

# 2008 REGIONAL MARK COMMITTEE MEETING

Hosted by CDFG

April 2-3, 2008

Lighthouse Lodge, Pacific Grove, California

## Meeting Notes

Highlight = task, or follow up required

Highlight = item for Data Standards WG

### APRIL 2: WEDNESDAY: 9:00 AM

#### 1. General business items (George Nandor, PSMFC)

- Welcome and introductions
- Discuss changes in agency personnel  
There have been many changes in personnel involved in tagging and data reporting over the past couple of years. We would like to welcome the new representatives (tag coordinators, etc.) as well as clarify who will be involved in data reporting for each agency on an ongoing basis.

CDFG is working on a CDFG recovery lab and a CWT coordinator- should all be up and running by July 2008. Melodie Palmer-Zwahlen will assist with coordinating information until that time.

- 2009 meeting to be in Alaska: Site and date to be determined.  
The meeting will be held either the 2<sup>nd</sup> or 3<sup>rd</sup> week in May in Ketchikan. Let Ron Josephson know if you have a preference for dates.
- 2010 meeting is scheduled to be hosted by IDFG in Idaho.

#### 2. Regional Mark Processing Center operations and announcements

##### A. RMPC web site (Dan Webb, PSMFC)- a PowerPoint presentation

A number of changes on the RMPC website

- Program Overview was rewritten
  - CWT overview has been edited down, information condensed, and updated
- Image Gallery is all new
  - Send any images you would like to have included in this section to Dan Webb
  - Section shows thumbnail images of processes (can click on the pictures for a larger image)
  - Users are welcome to make use of all images in reports, presentations, etc.
- More publications relevant to CWT's now available
  - Included a link for citing RMPC data and documents
  - Added link to report for marking variances
  - Added links to new maps
  - Added "Related Documents and Publications" section (external from RMPC but related to CWT programs in general)
  - All links are to pdf files
- Guidelines document for citing RMPC data on the Publications page
- Data Status buttons now change colors to indicate they are clickable
  - If only one recovery record fails, none of them get into the database

- If a release record fails, it is omitted but the other records that pass are included in the database
- Converted all the documents to PDF files
- Added some more historical Mark Meeting Minutes (2000 – 2007)

**Problem:** Information shows up in the Dataset Load Dates but not in the Dataset Descriptions. This may be caused when multiple description files are sent on the same day by the same agency. The RMPC thinks that a programming glitch causes the subsequent descriptions to not get posted. They are trying to fix this problem and working to identify the exact cause and how to correct it. The Mark Committee feels it would be nice to have the reasons for the re-submissions documented and available. Kathy will have Brenda contact Dan directly to determine which CDFO records are impacted, and identify what is missing (if it's missing from the database or if it just doesn't appear due to the programming).

## **B. Status of CWT data files (Dan Webb)- a PowerPoint presentation**

Lots more graphs than in past years!

The RMPC needs new and updated Locations files for CDFG and IDFG

Every data type (except releases and descriptions) must be uploaded in complete-year agency datasets

Waiting for 2007 release data from CRFC

Yakama has begun reporting their releases separate from CRFC as discussed at the 2007 meeting.

An error was identified in the “Combined All Agency Releases” graph. It was later re-displayed with the errors corrected.

Having a chart by species would be more useful than “All Species Combined” for the website. A “By Species” chart on the website could be canned graphs to give a snapshot to the public of what the status is. For Dan's annual presentation to the Mark Committee- they request that he present graphs “By Species, By Agency” so each agency can see if what they thought they sent is showing up in the database (would make it easy to then prepare a combined graph “By Species, All Agencies Combined” for the website).

The Mark Committee would also like to see a breakdown of Chinook and coho releases for each agency with Chinook and steelhead for IDFG.

The RMPC has discovered that it takes 3-4 years to get a stable platform of recovery data for any given run year.

This chart would be really useful to have “By Species”.

Should note that it is expected that escapement will not be included until January 31 of the following year. The Mark Committee would like to see a graph that includes escapement and one without, or one graph that shows the portion that is escapement.

WDFW the only agency with Catch & Effort data submitted.

**C. Discussion of data errors found during validation. (Dan Webb)- a PowerPoint presentation**

There will be a presentation of the most common types of problems encountered by our validation process. This presentation and discussion could be of help to agencies in their efforts to pre-validate datasets before submitting them for validation.

**Problem:** Long file names appear to be validated, but the data doesn't load.

**Questions from the Committee:**

**Why don't the individual recoveries that validate show up? What's the rationale?**

It has to do with how the database views the data record (it sees them all as one set, not a bunch of individual records). Agencies can put their data records in as a Status 7 until such time as they want to resolve the issues. In order to make significant changes, the Mark Committee would have to get Data Standards to change how they do things and everyone would have to go back and create a unique identifier for each row.

Let Dan know if you have data that won't validate so he can coordinate follow up with you and NMT.

On an ad hoc basis, RMPC can be the reporting agency and put in the minimum information required to get the data into the database as a preliminary release record.

**Can the system automatically make these records Status 7?**

Having the agencies individually designate their records as Status 7 makes sure the Agency knows about it, since there could be a number of reasons why a record doesn't validate. The Mark Committee would like to have an annual accountability update for tag codes that are preliminary and should not persist. This will be an annual update at the Mark Meeting to remind Agencies of what they have out there.

Add a Status 'X' for "Release Pending"- put on Data Standards Committee agenda. Would be for a specific set of circumstances, unlike the catch all Status 7. Every Agency has a different way to resolve data problems- need to have a discussion at Data Standards of how they each deal with their unresolved data issues.

Most reports only report Status 1 data.

**Common Errors (all data types):**

- File name or field value too long

- Submission date not consistent or too old (every record in the data file must have the same submission date and no older than 90 days)

- Value required but missing

- Location code not found

**Common Errors (releases):**

- Must be blank or numeric in a specific range

- First release date greater than last release date

- Tag code already reported by another agency

**Common Errors (recoveries):**

- Recovery Species must match release

- Recovery Date earlier than release

- Recovery Tag Code must be present in release

**Common Errors (catch/sample):**

- Estimated number/ number caught must be absent when Sample Type is '4'

**D. RMPC Updates (George Nandor) – a PowerPoint presentation**

- PSMFC is switching internet connection from 2 T-1 lines to a single fiber optic line
- Budgeted for a new RMIS database server to house the Oracle database (should be installed by summer)
- PSMFC has been working on improvement and documentation of data back-up and recovery procedures. This is for all PSMFC programs including the RMPC.
  - Incremental tape backup daily
  - M-W-F backup to another drive
  - Full tape backup weekly
  - Off-site tape storage once a month (worse case scenario is to lose 1 month of data)
- Developed a guidelines document for citing RMPC data – posted on the Publications page
- Participated in the regional Genetic Stock Identification workshops in Portland and Vancouver
  - PSMFC would house and maintain the database
  - GSI data would be used in conjunction with CWT data
  - Final report available on the PSC and RMPC web site. Conclusions of the report:
    - Important to restore the integrity of the CWT system to improve its performance
    - CWT system is the only system that can provide cohort reconstruction
    - CWT data should be used in tandem with GSI data
    - Data Standards Workgroup needs to standardize data for a coast wide database
- Participated as a member of the Columbia River Hatchery Scientific Review Group (HSRG)
  - Major recommendations so far have to do with brood-stock management, identification of hatchery origin fish, increased selectivity in fisheries, using locally adapted stocks and smolt release locations.
    - Reviewing 140 hatchery programs in OR, WA, ID
  - Status Reports for Lower Columbia Chinook and coho completed
  - Lower Columbia steelhead report will be available soon
  - Final Report in December, 2008
  - For more info see the HSRG document library at: <http://hatcheryreform.us>

**E. Update on RMIS spatial data enhancement project (Jim Longwill, PSMFC)- a pdf presentation**

An update on current progress with the PSC Domain/Region/Basin analysis project -- including RMPC efforts to verify the geographic integrity of CWT data elements. Example maps and spreadsheets were shown.

- These maps are available on the RMPC website in pdf form <ftp://ftp.rmhc.org/pub/maps>
- Jim is fixing the Domain/Region/Basin coding system and confirming that the maps are labeled accurately.
  - Using ArcGIS to search and analyze map features.
  - Going through them region by region and verifying/ correcting location coding, renaming basins, etc.
  - The spreadsheet Jim is working from is also available online.
- Filling in lat/long values where possible on the individual records
- Designing an online data retrieval system
- Fixed the Google maps application- can use to search maps by tag codes with lat/longs

The Mark Committee brought up several issues that should be taken into consideration when mapping Region and Basin boundaries:

Have the boundaries correspond as much as possible with U.S. HUCs and the boundaries of the Canadian watershed system. This will provide consistency with other databases and allow for better cross-system analysis. Submit the suggested boundaries to the Agencies (which is being done).

Make the distinction between location “label points” versus polygons and true point locations (such as hatchery locations). Jim should document the information throughout the process to avoid the creation of false data.

Create an explanation column in the associated data worksheet that corresponds to the new lat/long to indicate if it is for a point, line, polygon, etc. This will allow the information to be queried.

Document the limitations of what has been done for future use.

Possibly form a sub-group to work with Jim on location coding; how it was done in the past and how to improve the system in the future.

We need to deal with political boundaries as well as watershed boundaries (e.g. the Yukon River in Canada and Alaska).

### **3. Status of 2008-9 funding for the Regional Mark Processing Center (George Nandor)**

#### **Three funding sources for the RMPC:**

- U.S. Fish and Wildlife Service – full funding has been returned to the base budget (level funding)
- NOAA Fisheries funding is in place (level funding)
- BPA funding is in place, questions regarding “In lieu” funding for 2009 not yet resolved

### **4. Update on mass marking, selective fisheries, & agency tagging levels for 2008 (George Nandor)**

#### **Agency Updates:**

- CDFO
  1. Chinook- up slightly from last year to 3.8 million, increased indicator stocks, all others the same
  2. Coho- up to 435,000, mass mark coho stocks above 7 million
  3. Sockeye- 1 million ad clipped/not tagged, others clipped & tagged
  4. Chum/ Pink- some fin clipping, no tagging
  5. Selective fishery- 45-67cm allowed wild or hatchery, above 67cm is mark only in Juan de Fuca; directly sampling size specific encounter rates and mark rates through creel survey, double index tags is voluntary (not collecting heads, no wands in the field)
  6. The CDFO sampling situation [could be] in violation of SFEC requirements. This is known at CDFO, elsewhere "at the highest levels". A tribal protest is also underway.
- ADFG
  1. nothing changed since last year, CWT going down for 10 years due to dropping out species (pink, sockeye, chum). Only doing king and coho (1 million of each)
  2. no mass marking

- WDFW (Appendix A)
  1. coastal Chinook mass marking in Gray's Harbor, continuing Wilapa Bay
  2. 1 project left (Priest Rapids Hatchery, 4.8 million fish) until all of WA is mass marking
  3. Less CWT than last year- portion of HSRG funding was cut; doing 16-17 million this year
  4. Selective Fishery- no changes from last year; 5 drafts are out there but haven't been seen yet.
- ODFW
  1. No changes for 2008
  2. Were told if the fish aren't marked they can't be released; budget/ staffing issues causing a scramble to get it all done
  3. Talking about an Agency 09 tag for McKenzie spring Chinook (clipped & blank wire tagged); want to be able to sort out hatchery fish from migrating upstream with an automatic sorter, ad clip makes them still susceptible to the selective fishery (this will require a variance request)
  4. Plans are for a selective fishery on the Willamette River system sometime in the future.
- CDFG
  1. similar to last year; Central Valley 30-32 million fall Chinook, 25% tagged and clipped
  2. all steelhead produced in hatcheries are clipped (most with no tags)
  3. Butte Cr.: half-tags, 300,000 + being released
  4. Klamath /Iron Gate: seeking 25% tag rate as w/ Trinity for next yr.
  5. Rowdy Cr.: set for 200,000 + tags
  6. Warm Springs: set for 200,000 + tags
  7. There may be a need for a PSC indicator stock from CA for PSC analysis, etc. **Marianne /CRITFC may contact Melodie /CDFG regarding this.** [discussion during Item 8.]
- NWIFC
  1. CWT levels remain the same (2.5 million Chinook, 1 million Coho)
  2. Mass Mark 8 million Chinook, 5 million Coho
- CRITFC
  1. no change from last year
  2. new reporting agency (Yakama) makes it look different, but total numbers unchanged overall
- USFWS
  1. same as last year
- NMFS
  1. tagging at same level as last year (200,000 Chinook with clips and tags)
  2. no mass marking
  3. no selective fisheries
- IDFG (Appendix B)
  1. all steelhead & Chinook mass marked
  2. Chinook- total release 10 million (1.2 CWT, 150K wire only)
  3. Steelhead- 7.8 million released (800K CWT, 1 million unclipped)
  4. all fisheries are mark selected fisheries

**5. Problem with reporting when tag groups are transferred from one Release Agency to another (George Nandor)**

We have encountered situations which evolve generally as follows:

1. The tag code is acquired from vendor (NMT) by agency #1 and the new brood tagged by agency #1;
2. The tagged group (perhaps along with other, untagged fish) is transferred to agency #2 sometime during the rearing process;
3. The rearing process is continued by agency #2 for a certain period;
4. The tagged group is released by agency #2 (and perhaps divided up and also released by an agency #3);
5. Recoveries begin to appear for the tag group;
6. No data for the release group has been reported.

*This situation has resulted in tag codes getting "dropped from the system." I.e. **no one** has reported the tag code to the RMPC. As a result, we are prevented from validating multiple agencies' recovery data for the given tag code as it arrives. The RMPC ends up trying to track down nebulous tag code information in a short time frame in order to expedite data validation.*

A protocol is needed for reporting for these tag groups. RMPC proposes introducing the requirement that a reporting agency (the one that did the rearing) report a preliminary release for tag groups transferred to another agency (the one that does the releasing) so the transfers can be tracked until the final release record is submitted (by the releasing agency). It would at least show where the fish went in the event the releasing agency does not report the release. Then we could contact the Releasing agency for the final release record. Is this a reasonable approach? Is there a better approach? Let us define and document the protocol.

This approach would show up as a Preliminary Release record.

2 situations could occur that would make this protocol necessary:

Agency 1 orders wire from Agency 2, puts it in the fish and releases them

Agency 1 puts Agency 1 wire in fish, then transfers fish to Agency 2 for release

\*Most common unreported release is from these types of transfers

The releasing agency is responsible for submitting the release report, and needs to make sure they have all the information necessary to complete the report.

The Mark Committee will not define a specific protocol at this meeting. RMPC will continue to do their detective work on an as-needed basis. The problem has been brought to everyone's attention. All agree that the releasing agency is responsible for the reporting and their tagging coordinator(s) should be aware of the tag code's history.

\*If your Agency has a problem with tracking records, take the initiative to create a preliminary record now. Put the integrity as "W" (warning release), which requires comments. When you transfer to another Agency, make sure the tagging coordinators talk to one another! When they are officially released, change it from "W".

\*If your Agency doesn't deal with these issues, don't worry about them.

\*RMPC recommendation- preliminary release reporting will not be required. RMPC will continue to track and help on these issues and promote good communication between the agencies.

**6. Update on PSC CWT Workgroup: Implementation of Expert Panel Recommendations**

(George Nandor for Marianna Alexandersdottir)- a PowerPoint presentation

Discussion of the finalized report: "[Action Plan in Response to CWT Expert Panel Recommendations](#)" published March, 2008).

The full report is available on the RMPC website. The report concluded that increased investment will be required to maintain the viability of the CWT program.

Any written plans by the Agencies to address PSC CWT Workgroup recommendations must be submitted by October 1, 2008.

**7. Update on Selective Fisheries Evaluation Committee activities** (Ron Olson, NWIFC)  
a PowerPoint presentation

Every year, review Mass Mark proposals and Mark Selective Fishery proposals

All reports available on the PSC website

CDFO- 2007 will have complete data as of April 1 for commercial Chinook fisheries

Not planning on articulating any new recommendations for this year in their report.

Don't mass mark unless you plan on electronically sampling CWT (from 1995 ASFEC)

Continue to develop agreements to clarify responsibilities for maintaining a functional CWT system

All agencies proposing MSFs should be represented on the SFEC. Proposals need to be submitted (haven't received any to date)

**8. Update on status of PSC Data Sharing Committee meetings** (Norma Sands, NOAA Fisheries)

Meeting funding not approved; don't count on anything before October 2008

Try to use the forum to resolve data standards issues

PSMFC may have funding available to help with travel costs, could put together a 2-3 day meeting in the next couple of months (early June in Portland); will get it sanctioned by the PSC process; George will make contacts and begin the process and get the Data Sharing Committee's approval

**9. Presentation: "The California Constant Fractional Marking Program, Year 2"** (Stan Allen, PSMFC)  
provided Program Brochure

Key is to find and retain highly qualified people to run the trailers and implement these kinds of programs

PSMFC is in the process of securing funding for Year 3 and beyond

Thinking about the recovery program that must be in place due to increased numbers of CWTs out there



Wild fish are being tagged with half tags; not a large program

Recurring theme (from OR & WA experience) is that you have a lot more hatchery fish than you think you do, and you've overestimated your wild fish populations

**Adjourn: ~ 5:00 PM**

Around 6:15pm: a dinner hosted by NMT took place at Captain Bullwacker's Restaurant, 653 Cannery Row.

**APRIL 3: THURSDAY: Reconvene at 8:00 AM**

**10. Any special marking requests? (George Nandor)**

- Marking variance requests from agencies for adipose-only marking studies
- Agency marking requests involving use of blank wire
- Other requests?

CDFO- Sockeye- Agency only Wire (Appendix E)

2 stocks, both endangered, both in captive broodstock programs to test rearing and release strategies, 205,000 fish w/ wire and clip, 950,000 clip only

ODFW- Fall run Chinook- Agency only Wire

450,000 from Bonneville (similar to 2006 request) for release in the Umatilla River, on-going program; **Ken will look into the Willamette fish marking issues and will report back**

**11. High-seas sampling program (Adrian Celewycz, NMFS-AK)- a PowerPoint presentation**

Annual presentation of high-seas fisheries and interceptions of CWTs.

Please note their recent address change (moved to a new lab last summer):

Ted Stevens Marine Research Institute, Auke Bay Laboratory  
17109 Pt Lena Loop Road  
Juneau, AK 99801

The report focused on total by-catch of Chinook salmon in 3 high seas fisheries and CWT recoveries in those fisheries, with some additional information on Steelhead

In 2006, observers recovered 101 CWT out of 53,000 fish examined, all from Chinook:

- Gulf of Alaska
  - 24 CWT recovered from 2,880 Chinook examined
  - 17,583 total catch
  - total estimated contribution of CWT Chinook is 1,424
- Bering Sea/ Aleutian Islands
  - 32 CWT recovered from 50,739 Chinook examined
  - 83,103 total catch
  - total estimated contribution of CWT Chinook is 226

- Hake Trawl Fishery
  - 44 CWT recovered from 798 Chinook examined
  - 1747 total catch
  - total estimated contribution of CWT Chinook is 393

Total Chinook by-catch is going up in the Bering Sea & Gulf of Alaska trawl fisheries.

Total Chinook by-catch is trending down in the WA-OR-CA Hake Fishery.

The increases may be because Pollock have moved to the same areas where Chinook are, or Russia may be increasing their hatchery production.

In most years, the Hake fishery has the highest total estimated contribution of CWT, followed by the Gulf of Alaska.

There were no new Yukon River Chinook Salmon CWT recoveries for 2007.

In 2006, Japanese Research recovered 29 ad-clipped snouts. 3 had CWT (all Steelhead)- Idaho Steelhead migrate west across the open ocean

### **Magnusson Stevens Act implications:**

Everyone working with the observer program now has to sign a waiver to not reveal confidential information. Some in power/ in the industry are concerned that identifying recoveries by date and location may reveal confidential and proprietary information. The future of high seas CWT reporting is uncertain at this time. They have to resolve the reporting issues and whether or not they reveal confidential information by divulging precise locations. It is possible that the data will become “more fuzzy” as a result of these confidentiality concerns.

## **12. Presentation regarding updates to ADFG CWT online interactive system (Ron Josephson, ADFG)** - a PowerPoint presentation

Alaska Mark Tag and Age Lab update:

Have 21 total Status 7's (Dan can help with tracking them down if Ron sends him this list, and can run a query of tag codes with 0 releases )

They sample troll Chinook at 25%; the overall percentage of clipped fish without tags has increased over time in both winter and summer fisheries

Coho troll shows fairly stable numbers; 1.5% ad-clipped Coho; 15-25% ad-clipped Coho without tags

ADFG no longer tags Pinks, Sockeye, Chum, Steelhead (due to otolith marking); still tag Coho and Chinook

Every year, each hatchery submits their marking plan for review and approval

Japan is the biggest producer of hatchery releases (2 billion/ year, all species), followed by US, Korea, and Canada; Chum and Pink the 2 highest amount of species releases; 31% of all releases are otolith marked; the bulk of otolith marking is done in Alaska (some in Japan, Canada)

[www.taglab.org](http://www.taglab.org)

Facility mapper utilizes Google maps and locates hatcheries and release sites, and provides information on those releases; contact Ron if you would like the coding for the site

[www.npafc.org](http://www.npafc.org)

Keeps track of otolith mark releases for all the countries; can look up mark reports on brood years & species; shows if image is on file and you can view the otolith mark image; each country puts their own marks into the database. Images are all read manually

### **13. Northwest Marine Technology** (Geraldine Vander Haegen, Ken Molitor, NMT)

- Product updates
  - Started marking and tagging in the Great Lakes with the Autofish trailer- most in New York, some in Ontario; starting with Chinook and then will do Lake Trout; eventually will have 10 trailers in the region; 100% ad clipped (no electronic sampling needed)
  - Wand improvements going well; had 261 wands returned, 72% upgraded to meet 3.2 cm range; will continue to accept wands for upgrades
  - Working on platinum cobalt tags (nothing new to report), VI Alpha tags are being developed, VIE tags are going forward as the new standard
  - Working on counters for fish coming into hatcheries

### **14. Miscellaneous Discussions**

Body tags- should they be reported as a variance? Do you use blank wire, CWT? Don't want the releases reported. WA Tribe is body tagging (caudal) small groups of steelhead, won't have ocean recoveries (Upper Columbia- below Chief Joseph dam); **raise this issue at Data Standards for how to report this type of tagging- is it worth even worrying about it or creating new tables?**

ODFW Pocket PC development- is anyone else working on developing them? ODFW is not using them (Dell Axioms) due to problems with computers and programming, but isn't opposed to the idea. CDFO has it in their 3-5 year plan.

**Adjourn: ~ 12:00 Noon**

### **List of Appendices**

Appendix A: WDFW Marking Update

Appendix B: IDFG Marking Update

Appendix C: CDFO Request for Marking Variance

Appendix D: 2008 Mark Meeting Attendees & Contact Information

Appendix A:

WDFW Marking Update

# WDFW and TRIBAL PUGET SOUND CHINOOK MASS MARKING and CODED-WIRE TAGGING 2008

Species: Chinook  
Area: Puget Sound  
Brood: 2007  
Releases 2008 and 2009

03/31/2008

Agency	Hatchery	Stock	Number of fish to be released with a CWT		Number of fish to be released without a CWT		Total Production	Proposed to be marked this year (Y/N)	Marked in previous year (Y/N)
			Ad Clipped	Unclipped	Ad Clipped	Unclipped			
WDFW	Kendall Creek*	NF Nooksack springs	200,000	200,000	350,000	0	750,000	Y	Y
WDFW	Marblemount	Skagit River springs	250,000	0	0	0	250,000	Y	Y
WDFW	Marblemount*	Skagit River springs 1+	75,000	75,000	0	0	150,000	Y	Y
WDFW	Hupp Springs	White River springs	0	250,000	0	0	250,000	NA	NA
WDFW	Hupp Springs	White River springs	0	85,000	0	0	85,000	NA	NA
Tribal	White River	White River springs	0	340,000	0	0	340,000	NA	NA
Tribal	White River	White River springs 1+	0	55,000	0	0	55,000	NA	NA
Tribal	White River Acclimation	White River springs	0	0	0	1,000,000	1,000,000	NA	NA
WDFW	Dungeness	Dungeness River springs	0	50,000	0	0	50,000	NA	NA
WDFW	Greywolf Acclimation	Dungeness River springs	0	0	0	150,000	150,000	NA	NA
Total spring chinook			525,000	1,055,000	350,000	1,150,000	3,080,000		
WDFW	Marblemount	Skagit River summers	200,000	0	0	0	200,000	Y	Y
Tribal	Stillaguamish	NF Stillaguamish River summers	220,000	0	0	0	220,000	Y	Y
Tribal	Bernie Gobin	Skykomish River summers	100,000	0	1,280,000	320,000	1,700,000	80%	80%
WDFW	Wallace River*	Skykomish River summers	200,000	200,000	600,000	0	1,000,000	Y	Y
WDFW	Wallace River	Skykomish River summers 1+	100,000	0	150,000	0	250,000	Y	Y
Total summer chinook			820,000	200,000	2,030,000	320,000	3,370,000		
WDFW	Glenwood Springs	Glenwood Springs falls	100,000	0	400,000	0	500,000	Y	Y
Tribal	Lummi Bay Sea Ponds	Samish River (Friday Creek) falls	0	0	1,000,000	0	1,000,000	Y	Y
WDFW	Samish*	Samish River falls	200,000	200,000	3,600,000	0	4,000,000	Y	Y
WDFW	Marblemount	Skagit River falls	222,000	0	0	0	222,000	Y	Y
WDFW	Soos Creek*	Big Soos Creek falls	200,000	200,000	2,800,000	0	3,200,000	Y	Y
WDFW	Icy Creek	Big Soos Creek falls 1+	100,000	0	200,000	0	300,000	Y	Y
WDFW	Issaquah	Issaquah Creek falls	0	0	2,000,000	0	2,000,000	Y	Y
WDFW	Portage Bay (UW)	Portage Bay falls	0	0	306,000	0	306,000	Y	Y
WDFW	Minter Creek	Minter Creek falls	0	0	1,800,000	0	1,800,000	Y	Y
Tribal	Gorst Creek	Grosvors Creek falls	0	0	1,900,000	0	1,900,000	Y	Y

Tribal	Gorst Creek	Grovers Creek falls 1+	100,000	0	50,000	0	150,000	Y	Y
Tribal	Grovers Creek *	Grovers Creek falls	200,000	200,000	350,000	0	750,000	Y	Y
Tribal	Clarks Creek	Puyallup River falls	0	0	400,000	0	400,000	Y	Y
Tribal	Electron Ponds	Puyallup (Voights Creek) falls	200,000	0	0	0	200,000	Y	Y
WDFW	Voights Creek	Voights Creek falls	200,000	0	1,400,000	0	1,600,000	Y	Y
WDFW	Garrison Springs	Garrison Springs falls	0	0	1,150,000	0	1,150,000	Y	Y
WDFW	Chambers Creek	Garrison Springs falls	0	0	70,000	0	70,000	Y	Y
WDFW	Lakewood	Garrison Springs falls	200,000	0	0	0	200,000	Y	Y
WDFW	Lakewood	Garrison Springs falls 1+	100,000	0	30,000	0	130,000	Y	Y
Tribal	Clear Creek *	Clear Creek falls	200,000	200,000	3,100,000	0	3,500,000	Y	Y
Tribal	Kalama Creek	Kalama Creek falls	100,000	0	500,000	0	600,000	Y	Y
WDFW	Turnwater Falls	Deschutes River falls	200,000	0	3,600,000	0	3,800,000	Y	Y
WDFW	Percival Cove Net Pens	Deschutes River falls	75,000	0	125,000	0	200,000	Y	Y
WDFW	George Adams *	George Adams falls	225,000	225,000	3,350,000	0	3,800,000	Y	Partial
WDFW	Hamma Hamma	George Adams falls	86,000	0	0	0	86,000	Y	Y
WDFW	Hoodsport	Hoodsport falls	200,000	0	2,600,000	0	2,800,000	Y	Y
WDFW	Hoodsport	Hoodsport falls 1+	100,000	0	20,000	0	120,000	Y	Y
WDFW	Rick's Pond (LLTK)	George Adams falls	0	0	120,000	0	120,000	Y	Y
WDFW	Elwha	Elwha River falls 1+	0	435,000	0	0	435,000	NA	NA
WDFW	Elwha	Elwha River falls	0	200,000	0	2,300,000	2,500,000	NA	NA
Tribal	Hoko Falls *	Hoko River falls	200,000	200,000	0	0	400,000	Y	Y

Total fall chinook 3,208,000 1,860,000 30,871,000 2,300,000 38,239,000

**Total 4,553,000 3,115,000 33,251,000 3,770,000 44,689,000**

**Total Chinook Production 44,689,000**  
**Percent Marked 85%**

\* DiT group

# WDFW and TRIBAL PUGET SOUND COHO MASS MARKING and CODED-WIRE TAGGING 2008

03/31/2008

Species: Coho  
Area: Puget Sound  
Brood: 2007  
Release Year: 2009

Agency	Hatchery	Stock	Number of fish to be released with a CWT		Number of fish to be released without a CWT		Proposed to be marked this year (Y/N)	Marked in previous year (Y/N)
			Ad Clipped	Uncipped	Ad Clipped	Uncipped		
WDFW	Kendall Creek*	Nooksack (Kendall Creek)	45,000	45,000	210,000	0	Y	Y
WDFW	Squalicum Net Pens	Nooksack (Kendall Creek)	0	0	5,000	0	Y	Y
WDFW	Glenwood Springs	Glenwood Springs	0	0	100,000	0	Y	Y
Tribal	Lummi Bay Sea Pens	Lummi Bay	50,000	0	950,000	0	Y	Y
Tribal	Skookum Creek	Skookum Creek	50,000	0	950,000	0	Y	Y
WDFW	Marblemount*	Skagit ( Clark Creek)	45,000	45,000	160,000	0	Y	Y
WDFW	Lake Shannon Net Pens	Baker River	0	0	25,000	0	Y	Y
WDFW	Roche Harbor Net Pen	Skagit ( Clark Creek)	0	0	15,000	0	Y	Y
WDFW	Indian Slough (For SSC)	Skagit ( Clark Creek)	0	0	100,000	0	Y	Y
WDFW	Oak Harbor Net Pens	Skagit ( Clark Creek)	0	0	30,000	0	Y	Y
Tribal	Stillaguamish	Stillaguamish River	0	0	50,000	0	Y	Y
WDFW	Wallace River*	Skykomish (May Creek )	45,000	45,000	60,000	0	Y	Y
Tribal	Bernie Gobin	Skykomish (May Creek )	50,000	0	760,000	190,000	80%	80%
WDFW	NWSSC Everett Net Pens	Skykomish (May Creek )	0	0	25,000	0	Y	Y
WDFW	Possession Point Net Pens	Skykomish (May Creek )	0	0	50,000	0	Y	Y
WDFW	Seattle Poggie Club	Skykomish (May Creek )	0	0	54,000	0	Y	Y
WDFW	Laebugten Net Pens	Issaquah Creek	0	0	25,000	0	Y	Y
WDFW	Issaquah	Issaquah Creek	0	0	450,000	0	Y	Y
WDFW	Ballard Salmon Net Pens	Issaquah Creek	0	0	30,000	0	Y	Y
WDFW	Soos Creek*	Green River ( Soos Creek)	45,000	45,000	510,000	0	Y	Y
Tribal	Crisp Creek	Green River ( Soos Creek)	50,000	0	150,000	0	Y	Y
Tribal	Elliott Bay Net Pens	Green River ( Soos Creek)	50,000	0	350,000	0	Y	Y
WDFW	NWSSC Des Moines	Green River ( Soos Creek)	0	0	30,000	0	Y	Y
WDFW	Seattle Aquarium	Green River ( Soos Creek)	0	0	2,000	0	Y	Y
WDFW	Portage Bay ( UW)	Portage Bay ( UW)	0	0	90,000	0	Y	Y
WDFW	Marine Tech Center	MTC / Soos Creek	0	0	10,000	0	Y	Y
WDFW	Voights Creek*	Puyallup ( Voights Creek)	45,000	45,000	690,000	0	Y	Y
Tribal	Rushingwater Acclimation	Puyallup ( Voights Creek)	100,000	0	100,000	0	Y	Y

WDFW	Minter Creek	Minter Creek	50,000	0	994,000	0	1,044,000	Y	Y
WDFW/Tribal	South Sound Net Pens	Skykomish ( May Creek)	50,000	0	1,750,000	0	1,800,000	Y	Y
Tribal	Kalama Creek	Kalama Creek	50,000	0	250,000	0	300,000	Y	Y
WDFW	George Adams*	George Adams (Purdy Creek)	45,000	45,000	210,000	0	300,000	Y	Y
WDFW-Tribal	Port Gamble Net Pens	Big Quilcene River	45,000	0	355,000	0	400,000	Y	Y
Tribal	Quilcene Bay Net Pens	George Adams (Purdy Creek)	45,000	0	155,000	0	200,000	Y	Y
WDFW	Dungeness	Dungeness	40,000	0	460,000	0	500,000	Y	Y
Tribal	Lower Elwha*	Elwha River	75,000	75,000	600,000	0	750,000	NA	NA

\* = DIT Group

<b>Total</b>	<b>975,000</b>	<b>345,000</b>	<b>10,755,000</b>	<b>190,000</b>	<b>12,265,000</b>
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<b>Total Coho Production</b>	<b>12,265,000</b>
<b>Percent marked</b>	<b>96%</b>



# WDFW and TRIBAL COASTAL CHINOOK MASS MARKING and CODED-WIRE TAGGING 2008

03/31/2008

Species: Chinook  
Area: Coastal Washington  
Brood: 2007  
Releases: 2008 and 2009

Agency	Hatchery	Stock	Number of fish to be released with a CWT		Number of fish to be released without a CWT		Proposed to be marked this year (Y/N)	Marked in previous year (Y/N)
			Ad Clipped	Unc clipped	Ad Clipped	Unc clipped		
Tribal	Educket Creek	Sooes River falls	0	0	100,000	0	Y	Y
WDFW	Solduc	Solduc spring/summers	0	0	250,000	0	Y	Y
Tribal	Solduc (Lonesome Cr)	Solduc spring/summers	0	0	150,000	0	Y	N
Tribal	Salmon River	Queets River falls	200,000	0	0	0	Y	Y
Tribal	Quinalt River*	Quinalt River falls	200,000	200,000	0	0	Y	Y
WDFW	Humptulips	Humptulips River falls	0	0	500,000	0	Y	N
WDFW	Lake Aberdeen	Van Winkle Creek falls	0	0	50,000	0	Y	N
WDFW	Wishkah	Wishkah River falls	0	0	200,000	0	Y	N
WDFW	Satsop Springs	Satsop River falls	0	0	500,000	0	Y	N
WDFW	Forks Creek *	Willapa River falls	200,000	200,000	1,600,000	0	Y	Y
WDFW	Nemah	Nemah River falls	0	0	2,000,000	0	Y	Y
WDFW	Naselle	Naselle River falls	0	0	3,800,000	0	Y	Y
<b>Total</b>			<b>600,000</b>	<b>400,000</b>	<b>9,150,000</b>	<b>0</b>	<b>0</b>	<b>10,150,000</b>

**Total Chinook Production**  
**Percent Marked**

**10,150,000**  
**96%**

\* DIT

# WDFW and TRIBAL COASTAL COHO MASS MARKING and CODED-WIRE TAGGING 2008

03/31/2008

Species: Coho  
Area: Coastal Washington  
Brood: 2007  
Release Year: 2008

Agency	Hatchery	Stock	Number of fish to be released with a CWT		Number of fish to be released without a CWT		Proposed to be marked this year (Y/N)	Marked in previous year (Y/N)
			Ad Clipped	Unclipped	Ad Clipped	Unclipped		
Tribal	Educket Creek	Sooes River	0	0	50,000	0	Y	Y
WDFW	Solduc	Solduc summers	0	0	200,000	0	Y	Y
WDFW	Solduc *	Solduc falls	75,000	75,000	450,000	0	Y	Y
Tribal	Salmon River *	Salmon River	75,000	75,000	500,000	0	Y	Y
WDFW	Humtuplups	Humtuplups	0	0	750,000	0	Y	Y
WDFW	Humtuplups	Humtuplups lates	0	0	450,000	0	Y	Y
WDFW	Friends Landing	Satsop River	50,000	0	0	0	Y	Y
WDFW	Mayr Brothers	Wishkah River	0	0	150,000	0	Y	Y
WDFW	Buzzard Creek	Wishkah River	0	0	25,000	0	Y	Y
WDFW	Lake Aberdeen	Van Winkle	0	0	30,000	0	Y	Y
WDFW	Bingham Creek *	Satsop River	75,000	75,000	150,000	0	Y	Y
WDFW	Bingham Creek	Satsop Lates	0	0	300,000	0	Y	Y
WDFW	Heimbigner Project	Satsop River	0	0	30,000	0	Y	Y
WDFW	Satsop Springs	Satsop River	40,000	0	410,000	0	Y	Y
WDFW	Skookumchuck	Satsop River	50,000	0	0	0	Y	Y
WDFW	Skookumchuck	Satsop lates	0	0	50,000	0	Y	Y
WDFW	Carlisle Lake	Satsop River	0	0	50,000	0	Y	Y
WDFW	Carlisle Lake	Satsop lates	0	0	50,000	0	Y	Y
WDFW	Eight Creek	Satsop lates	0	0	100,000	0	Y	Y
WDFW	Forks Creek *	Willapa River	75,000	75,000	350,000	0	Y	Y
WDFW	Forks Creek	Willapa lates	50,000	0	50,000	0	Y	Y
WDFW	Nemah	Nemah River	0	0	500,000	0	Y	Y
WDFW	Naselle	Naselle River	50,000	0	450,000	0	Y	Y
WDFW	Aberdeen Net Pens	Wishkah River	0	0	150,000	0	Y	Y
WDFW	Westport Net Pens	Humtuplups River	0	0	200,000	0	Y	Y
Total			540,000	300,000	5,445,000	0	0	6,285,000

Total Coho Production  
Percent Marked

6,285,000  
95%

\* DIT groups

# WDFW and CRITFC COLUMBIA RIVER CHINOOK MASS MARKING and CODED-WIRE TAGGING 2008

03/31/2008

Species: Chinook  
Area: Columbia River  
Brood: 2007  
Release Year: 2008 and 2009

Agency	Hatchery	Stock	Number of fish to be released with a CWT		Number of fish to be released without a CWT		Total Production	Proposed to be marked this year (Y/N)	Marked in previous year (Y/N)
			Ad Clipped	Unclipped	Ad Clipped	Unclipped			
WDFW	Sea Resources	Sea Resources - Falls	107,500	0	107,500	0	215,000	Y	Y
WDFW	Elochoman	Elochoman - Falls	90,000	0	1,910,000	0	2,000,000	Y	Y
WDFW	Cowlitz	Cowlitz - Falls	200,000	0	4,800,000	0	5,000,000	Y	Y
WDFW	N Toutle	Toutle - Falls	90,000	0	2,410,000	0	2,500,000	Y	Y
WDFW	Kalama Falls	Kalama - Falls	90,000	0	2,410,000	0	2,500,000	Y	Y
WDFW	Fallert Creek	Kalama - Falls	90,000	0	2,410,000	0	2,500,000	Y	Y
WDFW	Lewis River	Lewis River - Falls (wild)	0	100,000	0	0	100,000	NA	NA
WDFW	Washougal	Washougal - Falls	90,000	0	3,910,000	0	4,000,000	Y	Y
CRITFC	Klickitat	Klickitat - falls	575,000	0	1,100,000	2,025,000	3,700,000	Partial	N
CRITFC	Hanford Reach	Hanford - Wild	200,000	0	0	0	200,000	NA	NA
WDFW	Lyons Ferry	Lyons Ferry - Falls	800,000	200,000	0	0	1,000,000	NA	NA
WDFW	Lyons Ferry	Lyons Ferry - Falls 1+	435,000	465,000	0	0	900,000	NA	NA
WDFW	Ringold **	URBs	200,000	0	0	3,250,000	3,450,000	N	N
WDFW	Priest Rapids ***	Priest Rapids - URBs	200,000	0	0	4,800,000	5,000,000	N	N
<b>Total Fall Chinook</b>			<b>3,167,500</b>	<b>765,000</b>	<b>19,057,500</b>	<b>10,075,000</b>	<b>33,065,000</b>		
<b>Total Percent Marked</b>			<b>67%</b>						
WDFW	Turtle Rock	Wells - summers	400,000	0	0	0	400,000	N	N
WDFW	Turtle Rock	Wells - summers 1+	40,000	0	0	0	40,000	Y	Y
WDFW	Dryden Pond	Wenatchee - summers 1+	864,000	0	0	0	864,000	Y	Y
WDFW	Wells	Wells - summers	484,000	0	0	0	484,000	Y	Y
WDFW	Wells	Wells - summers 1+	320,000	0	0	0	320,000	Y	Y
WDFW	Carlton Pond	Methow / Okanogan - summers 1+	400,000	0	0	0	400,000	Y	Y
WDFW	Similkameen Pond	Methow / Okanogan - summers 1+	576,000	0	0	0	576,000	Y	Y
<b>Total Summer Chinook</b>			<b>3,084,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,084,000</b>		
<b>Total Percent Marked</b>			<b>100%</b>						
WDFW	Deep River Net Pens	Cowlitz - springs 1+	50,000	0	280,000	0	330,000	Y	Y
WDFW	Cowlitz	Cowlitz - springs	100,000	0	812,000	0	912,000	Y	Y
WDFW	Cowlitz - upper river	Cowlitz - springs	0	0	0	300,000	300,000	NA	NA

WDFW	Friends of the Cowlitz	Cowlitz - springs 1+	0	0	55,000	0	55,000	Y	Y
WDFW	Fallert Creek	Kalama - springs 1+	125,000	0	125,000	0	250,000	Y	Y
WDFW	Gobar Pond	Kalama - springs 1+	125,000	0	125,000	0	250,000	Y	Y
WDFW	Lewis River*	Lewis River - springs 1+	150,000	150,000	600,000	0	900,000	Y	Y
WDFW	Fish First	Lewis River - springs 1+	0	0	150,000	0	150,000	Y	Y
CRITFC	Klickitat	Klickitat - springs 1+	147,000	0	453,000	0	600,000	Y	Y
CRITFC	Klickitat	Klickitat - springs	TBD	TBD	TBD	TBD	300,000	NA	NA
WDFW	Tucannon	Tucannon - springs 1+	0	282,000	0	0	282,000	Y	Y
WDFW	Chiwawa Pond	Chiwawa - springs 1+	672,000	0	0	0	672,000	NA	NA
WDFW	Methow	Methow - springs 1+	0	183,000	0	0	183,000	NA	NA
WDFW	Twisp	Twisp - springs 1+	0	183,000	0	0	183,000	NA	NA
WDFW	Chewuch	Chewuch - springs 1+	0	184,000	0	0	184,000	NA	NA
Total Spring Chinook			1,369,000	982,000	2,600,000	300,000	5,551,000		
Total Percent Marked			72%						

Total Chinook 7,620,500 1,747,000 21,657,500 10,375,000 41,700,000

Total Percent Marked 70%

\* DIT group

# WDFW and CRITFC COLUMBIA RIVER COHO MASS MARKING and CODED-WIRE TAGGING 2008

03/31/2008

Species: Coho  
Area: Columbia River  
Brood: 2007  
Release Year: 2009

Agency	Hatchery	Stock	Number of fish to be released with a CWT		Number of fish to be released without a CWT		Total Production	Proposed to be marked this year (Y/N)	Marked in previous year (Y/N)
			Ad Clipped	Unclipped	Ad Clipped	Unclipped			
WDFW	Sea Resources	Sea Resources	0	0	0	0	52,500	Y	Y
WDFW	Deep River Net Pens	Grays River - Type S	30,000	0	370,000	0	400,000	Y	Y
WDFW	Grays River	Grays River - Type S	30,000	0	120,000	0	150,000	Y	Y
WDFW	Elochoman	Elochoman - Type N	30,000	0	467,000	0	497,000	Y	Y
WDFW	Elochoman	Elochoman - Type S	30,000	0	388,000	0	418,000	Y	Y
WDFW	Cathlamet FFA	Elochoman - Type N	0	0	15,000	0	15,000	Y	Y
WDFW	Cowlitz	Cowlitz - Type N	90,000	0	3,110,000	0	3,200,000	Y	Y
WDFW	N Toutle	Toutle - Type S	30,000	0	770,000	0	800,000	Y	Y
WDFW	Kalama Falls	Kalama Falls - Type N	30,000	0	320,000	0	350,000	Y	Y
WDFW	Fallert Creek	Kalama Falls - Type S	30,000	0	320,000	0	350,000	Y	Y
WDFW	Lewis River*	Lewis River - Type S	75,000	75,000	730,000	0	880,000	Y	Y
WDFW	Lewis River*	Lewis River - Type N	75,000	75,000	665,000	0	815,000	Y	Y
WDFW	Washougal (Klickitat release)**	Washougal - Type N	60,000	0	0	2,440,000	2,500,000	N	N
WDFW	Washougal	Washougal - Type N	30,000	0	470,000	0	500,000	Y	Y
CRITFC	Klickitat	Klickitat - Type N	45,000	0	955,000	0	1,000,000	Y	Y
Total			585,000	150,000	8,752,500	2,440,000	11,927,500		

Total Coho Production 11,927,500  
Percent Marked 78%

\* DIT group

\*\* Harvest allocation agreement with tribes

## Appendix B:

### IDFG Marking Update

**Proposed- BY07 Spring/Summer Chinook Marking and Tagging (Includes Sockeye)**

Sum of Number Released		Marks & Tags					
Fish Hatchery	Release Site	AD	AD/CWT	CWT	OTC	VIE/CWT	Grand Total
Clearwater	Crooked River Pond	140,000					140,000
	Crooked River Trap Site	520,000	60,000				580,000
	Lower Selway R.	120,000	80,000	100,000			300,000
	Powell Pond	320,000	80,000				400,000
	Powell Pond	255,000	80,000				335,000
	Red River Pond	360,000	60,000		300,000		420,000
	Upper Selway R. (parr)						300,000
Dworshak	Dworshak Hatchery N.F. Clearwater R.	920,000	130,000				1,050,000
Kooskia	Clear Creek	550,000		50,000			600,000
Rapid River	Hells Canyon	400,000					400,000
	Little Salmon	200,000					200,000
	Rapid River	2,400,000	100,000				2,500,000
McCall	Johnson Creek					85,000	85,000
	Knox Bridge S.F. Salmon R.	800,000	200,000				1,000,000
Pahsimeroi	Pahsimeroi R.	896,720	50,000				946,720
Sawtooth	Sawtooth weir	178,856	120,000				298,856
Oxbow (Fall Chinook)	IPC Hells Canyon Dam/Pittsburg Landing		185,000				185,000
Eagle/Sawtooth (Sockeye)	Upper Salmon R. & Lakes	120,000	75,000				195,000
<b>Grand Total</b>		<b>8,180,576</b>	<b>1,220,000</b>	<b>150,000</b>	<b>300,000</b>	<b>85,000</b>	<b>9,935,576</b>

# Proposed- BY 08 Steelhead Marking and Tagging

Sum of Number Released			Marks & Tags					
Hatchery	Stock	Release Site	AD	AD/CWT	No Clip	No Clip/ CWT	AD/CWT/LV	Grand Total
Clearwater	Dwor B	Lolo Cr.			50,000			50,000
		Meadow Cr.			25,000			25,000
		Mill Cr.			25,000			25,000
		Crooked R.	90,000	60,000	83,000			233,000
		Red R.	70,000	30,000	150,000			250,000
Dworshak	Dwor B	S.F. Clearwater R. (Red House Hole)	200,000	60,000				260,000
		S.F. Clearwater R. (Red House Hole)	400,000					400,000
		N.Fk. Clearwater R. (DNFH)	1,050,000				150,000	1,200,000
		Clear Cr.	300,000					300,000
		Newsome Cr.			100,000			100,000
Hagerman	Dwor B	American R.			100,000			100,000
		Little Salmon R. (Stinky Springs)	70,000	30,000				100,000
	PAH A	East Fk. Salmon R. (Lower)	70,000	30,000				100,000
		Little Salmon R. (Stinky Springs)			160,000			160,000
	SAW A	Little Salmon R. (Hazard Cr.)			40,000			40,000
Magic Valley	Dwor B	Salmon R. (Sawtooth Weir)	690,000	60,000				750,000
		Yankee Fk. Salmon R.	100,000		140,000			240,000
		Little Salmon R. (Stinky Springs)	155,000	60,000				215,000
		Squaw Cr. Pond		60,000				60,000
		Squaw Cr.	190,000					190,000
	E.F. Natural	East Fk. Salmon R. (Lower)	195,000	30,000				225,000
		East Fk. Salmon R. (Weir)				60,000		60,000
		Salmon R. (Red Rock)	90,000	30,000				120,000
		Salmon R. (Shoup Bridge)	80,000					80,000
		Pahsimeroi R. (Weir)	30,000					30,000
Niagara Springs	PAH A/SAW A	Salmon R. (Colston Corner)	110,000	30,000				140,000
		Slate Cr.	10,000	30,000	60,000			100,000
	SAW A	Yankee Fk. Salmon R.	30,000	30,000	30,000			90,000
		Salmon R. (Tunnel Rock)	60,000					60,000
		Salmon R. (McNabb Point)	90,000	30,000				120,000
Grand Total	Upper Salmon B	Valley Cr.			50,000			50,000
	Oxbow A	Squaw Cr.		60,000				60,000
	PAH A	Little Salmon R. (Stinky Springs)	245,000	30,000				275,000
		Snake R. (Hells Canyon Dam)	495,000	30,000				525,000
			Little Salmon R. (Stinky Springs)	140,000	30,000			170,000
		Pahsimeroi R. (Weir)	770,000	60,000			830,000	
			5,730,000	780,000	1,013,000	60,000	150,000	7,733,000



## Appendix C:

### CDFO Request for Marking Variance

## Request for Marking Variance

### Regional Mark Committee

Agency: CDFO

Date: March 28, 2008

Marking Coordinator: Name: Roberta Cook

Email: [cookr@pac.dfo-mpo.gc.ca](mailto:cookr@pac.dfo-mpo.gc.ca)

1. Mark Requested: Agency Only wire tag
2. Details of Marking
  - a) Number of Fish: 205,000 agency tagged, 950,000 additively only
  - b) Species and Run: late run sockeye (fall)
  - c) Brood Year: 2007
  - d) Stock(s): cultus lake, sakinaw lake
  - e) Hatchery(ies): Inch creek, Reservoir, Quillaker
  - f) Geographic Areas: lower Fraser, Georgia Strait mainland north
  - g) Release date: Apr 08 - Apr 09
  - h) Duration of this marking program:  
Since 2007, CDFO is studying various rearing and release strategies for cultus and sakinaw sockeye due to their 'endangered' status.
3. Specific Management and/or Research Objectives  
Captive broodstock program since 2001
4. Impact on Coastwide CWT program
  - a) Predicted number observed recoveries by state/province and by year  
none
  - b) Changes to current CWT sampling program  
none
  - c) Other  
none
5. Specify Expected Benefits  
- differential rearing and release strategies to track smolt and adult migration in an effort to re-establish self-sustaining natural population  
- reduce the possibility of extirpation of unique stocks
6. Alternatives Considered (specify reasons for rejection)  
Complemented by predator control, habitat restoration, restrictions in First Nations, commercial and recreational fisheries.

Please forward request to :

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Regional Mark Coordinator  
Pacific States Marine Fisheries Commission  
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## Appendix D:

### 2008 Mark Meeting Attendees & Contact Information

## 2008 Mark Meeting Attendees

Name	Agency	Mailing Address/ Telephone/E-mail Address
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