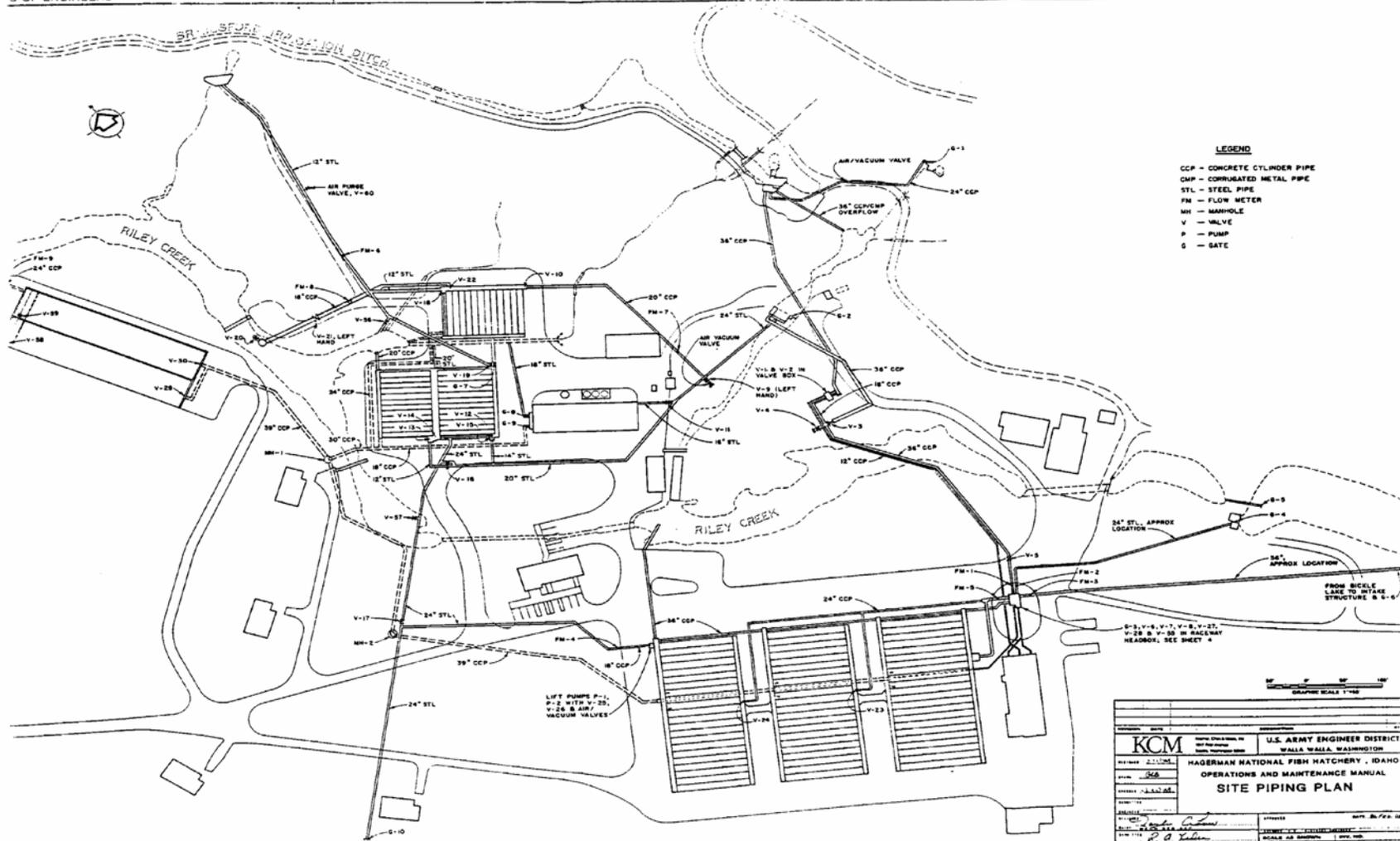
Visitors	Biosecurity	Yes	The Hatchery receives 5-10,000 visitors annually.	Designated walking path for visitors. Visitors only allowed in approved areas. Signs instructing visitors to keep hands out of water and stay off raceway walls.	No
	Vandalism	Yes	Break-ins and vandalism have occurred in the past. The Hatchery receives 5-10,000 visitors annually.	All water supply valves and buildings locked when not in use. Front gate blocks vehicle access after hours. Presence of Hatchery residents to deter vandalism	No

**Facility Security Plan Step 5 – SP Form**

<b>Facility Security Plan Form</b> (All yes from column 6 of Step 4)									
Critical System	Significant risks	Limits for each control measure	Monitoring				Evaluation and Corrective Action(s) (if needed)	Supporting Documentation (if any)	Justification (Include costs etc, for decision)
			What	How	Frequency	Who			
Water intake	Pipe Ruptures	Water must be restored within 20 minutes	Water flow to Hatcher y and raceway s	Visual inspection	Daily checks	Trained Hagerman staff	Thorough inspection of pipelines to determine life expectancy. Schedule replacement of pipelines and valves that are worn or over 40 years old.		No cost estimate generated.
	Vegetation Blockage	Water must be restored within 20 minutes	Water flow to Hatcher y and raceway s	Visual inspection	Check intakes a minimum of twice during work hours and again during callback. Additional checks	Trained Hagerman staff			\$20,000/annually for callback costs

					necessary during storms or high leaf volume.				
Fish Culture	Biosecurity	Prevent spread of disease on facility	Mortality Rates as disease indication	Removal of daily mortality	Daily	Trained Hagerman staff	Develop Biosecurity Plan for fish culture activities. Purchase additional equipment or disinfectants as needed.		No cost estimate generated.

Facility: Hagerman National Fish Hatchery	Activity: Steelhead Mitigation
Address: 3059-D National Fish Hatchery Rd. Hagerman, ID 83332	



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Figure 1. Hagerman National Fish Hatchery Site Plan