

# **BANDON HATCHERY**



## **PROGRAM MANAGEMENT PLAN 2016**

## Bandon Hatchery

(Beaver Creek, Big Creek Pond, Blossom, Charleston, Cunningham Creek, Coquille, Eel Creek, Ferry Creek, Hodges, Laverne Park, Millicoma Pond, Morgan Creek, Noble Creek, Rodine, Saunders, Sevenmile Creek, Tenmile and Woodward Creek Acclimation Sites)

### INTRODUCTION

Bandon Hatchery is located one mile east of the City of Bandon. The site is at an elevation of approximately 98 feet above sea level, at latitude 43° 06' 54" N (43.11611) and longitude 124° 23' 03" W (124.3992). Total land area is 32.7 acres.

The hatchery water supply is obtained from two sources: Ferry Creek and Geiger Creek. Water from both sources is supplied by gravity. The hatchery's water rights are a combined 3.0 cfs from both creeks.

The facility is staffed with 3.0 FTE's.

#### Rearing Facilities at Bandon Hatchery

Unit Type	Unit Length (ft)	Unit Width (ft)	Unit Depth (ft)	Unit Volume (ft <sup>3</sup> )	Number Units	Total Volume (ft <sup>3</sup> )	Construction Material	Age	Condition	Comment
Adult Holding Pond	80	20	3.25	5200	1	5200	concrete	1950	poor	spawning building built over first 20' of pond
Raceway	120	20	3.5	8400	1	8400	concrete	1950	fair	
Raceway	110	20	3.67	8074	1	8074	concrete	1950	fair	
Raceway	50	20	5.5	5500	1	5500	concrete	1937	poor	used for settling pond for vacuum sludge
Raceway	45	15	2.5	1688	1	1688	concrete	1950	good	
Raceway	100	20	3.5	7000	1	7000	concrete	1950	poor	used as acclimation ponds
Raceways	100	20	3.5	7000	2	14000	concrete	1958	good	
Troughs	16	3.2	2	102	2	205	concrete	1958	fair	
Troughs	18	2.5	1.25	56	2	113	fiberglass	1985	good	
Troughs	16	2.5	1.33	53	4	213	fiberglass	1991	good	
Vertical incubators					16			1984	good	2 stacks of 8 trays, used for isolation system
Vertical incubators					448			2003	excellent	28 stacks of 16 trays

## **PURPOSE**

Bandon Hatchery was constructed in 1925 and facility operations are funded by the State of Oregon. Various renovations have taken place since construction and recent construction includes a new anadromous fish trapping facility, new water intake on Ferry Creek and new intake screens on Geiger Creek.

The facility is used for adult collection, egg incubation and rearing of both natural and hatchery fall Chinook, coho, winter steelhead and trophy sized rainbow trout.

## **PROGRAM TYPE**

The ODFW Hatchery Management Policy defines hatchery programs as either harvest or conservation programs. Harvest programs operate to enhance or maintain fisheries without impairing naturally reproducing populations. Conservation programs operate to maintain or increase the number of naturally produced fish without reducing the productivity of naturally reproducing populations.

Bandon Hatchery programs are harvest programs, used for the augmentation of fishing and harvest opportunities.

## **GOALS**

### Fall Chinook:

#### Coos River (37) Stock:

1. To provide fish that are genetically and ecologically similar to wild populations, primarily for harvest, while minimizing any potential adverse impacts to the wild population of this species and other listed species.
2. To educate school students and public to increase awareness of salmonid biology, life history, and their habitat requirements, through the STEP component of the program.

#### Coquille River (44) Stock:

1. To provide hatchery fish for recreational and commercial harvest that are genetically and ecologically similar to wild populations, while minimizing any potential adverse impacts to the wild population of this species or other species.
2. To increase student awareness of salmonid biology, life history, and their habitat requirements, through the educational component of the program.
3. To mitigate for the removal of wild fish from the population for the broodstock program through incubation and release of unfed fry at locations in the upper portion of the basin.

Rainbow Trout: Produce trophy-sized triploid trout for Coos-Coquille District standing water bodies to meet management objectives.

Winter Steelhead:

Coos River (37) Stock: to provide fish primarily for angler harvest that are genetically and ecologically similar to wild populations to minimize any potential impacts to wild populations in the Coos River Basin. Unfed fry are used to temporarily stock unseeded habitats in the Coos Basin.

Coquille River (44) Stock: to provide fish primarily for angler harvest that are genetically and ecologically similar to wild populations to minimize any potential impacts to wild populations in the Coquille River Basin. 3,000 eyed eggs are designated for classroom incubation.

S. Fork Coquille River (144) Stock: to provide fish primarily for angler harvest that are genetically and ecologically similar to wild populations to minimize any potential impacts to wild populations in the S. Fork Coquille River system. 2,000 eyed eggs are designated for classroom incubation.

Tenmile Lakes (88) Stock: to provide fish primarily for angler harvest that are genetically and ecologically similar to wild populations to minimize any potential impacts to wild populations in the Tenmile Basin.

## **OBJECTIVES**

Objective 1: Foster and sustain opportunities for sport, commercial, and tribal fishers consistent with the conservation of naturally produced native fish.

Fall Chinook:

Coos River (37) Stock:

Provide 1,460,000 eyed eggs to STEP.

Provide 220,000 eyed eggs to Cole Rivers Hatchery

Produce 547,500 fingerlings (7,300 pounds) for acclimation and release at various sites in the Coos River System.

Coquille River (44) Stock:

Provide 170,000 eyed eggs to Cole Rivers Hatchery.

Provide 139,000 eyed eggs to STEP.

Produce 10,000 fingerlings (133 pounds) for release into Ferry Creek.

Rainbow Trout:

Cape Cod Triploid (72T) Stock

Produce 2,825 trophy-sized trout (5,508 pounds) for release into 5 Coos-Coquille District standing water bodies.

Winter Steelhead:

Coos River (37W) Stock:

Provide 175,000 eyed eggs to Cole Rivers Hatchery.

Provide 2,000 eyed eggs to STEP.

Coquille River (44W) Stock:

Provide 3,000 eyed eggs to STEP.

Produce 45,000 smolts (8,182 pounds) for release into N. Fork Coquille River.

Produce 3,000 smolts (545 pounds) for release into Ferry Creek.

Tenmile Lakes (88) Stock:

Provide 30,000 eyed eggs to Cole Rivers Hatchery.

S. Fork Coquille River (144) Stock:

Provide 2,000 eyed eggs for STEP.

Produce 70,000 smolts (12,728 pounds) for release into the S. Fork Coquille River system.

- Objective 2: Contribute toward the sustainability of naturally produced native fish populations through the responsible use of hatcheries and hatchery-produced fish.
- Objective 3: Maintain genetic resources of native fish populations spawned or reared in captivity.
- Objective 4: Restrict the introduction, amplification, or dissemination of disease agents in hatchery produced fish and in natural environments by controlling egg and fish movements and by prescribing a variety of preventative, therapeutic and disinfecting strategies to control the spread of disease agents in fish populations in the state.
- Objective 5: Minimize adverse ecological impacts to watersheds caused by hatchery facilities and operations.
- Objective 6: Communicate effectively with other fish producers, managers and the public.

## CURRENT PRACTICES TO ACHIEVE OBJECTIVES

The sections that follow describe the current hatchery practices associated with anadromous fish production at this facility. Because ODFW hatcheries are managed to maximize use of the hatchery rearing space, hatchery operations are dynamic and subject to annual change depending upon statewide program needs.

The Native Fish Conservation Policy, the Fish Hatchery Management Policy, the Fish Health Management Policy and Hatchery Genetic Management Plans provide guidelines for the management of wild and hatchery fish in Oregon. These policies describe the brood collection, rearing, release, and health management strategies currently used at this facility.

### **Objective 1: Foster and sustain opportunities for sport, commercial, and tribal fishers consistent with the conservation of naturally produced native fish.**

#### ***Adult Collection***

##### Fall Chinook:

Coos River (37) Stock – No adults are collected at the hatchery; collection sites are Morgan Creek and Noble Creek STEP facilities, and West Fork Millicoma Interpretive Center. Adults arrive at collection sites between October and December. Peak spawning occurs during mid-November. Adults are collected for broodstock using traps, seines, and entanglement nets at several sites.

Coquille River (44) Stock - Adults are collected at the hatchery, at the Sevenmile Acclimation site and at two locations on the South Fork Coquille River system. The annual collection goal is 150 (75 pairs). Adults arrive at the hatchery and other collection sites between October and December. Peak spawning occurs during mid-November.

##### Rainbow Trout:

Cape Cod Triploid (72T) Stock - No adult brood stock is maintained at Bandon Hatchery; fish are received from Klamath Hatchery.

##### Winter Steelhead:

Coos River (37) Stock – Adults are collected by trapping at sites on the South Coos River, West Fork Millicoma River, and Tioga Creek, and by trapping and seining at the Millicoma Interpretive Center. Broodstock may also come from angler donations. Adults arrive at the collection sites between December and March. Peak spawning occurs in February. Adults are collected by trapping, netting, and angler donation.

Coquille River (44) Stock – Adults are collected at the hatchery and sites on the East Fork and the North Fork of Coquille River between late December and March. Peak spawning occurs in late January to coincide with the peak of the run. Adults are collected by trapping, netting, and angler donation.

Tenmile Lakes (88) Stock – No adults are collected at the hatchery; broodstock is collected at Eel Lake Trap and Tenmile Lakes and transported to the hatchery. Adults arrive at collection sites between January and March. Peak spawning occurs in February. Adults are collected by trapping, netting, and angler donation.

S. Fork Coquille River (144) Stock – Adults are not collected at the hatchery. Broodstock is collected at several netting sites on the South Fork Coquille River between December and March. Peak spawning occurs in January to coincide with the peak of the run. Adults are collected by trapping, netting and angler donation.

**Objective 2: Contribute toward the sustainability of naturally produced native fish populations through the responsible use of hatcheries and hatchery-produced fish.**

***Rearing and Release Strategies***

Rearing and release strategies are designed to limit the amount of ecological interactions occurring between hatchery and naturally produced fish. Fish are reared to sufficient size that smoltification occurs within nearly the entire population, which will reduce the retention time in downstream migration. Rearing on parent river water, or acclimation to parent river water for several weeks, is used to ensure strong homing to the hatchery, thus reducing the stray rate to natural populations. Various release strategies are used to ensure that fish migrate from the hatchery with least amount of interaction with native populations. The specific rearing and release strategies used at this hatchery are outlined below.

Fall Chinook:

Coos River (37) Stock – Rear 200,000 fish to a size of 75 fish/pound for transfer to Blossom Acclimation in early May for acclimation and release into Blossom Gulch in late May. All fish are fin-clipped prior to transfer.

Rear 245,500 fish to a size of 75 fish/pound for transfer to Morgan Creek Hatchery for acclimation; release on-station in late May. All fish are fin-clipped prior to transfer.

Rear 100,000 fish to a size of 75 fish/pound for transfer to the Coquille Tribe in early May for release into Fourth Creek. All fish are fin-clipped prior to transfer.

Rear 5,000 fish to a size of 75 fish/pound for transfer to Charleston Acclimation in early May for acclimation and release into Charleston Creek in mid-May. All fish are fin-clipped prior to transfer.

Rainbow Trout:

Cape Cod Triploid (72T) Stock – Rear 800 fish to a size of 1.0 fish/pound, 750 fish to a size of 0.5 fish/pound, 1,250 fish to a size of 0.4 fish/pound and 25 fish to a size of 0.3 fish/lb (trophy fish) for release into Coos-Coquille District standing water bodies. None of the fish are marked.

### Winter Steelhead:

Coos River (37) Stock – Egg program only; see Cole Rivers Hatchery plan for details.

Coquille River (44) Stock – Rear 45,000 fish to a size of 5.5 fish/pound; transfer to the Laverne Park for acclimation and release into the N. Fork Coquille River in late April. Most tend to hang around in the swimming hole, where volunteers feed them until they decide to migrate.

Rear 3,000 fish to a size of 5.5 fish/pound for release into Ferry Creek in early April.

All groups are entirely marked with an adipose clip.

Tenmile Lakes (88) Stock – Egg Program only; see Cole Rivers Hatchery plan for details.

S. Fork Coquille River (144) Stock – Rear 40,000 fish to a size of 5.5 fish/pound; transfer to the Beaver Creek acclimation site for three-week acclimation; release into S. Fork Coquille River in late April. The entire group is marked with an adipose clip.

Rear 30,000 fish to a size of 5.5 fish/pound; transfer to Woodward Creek acclimation site for three-week period; release into Woodward Creek in late April. The entire group is marked with an adipose clip.

### **Objective 3: Maintain genetic resources of native fish populations spawned or reared in captivity.**

#### ***Broodstock Selection and Spawning***

Oregon's Native Fish Conservation Policy and Hatchery Genetic Management Plans outline broodstock selection and spawning protocols for some fish stocks. The following practices are currently being used at Bandon Hatchery:

#### Fall Chinook:

Coos River (37) Stock: Currently the broodstock program is comprised of a minimum of 30% wild fish, with hatchery fish making up the remainder. Adults are collected randomly throughout the run, without selection for any particular characteristics. Fish are spawned at a 1:1 male to female ratio.

Coquille River (44) Stock: The broodstock program is comprised of a minimum of 30% wild fish, with hatchery fish making up the remainder. Returning adults are collected randomly throughout the run, without selection for any particular characteristics. Spawning is at a 1:1 male to female ratio. Only Coquille River stock is used for the program.

#### Rainbow Trout:

Cape Cod (72T) Stock: No broodstock is maintained at the hatchery.



### Winter Steelhead:

Coos River (37) Stock: The broodstock program is comprised of a minimum of 30% wild fish, with hatchery fish making up the remainder. Adults are collected randomly throughout the run, without selection for any particular characteristics. Fish are spawned at a 1:1 male to female ratio; wild fish are mated only with wild fish.

Coquille River (44) Stock: The broodstock program is comprised of a minimum of 30% wild fish, with hatchery fish making up the remainder. Adults are collected randomly throughout the run, without selection for any particular characteristics. Fish are spawned at a 1:1 male to female ratio. Only Coquille stock is used for the program; any hatchery steelhead with marks identifying them as foreign stock are not used as broodstock.

Tenmile Lakes (88) Stock: The broodstock program is comprised of a minimum of 30% wild fish, with hatchery fish making up the remainder. Adults are collected randomly throughout the run, without selection for any particular characteristics. Fish are spawned at a 1:1 male to female ratio; wild fish are mated only with wild fish.

S. Fork Coquille River (144) Stock: The broodstock program is comprised of a minimum of 30% wild fish, with hatchery fish making up the remainder. Adults are collected randomly throughout the run, without selection for any particular characteristics. Fish are spawned at a 1:1 male to female ratio. Only Coquille stock is used for the program; any hatchery steelhead with marks identifying them as foreign stock are not used as broodstock.

**Objective 4: Restrict the introduction, amplification, or dissemination of disease agents in hatchery produced fish and in natural environments by controlling egg and fish movements and by prescribing a variety of preventative, therapeutic and disinfecting strategies to control the spread of disease agents in fish populations in the state.**

### ***Fish Health Management Programs--All Stocks***

ODFW has adopted a Fish Health Management Policy that describes measures that minimize the impact of fish diseases on the state's fish resources. The primary objective of fish health management programs at ODFW hatcheries is to produce healthy smolts that will contribute to the fishery and return sufficient numbers of adults to continue propagation of the stocks and provide supplementation if desired. Equally important is to prevent the introduction, amplification or spread of fish pathogens that might negatively affect the health of both hatchery and naturally reproducing stocks.

ODFW has implemented both disease control and disease prevention programs at all of its facilities to achieve these objectives. These programs include the following standard elements:

### Disease Control (Reactive)

- Perform necropsies of diseased and dead fish to diagnose the cause of loss.
- Prescribe appropriate treatments and remedies to disease. This includes recommending modifications in fish culture practices, when appropriate, to alleviate disease-contributing factors.
- Apply a disease control policy as stated in the Oregon Administrative Rules which dictates how specific disease problems will be addressed and what restrictions may be placed on movements of diseased stocks.
- Conduct applied research on new and existing techniques to control disease epizootics.

### Disease Prevention (Proactive)

- Routinely remove dead fish from each rearing container and notify ODFW Fish Pathology if losses are increasing. Monthly mortality records are submitted to Fish Pathology from each hatchery.
- Routinely perform examinations of live fish to assess health status and detect problems before they progress to clinical disease or mortality.
- Implement disease preventative strategies in all aspects of fish culture to produce a quality fish. This includes prescribing the optimal nutritional needs and environmental conditions in the hatchery rearing container based on historical disease events. It also involves the use of vaccines or antibiotics in order to avoid a disease problem.
- Use a disease prevention policy that restricts the introduction of stocks into a facility. This will help avoid new disease problems and fish pathogens not previously found at the site.
- Use sanitation procedures that prevent introduction of pathogens into and/or within a facility.
- Conduct applied research on new and existing disease prevention techniques.
- Utilize pond management strategies (e.g., Density Index and Flow Index guidelines) to help optimize the quality of the aquatic environment and minimize fish stress that can be conducive to infectious and noninfectious diseases. For example, a Density Index is used to estimate the maximum number of fish that can occupy a rearing unit based on the rearing unit's size. A Flow Index is used to estimate the rearing unit's carrying capacity based on water flows.

## ***Fish Health Activities at Bandon Hatchery***

### Health Monitoring

- All fish are given a health inspection no longer than 6 weeks before fish are released or transferred. This exam may be in conjunction with the routine monthly visit.
- Monthly health monitoring examinations of healthy and clinically diseased fish are conducted on each fish lot at the hatchery.
- Examinations for *Myxobolus cerebralis*, agent of whirling disease, are conducted annually on 60 fish held for a minimum of 180 days at the facility.
- At spawning, a minimum of 60 ovarian fluids and 60 kidney/spleen/pyloric caeca (based on a minimum sampling at the 5% incidence level) are examined for viral pathogens from each salmon lot. Lots with fewer spawned females are 100% sampled. If prespawning mortality is above normal, necropsies are conducted on dead adult fish for bacteria, parasites and other causes of death.
- Whenever abnormal behavior is reported or observed, or mortality exceeds 0.1% per day over five consecutive days in any rearing container, the fish pathologist will examine the affected fish, make a diagnosis and recommend the appropriate remedial or preventative measures.
- Reporting and control of specific fish pathogens are conducted in accordance with the Fish Health Management Policy. Results from each examination mentioned above are reported on the ODFW Fish Health or Virus Examination forms.

### Fish and Egg Movements

- Movements of fish and eggs are conducted in accordance with the Fish Health Management Policy.

### Therapeutic and Prophylactic Treatments

Only approved or permitted therapeutic agents are used for treatments:

- FDA labeled and approved for use on food fish
- Allowed by the FDA as an Investigational New Animal Drug
- Obtained by extra-label prescription from a veterinarian
- Allowed by the FDA as low regulatory priority or deferred regulatory status

- Approved by the FDA through USFWS for fish listed under the federal Endangered Species Act.

### Sanitation

- All eggs brought to the facility are surface-disinfected or water-hardened in buffered iodophor.
- Disinfection footbaths (or other means of disinfection) are provided at the incubation facility's entrance and exit areas while embryos are incubating in the facility.
- All equipment (e.g., nets, tanks, rain gear, boots) is disinfected with iodophor between uses with different fish/egg lots or different rearing containers.
- Dead fish are disposed of promptly and in a manner that prevents introduction of disease agents to the waters of the state.
- Rearing units are cleaned on a regular basis.
- Rearing units are sanitized after removing fish and before introducing a new fish stock either by thorough cleaning and use of a disinfectant or by cleaning and leaving dry for an extended time.

### **Objective 5: Minimize adverse ecological impacts to watersheds caused by hatchery facilities and operations.**

#### ***Environmental Monitoring***

Primarily, environmental monitoring is conducted at ODFW facilities to ensure these facilities meet the requirements of the National Pollution Discharge Elimination Permit administered by the Oregon Department of Environmental Quality. It is also used in managing fish health. On a short-term basis, monitoring helps identify when changes to hatchery practices are required. Long-term monitoring provides the ability to quantify water quality impacts resulting from changes in the watershed (e.g., logging, road building and urbanization). The following environmental parameters are currently monitored at all ODFW hatcheries:

- Total Suspended Solids (TSS) – measured quarterly during the month of highest production. Two composite samples are collected weekly, one during normal operations and one during cleaning. Some facilities may take more samples because of multiple outfalls.
- Settleable Solids (SS) – measured quarterly during the month of highest production. Two composite samples are collected weekly, one during normal operations and one during cleaning. Some facilities may take more samples because of multiple outfalls.

- pH – measured quarterly during normal operations.
- Water Temperatures – daily maximum and minimum water temperatures are measured within the hatchery. Temperature units are recorded for egg development in some hatcheries.
- Dissolved Oxygen (DO) – measured only when conditions warrant (e.g., periods of low flows and high temperatures).
- Air Temperatures – maximum and minimum temperatures are recorded daily at some stations, but there are no special monitoring requirements.
- Flow Logs – changes in water flows through the hatchery ponds are recorded whenever flows are altered for hatchery management activities (i.e., ponding of fish, splitting of fish lots, fish releases, etc.).

**Objective 6: Communicate effectively with other fish producers, managers and the public.**

***Coordination/Communication within ODFW***

Annual Fish Production Meetings: ODFW conducts meetings throughout the state to set annual fish production goals for all public hatcheries in Oregon. These meetings involve the participation of ODFW research, management and fish culture staff as well as representatives from applicable federal agencies and tribes.

Record Keeping: The following records are kept at all ODFW hatcheries:

- Anadromous Adult Transaction Report – details the collection and disposition of all adult fish handled at the facility.
- Mark Recovery Report – details sex, fish length and tag information from all marked adult fish that are captured.
- Egg and Fry Report – records all egg and fry movements, treatments, etc.
- Monthly Poned Report – updates hatchery operations from the previous month (i.e., current number of fish, size, transfers or releases, feed conversion, mortality, medication, etc.).
- Monthly Progress Report – document summarizing operational activities for the hatchery and all satellite facilities (e.g., fish culture, fish health, fish distribution, maintenance and safety).
- Fish Loss and Treatment Report – records disease problems and daily mortality.

- Fish Loss Report/Investigation – when 1,000 or more juveniles or 10 or more adult fish are accidentally lost in a single accident.
- Predator Mortality Report – documents any fish predators that may die at the hatchery facility.
- Fish Liberation Reports – details information regarding all fish releases (e.g., fish numbers, size, location, method of release, marks, etc.).
- Coded –Wire Tag Release Reports – record of all juvenile fish released with coded-wire tags.
- Length Frequency Record – details fish lengths of all anadromous fish released (based on a sample of the releases).
- Chemical use, waste discharge monitoring, purchasing, budget, hazardous materials, safety, vehicles, equipment, maintenance and alarm logs.
- Visitor Log – some facilities record the daily visitor use of the facility; however, this is not a requirement.

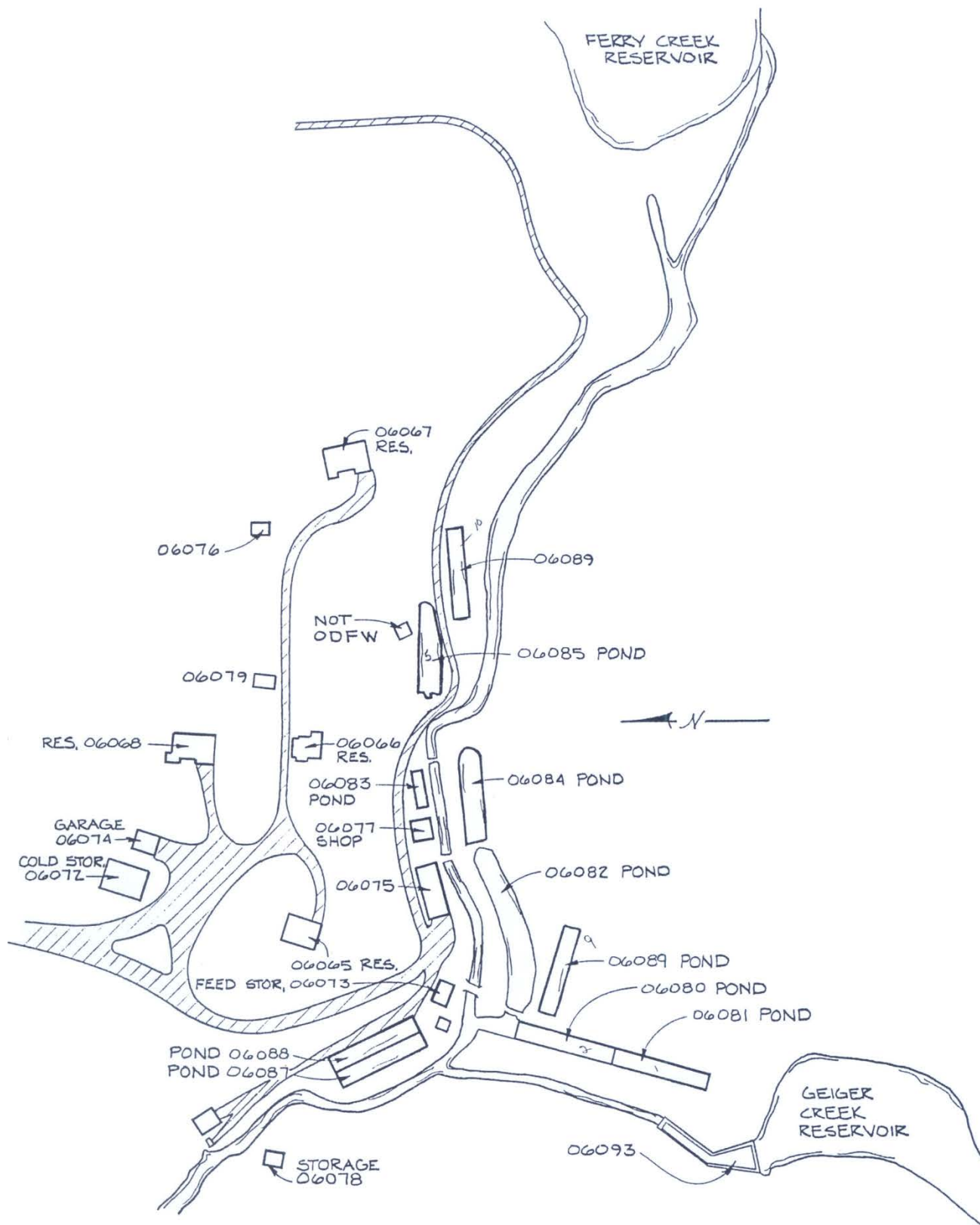
Hatchery Management System (HMS): Computerized system to collect, report, summarize and analyze hatchery production data. This system is a tool to be used in production control at all hatchery management levels.

### ***Interagency Coordination Communication***

Pacific Northwest Fish Health Protection Committee (PNFHPC): This group is comprised of representatives from U.S. and Canadian fish management agencies, tribes, universities, and private fish operations. The group meets twice a year to monitor regional fish health policies and to discuss current fish health issues in the Pacific Northwest.

### ***Communication with the General Public***

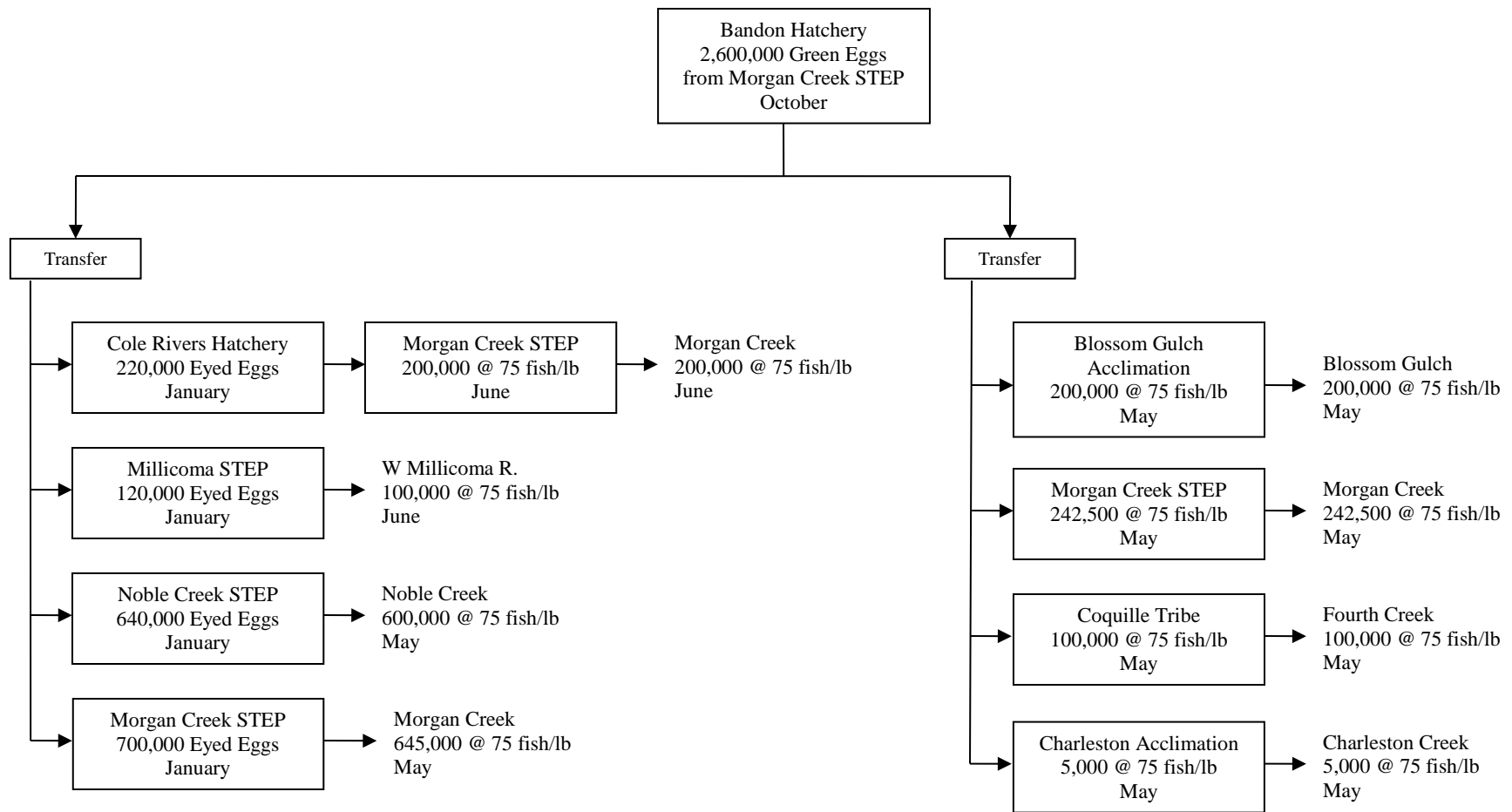
Bandon Hatchery receives approximately 3,000 visitors each year.



## BANDON HATCHERY

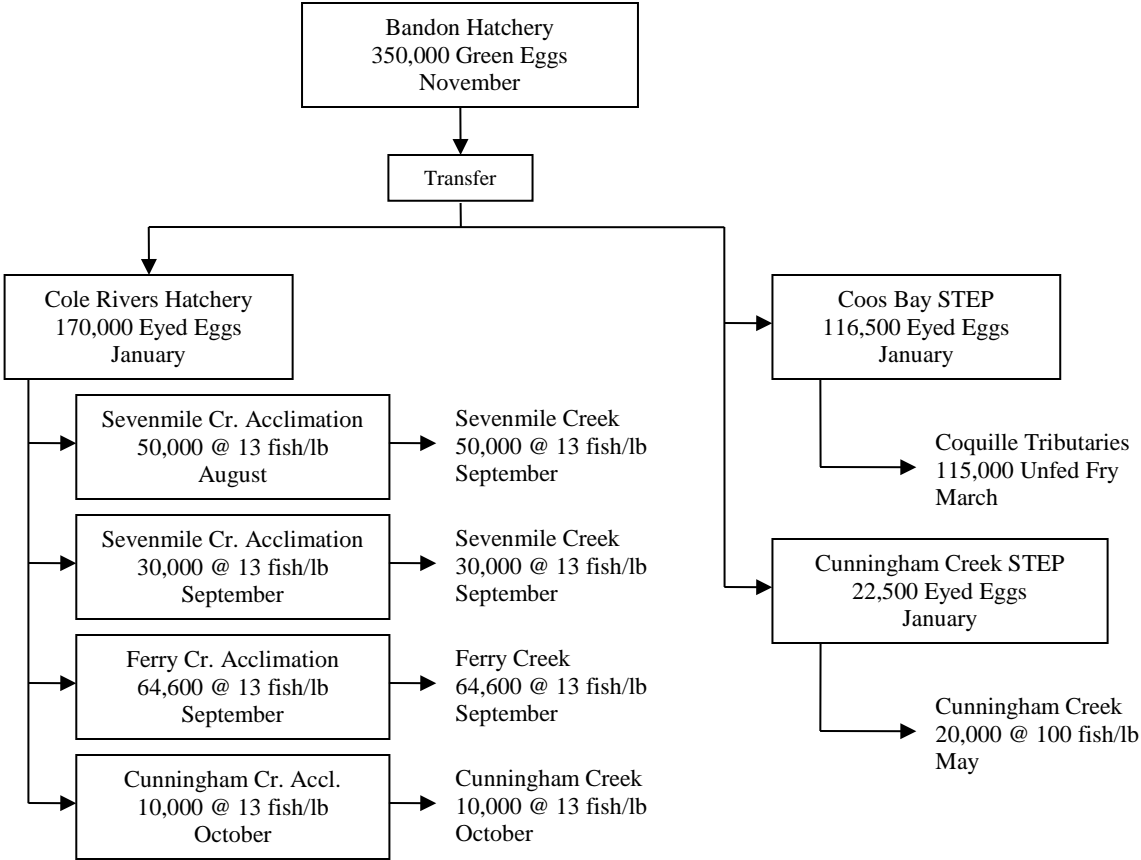
LAND - PARCEL A	(06061)	DAM	(06094)	LANDSCAPING	(06102)
" " B	(06062)	PIPELINE	(06095)	STOR. TANK	(06103)
" " C	(06063)	RETAINING WALL	(06096)	SEWAGE DISPOSAL	(06104)
PUMP HOUSE	(06076)	LIGHTS	(06105)	ROADS & CULVERTS	(06106)
STORAGE SHED	(06079)	CANAL	(06097)		
DAM & PIPELINE	(06090)	POND(HAT. BLDG.)	(06098)		
DAM	(06091)	" "	(06099)		
RETAINING WALL	(06092)	PIPE	(06100)		
DAM & PIPELINE	(06093)	FLAGPOLE	(06101)		
STORAGE SHED - SEARS	(06064)				
SPAWNING SHED	(06070)				

## Bandon Hatchery Fall Chinook Salmon – Stock 37 (Coos River)

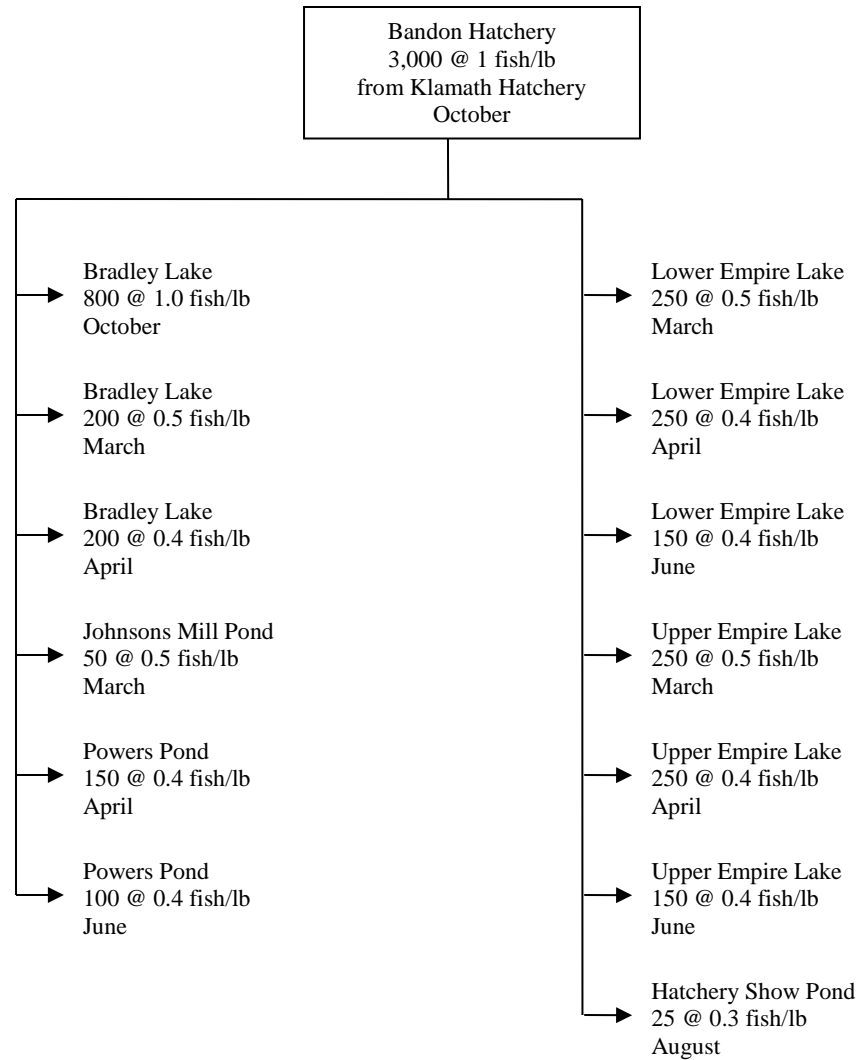




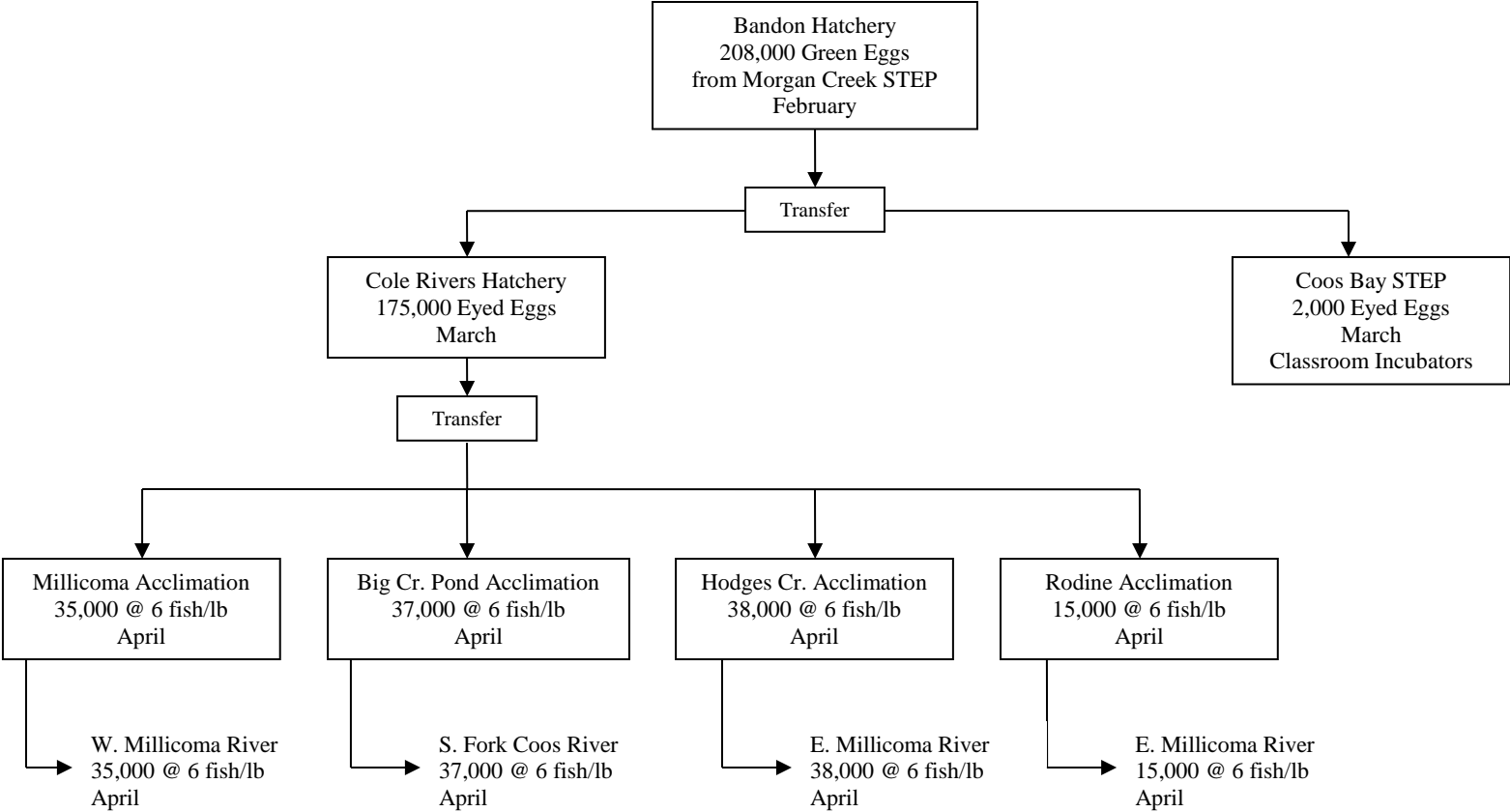
## Bandon Hatchery Fall Chinook Salmon – Stock 44 (Coquille River)



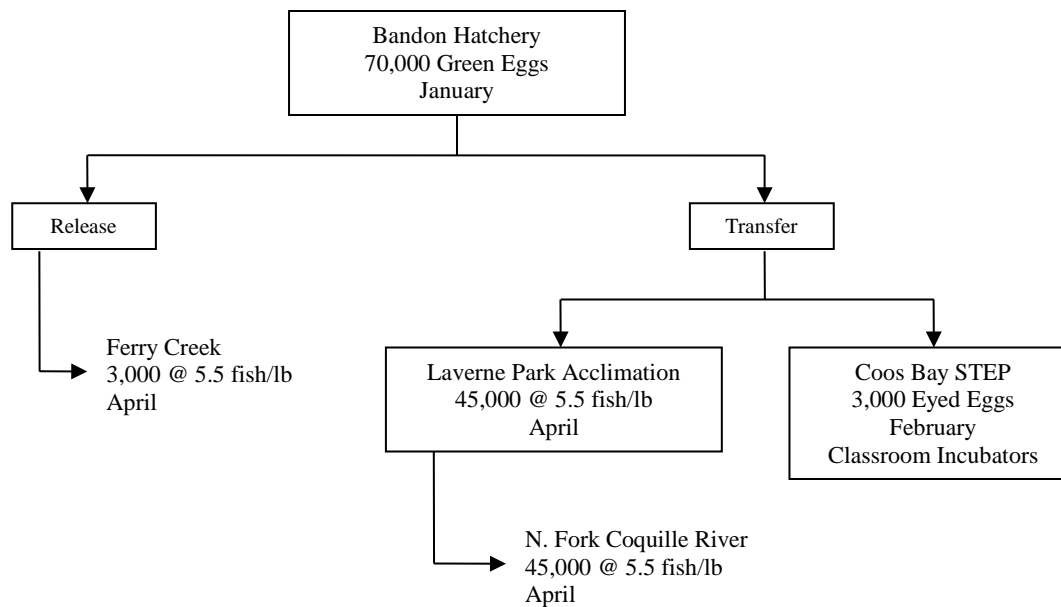
## Bandon Hatchery Rainbow Trout – Stock 72T (Cape Cod Triploid)



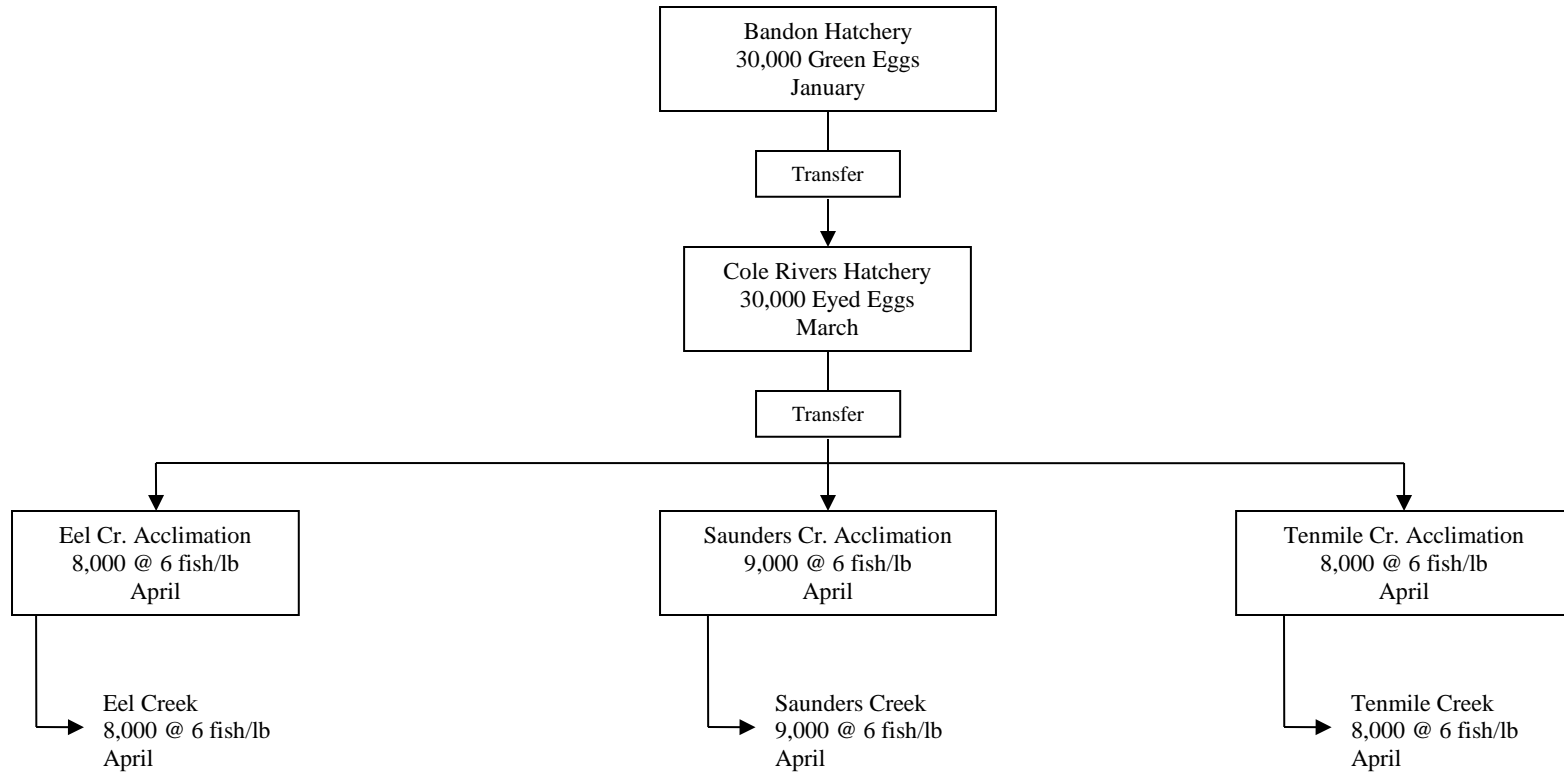
**Bandon Hatchery  
Winter Steelhead – Stock 37 (Coos River)**



## Bandon Hatchery Winter Steelhead – Stock 44 (Coquille River)



## Bandon Hatchery Winter Steelhead – Stock 88 (Tenmile Lakes)



**Bandon Hatchery**  
**Winter Steelhead – Stock 144 (S. Fork Coquille River)**

