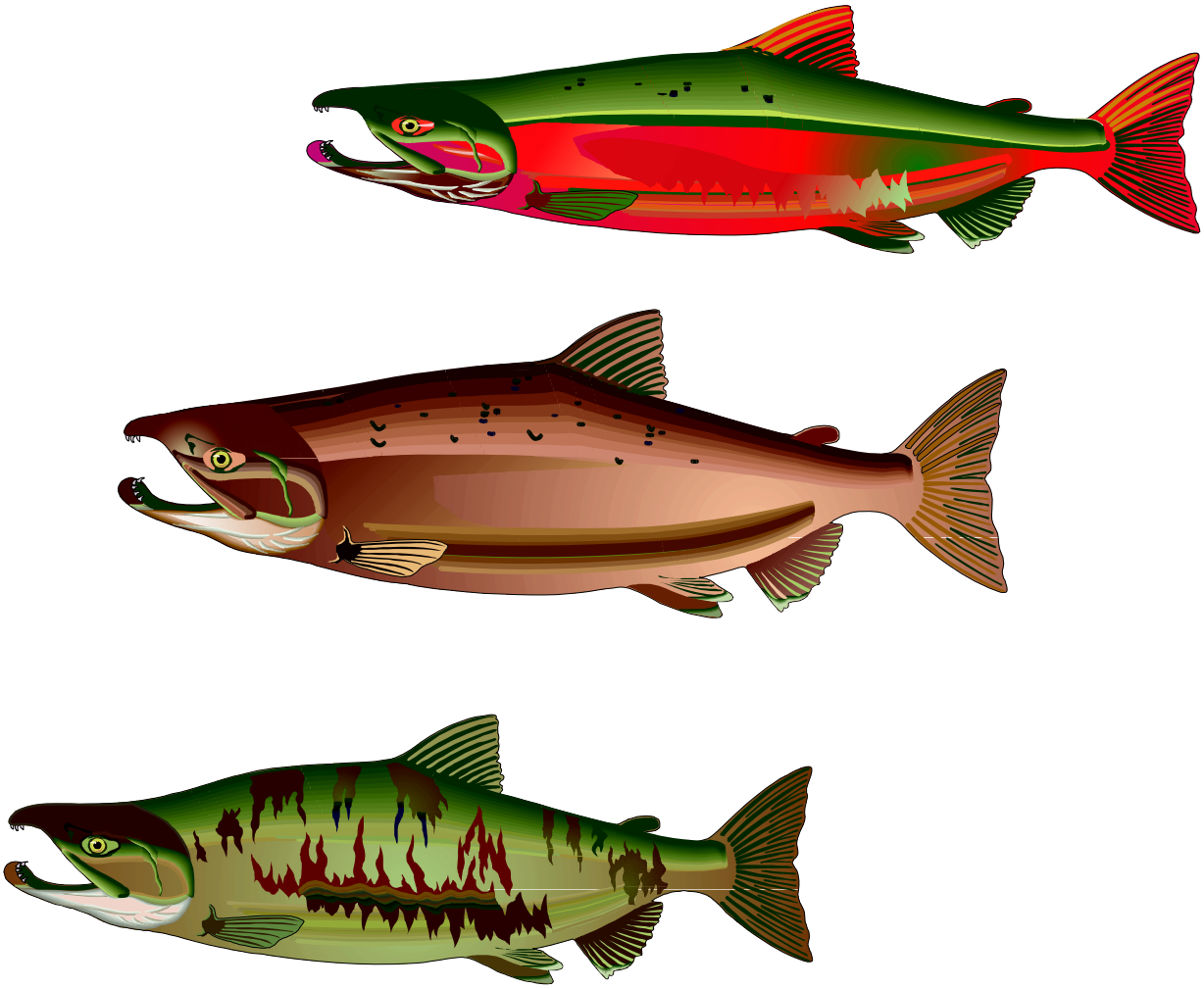
SALMON SPAWNING SURVEY

PROCEDURES MANUAL

October 2025



OREGON ADULT SALMONID INVENTORY AND SAMPLING (OASIS) PROJECT

OREGON DEPARTMENT OF FISH AND WILDLIFE

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THE OREGON PLAN FOR SALMON AND WATERSHEDS

A Unique Foundation

The Oregon Plan represents a unique foundation. It is Oregon's coordinated approach to recover salmonid populations, restore watersheds to healthy conditions, and address the issues and requirements of the federal Clean Water and Endangered Species Acts. The Oregon Plan is designed to function within the State's regulatory requirements, social realities, and funding constraints. Four legs support the foundation of the Oregon Plan: action by government agencies (including a regulatory baseline), voluntary action, monitoring, and scientific oversight.

Government Agencies

Action by government agencies, including enforcement of a regulatory baseline, is the first leg of the Oregon Plan. State and Federal agencies have committed to accomplish work that will complement work on private lands; helping sustain and restore healthy watersheds, improve water quality, and recover native salmonids across the landscape.

Voluntary Action

Voluntary action is the second leg of the Oregon Plan. Although more than half of Oregon is publicly owned, the distribution of public and private lands in Oregon and the life cycle requirements of federally listed salmonid species combine to make water quality and watershed health on private lands crucial to meeting requirements of federal Clean Water and Endangered Species Acts. This is where voluntary action by Oregonians is imperative. Private landowners, individuals and industries, rural and urban landowners, businesses, and citizens are filling critical gaps by conducting restoration work essential to watershed health, clean water, and recovery of listed fish species. Much of this work is coordinated through local watershed councils.

Monitoring

Monitoring is the third leg of the Oregon Plan. The goal of the monitoring effort is to document the current condition of Oregon's key watershed health parameters, track changes over time, and determine if restoration efforts are effective. ***The spawning surveys that you will be conducting are a key component of this monitoring activity.***

Scientific Oversight

Scientific oversight is the final leg of the Oregon Plan. The Independent Multidisciplinary Science Team (IMST) has an integral role in this process. This aspect provides a foundation that includes independent evaluation of the Oregon Plan's actions, monitoring and management programs, as well as a commitment to conduct needed research.

OREGON ADULT SALMONID INVENTORY AND SAMPLING PROJECT

The Oregon Adult Salmonid Inventory and Sampling (OASIS) project is one of four Oregon Department of Fish and Wildlife (ODFW) monitoring projects that contribute toward the overall Oregon Plan for Salmon and Watersheds (OPSW or Oregon Plan) monitoring program. The four monitoring projects are: Western Oregon Rearing Project (Juveniles), Aquatic Inventories Project (Habitat), Salmonid Life-Cycle Monitoring Project (Survival) and the Oregon Adult Salmonid Inventory and Sampling Project (Adults). The habitat, juvenile, and adult monitoring projects are linked through the use of a Generalized Random Tessellation Stratified (GRTS) site selection and rotating panel sample design to promote sampling efficiencies and allow for integration of data and analysis.

The overall objective of the OASIS project is to monitor status and trends of naturally produced Oregon coastal and Lower Columbia salmonid stocks. The project has four main target species: Chinook, chum, coho and steelhead. Although not a part of the initial design, the project has developed a monitoring plan for spawning Pacific lamprey. In addition, observations of brook lamprey and cutthroat trout are recorded. Key metrics include abundance, spatial distribution, temporal distribution and proportion of hatchery fish in the naturally spawning population. The geographic scale of abundance estimates varies by species, but the goal, in all cases, is a point estimate with a confidence interval (C.I.) of +/- 30%.

Spawning ground surveys are conducted from September through January (Chinook, chum and coho) and from February through mid-June (steelhead and lamprey). Surveys are conducted at least once every 10 days (Chinook, chum and coho) or once every 14 days (steelhead and lamprey). Survey sites are either “Standard” or random GRTS surveys. Standard surveys were specifically selected, many in the 1950’s, for ease of access and historic high numbers of spawning salmon. The GRTS survey sites are based on a spatially balanced random selection process and incorporate a rotating panel design. Surveyors either walk upstream or boat downstream, depending on the size of the stream being surveyed. The surveyors count redds, live and dead fish (by species), and sample carcasses for length, sex, scales, fin clips, and tags.

Project Objectives

Four salmonid species and Pacific lamprey are monitored through spawning surveys. Primary objectives for each of these species are as follows:

Coho Salmon

Continue long-term annual estimate of abundance index (peak count on standard surveys, in fish/mile) for selected areas.
Estimate annual abundance of natural spawners for each population/complex:
Lower Columbia - 8 populations
Oregon Coast - 24 populations
Survey 30 sites or 30% of the coho spawning habitat in each Lower Columbia population.

Survey 15 sites or 15% of the coho spawning habitat in each Oregon Coast population.
Evaluate straying and natural spawning of hatchery fish.
Map the spatial and temporal distribution of spawners.
Monitor Threatened and Endangered stocks.
Monitor and assess abundance trends.
Research and develop methodologies as need and opportunity allows.

Chinook Salmon

Oregon Coast
Continue long-term annual estimate of abundance index (peak count).
Monitor and assess trends in abundance index.
Determine spawner age composition and life history (fish scales).
Identify hatchery origin fish in naturally spawning population (fin clips and/or marks).

Lower Columbia
Estimate annual abundance of natural spawners for each population/complex: 9 populations.
Survey 30 sites or 30% of the Fall Chinook spawning habitat in each population.
Evaluate straying and natural spawning by hatchery fish.
Map the spatial and temporal distribution of spawners.
Monitor Threatened and Endangered stocks.
Monitor and assess abundance trends.

Chum Salmon

Continue long-term annual estimate of abundance index, (peak count).
Monitor and assess trends in abundance index.
Research and develop methodologies as need and opportunity allows.

Steelhead

Estimate annual abundance of natural spawners in each ESU (evolutionarily significant unit) or DPS (distinct population segment).
Evaluate straying and natural spawning by hatchery fish.
Map the spatial and temporal distribution of spawners.
Monitor and assess abundance trends.
Determine spawner age composition and life history (fish scales).
Research and develop methodologies as need and opportunity allows.

Pacific Lamprey

Report annual abundance index of natural spawners.
Monitor and assess abundance trends.
Map the spatial and temporal distribution of spawners.
Research and develop methodologies as need and opportunity allows.

Additional information is available on the project web site at:
https://odfw-oasis.forestry.oregonstate.edu/

COASTAL CHINOOK RESEARCH AND MONITORING PROJECT

The Coastal Chinook Research and Monitoring Project (CCRMP) is an ODFW project that is continuing a multi-year study designed to develop methods that provide reliable estimates of Fall Chinook spawner escapements for Oregon coastal streams. Chinook assessment studies will be conducted in basins which may include the Nehalem, Nestucca, Salmon, Siletz, Siuslaw, South Umpqua, Sixes and Elk River basins during the 2025-26 spawning season. The work will include spawning ground surveys which have been calibrated via mark recapture studies to obtain estimates of Fall Chinook spawners. Surveyors will follow the same survey protocol used elsewhere. It will also be important to look for opercle punches or additional tags from these studies in adjacent basins, particularly in the Sixes River.

OASIS surveyors working in most of the basins listed above will be required to sample all adult Chinook carcasses for fin-marks, length, scales, and sex. Careful attention should be directed towards identifying opercle punches (Figures 8 and 9). Carcasses may “fungus up” or the punch may “skin over” making it difficult to see the mark. The gill cover may erode into the punch, changing the round hole to a crescent shape mark. Any remnant of an opercle punch will be recorded as a marked fish. Each fish will be sampled once, and the tail removed.

Shared Chinook scale sampling efforts between OASIS and CCRMP in some basins will require close communication between the projects. Crews should work with crew leaders to make sure these surveys are conducted regularly throughout the Chinook spawning season.

WILLAMETTE SPRING CHINOOK RESEARCH AND MONITORING PROJECT

Spring Chinook salmon in the Willamette and Sandy basins are listed as threatened under the Endangered Species Act. This work contributes to the Upper Willamette River Conservation and Recovery Plan for Chinook and steelhead and the Willamette River Biological Opinion, which aims to reduce the effects of federal dams in the basin.

In past seasons, Spring Chinook surveys in the Willamette and Sandy Basins were a complete census of all spawning habitat in these basins. Starting in 2023 the Spring Chinook project will be randomly selecting sites using the same GRTS-based methodology as the OASIS project, and surveys will often overlap between these two efforts. This overlap allows Spring Chinook and OASIS staff to coordinate survey efforts, helping one another as we transition from Spring Chinook to Fall Chinook and coho surveys. Spring Chinook survey methods are similar to those of OASIS, with survey rotations of seven to 10 days. Peak redd counts are used to estimate spawner abundance by river and basin. Carcasses are recovered and sampled to estimate prespawn mortality, the proportion of hatchery origin spawners (pHOS), and age composition for each population. This information is used by fishery managers to monitor recovery of these runs and to set fishing seasons.

SUPPLY LIST FOR SPAWNING SURVEYORS

Forms:

Landowner Contact Form
List of Survey Location Descriptions
Spawning Survey Evaluation Form (Survey123)

Equipment:

Chest waders with wading belt and gravel guards
Wading boots with boot studs
Polarized sunglasses with Croakies
Raincoat
ODFW Hat
Orange field vest
Pencils, pens, and Sharpies
Measuring tape (in millimeters)
Forceps for scale collection
Scale envelopes
Knife with sheath
Snout ID Labels
Snout bags
Wading staff with gaff
Signs and aluminum nails for marking boundaries of surveys
CB Radio (in vehicle)
Life Jacket (for river surveys, as needed)
Spawning Survey Procedures Manual
OASIS Project Admin Handbook
Smartphone with waterproof Aquapac
InReach satellite messenger -or- iPhone (with satellite messaging capability)
Car charger
Site maps (coverage, topographic, road, GIS, State Forestry, etc.)
Machete
Knife sharpener (one per crew)
First Aid Kit
Cut resistant gloves
Flagging
Aqua Seal (one per crew)
Handheld radios

SURVEY SITES

Description Lists

You will receive a list of survey descriptions for sites in your area which provide detailed directions to the survey site, including the start and end coordinates (Figure 1). Survey descriptions are divided into three sections: a description of the survey boundaries (including the position of start and end signs); driving directions; and a section for special instructions unique to the survey, such as specific landowner requests. This information will allow you to correctly access and survey each site on your list.

Verify that you are in the right place, and that survey boundary signs are correct. Sometimes the reach ID and/or segment numbers change, and signs need to be updated. If start or end signs are missing, first check that you have correctly identified the start and end points by referencing survey description, site map, start/end coordinates and GPS location. Next, check the special instructions to see if a landowner has asked us not to post signs. Consult your crew leader in cases where there is a discrepancy or uncertainty in the location of the start or end of a survey. Update the description and start or end coordinates where necessary using the description change form.

Description Changes

Survey directions, descriptions and special instructions sometimes contain outdated or incorrect information which must be updated. Common description changes include (but are not limited to) correcting UTM coordinates, revising driving directions, updating information about access gates or keys, or moving sign locations. Record these changes on the **Description Change Form** (Figure 2). Fill out the form completely. When writing a description, be detailed and precise. Proper grammar and legibility are important. Read the current descriptions of your surveys to get an idea of what makes a good description.

Maps

You will also be provided with a notebook including detailed maps of all survey sites in your area. Each site will have a 1:24K topographic map (see Figure 4) as well as a larger scale map that includes tax-lots. Additional materials may be available if you cannot find a site using the description and the map. Summer surveyors fill out a Survey Site Verification Form (see Figure 3) when they set up a new survey or revisit an older survey. The verification form may have specific comments or landmarks that could help you locate the start and/or end of the survey. If needed, this information can be obtained by contacting your crew leader or assistant project leader.

UTM Coordinate System

The UTM coordinate system is based on a projection of the earth as a flat surface. The earth is divided into 60 zones, and all Western Oregon falls within Zone 10. Within each zone there are two coordinates that define a point: a Northing (y) and an Easting (x). The northing coordinate indicates the distance in meters from the southern boundary of Zone 10 (the values increase as you move north). The easting coordinate indicates the distance from the western boundary of Zone 10 (the values increase as you move east). These coordinates correspond to distances, in meters, inside the zone boundaries. Most maps will have the UTM grid printed on them.

Some maps may only have tick marks along the margins, so you must construct the grid. In the margins of the map, next to the grid lines, are the coordinates for the boundaries of the 1,000-meter grid. The two larger digits are called the “principal digits” and are always in ten-thousands and thousands of meters.

Missing or Inaccurate Coordinates

You will need to obtain UTM coordinates for all surveys where coordinates are missing on the data sheets or where the coordinates are inaccurate. You should confirm the accuracy of UTM coordinates for the start and end points of each survey. Write the new or corrected UTM readings on the Description Change Form. If there is more than a minor correction, please consult with your crew leader to confirm the start or end location of your survey is correct.

Crew: Sandy Hike

REACH ID: 33546.00 SEGMENT: 1 SURVEY: Zigzag R 0.3 MILES START COORD:

UTM COORDINATES: UP-E 585021 UP-N 5020415 DOWN-E 584901 DOWN-N 5020889

Survey Description: START sign on left bank alder. Survey upstream 0.3 mi to Still Cr. END sign on left bank alder.

Directions: From the Clackamas ODFW District office take a right on SE Jennifer St and drive 1.9 mi and then continue on SE 135th Ave to Hwy 212. Turn right on Hwy 212 and drive 9.6 mi to Hwy 26. Turn right onto Hwy 26 and drive 23.8 mi to E Little Brook Ln. Turn left on E Little Brook Ln and then immediate left onto Arlie Mitchel Rd and drive 0.2 mi to E Henry Creek Rd. Turn left on E Henry Creek Rd and drive 0.2 mi to pullout between residences. Park and walk down residence driveway to trail on left side of house that leads to Henry Cr. Follow creek to its confluence with Zigzag R. Survey upstream 0.3 mi to mouth of Still Cr. Exit up bank to Hwy 26. To END pt: Return to Hwy 26 and drive 0.3 mi West to bridge over Zigzag R and park. End of survey is just upstream of bridge at mouth of Still Cr (visible from bridge).

Special Instructions: Survey could be floated, as the Zigzag is very wide. Experienced kayakers only. **Surveyors can also survey from right bank. Access is 2nd house/driveway off FS Rd 9.

REACH ID: 33547.00 SEGMENT: 3 SURVEY: Still Cr 1.13 MILES START COORD: 03S07E24

UTM COORDINATES: UP-E 587218 UP-N 5016747 DOWN-E 586048 DOWN-N 5017812

Survey Description: START sign on right bank alder. Survey upstream 1.13 mi to Cool Cr. END sign on left bank alder next to START sign of next survey.

Directions: From the Clackamas ODFW District office take a right on SE Jennifer St and drive 1.9 mi and then continue on SE 135th Ave to Hwy 212. Turn right on Hwy 212 and drive 9.6 mi to Hwy 26. Turn right on Hwy 26 and drive 23.3 mi to E Still Creek Rd. Turn right on E Still Creek Rd (NF 2612) and drive 2.1 mi to trib crossing and park. Walk down driveway* that follows trib to confluence of Still Cr. Survey upstream 1.13 mi to Cool Cr. Exit right up Cool Cr to NF 2612 for pickup. Pickup: From start point trib continue on NF 2612 1.08 mi for pickup.

Special Instructions: *29994 E Road 12 M & V Stine

REACH ID: 33549.00 SEGMENT: 2 SURVEY: Still Cr 0.76 MILES START COORD: 03S08E19

UTM COORDINATES: UP-E 589459 UP-N 5015383 DOWN-E 588699 DOWN-N 5015979

Survey Description: No START sign. Survey from trib upstream 0.76 mi to bridge. END sign on left bank alder 5m down from bridge.

Directions: From the Clackamas ODFW District office take a right on SE Jennifer St and drive 1.9 mi and then continue on SE 135th Ave to Hwy 212. Turn right on Hwy 212 and drive 9.6 mi to Hwy 26. Turn right on Hwy 26 and drive 23.3 mi to E Still Creek Rd (NF 2612). Turn right on E Still Creek Rd and drive 4.3 mi to NF 2632. Turn left on NF 2632 and drive 0.03 mi to bridge. Park and enter creek. Follow downstream to left bank trib. Survey from trib upstream 0.76 mi to bridge. Exit via road. PICKUP: Go back to NF 2612 and drive 0.5 mi to next bridge.

Special Instructions: None

REACH ID: 33549.00 SEGMENT: 4 SURVEY: Still Cr 1.15 MILES START COORD:

UTM COORDINATES: UP-E 591499 UP-N 5013208 DOWN-E 590452 DOWN-N 5014387

Survey Description: START sign on right bank conifer. Survey upstream 1.15 mi to 2nd right bank trib.

Directions: From the Clackamas ODFW District office take a right on SE Jennifer St and drive 1.9 mi and then continue on SE 135th Ave to Hwy 212. Turn right on Hwy 212 and drive 9.6 mi to Hwy 26. Turn right onto Hwy 26 and drive 23.3 mi to E Still Creek Rd (NF 2612). Turn right on E Still Creek Rd and drive 5.77 mi to pullout on right. Park and walk down steep hill to start. Survey upstream 1.15 mi to 2nd right bank trib. Exit up trib to road. PickUp: To get to end continue down Still Creek Rd 1.2 mi **.

Special Instructions: ** Gate is closed in winter so surveyors will have to walk down road 0.4 mi to gate from end of survey.

Figure 1. Example of crew Survey Description sheet.

Tule Clackamas

SPAWNING SURVEY DESCRIPTION CHANGE FORM

Description changed
☐ Yes
☐ No

DATE _____ SURVEYOR ID _____

REACH ID: 30867.00 SEGMENT: 2 SURVEY: Clackamas R

UTM COORDINATES: Please update any new coordinates

DOWN-E	532829	_____
DOWN-N	5025305	_____
UP-E	534294	_____
UP-N	5027048	_____

Current Survey Description Survey from Riverside Park boat ramp downstream 1.75 mi to I-205 Bridge.

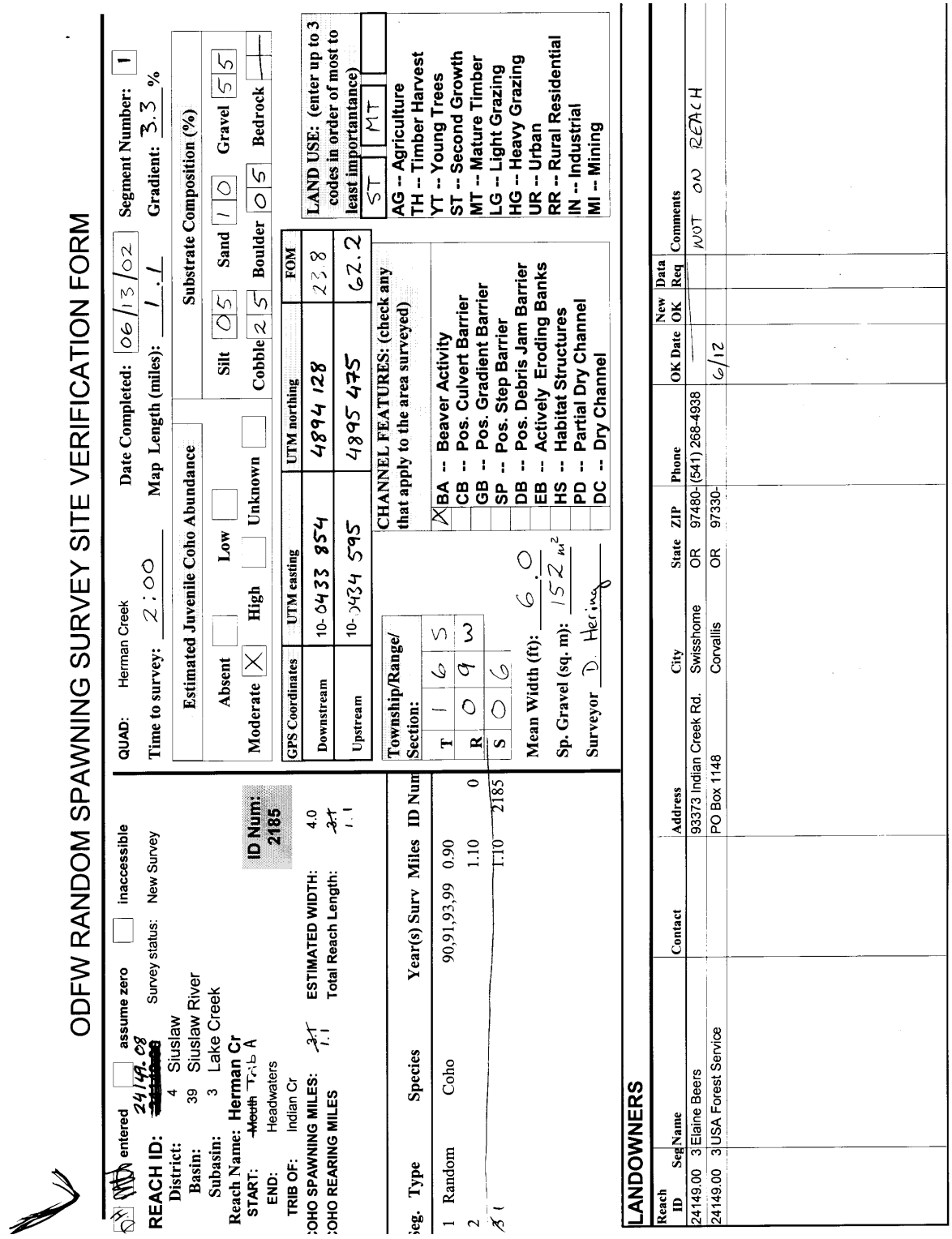
Current Directions: From the Clackamas ODFW District office take a right on Mangan Dr and drive one block to a natural right. Continue down to park enterance. Put in here. Survey downstream 1.75 mi to I-205 Bridge. Continue to float downstream to Clackamette Park.*

Current Special Instructions: * It is possible to drag inflatables out of river at "Hi Rocks" just below I-205.

INSTRUCTIONS: Print legibly, use complete sentences, and observe standard rules of grammar. Include as much detail as necessary so that your description will enable future surveyors to locate exactly the same stream segment. Try to avoid using landmarks and names that are likely to change over time.

Figure 2. Example of Description Change Form.

Random Survey Site Verification Form (Example)



ODFW RANDOM SPAWNING SURVEY SITE VERIFICATION FORM

entered 24149.08 assume zero inaccessible

REACH ID: [redacted] Survey status: New Survey

District: 4 Siuslaw
Basin: 39 Siuslaw River
Subasin: 3 Lake Creek
Reach Name: Herman Cr
START: ~~Mouth~~ Trib A
END: Headwaters
TRIB OF: Indian Cr

ID Num: 2185

COHO SPAWNING MILES: ~~3.5~~ 4.0
COHO REARING MILES ~~1.1~~ 1.1

ESTIMATED WIDTH: ~~3.5~~ 4.0
Total Reach Length: ~~3.5~~ 4.0

QUAD: Herman Creek
Time to survey: 2:00
Date Completed: 06/13/02
Map Length (miles): 1.1
Segment Number: 1
Gradient: 3.3 %

Estimated Juvenile Coho Abundance: Absent ☐ Low ☐ Moderate ☒ High ☐ Unknown ☐

Substrate Composition (%): Silt 05 Sand 10 Gravel 55 Cobble 25 Boulder 05 Bedrock —

GPS Coordinates	UTM easting	UTM northing	FOM
Downstream	10-0433 854	4894 128	23.8
Upstream	10-0434 595	4895 475	62.2

Township/Range/Section: T 11 6 S; R 09 W; S 06

Mean Width (ft): 60.0
Sp. Gravel (sq. m): 152 m²
Surveyor D. Herring

CHANNEL FEATURES: (check any that apply to the area surveyed)

- ☒ BA -- Beaver Activity
- ☐ CB -- Pos. Culvert Barrier
- ☐ GB -- Pos. Gradient Barrier
- ☐ SP -- Pos. Step Barrier
- ☐ DB -- Pos. Debris Jam Barrier
- ☐ EB -- Actively Eroding Banks
- ☐ HS -- Habitat Structures
- ☐ PD -- Partial Dry Channel
- ☐ DC -- Dry Channel

LAND USE: (enter up to 3 codes in order of most to least importantance): ST | MT |

AG -- Agriculture
TH -- Timber Harvest
YT -- Young Trees
ST -- Second Growth
MT -- Mature Timber
LG -- Light Grazing
HG -- Heavy Grazing
UR -- Urban
RR -- Rural Residential
IN -- Industrial
MI -- Mining

Seg.	Type	Species	Year(s) Surv	Miles	ID Num
1	Random	Coho	90,91,93,99	0.90	
2				1.10	0
				1.10	2185

LANDOWNERS

Reach ID	Seg	Name	Contact	Address	City	State	ZIP	Phone	OK Date	New OK	Data Req	Comments
24149.00	3	Elaine Beers		93373 Indian Creek Rd.	Swisshome	OR	97480-	(541) 268-4938				NOT ON REACH
24149.00	3	USA Forest Service		PO Box 1148	Corvallis	OR	97330-		6/12			

4/23/2002 9:48:51 AM JCF

Figure 3. Example of a random survey site selection verification form (Page 1).

Figure 3 (cont.). Example of a random survey site selection verification form (Page 2).

(Site verification form page 2)

Description (Example of format) : 1) Directions from district office or some other major landmark to the start of survey, location of start sign; 2) "Survey from _____ upstream ____ miles to_____ (location of endpoint sign)"; 3) Describe best way to exit; 4) "***NOTE: (include special landowner instructions and/or specific warnings, etc.)"

From Mapleton, drive miles east on Hwy 36 to Indian Cr. Rd. Go left (north) on Indian Cr. Rd and drive 8.8 miles to FS 3278 (Gibson Cr. Rd) on right. Take FS 3278 2.7 miles to FS 32. Turn left and drive 4.6 miles to FS 3250 on left. Take FS 3250 0.7 miles to Herman Cr. Rd on left. Take Herman Cr. Rd 1.9 miles to end of road and park (this is the junction of two decomissioned roads). Walk east down forested hillslope to Herman Cr. Survey starts at confluence with perennial right bank trib in marshy meadow. Start sign is on solitary old growth fir in meadow @ confluence. Survey upstream 1.1 miles to end signs on big leaf maple left and mid stream alder. Exit up left bank hillslope to Herman Cr road. (Well established elk trails lead straight up slope.) Exit point is marked on Herman Cr. Rd with orange sign.

Comments:

Spawning Gravel:
Spawning habitat exists throughout segment. Gravel is somewhat embedded in meadow areas.

Fish Presence:
coho and trout present — trout throughout segment, coho densities diminish toward endpoint

UTMe	UTMn	FOM	Dist. (ft)	Landmark	UTMe	UTMn	FOM	Dist. (ft)	Landmark
0434113	4894986	29.3		marshy meadow					
0434328	4895192	43.4		seasonal right trib + meadow					

Misc. Comments

steelhead redds visible in lower 1/3 of segment

right bank trib @ start point is coho bearing → ∴ reach change

Random Survey Site Map Example

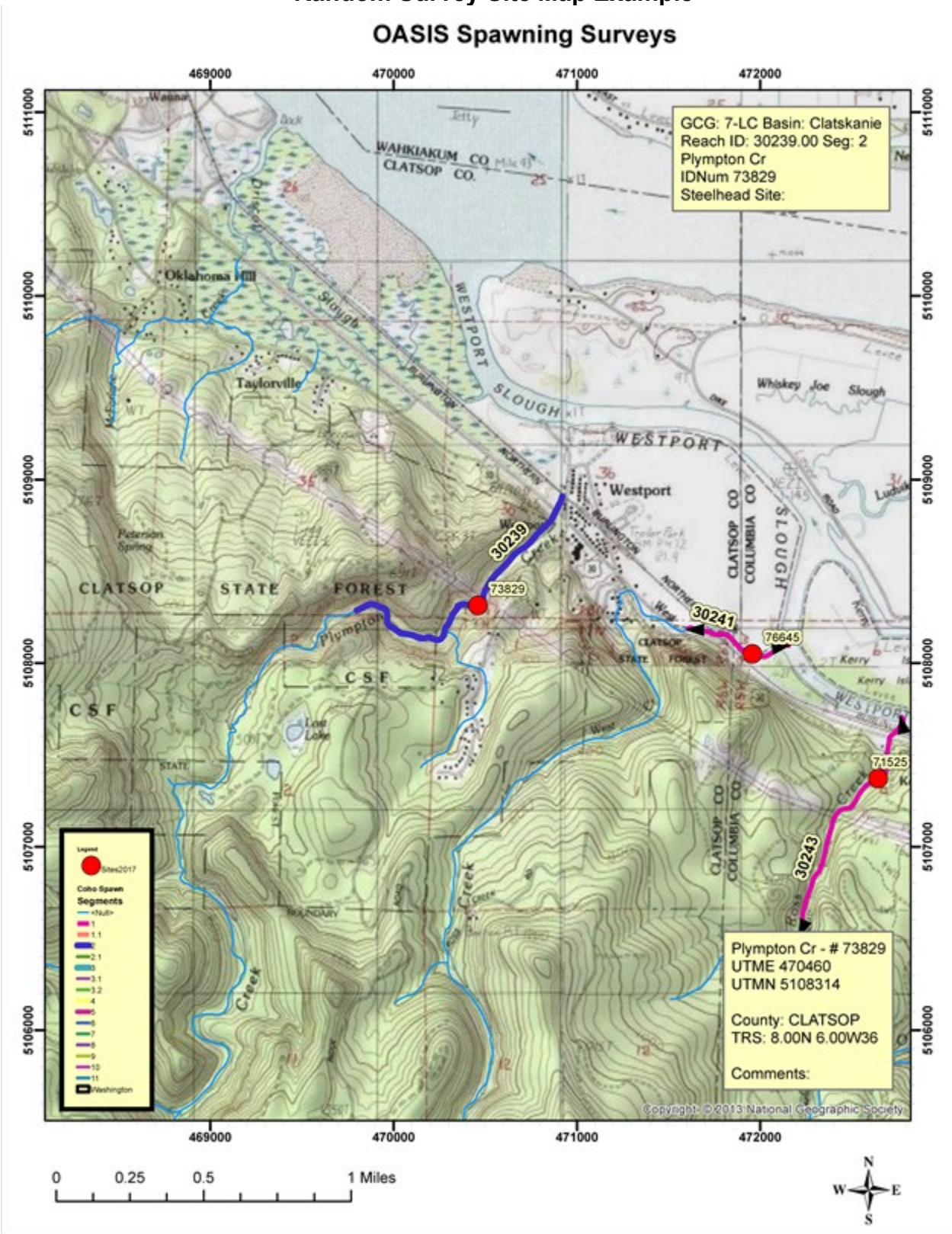


Figure 4. Example of a random survey site map.

Landowner Contacts

We must have documented permission from each landowner before accessing private land to conduct surveys. You will be given pre-printed Landowner Contact Forms (Figure 5) for all surveys which will note whether permission has been granted, denied, or if we have not yet received a response. You must contact landowners for permission to access their land for landowners we have not yet documented a response. The data on these forms is our best knowledge about the landowners on the survey, but it is not infallible. People buy, sell and subdivide land, and there may be new landowners that are not on your sheet, or old landowners that no longer live on the survey. These landowners will need to be added or removed, respectively, from the sheet. It is your responsibility to make sure you DO NOT TRESPASS.

When you contact landowners, be aware that some landowners may have been contacted previously by other projects. When contacting a landowner, introduce yourself in a professional manner and inform them that you work for ODFW. Explain your reason for requesting access, and be clear on your intent, methods, and the frequency of your visits. Inform landowners that surveys will be conducted approximately weekly October through January, and through May for surveys that continue through steelhead season. An example of how you might open a phone conversation with a landowner, and some common questions, follows:

Mock Landowner Conversation

Hi, my name is _(first)_ _(last)_. I work for the Oregon Department of Fish and Wildlife's Salmon Spawning Project (or Oregon Adult Salmonid Inventory and Sampling Project). If you have a few minutes I would like to ask for permission to survey _____ Creek/River where it flows adjacent to (or through) your property. Is now a good time?
The section of _____ Creek/River where it flows adjacent to (or through) your property was randomly selected to be surveyed for spawning salmon during the 2025-2026 season. We are requesting permission to access the creek from all landowners along this spawning survey. This site is among over 400 sites that have been randomly selected as potentially containing salmon spawning habitat. We count fish in these streams to estimate the abundance of spawning salmon along the (Oregon Coast or Lower Columbia). We conduct surveys approximately once a week and stay mainly in the stream bottom counting live fish and examining carcasses. Sometimes we need to come up onto the bank to skirt around obstructions or view fish. We would be happy to accommodate any special request that you have…Thank you for your time!

Common Landowner Questions/Comments

Q: How did you get my name/number?
A: 1) County Tax Lot information/ Public Records/White Pages *OR* 2) Going door to door asking permission along site.

Q: How will this affect my land use?
A: 1) Landowner names are not used on reports *AND* 2) Fish numbers are reported by basin, not tax lot/landowner specific.

Q: I haven't seen fish in this Creek in 20 years…Why survey it now?
A: 1) Each site is approximately 1 mile long; we may find fish upstream or downstream. *OR* 2) Because each site is randomly selected, we expect some sites might not have fish, but we still survey it because it is accessible to fish and historically fish were present. OR 3) Historically this stream/site did have fish and/or adequate habitat, and we survey to see if fish have returned after restoration efforts.

Q: How is the data you collect used?
A: We use it to determine presence/absence in some streams, to determine hatchery spawner distribution on spawning grounds, to monitor population trends and return timing, and final total estimates are used to guide managers in setting harvest opportunities and fishing seasons in the future.

Other Questions/Comments

- Surveyors can be identified by an ODFW hat or patch on clothing.
- Is there anything special we should know about your property? (i.e. dogs, gates, electric fences, where to park)
- If requested, we can send a data summary at the end of the season.
- Would you like us to check-in before each?
- An information pamphlet discussing the Oregon Plan for Salmon and Watersheds is also available for landowners (Appendix K). This pamphlet gives an overview of the goals of the Oregon Plan and explains the adult, juvenile, and habitat projects of ODFW. Be sure to check the box next to the Adult Salmon Spawning Surveys section of the pamphlet prior to handing it out.

Record your contacts on the Landowner Contact Form:
Write in any additional landowners that don't appear on the form and include as much contact data as you can obtain (address, phone, date permission granted, etc.).
Edit and ***highlight*** any landowner information corrections. If there are a lot of corrections to be made, please use a blank Contact Form (Figure 6).

Verify the information:
Make sure the names, complete address, and phone number(s) are correct. Add an email address if the landowner provides it to you. If any of this information is incorrect, record the correct information on the landowner contact form and ***highlight*** the corrections so they may be updated in our database. If the landowner lives offsite, record the actual site's address in the situs field. Obtain the tax lot information if it is not provided.

Check the "Result" line for each taxlot:
This field should show one of three possible results: Yes, Denied or Conditional. If the "Result" states "Conditional" please refer to the "Comments" section for the conditions, if

conditions are not stated please contact your crew leader. If no result has yet been recorded, you will need to contact the landowner or check with your crew leader in the case of corporate landowners.

Check the most recent OK date:
Landowners with a recorded permission result do not need to be contacted again unless there are specific instructions to do so in the comments or the survey special instructions. If the target species includes steelhead, when requesting permission to conduct surveys request access **through the end of May (or end of June if target species is lamprey)**. If a corporate landowner does not have a recorded permission date, confirm with your crew leader whether permission has been granted before conducting the survey. Some corporate landowners also require that we carry a permit in the vehicle. Government agencies are handled by office staff unless otherwise specified. If there is a contact person that is different from the owner or organization name, they will be indicated in the contact field above the phone number.

Record the date landowners were contacted:
When a landowner grants permission**,** fill in the date line on the landowner sheet with the date received, and record “Yes” on the result line. If a landowner denies permission, record the date of response, write “Denied” on the result line, include and highlight a note in the "Comments" and **do not trespass** on their property. You may need to drop a survey if this occurs, so consult your crew leader after receiving a denial.

Enter “Yes” or “No” in the “Data” line:
Record “Yes” on the data line of the landowner sheet if a landowner asks for a data summary to be sent to them. Record “No” on the data line if they do not ask for permission. Do **NOT** enter a check mark or leave this column blank. If “Yes”, make sure you have the current address of the owner (including zip code), or ask if they would like to receive data via email in which case record their email address. **Highlight** any landowners that you mark “Yes” to get data, so we make sure to update in the database to send them data.

Check the "Comments" section for any special instructions:
To conduct the survey, you must accommodate any special requests (i.e., the owner requests that surveyors not park in the driveway or to call before each survey), and record them in the “Comments” section of the landowner sheet. Please record all details of each request. If you have a question about a request, contact your crew leader. If we cannot accommodate the request (i.e. would take too much time, would compromise the data, etc.) then we may need to drop the survey.

Submit the Form to your Crew Leader:
When you have obtained all the necessary permissions. Make sure the form is complete even when there are no landowner contacts that need to be made (for example, if the survey falls entirely on public land). **Submit this form immediately upon completion. Do not wait to turn this form in! You can make a copy to keep for the remainder of the season for referencing any landowner information.**

Crew: Sauvie

2017 LANDOWNER INFORMATION

Reach ID: 30239.00 Segment: 2 Reach: Plympton Cr

SURVEY TYPE AND TARGET SPECIES:	
Random	Fall Chinook
Random	Coho
Random	Chum
Random	Steelhead

07N 06W 200	State of Oregon 1600 State St. Salem OR 97310 Situs:	Name: Phone: E-mail:	Date: 03/1/17 Result: Yes Data?: No	Public land	
07N 06W 1 B 101	[redacted] Clatskanie OR 97016 Situs:	Name: Phone: E-mail:	Date: 04/12/17 Result: Yes Data?: Yes		
07N 06W 1 B 103	State of Oregon 1600 State St. Salem OR 97310 Situs:	Name: Phone: E-mail:	Date: 03/1/17 Result: Yes Data?: No	Public land	
07N 06W 35 200	State of Oregon 1600 State St. Salem OR 97310 Situs:	Name: Phone: E-mail:	Date: Result: Data?:	Public land	
08N 06W 35 400	State of Oregon 1600 State St. Salem OR 97310 Situs:	Name: Phone: E-mail:	Date: 03/1/17 Result: Yes Data?: No	Public land	
08N 06W 36 800	Oregon Dept. of Forestry 2600 State St. Salem OR 97310 Situs:	Name: Phone: E-mail:	Date: 03/1/17 Result: Yes Data?: Yes	Public land	
08N 06W 36 801	[redacted] Westport OR 97016 Situs:	Name: Phone: E-mail:	Date: 04/12/17 Result: Yes Data?: No	2013 AQI: Property leased to [redacted]	
08N 06W 36 901	[redacted] Ontario OR 97914 Situs:	Name: Phone: E-mail:	Date: 06/1/17 Result: Yes Data?: No	2017 OASIS - Card returned with nothing marked 2014 - Only check 1x evaluation but has given us permission for past several years. May want to contact LO and check with them.	

8/17/2017

Figure 5. Example of Landowner Contact Form.

Year:______________ Page _____ of _____
Date: ____/____/____

Reach ID: ________________________________ Segment: __________ County: __________________________________

Township - Range: ____________________ ID Num:_____________ Surveyor:________________________

Plat #	/ Tax lot #

Name: ____
Site Address: ___________________________________
Address: ____
Phone: ( ) -

Email address:_________________________ Data Requested: Yes / No OK'd Date: ________

Plat #	/ Tax lot #

Name: ____
Site Address: ___________________________________
Address: ____
Phone: ( ) -

Email address:_________________________ Data Requested: Yes / No OK'd Date: ________

Plat #	/ Tax lot #

Name: ____
Site Address: ___________________________________
Address: ____
Phone: ( ) -

Email address:_________________________ Data Requested: Yes / No OK'd Date: ________

Figure 6. Example of a blank landowner contact form.

FISH IDENTIFICATION

You will be expected to identify the species of live fish, and the species and sex of all fish carcasses encountered in the field. To accomplish this, you will use several characteristics including size, run timing, geographic location, coloration, body morphology, markings, and behavior. It is prudent to use as many characteristics as possible when determining species and sex. If you are uncertain of the species of a carcass, take a scale sample and pictures (multiple clear shots of the body, head, and inside the mouth) and turn them into your crew leader. Salmon species can be determined based on scale characteristics by experienced scale readers.

Coho typically begin arriving in streams later in the season than Chinook, generally beginning in late October to early November. They tend to spawn in smaller streams and are generally smaller in body size than Chinook. Coho are dull to bright red with greenish backs, and the red or pink coloration extends onto their operculum (gill cover). Coho can sometimes be distinguished by the white spot at the top of the operculum behind their eyes. Occasionally you may see a coho that still has its bright silver ocean coloration. They tend to be deeper in the body, making them look football shaped. Coho have small round spots on their backs and the upper lobe of their tails, and their tail fin rays are segmented or grooved when you slide your fingers along the rays. The gums at the base of their teeth are white, but the rest of the jaw is dark. They tend to be more reclusive than Chinook and are more easily startled.

Chinook appear in early fall and are generally larger in body size than coho. They tend to spawn in bigger streams, are typically darker in color than coho, and are often bronze to black in coloration. Some Chinook (especially large males) can be quite red, but not forward of the dorsal fin. They have large irregular spots on their backs and both lobes of their tails, and their tail rays are smooth when you slide your fingers along the rays. Chinook can often be distinguished by the white 'skunk-line' of skin and fin decay on their backs. The gums at the base of their teeth are black.

Chum are present primarily in the northern half of the Oregon coast and typically in streams during November, sometimes into early December. They have a limited distribution and do not often travel far in-river and tend to spawn in low gradient streams within a few miles of tidewater. Chum can be distinguished by the distinctive vertical striated bars on their sides. They are often gray in color, though males are commonly green and can have purple and light/dark gray within the vertical striations. They can have small speckles on their backs, but do not have distinct black spots on their back or tail. Most males have large upper and lower canine teeth. Other key characteristics include their large eyes and narrow caudal peduncle.

Steelhead begin migrating into streams in the winter and early spring. They are more elongated (torpedo-shaped) than salmon and have a broader caudal peduncle and a square tail (salmon tails are more lobed or forked). They are typically gray blue on their backs and silvery-white on their lower halves when observed in the winter months. They have completely white mouths, small spots across their backs, sides and on their

tails. Steelhead are very shy, and to observe them you must move quietly and stealthily. As steelhead remain in fresh water prior to spawning, they develop a red or pink stripe down their sides, typically extending onto their operculum.

Female salmon tend to have a more extensively eroded tail fin with both lobes being eroded more evenly, which is the result of digging the redd. Males have a more pronounced kype (hooked nose) than females of the same species and are generally larger overall. The lower lobe of a male's tail is usually more eroded than the upper lobe. If you are unsure of the sex of a carcass, cut open its belly to examine gonads.

Salmon Fin Nomenclature

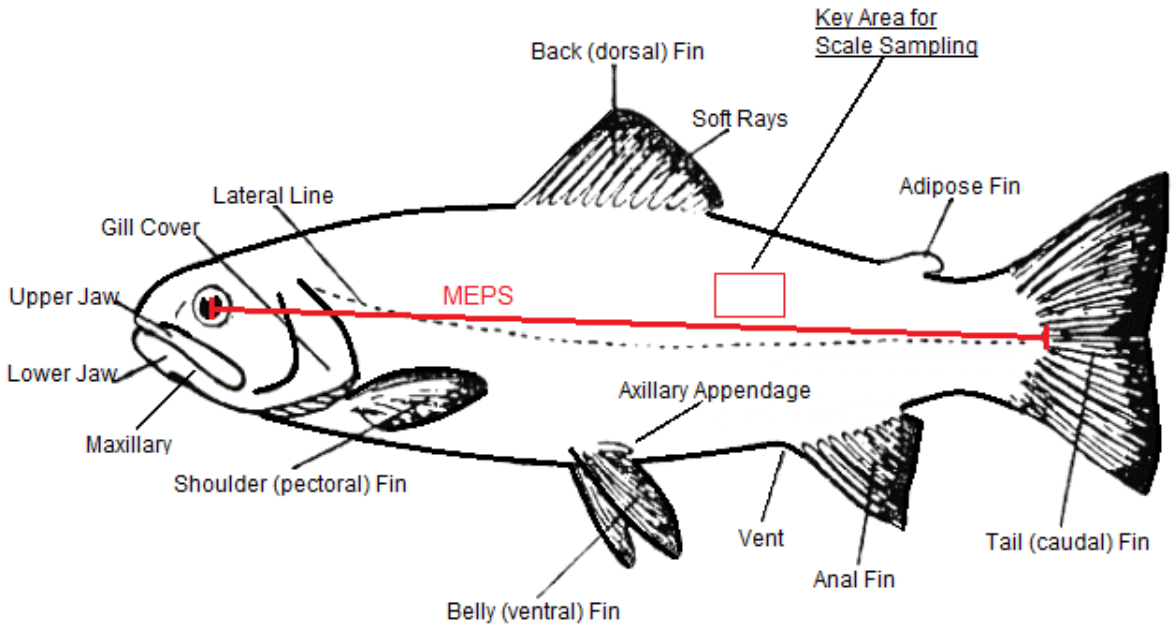
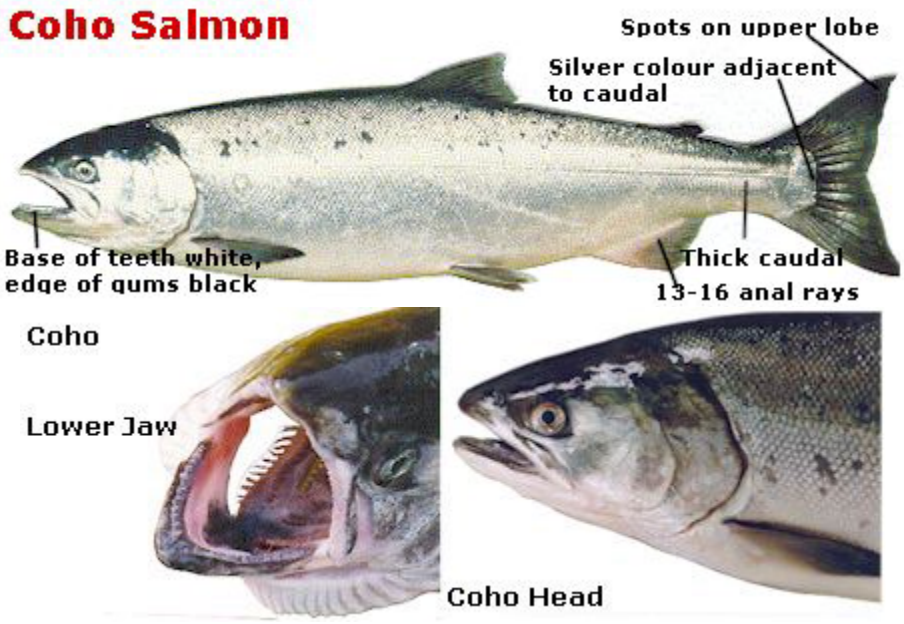


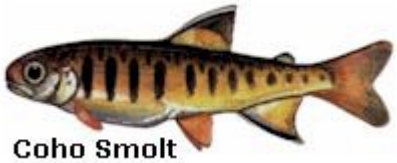
Figure 7. Schematic diagram of a generic salmon identifying fin names, the location of the Key Area for scale sampling, and the start and end points for measuring the Mid-Eye to Posterior Scale (MEPS) length.

Coho
(Oncorhynchus kisutch)



Coho salmon (*Oncorhynchus kisutch*), often called silver salmon, are found in most Oregon coastal streams and in many streams from California to Alaska. Oregon and California coho populations exist at the margins of the overall species range. Their major territory lies between Cook Inlet halfway up the Alaska coast, to the Columbia River. While most coho tend to remain close to the coast, they have been found as far as 100 miles inland. When mature in the late fall they average 750 mm (29.5 in) in total length (jacks are less than 430 mm (17 in) MEPS length) and weigh up to 25 pounds, although their average weight is between 8 and 14 pounds.

Coho life history patterns revolve around three largely independent age classes, each with a three-year generation time. Some breeding interaction between year classes is maintained by the spawning contribution of early returning jacks and the occasional four-year-old adults. Juvenile coho are highly adaptable and can have varied life histories. Most stay one year in coastal streams before emigrating seaward as smolts. However, other early life histories include rearing in lakes, estuaries, or moving between these different habitats.

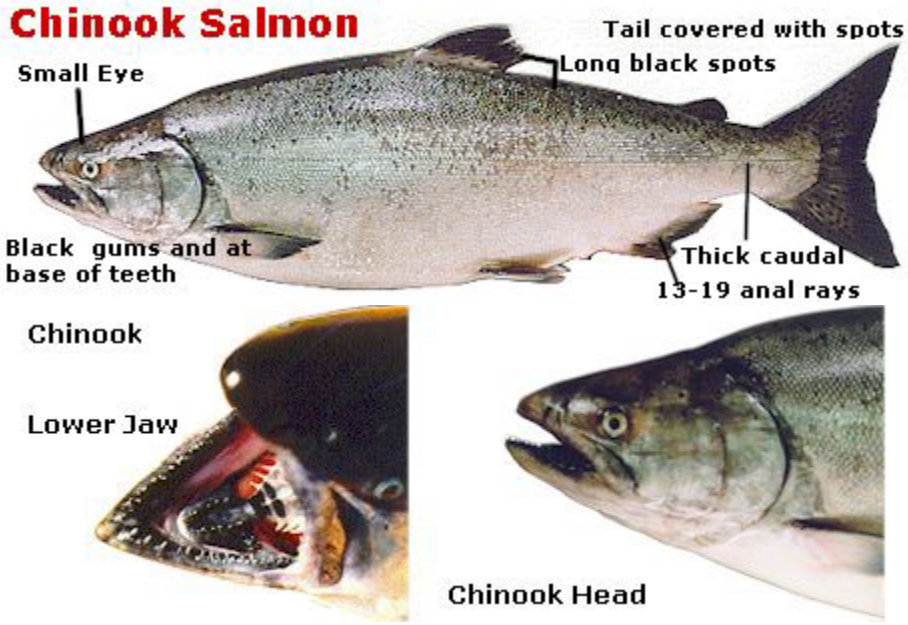

Coho Smolt

During early stages of growth, they have distinct parr markings (dark, vertical bars along each side), greenish brown backs, and a white leading edge on the anal fin and an orange tint on all but the dorsal fin. As they develop into smolts, their parr marks gradually fade and their backs become green with dark spots.

In the ocean, coho adults have silvery sides and a metallic blue back with black spots. Spawning males in fresh water may exhibit bright red on their sides and bright green on their back and head, with darker coloration on their belly. They also develop a deeper hooked jaw (kype) with sharp teeth. Females also change color and develop hooked snouts, but the alteration is less spectacular.


Spawing Male Coho

Chinook
(Oncorhynchus tshawytscha)



Chinook salmon (*Oncorhynchus tshawytscha*) are the largest of Oregon's five salmon species and are often referred to as King salmon because of their size and strength. Fall Chinook in our coastal rivers and streams range in size from about 530 to 1,200 mm (21 to 47 in) (jacks are less than 510 mm (20 in) MEPS length) and 20 to 60 pounds at the time of spawning.

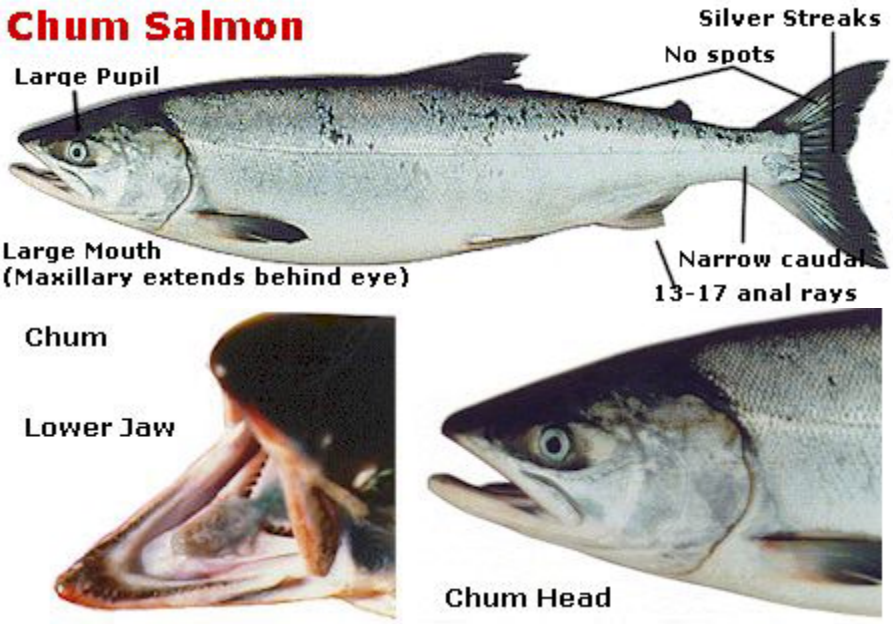
Although most Chinook salmon head to sea a few months after they emerge from the gravel, some remain in their home stream for one or two years. In the sea, Chinook feed on large zooplankton, herring, sand lance and many other fish, ranging widely in the ocean and growing rapidly during their last year in salt water. Chinook returning to spawn vary greatly in age. In Oregon, three, four and five-year-old Chinook are most common. Further north, five, six and seven-year-olds are more abundant. Chinook jacks are two- to three-year-old male fish that return earlier to spawn than adults. While still feeding in salt water, the Chinook has a dark back, with a greenish blue sheen.


Chinook Smolt

When entering fresh water to spawn, its color darkens, and it can develop a reddish hue around the fins and belly. By the time Chinook are typically observed on the spawning grounds, the head is significantly larger than pictured above, particularly for males. Spawning males also have enlarged teeth, and the snout develops a hooked appearance (called a kype), while less common in females. Some coastal river systems have more than one stock of Chinook, sometimes with the stocks migrating in spring or fall.


Spawning Male Chinook

Chum
(Oncorhynchus keta)



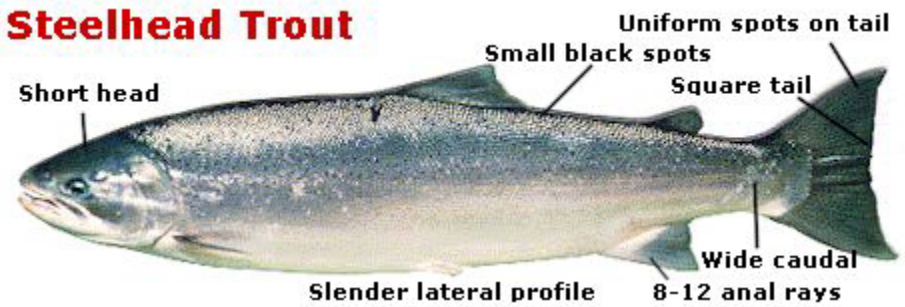
Chum salmon (*Oncorhynchus keta*) are widely dispersed along the Pacific coast from northern California to the Aleutian Islands in the Bering Sea. The distribution of chum salmon in Oregon is generally limited to the lower reaches of large streams and rivers on the north coast and tributaries in the Lower Columbia. In periods of high abundance, they may be found further upstream and occasionally can be observed during coho surveys. While some have been known to weigh up to 35 pounds, chum salmon average between 8 to 14 pounds and measure between 610 and 760 mm (24 and 30 in) in total length.

In coastal streams, young fry move directly to the estuary upon emergence from the gravel, sometimes requiring only a day or two for their journey downstream. In the larger river systems, the fry may stay in fresh water for several months while making their way to the estuary. They remain in coastal waters until mid- to late- summer before going farther offshore. Their growth during this part of their migration is rapid. The young are green-backed, silvery fish with faint parr markings.


Chum Smolt

In salt water, chum salmon are metallic blue and silver, with occasional black speckling on the back. As they near fresh water on the return to their home streams, their flesh quality and visual appeal deteriorate rapidly. Mature fish show reddish or dark bars across the sides, and some have blotches of gray or black as well. Sometimes spawning chum will display a greenish tint, but not as pronounced as in the illustration to the left. The males also develop a sharply hooked nose with deep jaw and large, dog-like teeth (hence the common name "dog salmon") which are used for displaying behaviors and to protect their territory during spawning.

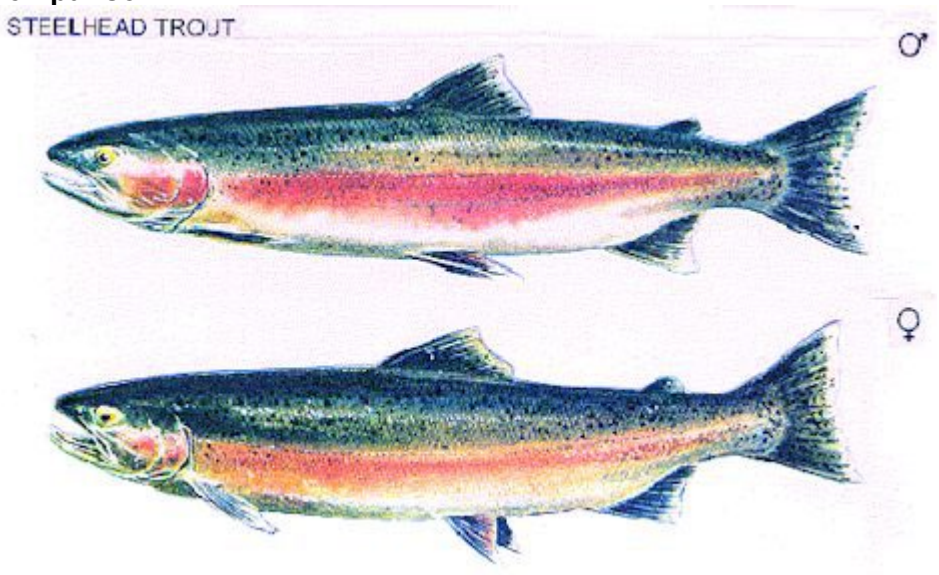
Steelhead
(Oncorhynchus mykiss)



Steelhead trout (*Oncorhynchus mykiss*) utilize habitat in freshwater, tidal waters of estuaries and the near-shore environment. Adults prey on squid, euphausiids, amphipods and fishes; the young eat insects, copepods, amphipods and other crustaceans and young fishes (*e.g.* sand lance, eulachon, and herring). Steelhead predators include a variety of fish, birds and marine mammals.

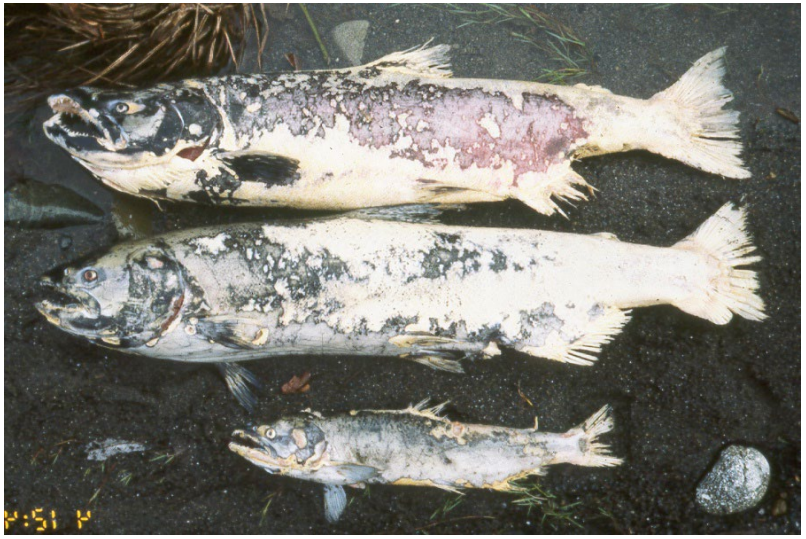
Steelhead spawn from larger streams and rivers to headwater streams. Mature adults enter rivers and larger streams year-round, but runs are generally concentrated in winter (November to May) and summer (May to October). Steelhead can spawn more than once, though a small proportion do successfully, and thus return to the ocean after spawning. Eggs are laid in gravel redds prepared by the female in streams from January to May. Eggs hatch in four to seven weeks and fry emerge from the gravel from mid-June to mid-August. Juveniles rear in freshwater for two to four years prior to migrating to the sea as smolts from April to June, and only remain in an estuary for a short period of time before moving offshore. Adults usually complete extensive feeding migrations in the Pacific Ocean before returning to spawn after two to three summers (range one to four) in the ocean. Adults can live six to eight years and may reach up to 1,140 mm (45 in) and 42 pounds. You will see more typical length and weight range of fish between 635 to 890 mm (25 to 35 in) and 5 to 20 pounds.

Spawning Comparison:



Fall Chinook: note irregular spots on back

Female, Male and Jack Coho



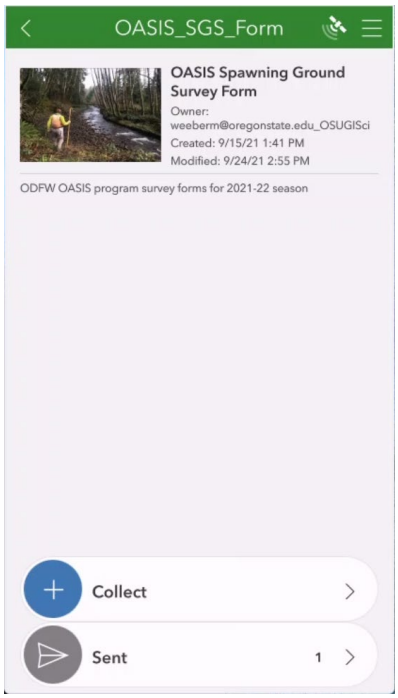
Male, Female and Jack Chinook carcasses

Female and Male Chum carcasses

SPAWNING SURVEY FIELD FORMS (SURVEY123)

All day-to-day field data will be recorded in the Survey123 app on your smartphone. This information includes counts of live fish and redds, carcass data, and survey conditions.

Survey123

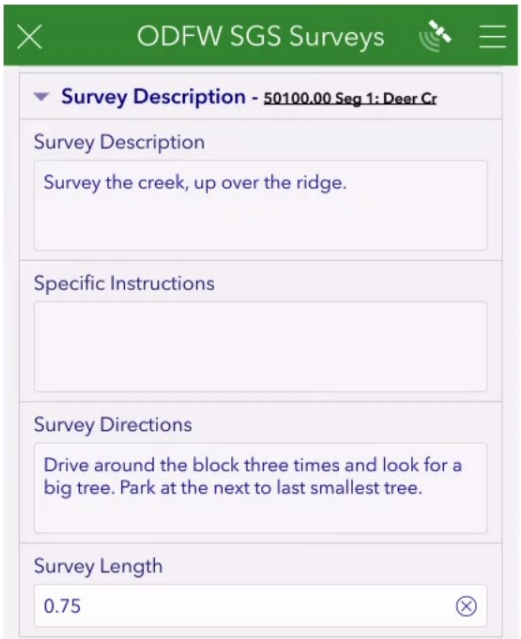


From the Survey123 log-in screen, select "Continue without signing in". Select the "2025-26 OASIS SGS Form". From the OASIS Spawning Ground Survey Form main menu page, select "Collect" to begin a new survey record. When you have completed a survey and are ready to exit the data entry, click on the checkmark at the bottom-right of the screen. You will be given the options to "send now" or "save in the outbox". When records are stored in the outbox, you must go into the outbox and click "send" once you have an WIFI/data connection. **Be sure you send your data every day!** You can view or edit previous survey records by clicking on "Sent".

Open Survey Select drop down menu. Select your crew location from the drop-down selection list. Select your Surveyor ID-Last name. Select the correct survey, listed by Reach ID & Seg #. Only surveys assigned to your crew will be displayed.

WARNING – Surveys may have similar names and Reach ID; pay attention to the Reach ID and Segment to be sure you are choosing the correct survey.

You and your partner may enter data for the same survey independently, and it will be combined later. You will each use your own SurveyorID for your portion of the data.

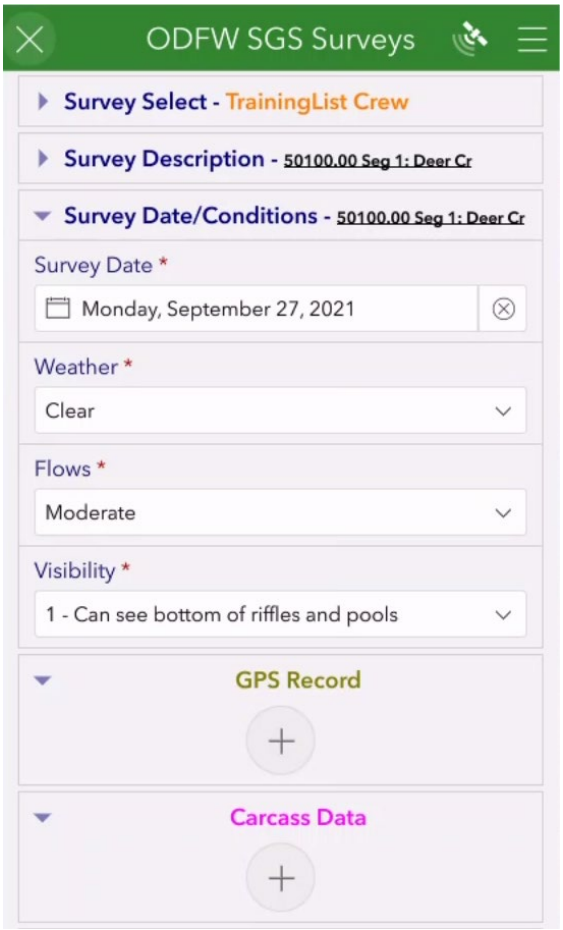


Survey Description

Tap Survey Description to view driving and survey directions. Listed are the Survey Description (describing boundaries of the survey and the survey itself), Special Instructions (any notes needed to conduct the survey), and Survey Directions (driving directions and instructions on how to access and exit survey).

If you need to make any changes to or update the description, special instructions, directions or UTM coordinates use the paper Description Change Form for the specific survey found in your crew binder.

Survey Date and Conditions



Ensure that the Survey Date shows the correct date. It should pull automatically from your device, but you can manually select the date if you are entering data from a previous date.

Select the weather as:

-Clear -Partly Cloudy
-Foggy -Rain
-Overcast -Snow

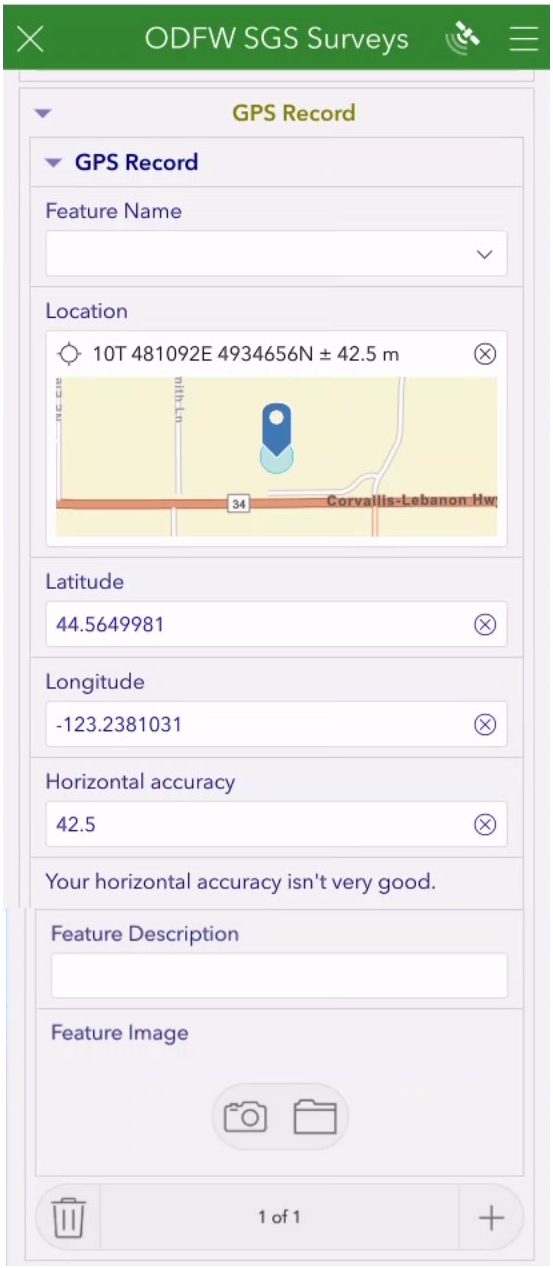
Describe the stream flow as:

Low or Dry: stream covers < 50% of the Active channel width.
Moderate: stream covers 50-75% of the ACW.
High: stream covers > 75% of the ACW and stream height approaches bank full.
F – Flooding: stream is out of its banks.

Describe stream visibility as:

1 - Can see bottom of riffles and pools.
2 - Can see bottom of riffles ONLY.
3 - Cannot see bottom of riffles or pools (check several areas before making this determination – see “Creeks are Unsurveyable” section).

GPS Record



The GPS Record section allows the opportunity to record any GPS waypoints, including unusual and/or significant features. Such features include noteworthy examples of the following:

Beaver Dam, Cascade, Chute/Slide, Culvert, Falls/Step, Fish Carcass, Log Jam, Mussels Observed, Other, Parking, Redd Cluster, Split Channel, Survey Start, Survey End and Tributaries.

To create a new record, click on the + button. Coordinates will be stored using your device's current location.

Feature Description is where you can document any additional information or comments about the location or feature you are recording.

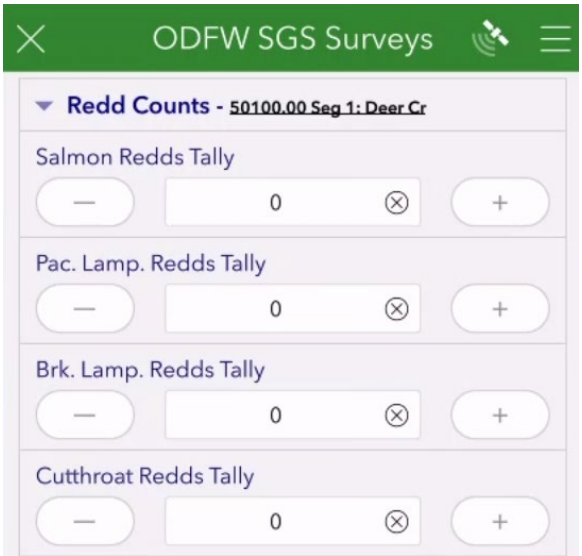
For Redd Clusters, Fish Carcasses, and "Other" features a Feature Description is required. Only some crews record redd clusters and carcasses (see crew leader). For Redd Clusters please record the species and number of redds present in each cluster. Also, ensure that all redds are tallied on the Redd Counts section (see below). For fish carcasses record the species, and for "Other" features please describe what exactly is being recorded.

You can take a photo to be included with the GPS Record by clicking on the camera icon under Feature Image.

Barrier feature types require additional information to be recorded. Feature height and length should be recorded to the nearest 0.5m. Jump Pool Depth should be recorded to the nearest 0.1m. If there is no jump pool, then the depth should be recorded as 0.0m. Describe Passage Status as: absolute barrier, partial barrier, not a barrier, or unknown status.

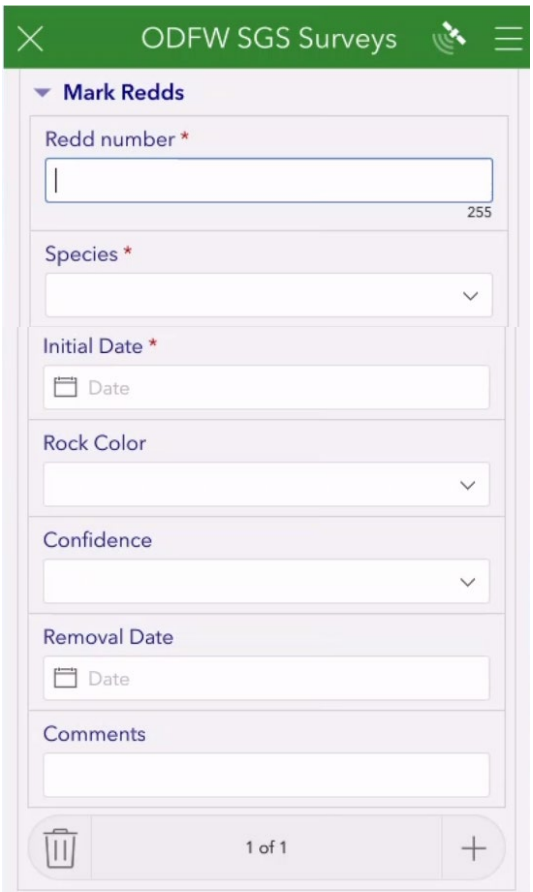
At the bottom of the GPS Record will be how many records you have created and which one you are viewing. To add additional records, click on the + button. To delete a record, click on the trash-can button.

Redd Counts



Redds observed on the survey are tallied in the Redd Counts section. A redd is an excavated depression dug by a spawning fish. A redd may be identified by a hollow in the gravel and the adjacent downstream plume of excavated gravel. The gravel from a recently dug redd will usually appear lighter colored and less uniformly oriented than the undisturbed gravel. Care should be taken not to confuse redds with general stream scouring or scouring associated with wood, root wads, or larger rocks. For the purpose of OASIS salmon surveys, redds are not differentiated by species - they should all be included in the same tally.

When it is not possible to distinguish individual redds because of high redd density, estimate the number of redds present and include “comment 71” in the comments section. Pacific lamprey, brook lamprey and cutthroat trout redds should be tallied in their respective species sections. Lamprey redds are not typically observed until later in the spring.



Steelhead redds are recorded individually in the Mark Redds section. This is not a required section for other species. Steelhead tend to spawn later than salmon, but you may encounter some toward the end of the salmon spawning season. Your crew leader can give you more information on identifying and recording steelhead redds. Redd number should autopopulate. If it does not, it should be recorded using the following format:
(two or three digit surveyor ID)-(six digit date)-(two digit redd number, starting with 01 for each survey and date, consecutive thereafter). Ex: 09-020126-01: surveyor=9, date=Feb 1st, 2026, first redd on the survey. Initial Date is the date the redd was first observed. Steelhead redds are marked with painted rocks, and you should record the color used. Confidence is your confidence that what you are marking is a steelhead redd: Confident, Probable, Uncertain, however regardless of your confidence the redd you are recording will be counted as a steelhead redd. Removal date is when you first document

that the redd is no longer visible. Additional notes can be made in the comments field.

Live Fish and Carcass Counts

For Coho, Chinook, Chum, Steelhead, and Other Species there are a number of similar fields for recording live and dead fish observations. Within each section, a number can be manually typed or tallied using the plus and minus buttons.

"Live Unmarked" specifies a live fish observed with an intact adipose fin. "Live Adipose Clipped" specifies live fish with a missing (or clipped) adipose fin. "Live Clip Unknown" specifies live fish for which it could not be determined whether the adipose fin was intact or clipped.

Live Jacks are tallied by species. A Coho jack is defined as a male measuring 430 mm (17 inches) or less in MEPS length, or 500 mm (20 inches) or less in fork length. A Chinook jack is defined as a male measuring 510 mm (20 inches) or less in MEPS length, or 600 mm (24 inches) or less in fork length.

Carcasses can be tallied by sex (male, female or unknown) within their respective species counts. Some basins require biosampling all carcasses of a given species, so know it is very important that **if biosampling a carcass it should not be tallied.** See the Biosampling Matrix in the Appendix. All sampled carcasses are entered into the Carcass Data section individually (see page 31).

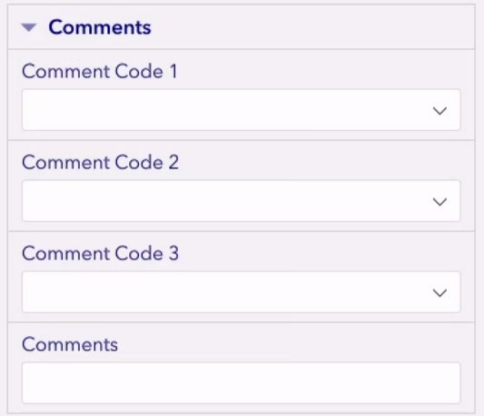
Previously handled carcasses (tails removed and previously sampled) should be tallied by their respective species. PHA refers to previously handled adults. PHJ refers to previously handled jacks.

The activity fields are required if any live fish are counted.

Describe live fish activity as:

0 - None.
13 - Most fish spawned out.
14 - Most fish holding in pools (prior to spawning).
15 - Most fish migrating through survey area.
16 - Most fish actively spawning (as demonstrated by courtship behavior, excavation of redds, competition for mates, and guarding of redds).

Comments



Common comments can be selected from the comment code boxes, or you may type out any additional comments.

Use comment codes from the list below. There is room for three comments per survey. Prioritize comments according to the priority of the categories listed below. If further comments would be useful, record in the comments section in the Spawning Survey Evaluation Form.

Comment Codes

Priority I - Essential
This category must be represented in the comment section when appropriate
24 Not surveyable (stream too high and/or turbid, counts will be disqualified)
48 Stream flow insufficient for adult entry to date
88 Survey not conducted due to impassable road
97 Placed coho carcasses observed

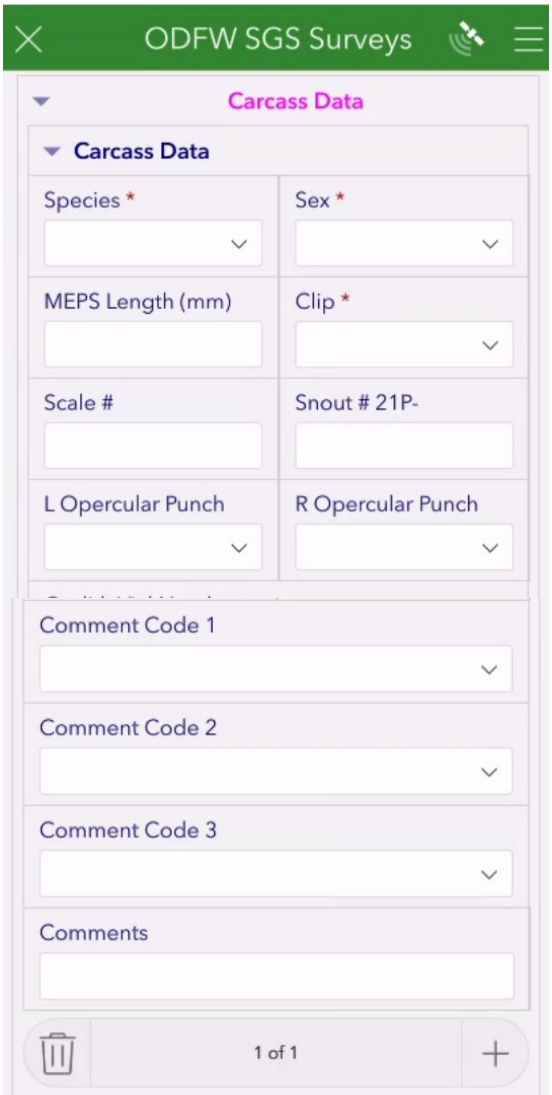
Priority II - Factors Affecting Fish Counts
02 Holes not surveyed *(Used when water is too high to survey holes)*
13 Live count estimated for >50% of survey
14 Live count estimated for <50% of survey
31 Impassable log jam
32 Passable log jam
33 Impassable beaver dam
34 Passable beaver dam
35 Impassable culvert
38 Passable culvert
66 Live Counts probably higher than observed
71 Number of redds estimated because of high density

Priority III - Miscellaneous
01 Count includes tributary to survey (*Used when fish are encountered in tributary of parent survey.* *See page 50 for details*).
11 Survey too early--before peak
12 Survey too late--after peak
20 Dark (pertains to the light source, not the water clarity)
21 Dark in pools (pertains to water quality, often tannins)

22 High glare
23 Partly frozen
49 Possible passage barriers below survey area (talk to crew leader)
52 Live tagged fish observed
57 Live fin-clipped (other than adipose fin) fish observed
60 Most carcasses washed out
64 Exposed redds due to low flow

Carcass Data (Biological Sampling Form)

All dead salmon encountered during a survey which are biologically sampled (i.e. scales, snouts, etc.) will be recorded in the Carcass Data form. All dead salmon which are ***not*** sampled should be tallied under their species sections. **Each carcass will either be entered into the Carcass Data section or tallied under the species section, but not both.**



Biological data recorded in the Carcass Data section for fish sampled include species, sex, MEPS length, fin-clips, scales, snout or Coded-Wire Tag (CWT), other marks or tags, opercular punches, otoliths and comments. Only new carcasses that have not already been sampled (i.e. tail is still attached) are recorded on this form.

A record from this form will be completed for each carcass that is sampled. See the Biosampling Matrix in the Appendix for details on which species are to be sampled in each basin.

Do not take samples from nor include in the dead salmon tally any hatchery salmon carcasses placed in the stream for nutrient enrichment projects (crew leaders should know if carcasses have been placed, typically identified by removed heads or cut in half).

Species, Sex, and Clip are required fields. Snout # is required if the clip is not None or Unknown. MEPS length measured in millimeters.

The clip field captures data on several clips; the adipose fin and the left and right ventral fins (multiple clip codes should be entered in the comments section). Remember that adipose clipped fish must have their snouts removed and placed in a plastic bag with the individual snout ID label. See Figure 8, below, for fin locations. **Inspect all**

carcasses for clips, marks, punches and tags (see figures 8 & 9). For ventral or pectoral clips indicate which side the clip is on in the comments field. **Adipose clips are the most common mark; however, carcasses must be completely inspected for all clip, mark and punch types.**

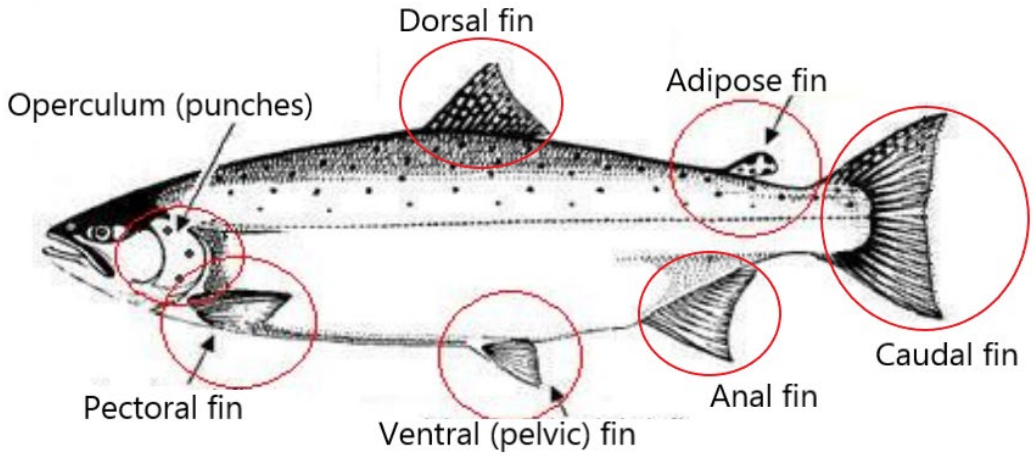


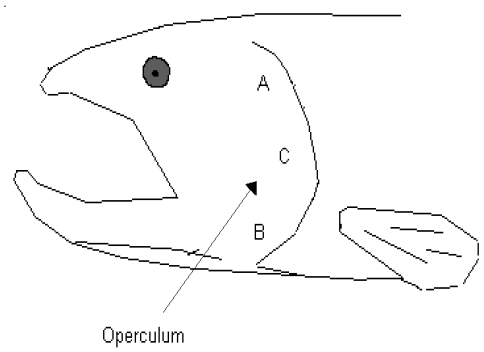
Figure 8. The locations of common fin clips and punches.

The Scale # is a unique number printed on the scale envelope (five-digit number). Write the number found on the scale envelope in this field (Figure 11). If the scale # is less than or greater than five digits, then enter "99999" in this field and record the actual scale number in the Carcass Data Comments field.

Complete the Snout # field by inserting the four-digit number found on the snout ID label (25P- is included by default). **Remember that for all carcasses with adipose clips, you will have to remove the snout, and that all snouts receive their own uniquely numbered snout ID label.** The label itself is stored with the snout inside the plastic snout bag. First, place the snout in the plastic bag, tie a knot above the snout, then place the label above the knot and tie a second knot to hold it in. There should be only one snout and label per plastic bag, and the snout and label should be separated by a knot. This will ensure there is no confusion as to which snout and label go together, and that the label will be legible. If the carcass is not adipose clipped, then leave this field blank. NOTE: If a snout wand was used and no tag was detected, select comment codes 56 (wand used) and 96 (no snout taken) under the comment section.

Inspect all fish for tags and record tag number and color information as available. If a carcass has more than one tag, record the second tag's information in the Comments field.

Opercle Punches *(All Chinook sampled in the Sixes and Elk River Basins.)*



Opercle punches are circular holes cut in the operculum, which is the bony flap covering the gills on both sides of the fish's head. Punches may occur on the left operculum, the right operculum, or both. For each side, there are three possible punch locations: Above center, below center, and center. These punches are most likely to be found on Chinook in the Sixes and Elk River basins, however vigilance is required in all surveys. **Fish may have punches on both opercula, or multiple (double) punches on a single side so be sure to check!**

Figure 9. Operculum punch locations.

Opercle Punch Codes: *(Fill out for both left and right operculum)*

A=Above Center	B=Below Center
C=Center	D=Double (any combination of punches/per side)
U=Unknown	N=No Mark

Otolith and DNA Samples

Otolith and DNA tissue samples may be collected on a special case basis. Your crew leader will let you know if you are to collect either otoliths or DNA samples. If so, record the vial number and for DNA, the fin sampled.

Carcass Comments

Select any relevant comment codes, listed below, and type in any additional comments in the comments field.

41=Scavenging	96=No Snout Taken
90=Pre-spawn	55=Fin clipped (other than adipose)
92=No Scales Taken	56=Snout wand used

CODED WIRE TAG AND FIN-MARK RECOVERIES

Instructions

Recoveries of Coded Wire Tags (CWT) and fin marks from salmon encountered on spawning surveys are used to assess straying of hatchery salmon to natural spawning areas. The CWT is a uniquely marked minute piece of wire that is inserted into the fleshy part of a salmon snout prior to its release from a hatchery. The tags are the primary method of identifying groups of salmon released from hatcheries. Most salmon marked with a CWT cannot be readily recognized by visual inspection. Coded-wire tags are recovered by removing the snout from adipose-clipped fish and sending the snout to the CWT processing lab for dissection and tag reading.

The following procedures are used to sample fin marked salmon and record recovery data:

Always carry Snout ID labels with you while surveying.

When a fin-marked carcass is found, complete one line for each fin-marked carcass in the Carcass Data Form. Complete all applicable fields and note the appropriate code for the corresponding fin-clip.

Instructions for fin-clipped fish. If the fish has a clipped adipose fin, remove the snout, from behind the eyes to the tip of the jaw, and place it in a plastic snout bag with a snout ID label (separated by knots as shown in the illustration below). Complete all applicable fields for the Carcass Data record. Record the snout ID label number on the Carcass Data form in the Snout # Column. *Snout samples are needed for all adipose fin-clipped fish, except when using a snout wand with no tag detected.*

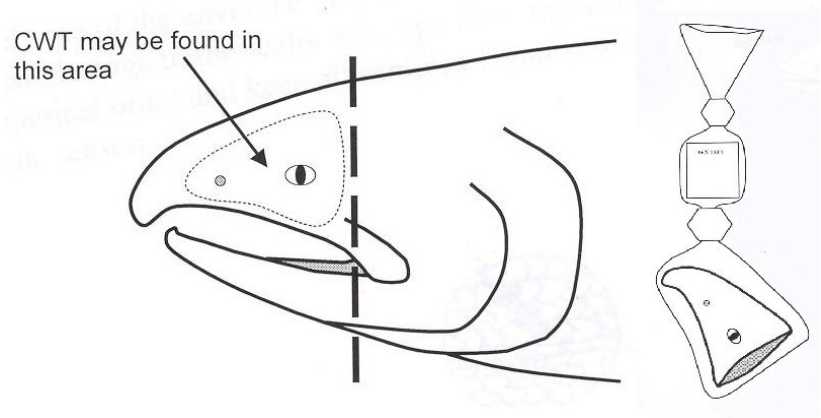


Figure 10. Snout removal and CWT location.

At the end of the season, snouts will be transported to Clackamas for processing. Attach a label to the container of snouts that shows (1) the area of origin, (2) the year, and (3) a statement that they were recovered on spawning fish surveys.

Use of Snout Wands (Lower Columbia & Sixes/Coquille Crews Only). In areas with heavy hatchery influence and large numbers of carcasses a snout wand may be used to detect CWT fish. Snout wands should be tested at least once a week throughout the season. Also note that minerals in some rocks may give false positives. Therefore, carcasses should be elevated off the streambed when snouts wands are used.

When adipose clipped fish are encountered and a snout wand is available, complete all applicable fields on the Carcass Data form and use clip code "2" (Adipose clipped) in the clip column.

If a CWT is detected, remove the snout and place in a plastic bag with a snout ID label (as described above). Record the snout ID number in the Snout # Column on the Carcass Data form. ***You must use comment code "56" (snout wand used) in the "comments" column.***

If no CWT is detected leave the snout intact. ***You must use comment code "56" (snout wand used) and "96" (no snout taken) in the comment columns.***

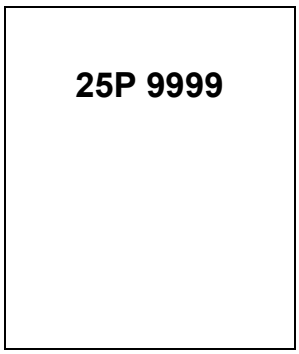
When unmarked fish are encountered in areas known to include non-clipped CWT fish, **a CWT wand must be used at ALL times** (for a list of these areas see your crew lead). Complete all applicable fields on the Carcass Data form and use clip code "0" (None) in the clip column.

If a CWT is detected, remove the snout and record the snout ID number the same as above. ***You must use comment code "56" (snout wand used) in the "comments" column.***

If no CWT is detected leave the snout intact. ***You must use comment code "56" (snout wand used) in the "comments" column.***

All carcasses must be examined for fin marks!
Fin-marked carcasses are recorded on the Carcass Data form and snouts are collected from all adipose-clipped carcasses.

EXAMPLE OF SNOUT ID LABEL
(actual size)



SCALE SAMPLING

Scale samples taken from salmon carcasses encountered on spawning fish surveys are used to assess age composition and hatchery-wild ratios of salmon populations and growth rates of individual fish. Growth is recorded on scales in rings or circuli, similar to those found on trees. When mounted and projected, these circuli patterns can be read (interpreted) to reveal the life history of each fish sampled, including the amount of time spent rearing in streams, time of ocean entry, and the number of years spent in the ocean. This information ultimately is used to aid in forecasting stock abundance and in assessing fishery harvest impacts.

Once a carcass has been sampled its tail should be cut off. Any carcass found without an intact skeleton (precluding a MEPS measurement) should not be sampled but instead recorded in the field book as “Previously Handled” (PHA or PHJ fields).

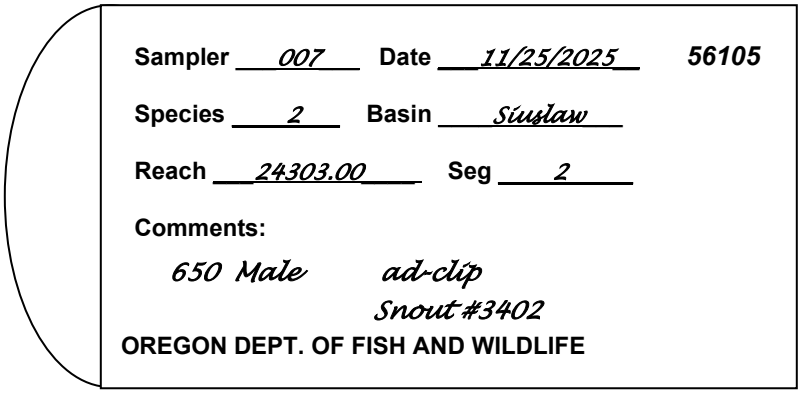


Figure 11. Example of a scale envelope with data fields completed.

Filling Out the Scale Envelope

All scale card fields must be completed as follows:

Sampler
Enter the surveyor ID number (see APPENDIX E) of the individual who is sampling the scales. This surveyor ID number must match the surveyor ID of the individual filling out the Carcass Data form.

Date
Enter month, day, and year

Scale Number
Scale number. Each scale envelope is uniquely numbered. This number must be entered on the Carcass Data form under scale #. If the scale # is less than or greater than five digits, then enter “99999” in this field and record the actual scale number in the Comments field.

Species
For each species, use the following species codes:

0=Unknown
1=Chinook
2=Coho
3=Chum
4=Steelhead

Basin
Provide the name of the Basin, not the stream name, where the carcass was recovered (found on the spawning survey list).

Reach ID & Segment
Provide the Reach ID and segment (found on the spawning survey list) of the survey the scales were sampled from. Include two decimal places for Reach ID.

Comments
Write comments using words, or codes found in the drop-down list on the smartphone. Examples include the fish sex, length, clip status, and/or snout tab ID.

Scale Sampling Frequency Expectations

Coho Salmon

See Sampling Matrix***.***

Sample scales from all adipose fin-marked coho in any basin.

To avoid re-sampling, cut the tail off all fish that are scale sampled.

Chinook Salmon

Sample all Chinook carcasses from the following CCRMP sample basins:

Nehalem
Wilson
Salmon R
Siletz
Siuslaw
Coos
Coquille
Sixes
Chetco

Lower Columbia Chinook Salmon

Sample all Chinook carcasses from Lower Columbia surveys, except Big Creek and Plympton Creek which will have a rate of 1:2 (every other fish) for hatchery fish. All wild fish (unmarked) in Big and Plympton Creeks will be sampled. Crew leads will use their best judgement for adjustments to this sample rate in these two streams, particularly for Plympton during peak returns. CRM's goal for the carcass heavy streams (namely Big and Plympton) is to get 250 scale samples, with samples spread evenly throughout the spawning season as much as possible. Once this goal is reached, sample rates can drop to 1:5 or 1:10 depending on how heavy the carcass count is.

Sample scales from all adipose fin-marked Chinook in any basin.

To avoid re-sampling, cut the tail off all fish that are scale sampled.

Chum Salmon

See Sampling Matrix***.***

To avoid re-sampling, cut the tail off any fish that are scale sampled.

Scale Sampling Procedure

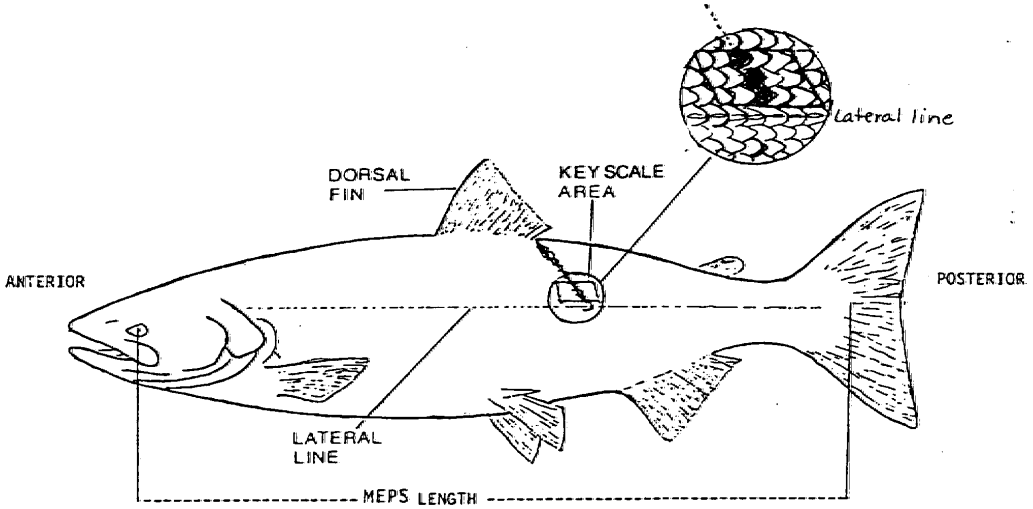


Figure 12. Scale sampling key area location.

Locate the Key Area for collecting scale samples (see Figure 12 above) by following the diagonal row of scales down and back from the posterior insertion of the dorsal fin to the first 3 scales above but not including the lateral line. One to two scales in front of (anterior) and behind (posterior) these three scales are within the key area.

Scrape the key area with the back of your knife blade to remove any slime. With forceps, pluck 4-5 scales from this area and place them neatly between the paper insert in the envelope. Be very careful that the scales come from the key area.

Turn fish over and repeat procedure on the other side of the fish, placing scales in the same envelope.

Write any pertinent information regarding that fish on the envelope.

If scales are absent from the key area on one side of the fish, sample from the key area on the other side of the fish. If scales are absent from key areas on both sides of fish, do not take scales, but complete the Carcass Data form, marking code 92 (no scales taken) under comments.

Pull the paper sleeve 2/3 of the way out of the scale envelope, then fold the upper half backward over the top of the envelope when placing scales inside the sleeve. Do not stack the scales. Taking the sleeve completely out of the envelope not only takes more time, but also causes wrinkling of the scales and can render them useless.

Keep all the scale samples organized and in the same place – scales should be stored in a dry location with adequate ventilation. Plastic trays are provided for daily deposition of samples, and a larger box located in a safe location is excellent for longer-term storage. Placing scales in Ziploc bags or other sealed environments causes scales to decompose or allow mold growth. This in turn makes your rig, office, or pants smell like dead salmon and generally makes you less popular with other, less odiferous, human beings.

OTOLITH REMOVAL

Background

Otoliths are structures made of calcium carbonate which reside in the inner ear of vertebrates. These structures allow organisms to perceive movement and acceleration, including 3D movements. In fish, the annual growth rings within otoliths can be analyzed to inform biologists on the age and other aspects of an individual's lifecycle.

Collection of otoliths is uncommon on OASIS surveys, however there are times when surveyors might be instructed to sample these organs. Please consult the Sampling Matrix for details on when and where otolith sampling is necessary and follow direction from your crew leader for cases otolith sampling is required. There are several ways to remove otoliths; the instructions below are one example.

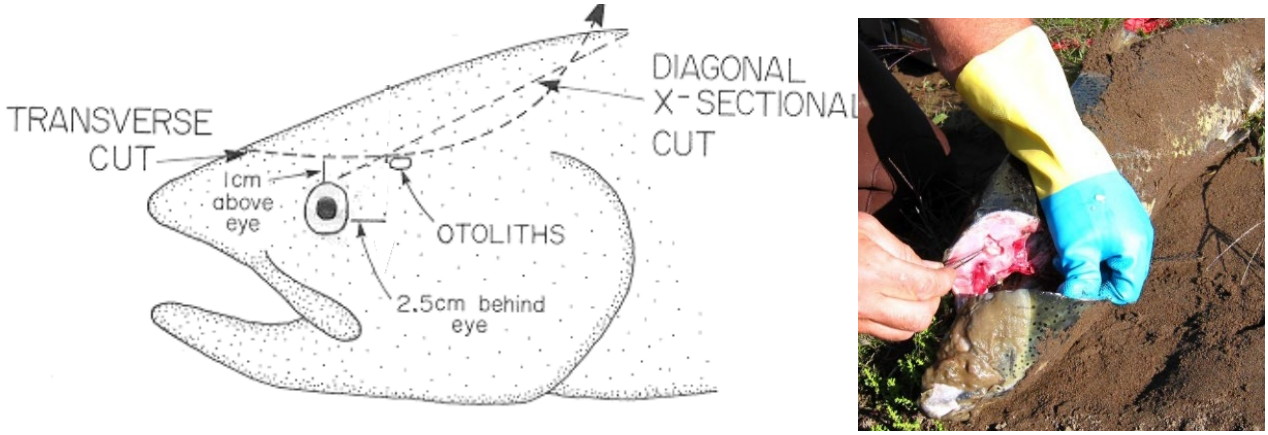


Figure 13. Otolith removal guide.

Instructions

1) Cut off top of skull (wedge) using knife while wearing cut gloves.

2) Remove brain and the membrane around otoliths using forceps.

3) Find both otoliths (one on each side) using forceps, if possible, and place otoliths in vial for storage.

DNA SAMPLING

Background

Samples of DNA taken from salmon carcasses are used to map the genetic variance represented within populations. This information will be used in turn to determine which components of the variation in life history are critical for long term viability of this species. In effect, DNA sampling is the first step to understanding the various genetic components in populations.

Instructions

DNA tissue samples will be taken on a special case basis. Your crew leader will inform you prior to going in the field if DNA samples are required. Before going into the field take an adequate selection of these vials and place them in a safe container (Ziploc or Tupperware). Ensure that you never run out of vials while in the field by leaving extra empty vials in your vehicle. If you run low on vials, contact your crew leader to obtain more.

To sample DNA cut a segment of the flesh from any fin (the target is fleshy tissue, not the harder ray material that has started to decompose) with a pair of scissors and place fleshy material in an individual DNA vial, record the vial ID number onto the Biological Sampling Form under the DNA # field, then place the vials in a safe container. At the end of the day, return the completed DNA vials to the office where they can be organized for review and storage. The size of the tissue sample should not exceed 25% of the total volume of the vial. Exceeding this size will only make preserving the sample more difficult. Extremely decomposed carcasses should be skipped since it is difficult to amplify DNA from these fish (i.e., if the sample is soupy, it probably won't amplify).

SALMON SPAWNING SURVEY EVALUATION FORM

Instructions

The Spawning Survey Evaluation Form is used to evaluate each spawning survey site in terms of general habitat characteristics. It is also used to note any factors that may influence our ability to obtain accurate estimates of spawner abundance in the survey segment. This form is to be completed on your smartphone in Survey123, once per season for each spawning survey segment. This form provides important information frequently used for a variety of essential data quality tasks. Survey Evaluations should be completed in the last few weeks of the season. Please take the time to fully report survey attributes.

REACH ID
Enter 7-digit survey identification code (*i.e. 25680.50*).

SEGMENT #
Enter 1-to-3-digit segment identification code (*i.e. 1 or 10.3*).

SURVEY NAME
Enter name of survey (*i.e. Salmon Creek*).

SURVEYOR ID
Enter the surveyor identification code of the surveyor who is completing the form.

DATE OF FORM COMPLETION
Enter date on which form was completed.

PROBLEMS WITH SURVEYING THIS STREAM SEGMENT
List any major problems that prevented the survey from being conducted or that caused the survey to be difficult (e.g., road conditions, extended high stream flows and/or turbidity, problems with access through private land, etc.). Identify any factors related to the condition of the survey segment that may have hindered your ability to make accurate counts of salmon (e.g., water clarity, structure in the stream channel, viewing conditions, etc.). Include information on date ranges if relevant.

BARRIERS TO UPSTREAM MIGRATION
List any potential barriers to upstream migration occurring within the survey segment during the spawning season. Wait until fish arrive and the first freshet (high water) has occurred before identifying barriers. Potential barriers are often identified by the presence of salmon immediately downstream from an obstacle but not upstream of the obstacle. Record the approximate location of the barrier from the survey starting point (nearest 0.1 miles from the start), nature of the barrier (e.g., beaver dam, culvert, log jam, waterfall, etc.), and the date when the barrier became passable (i.e., date when fish were first observed upstream from the barrier or when high flows removed the barrier). If you feel the barrier prevented fish passage for the entire season, note as such. *If the endpoint of the survey is a barrier, mention that too*.

ESTIMATES OF SPAWNING GRAVEL QUANTITY

This estimate should be done at the end of the season but should reflect spawning gravel quantities throughout the season. This is a rough quantitative estimate within large ranges of gravel abundance. See the description of coho spawning gravel below to help determine the quantity present in each of your surveys.

DISTRIBUTION OF SPAWNING GRAVEL

Estimate the proportion of spawning gravel in each quarter of the survey to the nearest 1%.

DISTRIBUTION OF SPAWNING FISH

Estimate the proportion of spawning fish in each quarter of the survey to the nearest 1%. Remember to indicate whether fish or redds were used to make the estimate.

HABITAT RANKING

Please circle the most appropriate ranking based on the description of the perfect spawning habitat (see below) in relation to gravel size, quantity, abundance, tail outs, and gradient.

GENERAL COMMENTS

Keep running notes in your field notebook as the season progresses to record observations that will help you complete this form. List any comments that may help us in interpreting your responses and list any other noteworthy features of the survey segment. Some possible questions to consider include: What are your impressions of the habitat? Did the habitat significantly change during the season, and if so, how? Are spawning habitat improvement structures present, and are they functioning to improve spawning habitat? If no coho were seen, do you have any idea why? Were there any tributaries within the segment where coho were seen holding at the confluence? Were there problems with access/roads/weather? Were the names, addresses, and/or phone numbers of landowners mentioned in the description, correct? Was this survey unusual compared to other surveys you have done? In what ways?

In many cases you will see certain sections of a stream more than any person on the planet. You may end up learning things about a stream that no one else knows. If you feel that you have information that would increase the quality of our data, correct possible errors in our stream database, or improve our understanding of a certain stream, this form is where that information should go.

Description of Salmon Spawning Gravel

Suitable spawning sites for coho salmon are characterized by gravel size, water depth, and water velocity. Preferred sites for redds are located at the tail end of pools or the head end of riffles (tail-outs), however other habitat types such as glides or side channels may also be used. Tail-outs appear to be preferred because they offer: (1) large uniform gravel deposits; (2) a gradient of water depth and velocity, allowing options for redd construction over varying stream flow; (3) good inter-gravel flow

through exchange of surface and ground waters; and (4) protection from gravel scouring during high flows.

Following is a listing of the physical parameters of optimal redd sites of coho salmon in Oregon coastal streams:

Habitat Unit Type
Pool tail-out

Gravel Size
- < 15 cm (6 in) in diameter
- > 2 cm (0.5 in) in diameter
- Prefer mean diameter of 9 cm (3-4 in)
- < 50 % of gravel area intermixed with fines (mud, silt, sand) or with larger rock (cobble, boulder)

Volume of Gravel Patch
- $\geq$ 20 cm (8 in) depth of deposit (thickness)
- $\geq$ 2 m^2 (36 ft^2) surface area of deposit

Water Depth Over Gravel
- < 62 cm (24 in)
- > 4 cm (2 in) - Preferred mean of 18 cm (7 in)

GENERAL SURVEY INSTRUCTIONS

Upload/Sync Survey123 Spawner Survey Data daily. Paper forms should be submitted to the Corvallis office (ATTN: Jon Nott or Alex Neerman) by the 1st and 15th of each month.

For survey areas where Area-Under-the-Curve (AUC) estimates are made (consult your crew leader for details on which surveys target AUC), **intervals** between successive valid surveys **should not exceed 10 days** from the date when the first visit is made. Surveys made under water visibility rating 3, or surveys having the comment code 24 “not surveyable” or 88 “survey not conducted” are not counted when calculating the interval between successive counts.

Examine all carcasses for fin clips, marks and tags and take snouts from all adipose clipped fish. Record all fin-marked carcasses on the Carcass Data form.

Remove tails from all carcasses (after examining for fin clips) that are sampled and recorded in the biological sampling form.

Leave dead fish where they are found, or if they are moved during sampling return them to where they were found.

Only count or sample carcasses with an intact skeleton (skull through caudal peduncle). Carcasses with fragmented skeleton should be tallied under “pre-handled” on Spawning Survey Form.

Use polarized sunglasses. Yellow or amber tinted lenses are best due to the low light conditions in the winter months and in dense tree cover. Spray-on defogger may help reduce condensation on the glasses.

Walk ALL stream channels (side channels, backwater pools, etc.).

Keep the direction walked on each survey consistent throughout the season, typically walking upstream.

Weather, flow and visibility for each survey area should reflect the conditions for the majority of the survey. These are initially recorded in your forms at the start of a given survey but remember to update them at the end of a survey if conditions vary or have changed from your initial assessment.

Count all species of salmon and steelhead seen in each survey area regardless of the target species of that survey area.

If you observe a salmon carcass that is due to be sampled, but you cannot recover it (e.g. at the bottom of a deep pool), tally it as a previously handled fish (PHA or PHJ). This ensures the carcass to be included in the total fish count (or peak count).

If live fish are observed during a survey, record most prevalent activity for each species: Spawned out; Holding in pools; Migrating through survey area; or Actively spawning. Use codes 13-16 (respectively) to record this on the Spawner Survey Form. These data are required anytime live fish of any species are observed.

Record survey data in the Survey123 form as you proceed through each survey. Don't wait to enter data! Carefully read the instructions for completing the forms at the beginning of and throughout the season.

Ensure each survey description is clear and accurate, and that survey start and end markers are posted. If necessary, revise the survey description using the Spawning Survey Description Change Form and replace the markers. Fill out forms or take excellent notes the day the changes are made to avoid forgetting details.

Record UTM coordinates for start and end points whenever coordinates are missing or appear inaccurate. Confirm any changes with your crew leader that may impact the location of the start or end point. Update this information on the Description Change Form.

TEN-DAY SURVEY ROTATION

Each random survey which targets AUC must be performed within ten days of the previous valid survey (those with a visibility code of 2 or lower). Any survey performed with a visibility code of 3 does not count toward this goal, and so surveyors must revisit that site within the original ten-day period.

Example: A survey is conducted on Monday. Tuesday would be day 1, Wednesday day 2, and so-on. On the following Monday (day 7) the survey is blown out with a visibility code of 3. The surveyors monitor conditions at this site for several days and return by Thursday (day 10) when conditions have improved. The survey is performed with a visibility code of 2 (acceptable). Friday then becomes day 1 of the newest survey schedule. In this example the survey was conducted on the last day which would be considered within the required schedule.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Survey-Vis 1	day 1	day 2	day 3	day 4	day 5	day 6
Survey-Vis 3	day 8	day 9	Survey-Vis 2	day 1	day 2	day 3

Figure 144. Example of survey rotation.

Multiple surveys may threaten to go beyond the 10-day schedule simultaneously. Careful planning of site rotations can help. Watch weather carefully, and if a storm is looming, anticipate your post-storm survey schedule by visiting (before the storm) those sites likely to stay blown-out after a storm hits. In this way you maximize the chance of maintaining the rotation schedule. Also remember that a survey should be conducted as often as possible. There may be times when a survey could be conducted twice in the same work week. Such a schedule may get old, but the quality of data would be much higher. We like this.

Inform your crew leader immediately for guidance or to request help if it appears that a survey may go beyond its 10-day rotation. Once over 10 days it is important to get a viable survey completed as soon as possible. Continue surveying the site on the regular schedule after that.

The 10-day rotation is based on experiments which suggest that the average lifespan of adult salmon on spawning grounds is slightly more than ten days. As a result, surveys performed more than ten days apart could potentially miss successfully spawning salmon. This means that surveys performed outside of the recommended rotation are not useful in providing estimates of abundance, though some valuable timing and distribution information can still be obtained from continuing the survey schedule.

FIRST WEEK PRIORITIES

Meet with crew leader and district staff to go over and/or devise a safety check-in procedure. Field stations will need to have a check-in/out board or system in place that will let others know where you are going and if you have returned. Isolated crews will need to devise a call in system with their crew leader.

Discuss office procedures, including gear storage, vehicle parking and computer use.

Office review with crew leader: Go over all forms and procedures. Review Survey Procedures Manual, Admin Manual, and Safety Procedures Manual.

Review Carcass Sampling Matrix for your area. Determine snout and scale card storage.

Go over smartphones with crew leader and make sure that you know how to locate all the forms and that you can upload your data. Review Field Maps use for navigation and locating surveys.

Field review with crew leader: try to go to a survey that will have fish. Go over survey techniques, fish and redd identification, gravel counts, and carcass processing. Each crew can plan on conducting the first few surveys together if they wish to. The beginning of the season is a good time to clear trails for easier surveying; keeping in mind that higher flows may require trails in different areas than at the start of the season to complete the survey.

Sit down with crew leader and identify early season priority surveys. These should include all standard Chinook and chum surveys, and any coho surveys that have a history of early returns. It is vital that these surveys be started at the earliest date possible.

Go over each survey description and landowner sheet. Mark all sites on a map. Draw up a likely survey rotation. Plan on doing an average of eight sites a day per crew.

Contact landowners that still need to be contacted. Start with landowners on the priority survey list. Use the county assessor website to identify unknown properties. Consult with crew leader on landowner contact techniques.

Survey descriptions should note if a gate key is needed. These keys will be obtained by crew leaders; however, surveyors should go over key lists with their crew leader to ensure that all necessary keys are being requested. Keys should be stored in a secure location in your office and never stored in your vehicle overnight.

Create a spreadsheet to record valid survey dates. This spreadsheet will be very helpful as a quick reference for survey and schedule planning, and for periodically comparing to survey data to ensure all survey visits have been entered.

DEALING WITH SPECIAL CIRCUMSTANCES

MISSING SURVEY PARTNER

What should you do if your partner does not return from a survey? Partners will survey separately unless specifically noted in the directions or in special circumstances. There may be times when you will find yourself waiting long periods of time for your partner to return. Keep in mind that surveys can take two to three times as long during periods of heavy carcass processing and scale recovery. High flows also make surveys more time consuming. If, after taking these and any other relevant factors into account, you determine that your partner has been gone too long, it may be time to go looking for them. Before leaving the predetermined pick-up spot, leave a very visible note in your vehicle (use flagging or survey sheets). The note should state when you left and your exact search plan. Start your search by going in the exit route, and then downstream from the end to the start. The next step, if necessary, would be to contact your crew leader and the state police. Do not attempt this search by yourself if it is late in the day. If cell coverage allows, stay on site near the survey. Leave the site only if you must do so to contact help. Keep a flashlight or headlamp in the rig or in your survey gear. Always keep an ODFW contact list with phone numbers with you in case of an emergency. If cell phone service is not available, ask a nearby resident to use their phone. Do not start surveys late in day if they cannot be completed before dark.

LANDOWNER DENIALS

It may be possible to complete surveys with one or more denials. There may be past denials that the current description already considers. Surveys can be cut short at the start or end to avoid denied property. In some cases, small portions can be skipped. Creeks are often used as property boundaries. When landowners own only one side, the opposite bank can be walked to avoid the denied property. If you encounter denials while contacting landowners, do not automatically drop the survey. Unless a major landowner denies access, contact all landowners, and then check the feasibility of the survey. It will be necessary to use the tax lot maps to check exact property boundaries. Use caution and good judgment when conducting a survey with partial denials. Do not put yourself in a dangerous position. **Consult with your crew leader prior to dropping a survey or deciding to do a survey with partial denials**.

UNSURVEYABLE CREEKS

Any creek with a visibility of “3” cannot be surveyed. **Before making this determination, check several areas within the route**. It is worthwhile to check several different spots, sometimes a creek may clear up a little way into the survey. If you cannot see more than a couple of inches into riffles or the tail outs of pools, you should not survey the creek.

There are a few guidelines that may help you during periods of high flows. Creeks have varying degrees of susceptibility to blowing out. If you know a big weather system is forecasted for the area, try to get the creeks that are more susceptible to blowing out done first. Once a storm has hit, focus on getting the smaller, less prone to blowing out, creeks done. Once the water level goes back down you can survey those creeks which you were not able to before. Planning and careful scheduling will help in keeping the surveys within the 10-day survey limit. It will be helpful to create a spreadsheet for planning. Consult regularly with your crew leader during periods of heavy rainfall when there are multiple creeks blown out. In general, when in doubt about the status of a creek go ahead and take the time to check it out.

FISHING AND HUNTING REGULATIONS

Extra copies of the ODFW fishing rules and regulations brochure may be provided at training or can be obtained at any ODFW office and should be stored in the glove box of your vehicle. Review the local regulations, however, bear in mind that you are not an enforcement officer. If you encounter someone fishing illegally, use your best judgment on how to proceed. Oftentimes it is just a matter of the fisherman not understanding or knowing the regulations. Suggesting a check of the regulations is generally all it takes to get them to move on. Be careful about confrontations. If you do not feel comfortable approaching certain individuals, try to obtain relevant information such as a license plate number. Report illegal activity to the state police or your supervisor (Oregon State Police tip line: 1-800-452-7888). Do not put yourself in a dangerous or uncomfortable position.

COHO SPAWNING IN SMALL TRIBUTARIES

Tributaries with less than 150 meters of habitat are known as spur tributaries. The description and/or special instructions for a survey may include directions to walk up spur tributaries to the end of habitat (typically less than 150 meters). Any fish or redds found in spur tributaries will be included in the total count for the parent survey.

In some cases, you may find coho spawning in tributaries within the survey boundaries that are not mentioned in the survey description. In this occurrence you should document that you saw fish spawning in a tributary by recording **comment code 01** (**“Includes tributary to index”**) in the Comments Section on your smartphone and record the number of fish and redds in the comment section only. Consult with your crew leader on how to proceed when you return to this site on your next visit.

CELL PHONES

All crew members will be issued a smartphone. Update the voicemail greeting with your name, and that you work for the Oregon Department of Fish and Wildlife. Phones are for work and emergency use only (not for routine personal calls) and should carried with you every day while working. Check and respond to your messages daily. Be

professional when answering the phone and when leaving your greeting. Your crew leader or supervisor can help you set up your phone so that you can access your messages and record a greeting.

PUBLIC RELATIONS AND SAFETY

When driving a state vehicle, accessing sites, or conducting surveys, you are personally representing ODFW to landowners, anglers, and the public. To ensure continuing cooperation with our efforts, it is essential that we maintain a positive image and constructive relationships with members of the public.

If a landowner challenges your right to conduct surveys on their land, explain it was your understanding that permission was obtained, apologize for the misunderstanding, and request permission to continue the survey. **Under no circumstances** conduct a survey if the landowner denies you permission. If someone other than a landowner challenges your right to conduct a survey, tell him or her that you will seek confirmation of permission through the owner and your supervisor. Do not conduct a survey if you feel that it is unsafe to do so.

Always treat members of the public with respect. In recent years, ODFW has generally improved its public image, having demonstrated respect for landowners, a high level of scientific credibility, and budgetary responsibility. However, it is not uncommon to encounter a person who has complaints about ODFW or other fish and wildlife management issues. If you encounter an angry person and you feel unsafe, end the encounter. Otherwise, repeating or paraphrasing back what the person says will help you gain that person's trust by letting them know that you hear and understand what they are saying. Find a point of agreement and end the conversation. Avoid prolonged discussions, you can always refer the individual to your supervisor if they want to follow up with more questions.

Be careful of other cars and trucks on the road, especially on logging roads. Generally, emergency vehicles, low boy trailers, dump trucks, log trucks, and pick-ups (in that order) have the right-of-way. **Use your CB radio when you are on industrial forest roads but NEVER assume that other vehicles are using their CBs!** The CB channel used in a particular area is generally posted on a sign or painted on a tree or rock at the beginning of the road. If none is visible, set your CB radio to scan until you can locate the channel used in a particular area. If your radio has no scan feature, check with your Crew Leader about any active logging operations and/or CB channels typically used in the area. Please add this information on your Description Change Form for future surveys in this area. An example of how you might use your CB to warn unseen vehicles of your approach is "Milepost 17 headed up the Eighty-one Fifty-five Road".

Respect your physical and mental limits when conducting a survey. Don't take unnecessary chances when walking across rapidly flowing streams, on slick rocks or bedrock, and on slick, unstable, or rotten logs. Always stay aware of your surroundings

and never assume the creek is the same this week as it was last week since high flows can change the stream throughout the season. Pay particular attention to fatigue or the potential for hypothermia as either will affect your judgment. You may be able to make that jump to the log 9 times out of 10, but it will be that one time you miss that you will probably regret for the rest of the day, if not the rest of the season.

Every workstation needs to have a surveyor check-in system and search plan to locate missing surveyors. It is a good idea to let your crew leader know what order you plan to do the surveys in. Your crew leader will set up a daily check-in system to make sure each crew safely returns from the field. If for any reason your original plans change, you must let your crew leader know.

HANDHELD 2-WAY RADIOS

Each crew will be assigned a set of 2-way radios. The radios are *non-waterproof*, but in your crew box is a spare plastic bag to help protect them. These radios are mandatory to keep in communication with your partner for safety and/or to meet up and help them process carcasses if you have finished your half of the survey. The radios are state property and for official business only. As with the CB radios, keep in mind that they are not secure lines and anyone else on the same channel will hear what you are saying, keep your communication professional.

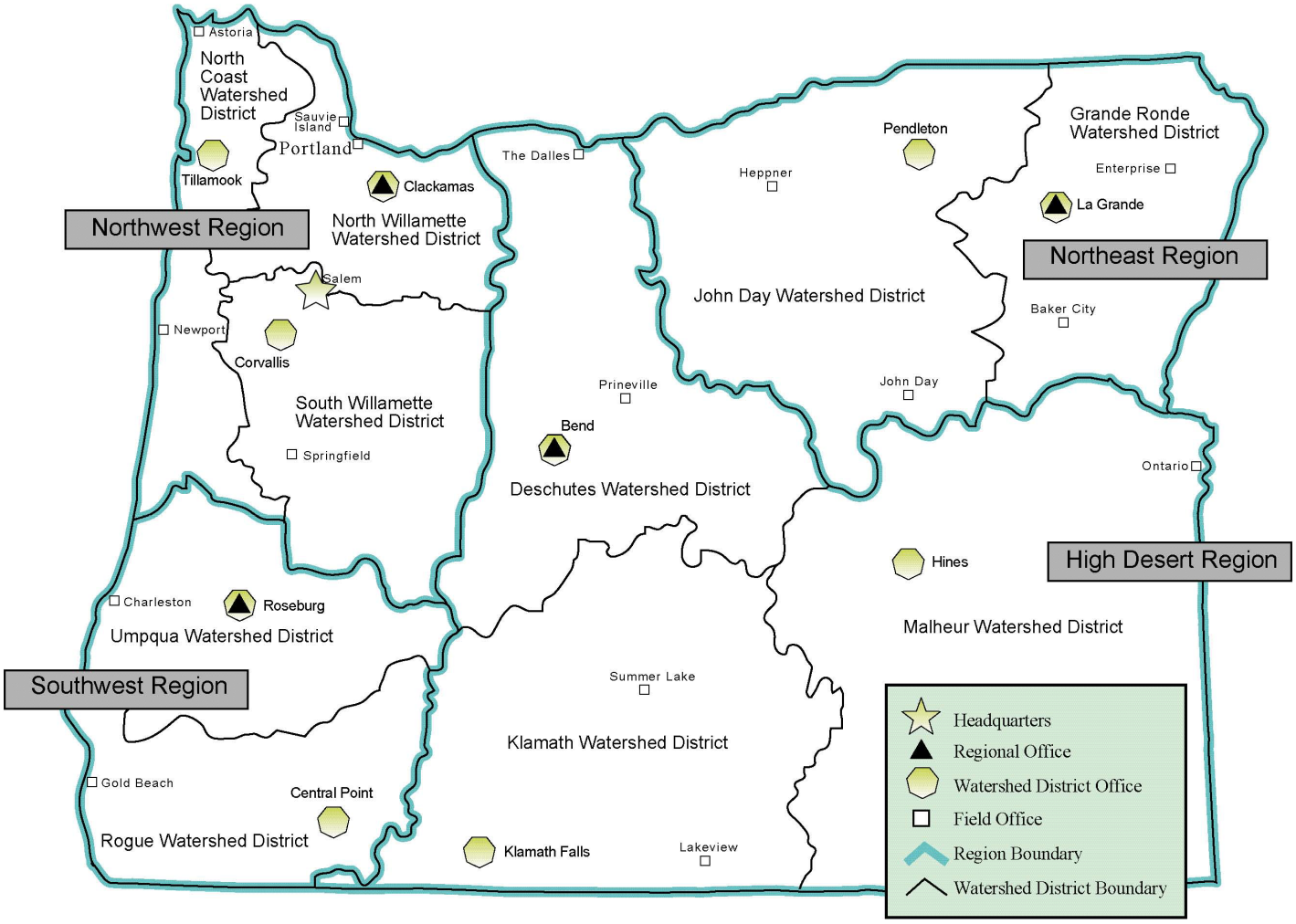
If you get into an emergency situation (lost, injured, etc.), the standard channel we use for the project is main channel “1”. You have been issued extra batteries that you should always carry in case you need them in an emergency. If your survey partner, crew leader, other staff, or emergency personnel need to contact you, they will be using channel 1 to try to contact you.

We Would Rather Lose a Survey Than a Surveyor

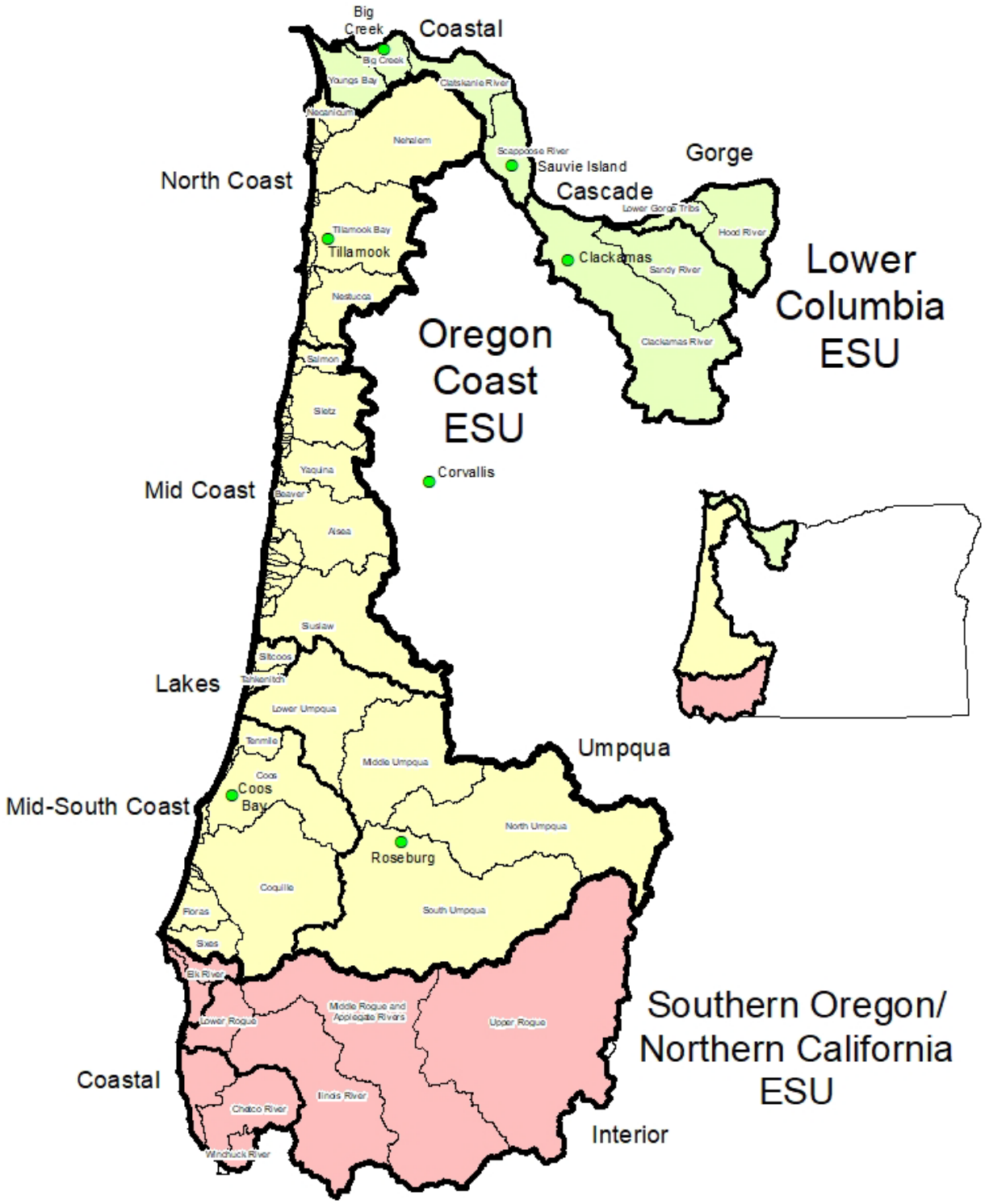
YOUR SAFTEY IS MORE IMPORTANT THAN THE DATA

MAKE SAFETY YOUR TOP PRIORITY, ALWAYS!

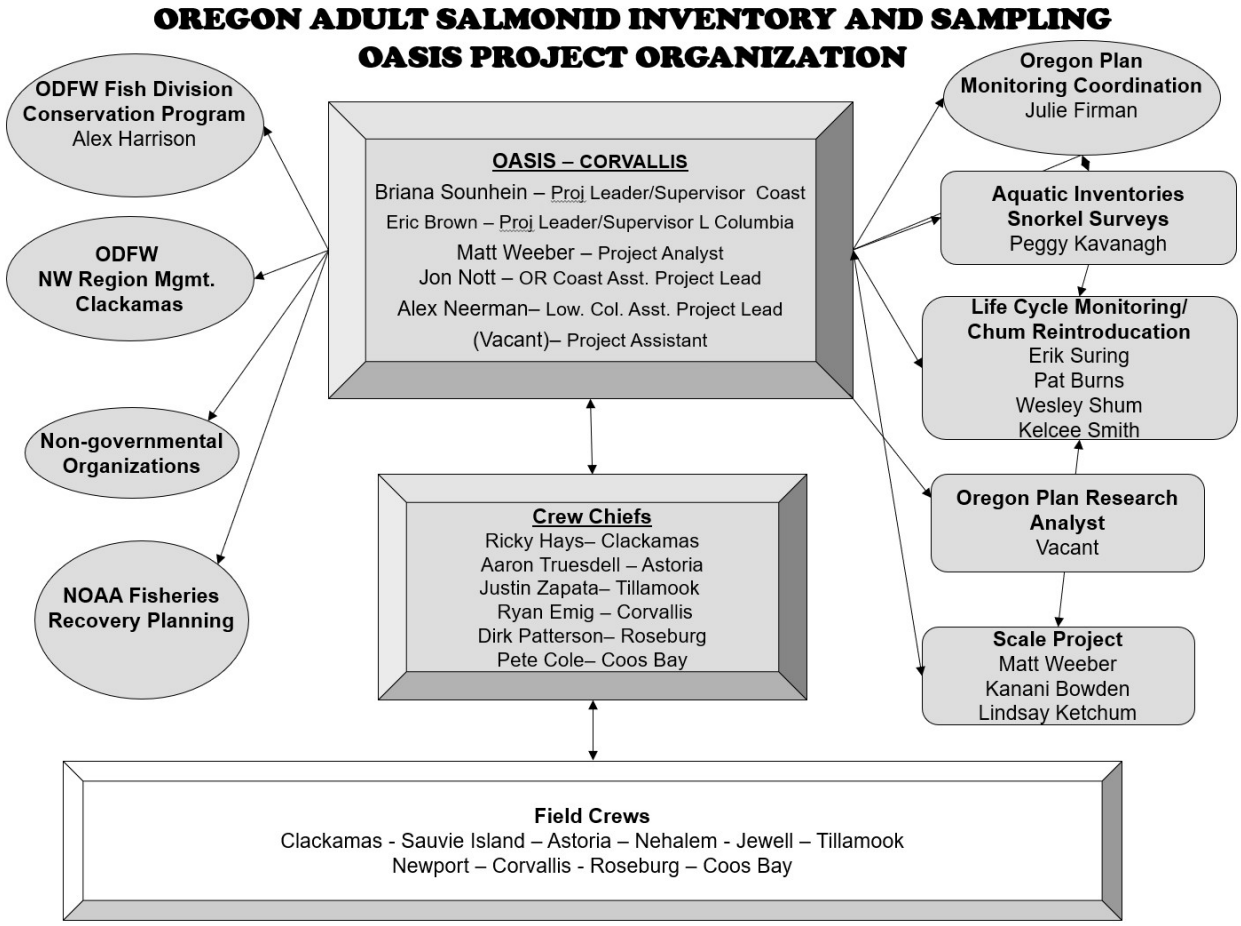
APPENDIX A. ODFW'S GEOGRAPHIC STRUCTURE AND OFFICE LOCATIONS



APPENDIX B. MONITORING AREA AND LOCATIONS OF ODFW SPAWNER SURVEY CREWS



APPENDIX C. OREGON ADULT SALMONID INVENTORY AND SAMPLING (OASIS) ORGANIZATIONAL FLOW CHART.



APPENDIX D. IMPORTANT PHONE NUMBERS

NAME	TITLE	NUMBER
OSP Tip Line	Oregon State Police anonymous tip line	(800) 452-7888
Motor pool questions	Oregon motor pool accidents/maintenance	(800) 378-0077
Kevin Stertz	North Willamette Coast Range District Fish Bio	(971) 673-6044
Vacant	North Willamette Coast Range Asst. Fish Biologist	(971) 673-2040
Ben Walczak	North Willamette Cascade Unit District Fish Bio	(971) 673-6013
Michael Hayworth	North Willamette Cascade Unit Asst. Fish Biologist	(971) 673-6011
Chris Knutsen	North Coast District Manager	(503) 842-2741
Robert Bradley	North Coast District Fish Biologist	(503) 842-2741
Michael Sinnott	North Coast Asst. Fish Biologist	(503) 338-0106
Vacant	Mid Coast District Fish Biologist	(541) 265-8306
Dylan O'Keefe	Mid Coast Asst. Fish Biologist	(541) 265-8306
Evan Leonetti	Umpqua District Fish Biologist	(541) 440-3353
Levi Simmons *(acting)*	Umpqua Asst. Fish Biologist	(541) 440-3353
Vacant	Coos-Coquille District Fish Biologist	(541) 888-5515
Gary Vonderohe	Coos-Coquille Asst. Fish Biologist	(541) 888-5515
Steve Mazur	South Coast District Biologist	(541) 247 7605
Laura Green	South Coast Asst. Fish Biologist	(541) 247 7605
Frank Drake	Upper Rogue District Biologist	(541) 826-8774
Pete Samarin	Upper Rogue Asst. Fish Biologist	(541) 826-8774
Erik Suring	NW Region Research Program Manager	(541) 757-5148
Kerrie Tarkinton	Corvallis Research Lab Office Manager	(541) 757-5101
Briana Sounhein	OASIS Project Leader Oregon Coast	(541) 757-5136
Eric Brown	OASIS Project Leader Lower Columbia	(541) 757-5133
Matt Weeber	OASIS Project Analyst & Scale Reading Project	(541) 757-5120
Alex Neerman	OASIS Assistant Project Leader - Lower Columbia	(541) 760-7723
Jon Nott	OASIS Assistant Project Leader - Oregon Coast	(541) 231-3412
Vacant	OASIS Project Assistant	(541) 757-5134
Kelcee Smith	Chum Reintroduction Project (PROCS) Project Leader	(541) 286-5328
Peggy Kavanagh	Aquatic Inventories (AQI) Project Leader	(541) 757-5124
Brian Riggers	CCRMP Project Biologist	(541) 757-5132
Katie Woodside	CCRMP Project Leader	(541) 757-5121
Aaron Truesdell	Crew Leader for Lower Columbia (West) – Astoria	(971) 320-0536
Ricky Hays	Crew Leader for L. Columbia (East) – Clackamas	(541)-223-4366
Justin Zapata	Crew Leader for North Coast – Tillamook	(541) 231-1958
Ryan Emig	Crew Leader for Mid Coast – Corvallis	(541) 760-7746
Dirk Patterson	Crew Leader for Umpqua – Roseburg	(541) 231-1961
Peter Cole	Crew Leader for Mid-South Coast – Coos Bay	(541) 231-1802

APPENDIX E. LOWER COLUMBIA SALMON SPAWNING SURVEYOR ID LIST

CREW LOCATION	ID #	SURVEYOR	PROJECT
Clackamas	131	Ricky Hays (Crew Leader)	OASIS
Clackamas	97	Jim Nunnally	OASIS
Clackamas	150	Cory Mack	OASIS
Clackamas	155	Ryan Casto	OASIS
Clackamas	159	Sasha Burchuk	OASIS
Clackamas	160	Deeann Schall	OASIS
Clackamas	135	Jon Mueller	OASIS
Clackamas	132	Erin Fulop	OASIS
Sauvie Island	152	Daniel Cassel	OASIS
Sauvie Island	95	Mahima White	OASIS
Astoria	82	Aaron Truesdell (Crew Leader)	OASIS
Astoria	156	Mia Hellman-Crump	OASIS
Astoria Tule	153	Isabela Garcia-Arce	OASIS
Astoria Tule	145	Anthony Simmons	OASIS
Jewell	47	Trenton Haas	OASIS
Jewell	24	Maddie Bacon	OASIS
Tillamook	98	Justin Zapata (Crew Leader)	OASIS
Tillamook	45	David Griffeth	OASIS
Tillamook	54	Louis Garcia	OASIS
Corvallis	2	Briana Sounhein	OASIS
Corvallis	4	Eric Brown	OASIS
Corvallis	5	Ryan Emig (Crew Leader)	OASIS
Corvallis	9	Jon Nott	OASIS
Corvallis	13	Matt Weeber	OASIS
Corvallis	113	Alex Neerman	OASIS
Corvallis	63	Molly Hamilton	OASIS
Corvallis	28	Joseph Lucero	OASIS
Corvallis	23	Matt Brengle	OASIS
Corvallis	35	Sean Valente	OASIS
Corvallis	20	Alanna Wong	OASIS
Corvallis	29	Jack Tyler	OASIS
Corvallis	86	Dave Metz	OASIS
Roseburg	65	Dirk Patterson (Crew Leader)	OASIS
Roseburg	57	Mike Koranda	OASIS
Roseburg	50	Weston Gillbanks	OASIS

CREW LOCATION	ID #	SURVEYOR	PROJECT
Coos Bay	68	Peter Cole (Crew Leader)	OASIS
Coos Bay	58	Lane Davison	OASIS
Coos Bay	44	Travis Landon	OASIS
Coos Bay	55	Jonathan Baldwerm	OASIS
Coos Bay	59	Pamela Baldwerm	OASIS
Coos Bay	66	Coos Bay Watershed Council	Other
Gold Beach District	201	Steve Mazur	District
Gold Beach District	202	Laura Green	District
Gold Beach District	203	*TBD*	District
Gold Beach District	204	*TBD*	District
Gold Beach District	210	Volunteer	District
Tillamook District	31	Tillamook District	District
Newport District	33	Newport District	District
Newport LCM	41	Kevin Hall	LCM
Newport LCM	37	Paul Vickers	LCM
Newport LCM	39	Wesley Shum	LCM
Corvallis LCM	40	Richard Biederbeck	LCM
Chum Reintroduction	396	Kelcee Smith	LCM
Chum Reintroduction	399	Scott Kirby	LCM
Chum Reintroduction	397	Brian Libercajt	LCM
Chum Reintroduction	398	Connor Randolph	LCM

APPENDIX F. SANITIZING SAMPLING GEAR

Disinfecting Field Gear to Reduce the Spread of Invasive Snails and Fish Pathogens

ODFW / Oregon Adult Salmonid Inventory and Sampling Project (OASIS)

Background

Aquatic pathogens such as bacteria, viruses, parasites, and invasive species such as New Zealand Mud Snails (NZMS) can adhere to or be trapped in field gear such as boots, waders, drysuits, nets, coolers, boats etc. New Zealand mudsnails (*Potamopyrgus antipodarum*) are an introduced species spreading rapidly among rivers and streams in the western United States. Since they were reported in the Snake River in Idaho in the 1980's, the snails have been discovered in at least ten western states. New Zealand mudsnails are parthenogenic, so a single introduced snail has the potential to start a new population. In Oregon, mudsnails have been found in tributaries of the lower Columbia River, Devil's Lake on the central coast, Garrison Lake near Port Orford, and several sites in the Snake River basin.

Researchers believe wading by recreational anglers may be a primary vector by which mudsnails are transported among streams. The ODFW Fish Health Management Policy (635-007-0965) states that it is the Department's responsibility to restrict the introduction, amplification, and dissemination of disease agents in the natural environment. Because OASIS spawning survey crews wade in multiple watersheds during the field season, it is important that the Project take measures to minimize the spread of invasive snails and other pathogens. Mudsnails are resistant to desiccation and may survive for days out of water on moist waders and sampling gear.

In the western U.S. mudsnails can reach a maximum length of 6mm.

Preventing Mudsnail Transport Between Watersheds

Whenever possible, OASIS crews should avoid surveying in more than one major river basin (e.g. Alsea, Yaquina, Siletz) per day. To avoid mudsnail and pathogen transport among basins, crews should sanitize waders and boots daily when they return to their duty station (ODFW office) or between sites if they must survey in two major basins in one day. The sanitization procedure listed below effectively kills New Zealand mudsnails with minimal damage to wading gear (Hosea and Finlayson, 2005).

Required equipment:

- Scrub brush
- Dishwashing gloves
- Formula 409® (100% solution)
- Clean water supply (not stream water)

Remove waders, boots, drysuits, and when possible, remove insoles from wading boots.

Use the scrub brush to clean loose dirt or mud off boots, waders, and field gear.

Using a spray bottle of Formula 409® cleaning solution (do not dilute), spray waders, wading boots, boot insoles and the streambed contact end of wading staff with the cleaning solution to the point of saturation. Be sure to treat the inside of the wading boots as well as the outside, paying special attention to bootlace grommets, seams, felt soles, and any other places where mudsnails might cling.

Allow treated gear to sit for ten minutes.

Rinse gear in clean water. **DO NOT USE STREAM WATER.** Ideal rinse stations are outdoor hoses at ODFW offices. When sanitizing gear in the field a separate spray bottle filled or water jug with tap water should be used for rinsing, and the process should occur at least 100m from any waterway or runoff-drain.

Store wading gear in a dry location for later use.

Crews should wear gloves while handling Formula 409® to minimize contact with skin.

Literature Cited

Hosea, R.C. and B. Finlayson. 2005. Controlling the spread of New Zealand Mudsnails on wading gear. California Department of Fish and Game Administrative Report 2005-02.

APPENDIX G. BIO-SAMPLING MATRIX

2025-26 Lower Columbia Biological Sampling							
Chinook	**Population (Area)**	**Tally Carcasses**	**Bio-Sample Information**	**Scale**	**Snout**	**Otolith**	**DNA**
	Lewis and Clark River	No	Yes	Every Fish Sampled	If Beeps	No	No
	North Fork Klaskanine			Every Fish Sampled	If Beeps		
	Plympton Creek (Clipped)	No	Yes	1 in 2	If Beeps		
	Plympton Creek (Unclipped without Coded Wire Tag)			Every Fish Sampled	NA		
	Youngs Bay	No	Yes	Every Fish Sampled	If Beeps		
	Big Creek Population (Clipped)	No	Yes	1 in 2	If Beeps		
	Big Creek Population (Unclipped without Coded Wire Tag)			Every Fish Sampled	NA		
	Clatskanie	No	Yes	Every Fish Sampled	If Beeps		
	Scappoose			Every Fish Sampled	If Beeps		
	Clackamas			Every Fish Sampled	If Beeps	No	No
	Sandy (Sample Chinook entire season!)			Every Fish Sampled	If Beeps	No	No

Coho	**Population (Area)**	**Tally Carcasses**	**Bio-Sample Information**	**Scale**	**Snout**	**Otolith**	**DNA**
	Big Cr	No	Sex & Clip Status	No	No	No	No
	Youngs Bay						
	Big Creek Population						
	Clatskanie/Plympton		Yes	1 in 10	If Beeps		
	Scappoose						
	Clackamas						
	Sandy			Every Fish			
	Upper Sandy Tribs (Before October 31st)						

Chum	**Population (Area)**	**Tally Carcasses**	**Bio-Sample Information**	**Scale**	**Snout**	**Otolith**	**DNA**
	Lower Columbia All	No	Yes	Every Fish	Every Fish	Every Fish	Untagged Fish

Steelhead, Pink and Sockeye	**Population (Area)**	**Tally Carcasses**	**Bio-Sample Information**	**Scale**	**Snout**	**Otolith**	**DNA**
	Lower Columbia All	No	Yes	Every Fish	If Clipped	No	No

2025-26 Oregon Coast Bio-Sampling Instructions

	Population (Area)	Tally Carcasses	Bio-Sample Information	Scale	Snout	Otolith	DNA
Chinook	Necanicum	Yes	No	All Adipose Clipped	All Adipose Clipped	No	No
	Nehalem	No	Yes	All			
	Tillamook Bay						
	- Miami - Kilchis	Yes	No	All Adipose Clipped			
	- Wilson	No	Yes	All			
	- Trask - Tillamook R	Yes	No	All Adipose Clipped			
	Nestucca NC Dependent	Yes	No	All Adipose Clipped			
	Salmon R Siletz	No	Yes	All			
	Yaquina Beaver Alsea	Yes	No	All Adipose Clipped			
	Siuslaw	No	Yes	All			
	MC Dependent Siltcoos Tahkenitch Tenmile	Yes	No	All Adipose Clipped			
	Coos Coquille	No	Yes	All			
	Floras	Yes	No	All Adipose Clipped			
	Sixes	No	Yes	All			
	Elk R	No	Yes	All			
	MS Dependent	Yes	No	All Adipose Clipped			
	Chetco	No	Yes	All			
	Lower Umpqua Middle Umpqua North Umpqua South Umpqua	No	Yes	All			

2025-26 Oregon Coast Bio-Sampling Instructions

	Population (Area)	Tally Carcasses	Bio-Sample Information	Scale	Snout	Otolith	DNA
Coho	Necanicum	Yes	No	All Adipose Clipped	All Adipose Clipped	No	No
	Nehalem						
	Tillamook Bay - Miami - Kilchis - Wilson - Trask - Tillamook R						
	Nestucca						
	NC Dependent						
	Salmon R						
	Siletz						
	Yaquina						
	Beaver						
	Alsea						
	Siuslaw						
	MC Dependent						
	Siltcoos						
	Tahkenitch						
	Tenmile						
	Coos						
	Coquille						
	Floras						
	Sixes						
	MS Dependent						
	Chetco						
	Lower Umpqua						
	Middle Umpqua						
	North Umpqua						
	South Umpqua						

2025-26 Oregon Coast Bio-Sampling Instructions

	Population (Area)	Tally Carcasses	Bio-Sample Information	Scale	Snout	Otolith	DNA
Chum	All Locations	Yes	No	No	No	No	No

	Population (Area)	Tally Carcasses	Bio-Sample Information	Scale	Snout	Otolith	DNA
Steelhead, Pink & Sockeye	All Locations	No	Yes	All	All Adipose Clipped	No	No

APPENDIX H. 2025-2026 SPAWNING SURVEY LIST

North Coast

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Necanicum River	Mainstem	26196.00	2	Little Muddy Cr	Random	Coho	18,19,20,21,22,23,24,25	0.79
Necanicum River	Mainstem	26198.00	4	Beerman Cr	Random	Coho	16,17,18,19,22,23,24,25	0.26
Necanicum River	Mainstem	26203.00	1	Circle Cr	Random	Coho	09,12,15,16,17,18,25	0.82
Necanicum River	Mainstem	26204.00	2	Circle Cr	Random	Coho	18,19,20,21,22,23,24,25	1.08
Necanicum River	Mainstem	26204.00	3	Circle Cr	Random	Coho	17,18,19,20,21,23,24,25	0.66
Necanicum River	Mainstem	26205.00	2.1	Necanicum R Chum (Lower)	Standard	Chum	Annual	0.96
Necanicum River	Mainstem	26211.00	1.1	Necanicum R Chum (Upper)	Standard	Chum	Annual	2.39
Necanicum River	Mainstem	26215.00	1	Necanicum R	Random	Coho	25	1.14
Necanicum River	Mainstem	26223.00	1	Necanicum R	Random	Coho	17,18,19,21,22,23,24,25	0.73
Necanicum River	Mainstem	26228.00	2	Necanicum R, N Fk	Random	Coho	18,19,20,21,22,23,24,25	0.18
Necanicum River	Mainstem	26228.00	4	Necanicum R, N Fk	Random	Coho	18,19,20,21,22,23,24,25	0.98
Necanicum River	Mainstem	26239.00	2	Joe Cr	Random	Coho	18,19,20,21,22,23,24,25	0.43
Necanicum River	Mainstem	26239.00	3	Joe Cr	Random	Coho	06,07,10,13,16,19,22,25	0.88
Necanicum River	Mainstem	26243.30	1	Necanicum R, Trib C	Random	Coho	16,19,22,25	0.52
Nehalem River	Mainstem	25887.00	1	Foley Cr	Random	Coho	92,98,01,07,10,13,16,25	0.63
Nehalem River	Mainstem	25889.00	1.3	Foley Cr	Random	Coho	24,25	0.79
Nehalem River	Mainstem	25907.00	1	Cook Cr	Standard	Fall Chinook	Annual	1.05
Nehalem River	Mainstem	25967.00	2.1	Humbug Cr	Standard	Fall Chinook	Annual	0.88
Nehalem River	Mainstem	25980.00	1	E Humbug Cr	Standard	Fall Chinook	Annual	0.94
Nehalem River	Mainstem	25980.40	2	E Humbug, Trib 1	Random	Coho	19,25	0.64
Nehalem River	Mainstem	25985.00	1	W Humbug Cr	Random	Coho	18,19,20,21,22,23,24,25	1.24
Nehalem River	Mainstem	25985.00	1	W Humbug Cr	Standard	Coho	Annual	1.24
Nehalem River	Mainstem	25986.50	1	Nehalem R, Trib 5	Random	Coho	25	0.24
Nehalem River	Mainstem	25993.00	1	George Cr	Random	Coho	18,19,20,21,22,23,24,25	0.44
Nehalem River	Mainstem	26024.70	1	Hamilton Cr	Random	Coho	18,19,20,21,22,23,24,25	0.61
Nehalem River	Mainstem	26043.00	2	Deep Cr	Random	Coho	04,05,07,10,13,16,19,25	0.76
Nehalem River	Mainstem	26043.00	7	Deep Cr	Random	Coho	16,17,18,19,20,23,24,25	0.35
Nehalem River	Mainstem	26055.00	2	Calvin Cr	Random	Coho	07,10,12,13,16,25	1.38
Nehalem River	Mainstem	26061.70	1	Lundgren Cr	Random	Coho	17,18,19,20,22,23,24,25	0.48
Nehalem River	Mainstem	26065.30	1	Mud Fork Battle Cr	Random	Coho	18,19,20,21,22,23,24,25	0.49
Nehalem River	Mainstem	26069.00	3	Deer Cr	Random	Coho	98,01,04,07,10,13,19,25	1.28
Nehalem River	Mainstem	26081.00	2	Crooked Cr	Random	Coho	17,18,19,20,21,22,23,25	1.19
Nehalem River	Mainstem	26093.70	1	Nehalem R, E Fk	Random	Coho	16,17,18,19,20,21,23,25	0.92
Nehalem River	Mainstem	26094.00	3	Nehalem R (Upper)	Standard	Fall Chinook	Annual	1.26
Nehalem River	Mainstem	26119.00	2	Coon Cr	Random	Coho	07,10,13,16,19,25	0.61
Nehalem River	Mainstem	26150.00	1	Nehalem R	Random	Coho	04,07,10,13,16,19,22,25	0.90

North Coast

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Nehalem River	North Fork	25840.00	2	Coal Cr	Standard	Chum	Annual	0.83
Nehalem River	North Fork	25874.00	2	Lost Cr	Random	Coho	01,04,07,10,13,16,19,25	0.88
Nehalem River	Salmonberry River	25931.00	2	Salmonberry R	Standard	Fall Chinook	Annual	0.54
Nehalem River	Rock Creek	26097.00	5	Rock Cr	Standard	Fall Chinook	Annual	2.50
Nehalem River	Rock Creek	26113.00	2	Rock Cr	Random	Coho	01,04,07,10,13,16,19,25	0.85
Nehalem River	Rock Creek	26117.00	2	Rock Cr, S Fk	Random	Coho	17,18,19,20,21,23,24,25	1.03

Tillamook

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Miami River	Mainstem	25787.00	1	Moss Cr	Standard	Chum	Annual	0.74
Miami River	Mainstem	25790.00	1.1	Miami R	Standard	Chum	Annual	0.68
Miami River	Mainstem	25797.00	1	Prouty Cr	Standard	Chum	Annual	0.44
Kilchis River	Mainstem	25722.00	2	Kilchis R	Standard	Chum	Annual	1.19
Kilchis River	Mainstem	25729.00	1	Clear Cr	Standard	Chum	Annual	0.61
Kilchis River	Mainstem	25729.00	1	Clear Cr	Standard	Fall Chinook	Annual	0.61
Kilchis River	Mainstem	25762.34	2	Kilchis R, N Fk	Random	Coho	04,06,07,10,13,16,19,25	1.28
Kilchis River	Mainstem	25763.20	2	Kilchis R, N Fk	Random	Coho	18,19,20,21,22,23,24,25	1.12
Kilchis River	Little South Fork	25733.00	1	Kilchis R, Little S Fk	Standard	Fall Chinook	Annual	0.82
Wilson River	Mainstem	25675.00	3	Jordan Cr	Random	Coho	18,19,20,21,22,23,24,25	1.13
Wilson River	Mainstem	25675.50	4	Jordan Cr	Random	Coho	18,19,20,21,22,23,24,25	0.92
Wilson River	Mainstem	25679.00	1.1	Cedar Cr	Standard	Coho	Annual	2.98
Wilson River	Mainstem	25679.00	1.1	Cedar Cr	Standard	Fall Chinook	Annual	2.98
Wilson River	Mainstem	25695.00	1	Ben Smith Cr	Random	Coho	18,19,20,21,22,23,24,25	0.38
Wilson River	Mainstem	25703.00	2	Elk Cr	Random	Coho	18,19,20,21,22,23,24,25	0.35
Wilson River	Little North Fork	25641.00	1	Wilson R, Little N Fk	Standard	Chum	Annual	0.59
Wilson River	Little North Fork	25641.00	1	Wilson R, Little N Fk	Standard	Fall Chinook	Annual	0.59
Wilson River	Little North Fork	25641.00	2	Wilson R, Little N Fk (Supp)	Random	Coho	95,98,01,04,13,16,19,25	0.69
Wilson River	North Fork	25688.70	1	Wilson R, N Fk, W Fk	Random	Coho	18,19,20,21,22,23,24,25	1.39
Wilson River	Devil's Lake Fork	25706.00	1	Wilson R, Devil'S Lake Fk	Random	Coho	97,03,07,10,13,16,19,25	1.29
Trask River	North Fork	25622.60	1	Michael Cr	Random	Coho	95,04,10,12,13,16,19,25	0.96
Trask River	North Fork	25625.00	1	Trask R N Fk, N Fk	Random	Coho	04,07,10,13,16,19,22,25	0.96
Trask River	South Fork	25606.30	2	Pigeon Cr	Random	Coho	10,13,16,19,25	0.32
Trask River	South Fork	25608.30	1	Boundary Cr	Random	Coho	18,19,20,21,22,23,24,25	0.60
Trask River	South Fork	25613.00	1	Trask R, S Fk	Random	Coho	95,07,10,13,16,19,22,25	1.09
Trask River	South Fork	25616.00	2	Bill Cr	Random	Coho	18,19,20,21,22,23,24,25	0.77
Tillamook River	Mainstem	25565.00	2	Simmons Cr	Standard	Coho	Annual	0.59
Tillamook River	Mainstem	25565.00	2	Simmons Cr	Standard	Fall Chinook	Annual	0.59
Tillamook River	Mainstem	25570.00	2	Tillamook R	Random	Coho	07,10,13,16,19,25	0.34
Netarts Bay	Mainstem	25543.00	1.1	Whiskey Cr	Standard	Chum	Annual	0.46
Nestucca River	Mainstem And Bay	25407.00	2	Clear Cr	Standard	Chum	Annual	0.79
Nestucca River	Mainstem And Bay	25407.00	2	Clear Cr	Standard	Coho	Annual	0.79
Nestucca River	Mainstem And Bay	25407.00	2	Clear Cr	Standard	Fall Chinook	Annual	0.79
Nestucca River	Mainstem And Bay	25458.00	3	Nestucca R (3rd Bridge to Wolfe Cr)	Standard	Fall Chinook	Annual	0.92
Nestucca River	Mainstem And Bay	25463.00	2	Tony Cr	Random	Coho	18,19,20,21,22,23,24,25	1.00
Nestucca River	Mainstem And Bay	25471.00	1	Alder Cr	Random	Coho	06,17,25	0.74

Tillamook

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Nestucca River	Mainstem And Bay	25474.40	1	East Cr	Random	Coho	13,14,15,16,18,19,24,25	1.69
Nestucca River	Mainstem And Bay	25481.00	1	Powder Cr	Random	Coho	18,19,20,21,22,23,24,25	0.94
Nestucca River	Mainstem And Bay	25482.50	1	Powder Cr	Random	Coho	18,19,20,21,22,23,24,25	0.83
Nestucca River	Mainstem And Bay	25485.00	1	Niagara Cr	Standard	Fall Chinook	Annual	0.34
Nestucca River	Mainstem And Bay	25502.00	1.1	Nestucca R	Standard	Fall Chinook	Annual	2.59
Nestucca River	Mainstem And Bay	25503.00	1	Bear Cr	Random	Coho	18,19,20,21,22,23,24,25	1.38
Nestucca River	Mainstem And Bay	25505.00	1	Elk Cr	Random	Coho	18,19,20,21,22,23,24,25	0.53
Nestucca River	Mainstem And Bay	25510.00	3	Nestucca R (Trib A to Trib C)	Standard	Fall Chinook	Annual	1.17
Nestucca River	Three Rivers	25426.00	1	Three Rivers	Random	Coho	18,19,20,21,22,23,24,25	0.93
Nestucca River	Beaver Creek	25441.00	1	Beaver Cr	Random	Coho	06,07,10,13,16,19,22,25	0.87
Nestucca River	Beaver Creek	25441.00	1	Beaver Cr	Standard	Fall Chinook	Annual	0.87
Nestucca River	Beaver Creek	25451.00	4.1	E Beaver Cr	Random	Coho	22,25	0.64
Nestucca River	Beaver Creek	25451.00	7	E Beaver Cr	Random	Coho	18,19,20,21,22,23,24,25	0.92
Nestucca River	Little Nestucca	25354.00	3	Bowers Cr	Random	Coho	16,19,22,25	0.37
Nestucca River	Little Nestucca	25372.00	1	Little Nestcca R.S Fk	Random	Coho	16,25	0.27
Nestucca River	Little Nestucca	25373.00	3	Little Nestucca R	Random	Coho	15,16,17,18,19,20,21,25	0.76
Nestucca River	Little Nestucca	25377.00	1	Little Nestucca R	Random	Coho	14,15,16,17,18,19,20,25	0.72
Nestucca River	Little Nestucca	25383.00	2	Sourgrass Cr	Random	Coho	98,07,10,13,16,19,22,25	0.74
Tillamook Bay	Mainstem And Bay	25774.30	1	Jacoby Cr	Random	Coho	01,07,08,09,16,17,18,25	0.69

Lincoln

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Salmon River	Mainstem And Bay	25288.00	1	Willis Cr	Random	Coho	13,16,19,22,25	0.17
Salmon River	Mainstem And Bay	25292.00	1	Panther Cr	Random	Coho	15,16,17,18,19,22,24,25	1.04
Salmon River	Mainstem And Bay	25292.00	3	Panther Cr	Random	Coho	16,17,18,19,21,22,24,25	0.19
Salmon River	Mainstem And Bay	25296.00	1.1	Bear Cr (Lower)	Random	Coho	18,19,20,21,22,23,24,25	2.12
Salmon River	Mainstem And Bay	25296.00	1.1	Bear Cr (Lower)	Standard	Chum	Annual	2.12
Salmon River	Mainstem And Bay	25296.00	1.1	Bear Cr (Lower)	Standard	Fall Chinook	Annual	2.12
Salmon River	Mainstem And Bay	25296.20	5	Bear Cr (Upper)	Random	Coho	18,19,20,21,22,23,24,25	1.13
Salmon River	Mainstem And Bay	25310.00	1	Deer Cr	Random	Coho	17,18,19,20,21,22,24,25	0.98
Salmon River	Mainstem And Bay	25315.00	1	Salmon R	Supplemental	Fall Chinook	14,15,19,20,21,22,24,25	1.15
Salmon River	Mainstem And Bay	25315.00	1.1	Salmon R (Sulphur Cr to Little Salmon)	Standard	Fall Chinook	Annual	2.53
Salmon River	Mainstem And Bay	25317.00	1	Salmon R	Supplemental	Fall Chinook	16,17,18,19,20,21,22,25	0.55
Salmon River	Mainstem And Bay	25321.00	1	Salmon R	Random	Coho	17,18,19,20,21,22,24,25	0.82
Salmon River	Mainstem And Bay	25322.00	1	Little Salmon R	Random	Coho	18,19,20,21,22,23,24,25	0.80
Salmon River	Mainstem And Bay	25325.00	1	Salmon R	Random	Coho	07,10,13,16,19,22,25	0.64
Salmon River	Mainstem And Bay	25325.00	2	Salmon R	Random	Coho	14,25	0.70
Siletz River	Mainstem	25081.00	1	Bear Cr	Standard	Chum	Annual	0.49
Siletz River	Mainstem	25101.50	3	Jaybird Cr	Random	Coho	06,07,10,13,16,19,22,25	0.58
Siletz River	Mainstem	25102.50	1	Cedar Cr	Standard	Chum	Annual	1.76
Siletz River	Mainstem	25102.50	1	Cedar Cr	Standard	Fall Chinook	Annual	1.76
Siletz River	Mainstem	25102.54	4	Cedar Cr	Random	Coho	10,13,21,25	0.69
Siletz River	Mainstem	25105.00	1	Euchre Cr	Standard	Fall Chinook	Annual	1.28
Siletz River	Mainstem	25105.00	2	Euchre Cr	Random	Coho	10,13,16,19,22,25	0.96
Siletz River	Mainstem	25111.00	1	Ojalla Cr	Random	Coho	18,19,20,21,22,23,24,25	0.75
Siletz River	Mainstem	25123.00	4	Mill Cr	Random	Coho	18,19,20,21,22,23,24,25	0.57
Siletz River	Mainstem	25125.00	3	Bentilla Cr	Random	Coho	18,19,20,21,22,23,24,25	0.49
Siletz River	Mainstem	25126.10	2	Sam Cr	Random	Coho	99,07,10,13,16,19,22,25	1.26
Siletz River	Mainstem	25131.70	1	Sam Cr	Random	Coho	07,10,11,13,16,19,22,25	0.37
Siletz River	Mainstem	25131.70	3	Sam Cr	Random	Coho	18,19,20,21,22,23,24,25	1.09
Siletz River	Mainstem	25151.00	1	Mill Cr, N Fk (Forks to A)	Random	Coho	18,19,20,21,22,23,24,25	0.53
Siletz River	Mainstem	25159.00	1	Buck Cr	Random	Coho	18,19,20,21,22,23,24,25	0.48
Siletz River	Mainstem	25159.00	1	Buck Cr	Standard	Fall Chinook	Annual	0.48
Siletz River	Mainstem	25165.00	1	Sunshine Cr	Standard	Fall Chinook	Annual	1.39
Siletz River	Mainstem	25167.00	2	Sunshine Cr	Random	Coho	18,19,20,21,22,23,24,25	1.36
Siletz River	Mainstem	25168.80	1	Fourth Of July Cr	Random	Coho	18,19,20,21,22,23,24,25	0.70
Siletz River	Mainstem	25172.00	1	Siletz R	Standard	Fall Chinook	Annual	1.49
Siletz River	Rock Creek	25134.00	1	Big Rock Cr	Standard	Fall Chinook	Annual	1.12

Lincoln

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Siletz River	Rock Creek	25144.00	2	Brush Cr	Random	Coho	18,19,20,21,22,23,24,25	1.16
Siletz River	Rock Creek	25145.00	2.1	Little Rock Cr	Random	Coho	24,25	0.33
Siletz River	Drift Creek	25232.00	2	Anderson Cr	Random	Coho	01,04,06,07,10,13,16,25	0.86
Siletz River	Drift Creek	25235.00	7	Drift Cr (up to North Cr)	Supplemental	Coho	Annual	0.96
Siletz River	Drift Creek	25235.00	7	Drift Cr (up to North Cr)	Supplemental	Fall Chinook	Annual	0.96
Siletz River	Drift Creek	25237.00	1	Drift Cr (North Cr up)	Supplemental	Coho	Annual	0.98
Siletz River	Drift Creek	25237.00	1	Drift Cr (North Cr up)	Supplemental	Fall Chinook	Annual	0.98
Siletz River	Drift Creek	25249.00	1	Drift Cr	Random	Coho	07,10,13,19,25	0.56
Yaquina River	Mainstem And Bay	24951.30	1	W Olalla Cr, Trib A	Random	Coho	06,16,17,19,22,25	1.01
Yaquina River	Mainstem And Bay	24953.30	1	Mill Cr, Trib A (Slack Cr)	Standard	Chum	Annual	0.88
Yaquina River	Mainstem And Bay	24953.40	1	Mill Cr, Trib A, Trib B	Random	Coho	25	0.60
Yaquina River	Mainstem And Bay	24953.70	1	Mill Cr (Lower)	Standard	Chum	Annual	0.86
Yaquina River	Mainstem And Bay	24953.70	2	Mill Cr (Upper)	Standard	Chum	Annual	1.31
Yaquina River	Mainstem And Bay	24953.80	2	Mill Cr, E Fk	Calibration	Coho	17,18,19,21,22,23,24,25	1.31
Yaquina River	Mainstem And Bay	24953.85	1	Mill Cr (W Fk), Trib B	Calibration	Coho	17,18,19,21,22,23,24,25	0.18
Yaquina River	Mainstem And Bay	24953.90	1	Mill Cr (W Fk)	Calibration	Coho	17,18,19,21,22,23,24,25	1.09
Yaquina River	Mainstem And Bay	24953.93	1	Mill Cr, Trib C	Calibration	Coho	17,18,19,21,22,23,24,25	0.22
Yaquina River	Mainstem And Bay	24953.97	1	Mill Cr (W Fk)	Calibration	Coho	17,18,19,21,22,23,24,25	0.10
Yaquina River	Mainstem And Bay	24997.00	1.1	Simpson Cr	Standard	Chum	Annual	1.60
Yaquina River	Mainstem And Bay	24997.00	1.1	Simpson Cr	Supplemental	Fall Chinook	Annual	1.60
Yaquina River	Mainstem And Bay	25019.00	1	Eddy Cr	Random	Coho	93,10,13,16,19,22,25	0.46
Yaquina River	Mainstem And Bay	25043.00	2	Young Cr	Random	Coho	10,12,13,16,19,22,25	0.93
Yaquina River	Mainstem And Bay	25046.00	3.1	Yaquina R	Standard	Coho	Annual	2.37
Yaquina River	Mainstem And Bay	25046.00	3.1	Yaquina R	Standard	Fall Chinook	Annual	2.37
Yaquina River	Elk Creek	24960.00	2	Beaver Cr	Random	Coho	25	0.14
Yaquina River	Elk Creek	24962.40	1	Bull Cr	Random	Coho	18,19,20,21,22,23,24,25	0.30
Yaquina River	Elk Creek	24962.55	1	Bull Cr, Trib C, Trib 1	Random	Coho	16,19,22,25	0.15
Yaquina River	Elk Creek	24964.90	1	Deer Cr	Random	Coho	18,19,20,21,22,23,24,25	0.38
Yaquina River	Elk Creek	24968.80	1	Wolf Cr, Trib C	Random	Coho	18,19,20,21,22,23,24,25	0.29
Yaquina River	Elk Creek	24970.00	1.1	Grant Cr	Standard	Fall Chinook	Annual	1.87
Yaquina River	Elk Creek	24971.00	3	Savage Cr	Random	Coho	18,19,20,21,22,23,24,25	0.30
Yaquina River	Elk Creek	24976.40	1	Spout Cr	Random	Coho	18,19,20,21,22,23,24,25	0.55
Yaquina River	Elk Creek	24981.00	1	Elk Cr	Random	Coho	97,99,13,16,19,22,25	0.79
Yaquina River	Elk Creek	24981.70	1	Elk Cr	Random	Coho	18,19,20,21,22,23,24,25	0.82
Yaquina River	Elk Creek	24982.00	1	Sugarbowl Cr	Random	Coho	18,19,20,21,22,23,24,25	1.36
Yaquina River	Elk Creek	24985.70	1	Elk Cr	Random	Coho	13,16,19,22,25	0.50

Lincoln

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Yaquina River	Little Elk Creek	25022.00	1	Salmon Cr	Standard	Coho	Annual	0.63
Yaquina River	Little Elk Creek	25022.00	1	Salmon Cr	Standard	Fall Chinook	Annual	0.63
Yaquina River	Little Elk Creek	25022.70	1	Salmon Cr	Random	Coho	07,10,13,16,19,22,25	0.65
Beaver Creek	Mainstem	24919.20	2	Elkhorn Cr	Random	Coho	18,19,20,21,22,23,24,25	0.90
Beaver Creek	South Fork	24913.00	4	Beaver Cr, S Fk	Random	Coho	18,19,20,21,22,23,24,25	0.45
Beaver Creek	North Fork	24923.00	4	Peterson Cr	Random	Coho	18,19,20,21,22,23,24,25	0.50
Beaver Creek	North Fork	24924.00	3.1	Beaver Cr, N Fk	Standard	Coho	Annual	1.08
Beaver Creek	North Fork	24924.70	4	Beaver Cr, N Fk	Random	Coho	18,19,20,21,22,23,24,25	0.29
Alsea River	Mainstem And Bay	24670.00	2	Bear Cr	Random	Coho	18,19,20,21,22,23,24,25	0.86
Alsea River	Mainstem And Bay	24671.00	1	Canal Cr	Random	Coho	07,10,13,22,25	0.65
Alsea River	Mainstem And Bay	24793.00	1	Cow Cr	Random	Coho	01,04,07,10,13,16,19,25	0.72
Alsea River	Mainstem And Bay	24796.00	1	Skunk Cr	Random	Coho	18,19,20,21,22,23,24,25	1.10
Alsea River	Mainstem And Bay	24804.00	1	Bull Run Cr	Random	Coho	07,10,13,16,19,22,24,25	0.94
Alsea River	Drift Creek	24641.00	4	Drift Cr	Standard	Fall Chinook	Annual	1.52
Alsea River	Drift Creek	24644.00	1	Meadow Cr	Random	Coho	91,10,13,16,19,22,25	0.63
Alsea River	Drift Creek	24646.00	2.1	Horse Cr	Standard	Coho	Annual	0.79
Alsea River	Drift Creek	24652.00	1	Nettle Cr	Standard	Coho	Annual	0.83
Alsea River	Drift Creek	24652.70	1	Nettle Cr	Random	Coho	18,19,20,21,22,23,24,25	0.53
Alsea River	Five Rivers	24719.00	1	Phillips Cr	Random	Coho	07,10,13,16,19,22,25	0.68
Alsea River	Five Rivers	24725.00	1	Wilkinson Cr	Random	Coho	18,19,20,21,22,23,24,25	0.76
Alsea River	Five Rivers	24727.00	2	Little Lobster Cr	Random	Coho	98,01,07,10,22,25	0.66
Alsea River	Five Rivers	24745.00	2	Lobster Cr, E. Fk	Random	Coho	15,16,18,19,21,22,24,25	1.30
Alsea River	Five Rivers	24776.00	1	Green R	Random	Coho	01,04,10,12,13,16,19,25	0.94
Alsea River	Five Rivers	24776.20	1	Green R	Random	Coho	18,19,20,21,22,23,24,25	0.64
Alsea River	Five Rivers	24783.00	3	Five Rivers	Random	Coho	18,19,20,21,22,23,24,25	0.72
Alsea River	North Fork	24835.00	1.1	Alsea R, N Fk	Standard	Fall Chinook	Annual	2.24
Alsea River	North Fork	24850.00	1	Crooked Cr	Random	Coho	13,16,19,22,25	0.29
Alsea River	North Fork	24850.00	2	Crooked Cr	Random	Coho	18,19,20,21,22,23,24,25	0.94
Alsea River	South Fork	24882.80	1	Swamp Cr	Random	Coho	18,19,20,21,22,23,24,25	0.64

Siuslaw

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Yachats River	Mainstem	24593.00	2	Yachats R, School Fork	Standard	Coho	Annual	0.94
Yachats River	Mainstem	24596.00	1	Yachats R	Supplemental	Coho	Annual	0.95
Siuslaw River	Mainstem	24060.70	1	Sweet Cr	Random	Coho	13,16,19,25	0.92
Siuslaw River	Mainstem	24084.20	1	Hadsall Cr, Trib D	Random	Coho	13,16,19,22,25	0.20
Siuslaw River	Mainstem	24084.90	2	Hadsall Cr	Random	Coho	04,07,10,13,16,19,22,25	0.72
Siuslaw River	Mainstem	24100.90	1	Knowles Cr	Random	Coho	18,19,20,21,22,23,24,25	0.40
Siuslaw River	Mainstem	24301.00	2	Whittaker Cr (Lower)	Standard	Fall Chinook	Annual	0.33
Siuslaw River	Mainstem	24303.00	2	Whittaker Cr (Upper)	Standard	Fall Chinook	Annual	0.32
Siuslaw River	Mainstem	24349.00	1.1	Esmond Cr	Standard	Fall Chinook	Annual	1.29
Siuslaw River	Mainstem	24359.00	1	Esmond Cr	Random	Coho	18,19,20,21,22,23,24,25	0.26
Siuslaw River	Mainstem	24373.00	1	Clay Cr	Random	Coho	17,18,19,20,21,22,23,25	0.64
Siuslaw River	Mainstem	24384.30	1	Siuslaw R, East Trib	Random	Coho	98,01,04,07,10,13,19,25	0.99
Siuslaw River	Mainstem	24421.00	1	Buck Cr	Random	Coho	18,19,20,21,22,23,24,25	0.89
Siuslaw River	Mainstem	24425.00	1	Russell Cr	Random	Coho	18,19,20,21,22,23,24,25	0.87
Siuslaw River	Mainstem	24427.00	1	Russell Cr	Random	Coho	10,13,25	0.41
Siuslaw River	North Fork	24026.00	1	Siuslaw R, N Fk	Standard	Fall Chinook	Annual	1.30
Siuslaw River	Lake Creek	24135.00	1	Rogers Cr	Random	Coho	18,19,20,21,22,23,24,25	0.66
Siuslaw River	Lake Creek	24135.00	1.1	Rogers Cr	Standard	Coho	Annual	1.29
Siuslaw River	Lake Creek	24135.00	1.1	Rogers Cr	Standard	Fall Chinook	Annual	1.29
Siuslaw River	Lake Creek	24135.30	1	Rogers Cr	Supplemental	Coho	18,19,20,21,22,23,24,25	0.63
Siuslaw River	Lake Creek	24136.00	1	Indian Cr, W Fk	Standard	Fall Chinook	Annual	1.10
Siuslaw River	Lake Creek	24149.60	1	Indian Cr, N Fk, Trib D	Random	Coho	18,19,20,21,22,23,24,25	0.48
Siuslaw River	Lake Creek	24153.00	4	Deadwood Cr	Random	Coho	01,07,10,13,16,19,22,25	0.75
Siuslaw River	Lake Creek	24168.00	3	Bear Cr	Random	Coho	19,25	0.25
Siuslaw River	Lake Creek	24177.00	3	Panther Cr, N Fk	Random	Coho	18,19,20,21,22,23,24,25	0.98
Siuslaw River	Lake Creek	24206.00	2	Lake Cr	Standard	Fall Chinook	Annual	0.86
Siuslaw River	Lake Creek	24228.50	1	Leibo Canyon	Random	Coho	16,19,22,25	0.41
Siuslaw River	Lake Creek	24232.70	1	Pucker Cr	Random	Coho	17,18,19,20,21,22,23,25	0.34
Siuslaw River	Wolf Creek	24333.00	2	Wolf Cr	Random	Coho	04,07,10,13,16,19,22,25	1.53
Siltcoos River	Fiddle Creek	23965.00	2	Alder Cr	Lake	Coho	Annual	0.89
Siltcoos River	Fiddle Creek	23974.80	1.1	Fiddle Cr	Lake	Coho	Annual	1.58
Tahkenitch Creek	Fivemile Creek	23957.40	2	Fivemile Cr	Lake	Coho	Annual	0.54
Tahkenitch Creek	Leitel Creek	23949.70	3	Leitel Cr	Lake	Coho	Annual	1.16

Umpqua

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Umpqua River	Mainstem And Bay	22624.00	1	Dean Cr	Random	Coho	16,19,22,25	0.78
Umpqua River	Mainstem And Bay	22642.70	1	Charlotte Cr	Random	Coho	07,13,19,22,25	1.03
Umpqua River	Mainstem And Bay	22653.00	5	Camp Cr	Random	Coho	18,19,20,21,22,23,24,25	0.57
Umpqua River	Mainstem And Bay	22686.90	1	Weatherly Cr	Random	Coho	98,01,04,07,13,25	1.45
Umpqua River	Mainstem And Bay	22688.00	3	Lutsinger Cr	Random	Coho	18,19,20,21,22,23,24,25	0.52
Umpqua River	Mainstem And Bay	22845.00	1	Galagher Canyon	Random	Coho	95,12,25	0.61
Umpqua River	Mainstem And Bay	22857.80	1	Little Wolf Cr, Trib D	Random	Coho	04,07,10,13,16,19,22,25	1.00
Umpqua River	Mainstem And Bay	22862.00	1	Wolf Cr	Random	Coho	18,19,20,21,22,23,24,25	1.05
Umpqua River	Mainstem And Bay	22876.00	1	Hubbard Cr	Random	Coho	18,19,20,21,22,23,24,25	0.78
Umpqua River	Mainstem And Bay	22973.10	1	Turkey Cr	Random	Coho	19,25	0.66
Umpqua River	Smith River	22466.00	1	Cedar Cr	Random	Coho	13,25	0.30
Umpqua River	Smith River	22485.00	2	Spencer Cr	Random	Coho	07,10,13,16,19,22,23,25	1.56
Umpqua River	Smith River	22503.30	1	Smith R, W Fk	Random	Coho	18,19,20,21,22,23,24,25	0.40
Umpqua River	Smith River	22504.70	1	Beaver Cr	Random	Coho	07,10,11,13,16,19,22,25	1.18
Umpqua River	Smith River	22526.00	2	N Sister Cr	Random	Coho	18,19,20,21,22,23,24,25	0.93
Umpqua River	Smith River	22527.70	1.1	Herb Cr	Random	Coho	25	0.24
Umpqua River	Smith River	22530.00	1	N Sister Cr	Random	Coho	18,19,20,21,22,23,24,25	0.93
Umpqua River	Smith River	22537.50	1	Marsh Cr	Random	Coho	18,19,20,21,22,23,24,25	0.31
Umpqua River	Smith River	22546.60	1	Mosetown Cr, E Fk, Trib A	Random	Coho	18,19,20,21,22,23,24,25	0.35
Umpqua River	Smith River	22547.00	1	Mosetown Cr	Random	Coho	98,01,02,04,07,25	0.75
Umpqua River	Smith River	22549.30	1	Halfway Cr, Trib A	Random	Coho	97,07,10,13,16,19,25	0.89
Umpqua River	Smith River	22577.30	1	Panther Cr	Random	Coho	17,18,19,20,22,23,24,25	0.87
Umpqua River	Elk Creek	22712.00	2	Big Tom Folley Cr, N Fk	Random	Coho	92,07,10,13,16,19,22,25	0.91
Umpqua River	Elk Creek	22713.90	2	Big Tom Folley Cr	Random	Coho	06,15,16,17,18,25	0.38
Umpqua River	Elk Creek	22719.00	1	Brush Cr	Random	Coho	13,16,19,22,25	0.35
Umpqua River	Elk Creek	22722.00	1	Blue Hole Cr	Random	Coho	19,22,25	0.68
Umpqua River	Elk Creek	22735.00	1	Hardscrabble Cr	Random	Coho	18,19,20,21,22,23,24,25	0.82
Umpqua River	Elk Creek	22771.60	1	Pass Cr	Random	Coho	19,22,25	0.47
Umpqua River	Elk Creek	22807.00	2	Curtis Cr	Random	Coho	18,19,20,21,22,23,24,25	0.81
Umpqua River	Elk Creek	22816.30	3	Lane Cr	Random	Coho	13,16,19,22,25	0.43
Umpqua River	South Umpqua	22981.00	2	Doerner Cr	Random	Coho	13,19,25	1.29
Umpqua River	South Umpqua	22996.70	1	Deer Cr, S Fk	Random	Coho	10,13,16,19,22,25	0.57
Umpqua River	South Umpqua	22999.00	1	Deer Cr, N Fk	Random	Coho	18,19,20,21,22,23,24,25	0.15
Umpqua River	South Umpqua	23108.00	3	Bilger Cr	Random	Coho	05,06,25	0.34
Umpqua River	South Umpqua	23121.00	1	Riser Cr	Random	Coho	01,02,03,04,05,06,13,25	0.74
Umpqua River	South Umpqua	23209.30	1	Elk Valley Cr, E Fk	Random	Coho	18,19,20,21,22,23,24,25	0.90

Umpqua

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Umpqua River	South Umpqua	23264.00	1	Middle Cr, S Fk	Random	Coho	04,07,10,13,16,19,22,25	0.57
Umpqua River	South Umpqua	23299.00	2	Wood Cr	Random	Coho	18,19,20,21,22,23,24,25	0.85
Umpqua River	South Umpqua	23304.90	1	Windy Cr	Random	Coho	16,19,22,25	0.45
Umpqua River	South Umpqua	23313.00	1	Bull Run Cr	Random	Coho	18,19,20,21,22,23,24,25	1.25
Umpqua River	South Umpqua	23332.00	2	Clear Cr	Random	Coho	18,19,20,21,22,23,24,25	0.26
Umpqua River	South Umpqua	23389.00	1	Canyon Cr	Random	Coho	04,07,10,13,16,19,22,25	0.66
Umpqua River	South Umpqua	23426.00	2	Wood Cr	Random	Coho	19,22,25	0.21
Umpqua River	South Umpqua	23552.30	2	Black Canyon Cr	Random	Coho	17,19,20,21,22,23,24,25	0.61
Umpqua River	South Umpqua	23562.00	1	Falcon Cr	Random	Coho	18,19,20,21,22,23,24,25	0.72
Umpqua River	South Umpqua	23569.00	1	Deadman Cr	Random	Coho	98,07,10,13,16,19,25	0.94
Umpqua River	South Umpqua	23585.00	2	Dumont Cr	Random	Coho	22,25	0.80
Umpqua River	South Umpqua	23589.00	2	Boulder Cr	Random	Coho	17,18,19,20,22,23,24,25	0.84
Umpqua River	Calapooya Creek	22899.00	1	Cabin Cr	Random	Coho	18,19,20,21,22,23,24,25	0.61
Umpqua River	Calapooya Creek	22927.00	1	Banks Cr	Random	Coho	07,10,13,16,19,22,25	1.21

Coos-Coquille

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Tenmile Creek	North Tenmile Lake	22379.30	1	Alder Cr	Lake	Coho	Annual	0.39
Tenmile Creek	North Tenmile Lake	22379.70	1	Big Cr	Lake	Coho	Annual	0.56
Tenmile Creek	South Tenmile Lake	22356.00	2	Roberts Cr (Std Unit No 2)	Lake	Coho	Annual	1.64
Tenmile Creek	South Tenmile Lake	22357.20	1	Hatchery Cr	Lake	Coho	Annual	0.46
Tenmile Creek	South Tenmile Lake	22357.40	1	Hatchery Cr, W Fk	Lake	Coho	Annual	0.13
Tenmile Creek	South Tenmile Lake	22357.60	1	Hatchery Cr, E Fk	Lake	Coho	Annual	0.13
Tenmile Creek	South Tenmile Lake	22357.80	1.1	Johnson Cr, R Fk	Lake	Coho	Annual	1.09
Coos River	Mainstem	22316.00	2	Kentuck Cr	Random	Coho	01,03,04,07,10,12,13,25	1.12
Coos River	Millicoma River	22237.50	2	Packard Cr	Random	Coho	18,19,20,21,22,23,24,25	0.44
Coos River	Millicoma River	22242.00	1	Marlow Cr	Standard	Chum	Annual	0.65
Coos River	Millicoma River	22242.30	1	Y Cr	Random	Coho	18,19,20,21,22,23,24,25	0.37
Coos River	Millicoma River	22265.00	1	Millicoma R, E Fk	Standard	Fall Chinook	Annual	0.57
Coos River	Millicoma River	22270.00	1	Matson Cr	Random	Coho	04,07,10,13,16,19,22,25	0.80
Coos River	Millicoma River	22273.00	3	Millicoma R, E Fk	Random	Coho	01,04,06,07,10,13,16,25	1.21
Coos River	Millicoma River	22273.00	4	Millicoma R, E Fk	Random	Coho	18,19,20,21,22,23,24,25	0.93
Coos River	Millicoma River	22276.00	2	Millicoma R, W Fk	Standard	Fall Chinook	Annual	0.59
Coos River	Millicoma River	22291.00	1	Otter Cr	Random	Coho	10,13,14,16,17,19,22,25	1.10
Coos River	Millicoma River	22293.00	2	Deer Cr	Random	Coho	18,19,20,21,22,23,24,25	0.81
Coos River	Millicoma River	22297.60	1	Elk Cr	Random	Coho	05,07,10,12,13,16,23,25	1.38
Coos River	Millicoma River	22299.00	1	Fish Cr	Random	Coho	18,19,20,21,22,23,24,25	1.44
Coos River	Millicoma River	22300.00	1	Millicoma R, W Fk	Random	Coho	18,19,20,21,22,23,24,25	0.68
Coos River	South Fork	22157.00	1	Wren Smith Cr	Random	Coho	18,19,20,21,22,23,24,25	1.27
Coos River	South Fork	22160.80	1	Rogers Cr	Random	Coho	04,07,10,13,16,19,22,25	0.55
Coos River	South Fork	22177.50	1	Coos R, S Fk	Standard	Fall Chinook	Annual	1.13
Coos River	South Fork	22192.00	2	Tioga Cr	Random	Coho	04,07,10,13,16,19,22,25	0.80
Coos River	South Fork	22200.40	1	Bottom Cr	Random	Coho	18,19,20,21,22,23,24,25	0.38
Coos River	South Fork	22204.00	1	Cedar Cr	Random	Coho	18,19,20,21,22,23,24,25	1.20
Coos River	South Fork	22207.00	1	Cedar Cr	Random	Coho	07,09,10,13,16,19,22,25	1.52
Coos River	South Fork	22215.00	2	Williams R	Standard	Fall Chinook	Annual	1.14
Coos River	South Fork	22219.00	1	Williams R	Random	Coho	00,07,10,13,16,19,22,25	1.34
Coquille River	Mainstem And Bay	21613.00	3	Bill Cr	Random	Coho	18,19,20,21,22,23,24,25	1.27
Coquille River	Mainstem And Bay	21613.70	2	Bill Cr	Random	Coho	10,11,13,16,17,20,23,25	1.00
Coquille River	Mainstem And Bay	21620.00	2	Bear Cr	Random	Coho	13,16,19,22,25	0.28
Coquille River	Mainstem And Bay	21620.00	3	Bear Cr	Random	Coho	18,19,20,21,22,23,24,25	0.66
Coquille River	Mainstem And Bay	21667.00	2	Walker Cr	Random	Coho	13,25	0.33
Coquille River	North Fork	21946.40	1	Johns Cr	Random	Coho	18,19,20,21,22,23,24,25	0.33

Coos-Coquille

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Coquille River	North Fork	22010.00	1.1	Middle Cr	Standard	Fall Chinook	Annual	1.90
Coquille River	North Fork	22036.00	4	Hudson Cr	Random	Coho	17,18,19,20,21,22,24,25	1.12
Coquille River	North Fork	22037.00	3	Coquille R, N Fk	Random	Coho	18,19,20,21,22,23,24,25	1.05
Coquille River	North Fork	22041.00	2.1	Coquille R, N Fk	Standard	Coho	Annual	0.73
Coquille River	North Fork	22041.00	2.1	Coquille R, N Fk	Standard	Fall Chinook	Annual	0.73
Coquille River	North Fork	22046.00	1	Coquille R, N Fk, Trib Y	Random	Coho	18,19,20,21,22,23,24,25	0.53
Coquille River	East Fork	21951.10	1	Elk Cr, Trib A	Random	Coho	07,10,13,16,19,22,25	0.42
Coquille River	East Fork	21951.70	1	Elk Cr	Random	Coho	07,09,10,13,16,19,22,25	1.29
Coquille River	East Fork	21954.00	4	Coquille R, E Fk (Lower)	Standard	Fall Chinook	Annual	0.86
Coquille River	East Fork	21957.00	1.1	Steel Cr	Random	Coho	21,22,23,24,25	0.19
Coquille River	East Fork	21962.00	1	Coquille R, E Fk (Above Dora)	Standard	Fall Chinook	Annual	0.27
Coquille River	Middle Fork	21740.00	1	Big Cr	Random	Coho	13,16,19,22,25	0.23
Coquille River	Middle Fork	21743.00	1	Axe Cr	Random	Coho	18,19,20,21,22,23,24,25	1.12
Coquille River	Middle Fork	21748.00	1	Big Cr	Random	Coho	05,07,10,13,16,19,22,25	1.51
Coquille River	Middle Fork	21773.00	2	Sandy Cr	Random	Coho	18,19,20,21,22,23,24,25	0.98
Coquille River	Middle Fork	21775.00	2	Coquille R, M Fk	Standard	Fall Chinook	Annual	0.40
Coquille River	South Fork	21710.20	1	Ward Cr	Random	Coho	18,19,20,21,22,23,24,25	0.47
Coquille River	South Fork	21838.00	1.2	Coquille R, S Fk	Supplemental	Fall Chinook	22,23,24,25	0.82
Coquille River	South Fork	21840.00	2	Coquille R, S Fk	Standard	Fall Chinook	Annual	1.21
Coquille River	South Fork	21849.00	1.2	Salmon Cr (Lower)	Supplemental	Fall Chinook	21,22,23,24,25	0.10
Coquille River	South Fork	21853.70	1	Salmon Cr	Random	Coho	18,19,20,21,22,23,24,25	0.42

South Coast

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Fourmile Cr	Mainstem	21560.76	2.1	Fourmile Cr	Random	Coho	22,23,24,25	0.56
New River	Mainstem	21566.30	3	Butte Cr	Random	Coho	06,07,10,13,16,19,22,25	0.86
New River	Mainstem	21566.30	4	Butte Cr	Random	Coho	09,10,11,12,13,15,21,25	0.70
New River	Mainstem	21566.30	6	Butte Cr	Random	Coho	20,22,25	0.25
Floras Creek	Mainstem	21569.00	2	Willow Cr (Lower)	Random	Coho	12,13,15,16,19,22,24,25	1.52
Floras Creek	Mainstem	21569.00	2	Willow Cr (Lower)	Supplemental	Fall Chinook	Annual	1.52
Floras Creek	Mainstem	21570.00	3	Floras Cr	Random	Coho	18,19,20,21,22,23,24,25	1.66
Floras Creek	Mainstem	21570.60	2	Floras Cr	Standard	Fall Chinook	Annual	0.65
Floras Creek	Mainstem	21572.00	1	Floras Cr	Random	Coho	16,19,22,25	0.41
Floras Creek	Floras Lake	21583.00	3	Boulder Cr	Random	Coho	18,19,20,21,22,23,24,25	0.58
Floras Creek	North Fork	21579.30	2	Floras Cr, E Fk, Trib G	Random	Coho	19,22,25	0.65
Floras Creek	North Fork	21579.50	1	Floras Cr, E Fk, Trib G	Random	Coho	19,22,25	0.82
Floras Creek	North Fork	21579.70	1	Floras Cr, E Fk	Random	Coho	17,18,19,21,22,24,25	0.54
Sixes River	Mainstem	21534.00	3.3	Crystal Cr	Standard	Fall Chinook	Annual	0.66
Sixes River	Mainstem	21538.70	1	Beaver Cr	Random	Coho	17,18,19,20,21,22,24,25	0.38
Sixes River	Mainstem	21540.00	1	Edson Cr (Lower)	Standard	Fall Chinook	Annual	1.08
Sixes River	Mainstem	21540.00	2	Edson Cr (Upper)	Standard	Fall Chinook	Annual	1.03
Sixes River	Mainstem	21542.00	1	Dry Cr (Lower)	Random	Coho	14,15,16,19,22,23,24,25	1.82
Sixes River	Mainstem	21542.00	1	Dry Cr (Lower)	Standard	Fall Chinook	Annual	1.82
Sixes River	Mainstem	21542.00	2	Dry Cr (Upper)	Random	Coho	07,10,11,13,16,19,22,25	1.82
Sixes River	Mainstem	21542.00	2	Dry Cr (Upper)	Standard	Fall Chinook	Annual	1.82
Sixes River	Mainstem	21555.00	1	Sixes R	Random	Coho	18,19,20,21,22,23,24,25	0.80
Sixes River	Mainstem	21558.30	1	Sixes R	Random	Coho	18,19,20,21,22,23,24,25	0.44
Sixes River	Middle Fork	21552.00	1	Sixes R, M Fk (Lower)	Standard	Fall Chinook	Annual	1.15
Sixes River	Middle Fork	21552.63	1	Sixes R, M Fk, Trib B	Random	Coho	18,19,20,21,22,23,24,25	0.53
Sixes River	Middle Fork	21552.75	1	Sixes R, M Fk	Random	Coho	18,19,20,21,22,23,24,25	1.03
Sixes River	North Fork	21557.40	1	Crafton Cr	Random	Coho	07,10,13,16,19,22,25	0.33
Sixes River	North Fork	21558.00	1	Sixes R, N Fk, Trib B	Random	Coho	20,21,22,23,24,25	0.79
Sixes River	North Fork	21558.15	1	Sixes R, N Fk, Trib C	Random	Coho	20,21,22,23,24,25	0.54

Lower Willamette

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Lower Willamette (Canby)	Mainstem	30863.00	2	Mt Scott Cr	Random	Coho	18,19,20,21,22,23,24,25	1.31
Lower Willamette (Canby)	Mainstem	30865.60	1	Nettle Cr	Random	Coho	18,19,20,21,22,23,24,25	0.45
Lower Willamette (Canby)	Mainstem	30865.90	1	Tryon Cr	Random	Coho	03,04,07,10,13,16,22,25	0.98
Lower Willamette (Canby)	Mainstem	31199.50	1	Potter Cr	Random	Coho	02,16,25	1.01
Lower Willamette (Canby)	Mainstem	31200.00	1.1	Abernathy Cr	Random	Coho	17,18,19,20,22,23,24,25	1.07
Lower Willamette (Canby)	Mainstem	31200.10	1	Thimble Cr	Random	Coho	18,19,20,21,22,23,24,25	0.49
Lower Willamette (Canby)	Mainstem	31200.75	1	Abernathy Cr	Random	Coho	17,18,20,21,22,23,24,25	0.68
Lower Willamette (Canby)	Mainstem	31200.75	2	Abernathy Cr	Random	Coho	09,12,15,16,18,21,25	0.85
Lower Willamette (Canby)	Milton Creek	30795.00	2	Milton Cr	Random	Coho	18,19,20,21,22,23,24,25	0.88
Lower Willamette (Canby)	Milton Creek	30795.00	2	Milton Cr	Random	Fall Chinook	18,19,20,21,22,23,24,25	0.88
Lower Willamette (Canby)	Milton Creek	30799.00	1	Milton Cr	Random	Coho	07,10,12,13,15,16,25	1.39
Lower Willamette (Canby)	Milton Creek	30799.00	1	Milton Cr	Random	Fall Chinook	10,12,13,15,16,25	1.39
Lower Willamette (Canby)	Milton Creek	30800.00	2	Cox Cr	Random	Coho	25	0.48
Lower Willamette (Canby)	Milton Creek	30800.00	3	Cox Cr	Random	Coho	17,18,20,21,22,23,24,25	0.36
Lower Willamette (Canby)	Milton Creek	30800.00	4	Cox Cr	Random	Coho	09,12,15,16,18,21,24,25	0.98
Lower Willamette (Canby)	Milton Creek	30801.00	1	Milton Cr	Random	Coho	17,18,19,20,21,23,24,25	0.66
Lower Willamette (Canby)	Milton Creek	30803.00	2	Milton Cr	Random	Coho	09,12,16,24,25	0.89
Lower Willamette (Canby)	Milton Creek	30807.00	1	Milton Cr	Random	Coho	14,23,24,25	0.90
Lower Willamette (Canby)	Milton Creek	30807.00	2	Milton Cr	Random	Coho	02,16,17,25	0.97
Lower Willamette (Canby)	Milton Creek	30809.00	1	Milton Cr	Random	Coho	16,17,18,19,21,22,24,25	1.17
Lower Willamette (Canby)	Milton Creek	30809.00	3	Milton Cr	Random	Coho	07,10,13,16,17,19,22,25	0.51
Lower Willamette (Canby)	Johnson Creek	30857.00	2	Crystal Springs Cr	Random	Coho	25	0.95
Lower Willamette (Canby)	Johnson Creek	30858.70	3	Johnson Cr	Random	Coho	04,05,07,13,16,19,22,25	1.34
Scappoose Creek	Mainstem	30818.50	2	Honeyman Cr.	Random	Coho	13,14,20,21,22,23,24,25	0.87
Scappoose Creek	Mainstem	30819.00	1	Sly Cr	Random	Coho	13,14,16,19,21,22,23,25	1.26
Scappoose Creek	South Scappoose Creek	30824.00	1	Raymond Cr	Random	Coho	12,13,14,15,16,17,24,25	1.13
Scappoose Creek	South Scappoose Creek	30825.00	1	S Scappoose Cr	Random	Coho	16,25	0.48
Scappoose Creek	South Scappoose Creek	30825.00	1	S Scappoose Cr	Random	Fall Chinook	16,25	0.48
Scappoose Creek	South Scappoose Creek	30825.50	1	S Scappoose Cr	Random	Coho	02,05,07,25	1.01
Scappoose Creek	South Scappoose Creek	30829.00	1	S Scappoose Cr	Random	Coho	17,23,24,25	0.19
Scappoose Creek	North Scappoose Creek	30830.00	3	N Scappoose	Random	Fall Chinook	10,25	0.77
Scappoose Creek	North Scappoose Creek	30830.00	4	N Scappoose Cr	Random	Coho	06,09,11,24,25	0.46
Scappoose Creek	North Scappoose Creek	30830.00	4	N Scappoose Cr	Random	Fall Chinook	09,10,11,16,24,25	0.46
Scappoose Creek	North Scappoose Creek	30831.00	1	Sierks Cr (Deep Cr)	Random	Coho	07,16,25	0.46
Scappoose Creek	North Scappoose Creek	30831.00	1	Sierks Cr (Deep Cr)	Standard	Coho	Annual	0.46
Scappoose Creek	North Scappoose Creek	30832.30	1	Fall Cr	Random	Coho	10,13,14,16,19,22,23,25	0.58

Lower Willamette

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Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Scappoose Creek	North Scappoose Creek	30832.70	1	N Scappoose Cr	Random	Coho	22,23,25	0.87
Scappoose Creek	North Scappoose Creek	30838.70	1	N Scappoose R	Random	Coho	25	0.81
Scappoose Creek	North Scappoose Creek	30838.80	1	N Scappoose Cr	Random	Coho	25	
Clackamas River	Mainstem	30867.00	1	Clackamas R	Random	Fall Chinook	11,12,21,22,23,24,25	1.30
Clackamas River	Mainstem	30867.00	3	Clackamas R	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.93
Clackamas River	Mainstem	30867.00	4	Clackamas R	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.52
Clackamas River	Mainstem	30869.00	1	Clackamas R	Random	Fall Chinook	14,17,18,21,22,23,24,25	1.51
Clackamas River	Mainstem	30886.00	1	Clackamas R	Random	Fall Chinook	14,16,17,19,21,22,23,25	2.06
Clackamas River	Mainstem	30887.00	3	Foster Cr	Random	Coho	20,23,24,25	0.89
Clackamas River	Mainstem	30888.00	1	Clackamas R	Random	Fall Chinook	12,15,16,17,18,21,24,25	1.00
Clackamas River	Mainstem	30889.00	1	Deep Cr	Random	Coho	02,10,13,16,19,22,25	0.90
Clackamas River	Mainstem	30889.00	1	Deep Cr	Random	Fall Chinook	10,13,16,19,22,25	0.90
Clackamas River	Mainstem	30891.00	1	Deep Cr	Random	Fall Chinook	12,13,16,18,21,22,24,25	0.64
Clackamas River	Mainstem	30892.00	3	Deep Cr, N Fk	Random	Coho	07,10,13,16,22,25	1.29
Clackamas River	Mainstem	30895.70	2	Deep Cr	Random	Coho	10,14,15,16,19,22,23,25	0.94
Clackamas River	Mainstem	30900.20	1	Tickle Cr	Random	Coho	07,16,25	0.29
Clackamas River	Mainstem	30902.00	1	Clackamas R	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.16
Clackamas River	Mainstem	30902.00	2	Clackamas R	Random	Coho	21,22,23,24,25	1.50
Clackamas River	Mainstem	30904.00	1	Clackamas R	Random	Fall Chinook	15,18,19,21,22,23,24,25	2.14
Clackamas River	Clear Creek	30870.30	1	Clear Cr, Trib A	Random	Coho	14,23,25	0.45
Clackamas River	Clear Creek	30870.70	1	Clear Cr	Random	Coho	07,10,13,16,19,22,23,25	1.33
Clackamas River	Clear Creek	30872.00	4	Clear Cr	Random	Coho	18,19,20,21,22,23,24,25	0.48
Clackamas River	Clear Creek	30872.00	5	Clear Cr	Random	Coho	02,03,04,10,16,25	1.15
Clackamas River	Clear Creek	30875.10	4	Clear Cr	Random	Coho	14,15,16,19,22,23,24,25	1.27
Clackamas River	Clear Creek	30875.30	1	Clear Cr	Random	Coho	06,10,12,13,16,21,22,25	1.70
Clackamas River	Clear Creek	30876.00	1	Clear Cr	Random	Coho	17,19,20,21,22,23,24,25	0.43
Clackamas River	Clear Creek	30876.00	2	Clear Cr	Random	Coho	03,04,25	1.10
Clackamas River	Clear Creek	30882.00	1	Clear Cr	Random	Coho	08,10,11,13,14,16,17,25	1.09
Clackamas River	Eagle Creek	30905.00	1	Eagle Cr	Random	Coho	04,05,11,25	1.60
Clackamas River	Eagle Creek	30905.00	1	Eagle Cr	Random	Fall Chinook	11,16,25	1.60
Clackamas River	Eagle Creek	30907.00	3	Eagle Cr	Random	Coho	13,25	0.78
Clackamas River	Eagle Creek	30915.00	2	Little Eagle Cr	Random	Coho	18,19,20,21,22,23,24,25	1.16
Clackamas River	Eagle Creek	30916.00	1	Eagle Cr, N Fk	Random	Coho	07,25	0.34
Clackamas River	Eagle Creek	30916.00	3	Eagle Cr, N FK	Random	Coho	19,20,21,22,23,24,25	0.70
Clackamas River	Eagle Creek	30918.00	1	Eagle Cr, N Fk	Random	Coho	07,08,25	1.17
Clackamas River	Eagle Creek	30920.00	1	Eagle Cr, N Fk	Random	Coho	13,15,16,19,21,22,24,25	1.52

Lower Willamette

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Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Clackamas River	Eagle Creek	30921.00	1	Eagle Cr	Random	Coho	11,25	0.88
Clackamas River	Eagle Creek	30921.00	2	Eagle Cr	Random	Coho	18,19,20,21,22,23,24,25	1.22
Clackamas River	Eagle Creek	30922.00	1	Delph Cr.	Random	Coho	16,25	0.91
Sandy River	Mainstem	33395.00	1	Beaver Cr	Random	Coho	03,04,16,25	0.52
Sandy River	Mainstem	33396.00	1	Beaver Cr, S Fk	Random	Coho	06,19,21,25	0.93
Sandy River	Mainstem	33400.00	1	Sandy R	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.56
Sandy River	Mainstem	33400.00	3	Sandy R	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.31
Sandy River	Mainstem	33400.00	5	Sandy R	Random	Fall Chinook	11,12,16,21,25	1.27
Sandy River	Mainstem	33404.00	1	Sandy R	Random	Fall Chinook	12,14,15,19,21,23,24,25	2.22
Sandy River	Mainstem	33407.00	2	Gordon Cr	Random	Coho	02,04,07,15,16,24,25	1.08
Sandy River	Mainstem	33407.00	2	Gordon Cr	Random	Fall Chinook	15,16,24,25	1.08
Sandy River	Mainstem	33419.00	1	Trout Cr	Random	Coho	18,19,20,21,22,23,24,25	0.16
Sandy River	Mainstem	33419.00	1	Trout Cr	Random	Fall Chinook	18,19,20,21,22,23,24,25	0.16
Sandy River	Mainstem	33420.00	1	Sandy R	Random	Fall Chinook	18,19,20,21,22,23,24,25	2.22
Sandy River	Mainstem	33422.00	1	Sandy R	Random	Fall Chinook	17,18,19,21,22,23,24,25	2.54
Sandy River	Mainstem	33471.00	1	Sandy R	Random	Fall Chinook	10,15,16,19,25	1.02
Sandy River	Mainstem	33479.00	1	Sandy R	Random	Fall Chinook	18,19,20,21,22,23,24,25	2.19
Sandy River	Mainstem	33481.00	3	Sandy R	Random	Fall Chinook	09,14,17,23,24,25	1.82
Sandy River	Mainstem	33483.70	1	Sandy R	Random	Fall Chinook	18,19,20,21,22,23,24,25	0.81
Sandy River	Mainstem	33487.00	1	Sandy R	Random	Fall Chinook	17,18,19,21,22,23,24,25	2.44
Sandy River	Mainstem	33487.30	1	Little Joe Cr	Random	Coho	06,07,10,13,16,19,22,25	0.87
Sandy River	Mainstem	33487.70	1	Sandy R	Random	Fall Chinook	10,13,18,19,21,22,24,25	0.89
Sandy River	Mainstem	33535.50	1	N Boulder Cr	Random	Coho	13,16,19,22,25	0.16
Sandy River	Mainstem	33535.70	1	Sandy R	Random	Coho	13,19,22,25	0.91
Sandy River	Mainstem	33535.70	1	Sandy R	Random	Fall Chinook	13,19,22,25	0.91
Sandy River	Mainstem	33537.00	1	Sandy R	Random	Coho	13,14,17,21,22,23,24,25	3.68
Sandy River	Mainstem	33537.00	1	Sandy R	Random	Fall Chinook	13,14,17,21,22,23,24,25	3.68
Sandy River	Mainstem	33564.00	1	Clear Cr	Random	Coho	18,19,20,21,22,23,24,25	0.87
Sandy River	Mainstem	33564.00	1	Clear Cr	Random	Fall Chinook	18,19,20,21,22,23,24,25	0.87
Sandy River	Mainstem	33566.10	1	Conway Cr	Random	Coho	07,10,13,16,19,22,25	0.77
Sandy River	Mainstem	33572.00	1	Lost Cr	Random	Coho	18,19,20,21,22,23,24,25	1.42
Sandy River	Mainstem	33572.80	1	Lost Cr	Random	Coho	07,10,13,16,19,22,25	0.48
Sandy River	Mainstem	33574.00	1	Sandy R, Clear Fk	Random	Coho	07,10,22,23,25	1.67
Salmon River	Mainstem	33490.00	2	Salmon R	Random	Coho	13,14,16,17,18,22,23,25	1.59
Salmon River	Mainstem	33490.00	2	Salmon R	Random	Fall Chinook	13,14,16,17,18,22,23,25	1.59
Salmon River	Mainstem	33492.40	1	Salmon R.	Random	Fall Chinook	16,25	0.62

Lower Willamette

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Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Salmon River	Mainstem	33494.00	1	Salmon R	Random	Coho	07,24,25	0.61
Salmon River	Mainstem	33494.00	1	Salmon R	Random	Fall Chinook	16,19,21,22,24,25	0.61
Salmon River	Mainstem	33496.00	1	Little Cheeney Cr	Random	Coho	09,12,15,16,18,21,24,25	0.54
Salmon River	Mainstem	33497.00	1	Cheeney Cr	Random	Coho	10,13,16,17,18,19,22,25	1.31
Salmon River	Mainstem	33498.00	2	Salmon R	Random	Coho	18,19,20,21,22,23,24,25	1.04
Salmon River	Mainstem	33498.00	2	Salmon R	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.04
Salmon River	Mainstem	33498.50	1	Salmon R	Random	Coho	07,08,11,14,16,17,23,25	0.99
Salmon River	Mainstem	33498.50	1	Salmon R	Random	Fall Chinook	11,14,16,17,23,25	0.99
Salmon River	Mainstem	33498.50	2	Salmon R	Random	Coho	18,19,20,21,22,23,24,25	0.91
Salmon River	Mainstem	33498.50	2	Salmon R	Random	Fall Chinook	18,19,20,21,22,23,24,25	0.91
Zigzag River	Mainstem	33543.00	1	Henry Cr	Random	Coho	18,19,20,21,22,23,24,25	1.04
Zigzag River	Mainstem	33550.00	3	Zigzag R	Random	Coho	06,07,16,25	0.54
Zigzag River	Mainstem	33550.00	3	Zigzag R	Random	Fall Chinook	16,25	0.54
Zigzag River	Mainstem	33551.00	3	Camp Cr	Random	Coho	19,23,24,25	0.85
Zigzag River	Mainstem	33555.00	1	Camp Cr	Random	Coho	13,15,16,18,19,21,24,25	1.09
Zigzag River	Mainstem	33555.00	3	Camp Cr	Random	Coho	17,18,19,21,22,23,24,25	0.97
Zigzag River	Mainstem	33559.00	1	Lady Cr	Random	Coho	03,04,07,11,16,25	1.05
Zigzag River	Mainstem	33560.00	1	Zigzag R	Random	Coho	18,19,20,21,22,23,24,25	0.70
Zigzag River	Still Creek	33547.00	1	Still Cr	Random	Coho	07,08,10,16,17,19,22,25	1.05
Zigzag River	Still Creek	33547.00	1	Still Cr	Random	Fall Chinook	16,17,19,21,22,25	1.05
Zigzag River	Still Creek	33547.00	2	Still Cr	Random	Coho	10,12,13,16,19,21,22,25	0.96
Zigzag River	Still Creek	33547.00	2	Still Cr	Random	Fall Chinook	10,12,13,16,19,21,22,25	0.96
Zigzag River	Still Creek	33547.00	3	Still Cr	Random	Coho	18,19,20,21,22,23,24,25	1.13
Zigzag River	Still Creek	33547.00	3	Still Cr	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.13
Zigzag River	Still Creek	33549.00	2	Still Cr	Random	Coho	16,17,18,19,21,23,24,25	0.76
Zigzag River	Still Creek	33549.00	3	Still Cr	Random	Coho	03,04,07,13,14,22,23,25	0.94
Zigzag River	Still Creek	33549.70	3	Still Cr	Random	Coho	18,19,20,21,22,23,24,25	1.28
Zigzag River	Still Creek	33549.80	1	Still Cr	Random	Coho	07,16,25	0.26

Lower Columbia

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Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Lewis and Clark River	Mainstem	30029.00	1	Abercrombie Cr	Random	Chum	25	0.31
Lewis and Clark River	Mainstem	30046.00	1	Hortill Cr	Random	Chum	18,19,20,21,22,23,24,25	0.32
Lewis and Clark River	Mainstem	30047.00	1	Lewis & Clark R	Random	Chum	16,19,21,22,23,25	0.61
Lewis and Clark River	Mainstem	30047.00	1	Lewis & Clark R	Random	Fall Chinook	13,14,16,19,21,22,23,25	0.61
Lewis and Clark River	Mainstem	30049.00	1	Lewis & Clark R	Supplemental	Chum	18,19,20,21,23,24,25	0.54
Lewis and Clark River	Mainstem	30051.00	1	Lewis & Clark R	Random	Chum	16,17,19,20,21,22,23,25	1.14
Lewis and Clark River	Mainstem	30051.00	1	Lewis & Clark R	Random	Fall Chinook	16,17,19,20,21,22,23,25	1.14
Lewis and Clark River	Mainstem	30053.00	1	Lewis & Clark R	Supplemental	Chum	18,19,21,24,25	0.93
Lewis and Clark River	Mainstem	30055.00	1	Lewis & Clark R	Random	Chum	16,18,21,25	1.39
Lewis and Clark River	Mainstem	30055.00	1	Lewis & Clark R	Random	Fall Chinook	12,16,18,21,25	1.39
Lewis and Clark River	Mainstem	30055.00	2	Lewis & Clark R	Random	Chum	18,19,20,21,22,23,24,25	1.12
Lewis and Clark River	Mainstem	30055.00	2	Lewis & Clark R	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.12
Lewis and Clark River	Mainstem	30055.70	1	Lewis & Clark R	Random	Fall Chinook	10,12,13,16,21,22,25	0.62
Youngs River	Mainstem	30089.00	2	Youngs R	Standard	Fall Chinook	Annual	0.31
Youngs River	Walluski River	30068.00	2.1	Wallooskee R	Random	Chum	16,17,18,19,20,22,23,25	1.58
Youngs River	Walluski River	30068.00	2.1	Wallooskee R	Random	Fall Chinook	16,17,18,19,20,22,23,25	1.58
Youngs River	Klaskanine River	30086.30	2	Klaskanine R, S Fk	Random	Chum	17,18,20,21,22,23,24,25	1.65
Youngs River	Klaskanine River	30086.30	2	Klaskanine R, S Fk	Random	Fall Chinook	17,18,20,21,22,23,24,25	1.65
Youngs River	Klaskanine River	30086.40	2	Klaskanine R, S Fk	Random	Fall Chinook	18,19,20,21,22,23,24,25	0.59
Bear Creek	Mainstem	30125.00	1	Bear Cr	Supplemental	Chum	21,23,24,25	0.43
Bear Creek	Mainstem	30125.00	2	Bear Cr #1	Supplemental	Chum	18,19,20,23,25	0.70
Bear Creek	Mainstem	30126.00	1	Little Bear Cr	Random	Chum	17,18,19,20,21,22,23,25	1.02
Bear Creek	Mainstem	30126.00	2	Little Bear Cr	Random	Chum	18,19,20,21,22,23,24,25	0.98
Bear Creek	Mainstem	30127.00	1	Bear Cr	Supplemental	Chum	20,21,24,25	1.15
Bear Creek	Mainstem	30129.00	1.2	Bear Cr	Random	Chum	21,22,25	0.87
Bear Creek	Mainstem	30129.00	1.2	Bear Cr	Random	Fall Chinook	21,22,25	0.87
Columbia River	Ferris Creek	30139.70	1	Ferris Cr	Random	Chum	22,25	0.52
Big Creek	Mainstem	30171.00	3.2	Little Cr	Supplemental	Chum	20,21,23,24,25	0.43
Big Creek	Mainstem	30172.00	2	Big Cr	Supplemental	Chum	20,21,25	1.10
Big Creek	Mainstem	30172.00	3	Big Cr	Random	Chum	18,19,20,21,22,23,24,25	1.21
Big Creek	Mainstem	30172.00	3	Big Cr	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.21
Big Creek	Mainstem	30172.00	4	Big Cr	Supplemental	Chum	20,21,23,25	0.68
Gnat Creek	Mainstem	30194.50	1		Random	Chum	25	
Gnat Creek	Mainstem	30198.70	1	Gnat Cr	Random	Fall Chinook	14,16,17,19,20,22,23,25	0.78
Westport Slough	Mainstem	30239.00	2	Plympton Cr	Random	Chum	18,19,20,21,22,23,24,25	1.03
Westport Slough	Mainstem	30239.00	2	Plympton Cr	Random	Coho	18,19,20,21,22,23,24,25	1.03

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Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Westport Slough	Mainstem	30239.00	2	Plympton Cr	Random	Fall Chinook	18,19,20,21,22,23,24,25	1.03
Westport Slough	Mainstem	30239.00	2	Plympton Cr	Standard	Fall Chinook	Annual	1.03
Westport Slough	Mainstem	30243.00	1	Ross Cr	Random	Coho	08,11,14,17,20,22,23,25	0.90
Westport Slough	Mainstem	30261.00	1	Graham Cr	Supplemental	Chum	25	0.47
Clatskanie River	Mainstem	30272.00	1	Fall Cr	Supplemental	Chum	25	0.32
Clatskanie River	Mainstem	30274.00	2	Conyers Cr	Supplemental	Chum	24,25	0.35
Clatskanie River	Mainstem	30274.30	1	Conyers Cr, Trib A	Supplemental	Chum	25	0.65
Clatskanie River	Mainstem	30274.70	1	Conyers Cr	Random	Chum	18,21,24,25	0.66
Clatskanie River	Mainstem	30274.70	1	Conyers Cr	Random	Coho	03,04,15,16,18,21,24,25	0.66
Clatskanie River	Mainstem	30276.00	1	Conyers Cr	Random	Chum	19,22,25	0.62
Clatskanie River	Mainstem	30276.00	1	Conyers Cr	Random	Coho	04,05,10,13,16,19,22,25	0.62
Clatskanie River	Mainstem	30277.00	1	West Cr (Conyers Trib)	Supplemental	Chum	25	1.08
Clatskanie River	Mainstem	30279.00	1	East Cr	Supplemental	Chum	24,25	0.78
Clatskanie River	Mainstem	30280.00	1	Conyers Cr	Supplemental	Chum	24,25	1.21
Clatskanie River	Mainstem	30280.00	2	Conyers Cr	Random	Coho	10,13,14,16,19,22,23,25	0.94
Clatskanie River	Mainstem	30283.00	1	Clatskanie R	Random	Chum	18,19,20,21,22,23,24,25	0.99
Clatskanie River	Mainstem	30283.00	1	Clatskanie R	Random	Fall Chinook	18,19,20,21,22,23,24,25	0.99
Clatskanie River	Mainstem	30284.00	1	Merrill Cr	Supplemental	Chum	25	0.51
Clatskanie River	Mainstem	30285.00	1	Clatskanie R	Random	Chum	16,19,22,25	0.75
Clatskanie River	Mainstem	30285.00	1	Clatskanie R	Random	Fall Chinook	10,13,16,19,22,25	0.75
Clatskanie River	Mainstem	30287.00	1	Clatskanie R	Supplemental	Chum	25	0.36
Clatskanie River	Mainstem	30288.00	1	Keystone Cr	Supplemental	Chum	25	1.18
Clatskanie River	Mainstem	30289.00	1	Clatskanie R	Supplemental	Chum	25	1.15
Clatskanie River	Mainstem	30289.00	2	Clatskanie R	Supplemental	Chum	25	1.00
Clatskanie River	Mainstem	30289.00	3	Clatskanie R	Supplemental	Chum	25	0.79
Clatskanie River	Mainstem	30291.00	1	Clatskanie R	Random	Chum	16,17,19,25	0.85
Clatskanie River	Mainstem	30291.00	1	Clatskanie R	Random	Coho	04,05,07,10,11,16,19,25	0.85
Clatskanie River	Mainstem	30291.00	1	Clatskanie R	Random	Fall Chinook	10,11,16,17,19,25	0.85
Clatskanie River	Mainstem	30292.00	1	Miller Cr	Random	Coho	15,16,18,19,21,22,24,25	1.02
Clatskanie River	Mainstem	30296.00	1	Clatskanie River	Supplemental	Chum	24,25	0.88
Clatskanie River	Mainstem	30297.00	1	Adam Cr (Page Creek)	Random	Coho	02,04,05,07,08,16,17,25	1.04
Clatskanie River	Mainstem	30298.00	1	Clatskanie R	Supplemental	Chum	25	1.21
Clatskanie River	Mainstem	30298.30	1	Division Cr	Supplemental	Chum	25	0.26
Clatskanie River	Mainstem	30298.50	1	Clatskanie R	Random	Chum	16,21,22,23,25	1.01
Clatskanie River	Mainstem	30298.50	1	Clatskanie R	Random	Coho	12,13,14,16,21,22,23,25	1.01
Clatskanie River	Mainstem	30298.50	1	Clatskanie R	Random	Fall Chinook	12,13,14,16,21,22,23,25	1.01

Lower Columbia

2025-2026 Spawning Surveys

Basin	Subbasin	Reach ID	Seg.	Survey Name	Type	Species	Year(s) Surv.	Miles
Clatskanie River	Mainstem	30298.50	2	Clatskanie R	Supplemental	Chum	25	0.78
Clatskanie River	Mainstem	30301.00	1	Carcus Cr	Supplemental	Chum	25	1.37
Clatskanie River	Mainstem	30301.00	2	Carcus Cr	Random	Coho	18,19,20,21,22,23,24,25	1.10
Clatskanie River	Mainstem	30303.00	1	Carcus Cr	Standard	Coho	Annual	1.64
Clatskanie River	Mainstem	30306.00	1	Clatskanie R	Supplemental	Chum	25	0.87
Clatskanie River	Mainstem	30306.00	2	Clatskanie R	Random	Coho	18,19,20,21,22,23,24,25	0.72
Clatskanie River	Mainstem	30306.00	3	Clatskanie R	Random	Coho	14,15,16,19,22,23,24,25	1.11
Clatskanie River	Mainstem	30306.00	5	Clatskanie R	Random	Coho	18,19,20,21,22,23,24,25	1.09
Clatskanie River	Mainstem	30308.00	3	Clatskanie R	Random	Coho	18,19,20,21,22,23,24,25	0.70
Clatskanie River	Mainstem	30308.30	1	Dribble Cr	Random	Coho	18,19,20,21,22,23,24,25	0.14
Clatskanie River	Mainstem	30308.50	2	Upper Clatskanie R, Wilark Unit	Standard	Coho	Annual	0.75
Dobbins Slough	Beaver Creek	30333.00	1	Stewart Cr	Supplemental	Chum	24,25	0.35
Dobbins Slough	Beaver Creek	30334.00	1	Stewart Creek, North Fork	Supplemental	Chum	24,25	0.42
Dobbins Slough	Beaver Creek	30335.00	1	Stewart Cr	Random	Coho	12,21,23,24,25	0.82
Columbia River	Rinearson Slough	30363.00	2	Green Cr	Random	Chum	22,23,25	1.13
Columbia River	Rinearson Slough	30363.00	2	Green Cr	Random	Coho	22,23,25	1.13
Tide Creek	Mainstem	30656.63	1	Merrill Cr, Trib A	Random	Coho	07,10,13,16,19,22,25	1.05
Tide Creek	Mainstem	30656.63	3	Merrill Cr, Trib A	Random	Coho	18,19,20,21,22,23,24,25	0.17
Tide Creek	Mainstem	30656.67	2	Merrill Cr	Random	Coho	03,04,16,25	0.90

Sampling Record

Stream Name: _____

Site Number: _____

Field Crew: _____

_____

Agency: _____

Local Phone: _____

Supervisor: _____

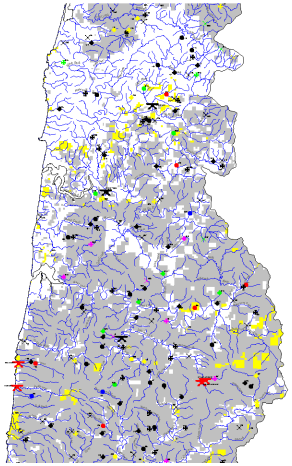
Phone: _____

Comments: _____

_____

_____

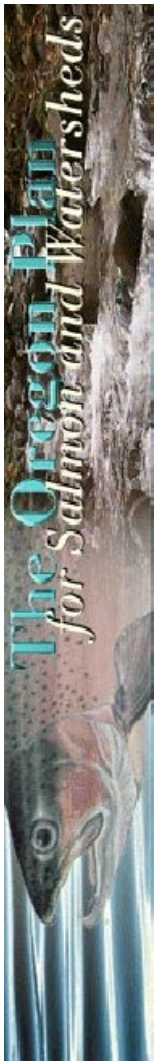
Example of sample sites in the Mid-Coast



Streams are randomly selected for sampling using a computer program. Landowner names and addresses are not used in reports or data summaries. If you would like a copy of the report summary for your area, we will gladly supply it without charge.

What is the Oregon Plan?

The Oregon Plan for Salmon and Watersheds is a broad-based effort of citizens, local watershed groups, the State of Oregon, and federal agencies to restore healthy salmon populations and their watersheds.



The most important part of the Plan is the idea that people working together, with the support of state and local government, can do more to help fish than could be accomplished by a strict regulatory approach.

. Hundreds of projects designed to improve stream habitat and watershed conditions have been completed. Support for watershed groups, soil and water conservation districts, and landowners has brought people together to develop stream restoration plans tailored to the needs of the local community.

APPENDIX I. OREGON PLAN FOR SALMON AND WATERSHEDS

2025-2026

The Oregon Plan Monitoring Program is designed to assess the current status of fish populations and their habitat and to document the effectiveness of restoration and enhancement programs.

Streams in your area have been randomly selected for salmon population surveys, habitat surveys, and assessing overall stream health. Sampling is coordinated using an unbiased statistical survey plan. Specially trained field crews conduct the various sampling tasks described in this pamphlet.

Monitoring Program Activities

These Oregon Plan Monitoring Projects are designed to work together to give us basic information on salmon populations and conditions across large geographic areas.

Activities that we would like to conduct on the stream or streams on your property are marked in the checkbox by the name of each project.

❒ Stream Habitat Assessment

Stream habitat surveys are conducted from June through September in one-half mile long sections of stream. Each section takes about a day to survey. Surveyors will collect information on channel size, flow, substrate composition, large wood, habitat complexity, and riparian characteristics.

ODFW Contacts:

Peggy Kavanagh (541) 757-5124

❒ Adult Salmon Spawning Surveys

Counts of spawning adult salmon are a key indicator of abundance. A team of one or two surveyors will visit each potential site once during the summer to mark the boundaries of the survey and collect data on stream size, availability of spawning gravel, and possible barriers to fish-passage.

Each survey covers about one mile of stream. Coho surveys will be conducted from October through January while steelhead surveys will be conducted from January through the end of May.

Crews will visit each site about once every 10 to 14 days depending on the spawning season to count the salmon.

ODFW Contacts:

Oregon Coast:
Briana Sounhein (541) 757-5136

Lower Columbia:
Eric Brown (541) 757-5133

❒ Juvenile Salmon Population Census

Divers will snorkel pool habitats to count juvenile salmon. Over time, these counts help us understand trends in the abundance and distribution of juvenile salmonids. At some of the sites, more precise population estimates will be made for juvenile coho, cutthroat, and steelhead.

Survey sites will vary in length. Field crews will spend about one day at each site over the summer sampling period.

ODFW Contacts:

Ron Constable (541) 757-5107

Corvallis Research Laboratory
28655 Hwy. 34
Corvallis, OR 97333
541-757-4263

https://odfw-oasis.forestry.oregonstate.edu/