



TO: U.S. Section, Pacific Salmon Commission

FROM: **Scott McPherson, Co-Chair CWTIT and U.S. CWTIT Members**

DATE: February 12, 2013

SUBJECT: 2013 Coded Wire Tag (CWT) Proposed Improvement Funding
Recommendations—U.S. projects

The U.S. CWTIT met via teleconference on January 31, 2013 and deliberated on 18 proposals that were received by the close of the US Request For Proposals (Jan. 8th). We recommend funding for 14 of those projects as per Table 1. Rank 15 is not a project, but rather a reserve of about \$12,000 to provide funding to defray travel expenses for U.S. CWTIT members for attending workshops. The rankings were determined pooled ranks, then by the consensus during deliberations of the U.S. CWTIT members. Our recommendations total \$1,500,000. The total through rank 14 is \$1,481,627 and the remainder is \$18,373, to be potentially used on the reserve and a portion of Rank 16. We did not recommend funding for the projects ranked 18 and 19. The bilateral CWTIT met via teleconference on February 5, 2013 and the U.S. recommendations were received favorably by the Canadian members after clarifications for some projects.

Briefs for each project are provided in the section after Table 1 that include a description of the project, the intended improvements and the consequences of not funding the project. Projects that are one-time funding requests and those that require future funding are identified at the end of each brief.

Appendix 1 provides additional details and cite the Tech Report 25 issues addressed. The proposals are ordered by rank in Table 1, the project briefs, and Appendix 1.

US CWTIT Members: Scott McPherson (Co-Chair), Gary Morishima, Larrie La Voy, Kristen Ryding, Marianna Alexandersdottir, Marianne McClure, Ken Johnson

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Table 1. USCWTIT projects received for FY 2013 and those proposed for funding.

Rank/ Prop #	Agency	Project Type	Project Description	Cost	Fund ?
1/10	WDFW	Equipment	Coded Wire Tag Field Equipment Replacement (85 Wand Detectors)	\$248,543	Yes
2/05	WDFW	Sampling	Sampling Washington Ocean Salmon Fisheries	\$354,492	Yes
3/11	ADFG	Sampling	SE Alaska Marine Sport Catch Sampling	\$57,367	Yes
4/17	ODFW	Ind. Stock	Mid-Oregon Coast (Elk River) CWT Tagging, Recovery, Escapement	\$125,195	Yes
5/06	ADFG	Equipment	ADFG MTA Lab Coded Wire Tag Reading Station Upgrades	\$29,304	Yes
6/03	ADFG	Sampling	SEAK Commercial Port Sampling No Tags	\$58,164	Yes
7/04	ODFW	Equipment	Replace Outdated Handheld CWT (Wand) Detectors - 30 Wands	\$101,063	Yes
8/07	ODFW	Equipment	Coded Wire Tag Database Reports, Training and Data Logger Acquisition	\$99,653	Yes
9/08	ADFG	Coordination	U.S. CWTIT Co-Chair: Partial Funding	\$14,820	Yes
10/16	ADFG	Ind. Stock	Chilkat River Chinook CWT	\$86,801	Yes
11/18	ADFG	Ind. Stock	Stikine River Chinook Smolt CWT	\$134,562	Yes
12/02	ODFW	Sampling	Oregon CWT Sampling in the Columbia River Ocean Area	\$112,597	Yes
13/09	Makah Tribe	Equipment & Sampling	Staff Support and Equipment For Coded-Wire Tag Lab	\$46,459	Yes
14/15	Lummi Tribe	Equipment	Lummi CWT Equipment Acquisition	\$12,607	Yes
			TOTAL through Rank 14	\$1,481,627	
NA	Pacific Salmon Commission	Admin	Funding Hold-back for next 2 CWTIT Workshops	\$13,200	¹
16/01	Stillaguamish Tribe	Equipment	Stillaguamish Chinook CWT Processing Improvement Funds	\$30,922	²
17/12	Lummi Tribe	Sampling	Lummi Harvest By-Catch Sampling	\$39,221	²
18/14	WDFW	Database	Washington Regulations Database	\$125,363	NO
19/13	WDFW	Equipment	Purchase Individual Fish Counters of Mass Marked Hatchery Releases	\$177,399	NO
			Total recommended for funding	\$1,500,000	

¹ This project would provide support costs for two CWTIT Workshops in 2013 and 2014; discussions with U.S. Section TBD at February 2013 PSC Annual Meeting; note that the sum of ranks 1-14 is \$18,373 short of \$1.5M.

² Insufficient funding, but funding may be available for a portion of Rank 16.

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U.S. Project Briefs for 2013 U.S. CWTIT Projects

Primary questions:

- 1) **Project description.**
- 2) **Why fund it?**
- 3) **What happens if we don't fund it?**

Rank	#	Agency	Project Description	Cost	Fund?
1	10	WDFW	CWT field equipment replacement-85 Handheld Wands	\$248,543	YES

1. This EQUIPMENT project will purchase 85 new-style NMT "T-wands" at \$2,924 (with trade-in) each. Costs include a 10% volume discount contingent on trade-in (\$1,000 for working wand).
2. Will increase the accuracy of detecting CWTs in fisheries and on spawning grounds and sampling efficiency, and the ease of handling Chinook salmon for samplers and commercial processors. This project is cost effective as WDFW waived its normal overhead charge of about 28% for this project.
3. WDFW will continue to sample using their old blue "stick" NMT wands which are less sensitive in detecting tags and ergonomically more difficult for field staff.

Overall: This is an equipment purchase that will have lasting benefits to the CWT system; a proposal is expected next cycle.

Rank	#	Agency	Project Description	Cost	Fund?
2	5	WDFW	Sampling Washington ocean salmon fisheries	\$354,492	YES

1. This SAMPLING project funds the portion (about 50%) of the base sampling for the WA coast ocean troll and sport fisheries that was lost through the discontinuation of Anadromous Fish Act (AFA) grants 3 years ago. This project was funded in 2011 and 2012 using CWTIT funds with the expectation that WDFW would be able to find replacement funding for the loss of the AFA funds; unfortunately, replacement funding has not been secured.
2. The sampling rates for these fisheries will be less without the CWTIT funding.
3. Sampling rates will be lower and CWT data imprecise without the CWTIT funding.

Overall: This project covers the base funding for WDFW previously provided by the AFA. The Chinook sampling rates in the ocean troll fishery were 41% troll (catch = 27,000) in 2011 and 42% (catch = 37,000) in 2012; the average rate for 2006-2012 is 50%. The sampling rates in the sport fishery was 40% sport (catch = 29,000) in 2011 and 45% (catch = 34,000) in 2012; the average rate for 2006-2012 was 41%. This is a well established and well run project. This project will require future funding.

Rank	#	Agency	Project Description	Cost	Fund?
3	11	ADFG	Southeast Alaska Marine Sport Catch Sampling	\$57,367	YES

1. This SAMPLING project increases sport sampling rates in Juneau, Ketchikan and Craig to >20%, by adding 6 catch samplers, who will sample for CWTs and not be involved in creel estimates of harvest. The Chinook sampling rates in Juneau have averaged 12%

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over the past 5 years (average harvest = 7,600) and 10% in Ketchikan (average harvest = 14,000). Sampling rates have averaged 21% in Craig (average harvest = 6,200) with its larger mix of PSC indicator stocks.

2. PSC Indicator Stocks are caught in these fisheries and past sampling rates for those stocks averaged 12% in Juneau and 10% in Ketchikan over the past five years.
3. Without funding, the sample rates for these fisheries will not be expected to meet coast wide standards. The Juneau sport fishery will not produce enough CWTs to adequately estimate exploitation by age for the jointly managed Taku transboundary river stock.

Overall: It was noted that SEAK sport was below 20% in TR25, 18-19% overall, but that sampling rates are too low in the ports of Juneau (12%) and Ketchikan (10%), which take about 30-35% of SEAK sport catch. In 2011, with CWTIT funding, sampling rates were raised in those 2 ports; this project fell below the cut line in 2012. This project will require future funding.

Rank	#	Agency	Project Description	Cost	Fund?
4	17	ODFW	Mid-Oregon Coast CWT tagging, recovery, and escapement of Elk River Fall Chinook	\$125,195	YES

1. Mid-Oregon Coast (MOC) INDICATOR STOCK—this project covers several aspects needed for an Exploitation Rate Analysis (ERA) indicator stock, including tagging the hatchery stock with CWTs, escapement sampling, and estimation and sampling of the inriver freshwater (terminal) harvest. This stock is used in the ERA by the CTC.
2. A MOC indicator stock would help close a geographic gap in coverage identified in TR25 and by Oregon for the mid-Oregon coast stock aggregate.
3. There won't be a MOC indicator stock without this or alternative funding.

Overall: This project requires future funding and the tags are recovered in PST fisheries in both countries.

Rank	#	Agency	Project Description	Cost	Fund?
5	6	ADFG	ADGF MTA Lab CWT Reading Station Upgrades	\$29,304	YES

1. This EQUIPMENT project upgrades 8 outdated CWT reading stations at the Alaska Mark Tag, and Age Lab in Juneau with a digital imaging system (DIS) that will consist of a dissecting microscope equipped with a digital video camera and 10-inch hi-resolution LCD monitor for viewing and reading CWTs.
2. It improves efficiency, accuracy, and timeliness of reading and reporting CWTs from SEAK Chinook fisheries.
3. CWT reading and reporting will be less timely and efficient.

Overall: This is a one-time equipment purchase that will have lasting benefits to the CWT system.

Rank	#	Agency	Project Description	Cost	Fund?
6	3	ADFG	SEAK Commercial Port Sampling NO TAGs	\$58,164	YES

1. This SAMPLING project provides sampling costs in commercial fisheries to reduce the impacts and processing costs associated with the increase in Chinook with adipose clips, but no tags present, i.e., NO TAGs. The sampling protocols are to use the new T-Wands from NMT (purchased last year) to eliminate processing and shipping of NO TAGs, in commercial fisheries. The NO TAG rate, for Chinook with adipose clips, has gone from

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7% before mass marking in Washington and Oregon to over 50% in the outside troll fishery at present.

2. Will save about \$700,000 over next 10 years in NO TAG shipping and processing alone. Also, it will increase sampling efficiency by commercial port samplers, reduce handling of Chinook salmon, and raise sampling rates.
3. The Tag Lab will be overrun with meaningless heads, reporting will be less timely and sampling rates in SEAK commercial fisheries will decrease.

Overall: This project covers part of the cost of dealing with NO TAGs resulting from mass marking in the PNW and creates efficiencies for field sampling and data processing and reporting. This project will require future funding.

Rank	#	Agency	Project Description	Cost	Fund?
7	4	ODFW	Replace Outdated Handheld CWT Wand Detectors	\$101,063	YES

1. This EQUIPMENT project proposes to purchase 30 new-style NMT T-Wands at \$3,369 (with trade-in and agency overhead) each.
2. Will increase the accuracy and efficiency of detecting CWTs in fisheries and on spawning grounds, and ease the handling of Chinook salmon for samplers and commercial processors.
3. Oregon will continue to sample using their remaining old blue NMT wands which are less sensitive in detecting tags and ergonomically more difficult for field staff. This is an equipment purchase and will have lasting CWT improvements.

Overall: This is an equipment purchase that will have lasting benefits to the CWT system.

Rank	#	Agency	Project Description	Cost	Fund?
8	7	ODFW	CWT Database Reports, Training and Data Logger Acquisition	\$99,653	YES

1. This EQUIPMENT project funds data loggers and training at 10 hatcheries to transmit tag and recovery CWT data electronically and eliminate the old paper forms. This is part of ODFW's complete overall of their Data Reporting System upgrade. The project also documents all of the next aspects of CWT system to have a permanent working knowledge and transferability of that knowledge to new employees and interested outside parties.
2. Faster, more accurate and timely data, easier input and retrieval.
3. CWT reporting takes longer, less accurate and timely.

Overall: This project will allow ODFW to report CWT data earlier and more accurately, but not by Jan. 31st of the year following collection of data. This is a one-time equipment purchase and will have lasting CWT improvements.

Rank	#	Agency	Project Description	Cost	Fund?
9	8	ADFG	U.S. CWTIT Co-Chair: Partial Funding	\$14,820	YES

1. This ADMINISTRATIVE project pays for the U.S. Co-Chair time spent above and beyond that estimated to be spent on average by the other 6 U.S. CWTIT members.
2. Will maintain the ability of the Co-Chair to produce the products of the CWTIT, including production of the annual timeline/work plan, the annual RFP, organizing the

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annual workshop, the annual progress report to the PSC each January, development of the draft ranks/recommendations and exchange with Canada, the annual bilateral recommendations document to the PSC each February, and working with the PIs and NOAA on all aspects of producing proposals and obtaining grants through NOAA.

3. Other funding or personnel will need to accomplish these tasks, which are part of the 2009 PST Agreement.

Overall: The CWTIT process was added to the 2009 PST Agreement without any funding to administer it. All of the CWTIT members are on other PSC technical committees; primary administration of the program falls back to the Co-Chair.

Rank	#	Agency	Project Description	Cost	Fund?
10	16	ADFG	Chilkat River Chinook CWT (fall tagging)	\$86,801	YES

1. Chilkat INDICATOR STOCK—wild stock capture and tagging of juveniles in fall of 2013 will continue the time series of CWT statistics for this natural stock. This stock is used by the CTC for both an exploitation rate indicator stock and an escapement indicator. It was proposed as a PSC Chinook Model Stock by ADFG in 1998 and the data base has been built by ADFG for that purpose. It is awaiting inclusion as a model stock when the CTC's model improvement workgroup has completed model work to include it as such.
2. To have a Northern SEAK Inside (NSI) exploitation rate indicator stock now and, in the future, a NSI Indicator Model Stock for SEAK.
3. CWT geographic coverage GAP for NSI (Chilkat) stocks in SEAK.

Overall: This project has met tagging goals each year it has been run, including 2010 and 2011 with CWTIT funding. This project was not funded by CWTIT in 2012 as it was below the cut line. Future funding is required to continue to tag this stock; the recovery of tags from adults in ocean, terminal and the escapement is funded by separate agency funding.

Rank	#	Agency	Project Description	Cost	Fund?
11	18	ADFG	Stikine River Chinook Smolt CWT	\$134,562	YES

1. This INDICATOR STOCK project funds efforts to capture and CWT wild smolt from the Stikine River stock, with a tagging goal of > 30,000 smolt/year with combined U.S. and Canadian funding. This is a jointly managed transboundary river stock and is an escapement indicator stock for the CTC/PSC.
2. This project provides the ability to jointly manage the terminal run of Stikine River Chinook by providing estimates of harvest, exploitation and total adult and smolt production.
3. Without it, we won't have the data for run reconstruction and harvest sharing, making management of these fisheries difficult.

Notes: This project has been successful as CWT tagging goals have been exceeded over the past 4 years. Funding for tag recovery in marine fisheries, in Canadian fisheries, and in the escapement are in place and funded with other funding sources.

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Rank	#	Agency	Project Description	Cost	Fund?
12	2	ODFW	Improvements to Oregon ocean coded wire tag sampling in Columbia River Management Area	\$112,597	YES

1. This SAMPLING project funds the portion of the base sampling for the Columbia River mouth and ocean management area in Oregon for ocean troll and sport fisheries that was lost through the Anadromous Fish Act (AFA) 2 years ago. This project was funded in 2011 and 2012 using CWTIT as a stop-gap measure. Note that about 50% of this project represents CWT improvements by continuing full electronic sampling, which began in 2011.
2. To conduct basic sampling in these fisheries and implement full electronic sampling.
3. The sampling rate in these fisheries will drop and estimates based on data from these fisheries will be less precise.

Overall: This project covers half or more of the base funding for ODFW lost through the AFA. The Chinook sampling rates in the troll fishery have averaged 38% for 2006-2012 and 46% in the sport fishery. This is a well established and well run project. This project will require future funding.

Rank	#	Agency	Project Description	Cost	Fund?
13	9	Makah Tribe	Staff Support and Equipment for Coded-Wire Tag Lab	\$46,459	YES

1. This EQUIPMENT and SAMPLING project pays for equipment upgrades in the Makah Tribe CWT Lab, including improvements to the electronic reading station, a corer, some sampling costs for the Makah Tribe fisheries, and a T-Wand detector.
2. The harvests in the Makah tribal fisheries are of the magnitude to warrant the equipment upgrades and sampling time. This is a cost-effective project and will increase sampling rates, sampling efficiency, and the timeliness and accuracy of CWT data reporting from the Makah fisheries.
3. Sampling rates will be lower, CWT data will be reported less timely and likely not in time for the PFMC process.

Overall: The equipment portion of this project will provide lasting benefits to the CWT program. Future funding is required for the sampling portion of this proposal

Rank	#	Agency	Project Description	Cost	Fund?
14	15	Lummi Tribe	Lummi CWT Equipment Acquisition	\$12,607	YES

1. This EQUIPMENT project funds an electronic reading station with LCD screen and 2 NMT T-Wands for sampling Lummi Chinook by-catch. The Lummi catch of Chinook ranges from < 100 to about 6,000 fish.
2. Sampling will be improved with use of the T-Wands (accuracy) and reading of recovered CWTs will be more accurate, efficient and timely with the new reading station.
3. Data reporting will be less accurate and timely, and sampling of CWTs will be less accurate.

Overall: This equipment purchase will provide lasting benefits to the CWT program.

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Rank	#	Agency	Project Description	Cost	Fund?
16	1	Stillaguamish Tribe	Stillaguamish Chinook CWT Processing Improvement Funds	\$30,922	TBD

1. This EQUIPMENT and INDICATOR STOCK project seeks funds to buy 2 new electronic reading and dissection stations for the Stillaguamish tag lab and hatchery. Currently, equipment is borrowed and transferred between the lab and the hatchery. It also covers the cost of 35,000 CWTs to begin tagging the fall stock. An upgrade of the electronic database, for standardization and timeliness, is also proposed. The tagging proposed is in addition to the exploitation rate indicator for the Stillaguamish summer Chinook stock.
2. Extraction, reading, and reporting of CWTs from the spawning grounds and terminal fishery would be more efficient and the Stillaguamish lab would have ownership of the equipment.
3. The Stillaguamish will still have to borrow equipment and timeliness of reporting is not improved.

Overall: The equipment purchase would have lasting benefits to the CWT program.

Rank	#	Agency	Project Description	Cost	Fund?
17	12	Lummi Tribe	Lummi Harvest By-Catch Sampling	\$39,221	Below cut

1. This SAMPLING project proposes to fund expanded sampling Lummi fisheries for one biologist and 3 technicians and travel costs, in mixed stock fisheries in areas 7 and 7A (WA state). Harvest ranges from < 100 to 6,800.
2. Sampling of these fisheries would increase. Existing rates by WDFW and the Lummi Tribe are 15% to 70%.
3. Sampling rates will be acceptable and likely be near or above 20%.

Overall: Stock composition in these boundary area fisheries is important for ESA considerations (both Puget Sound Chinook and Southern Resident Killer Whale). However, by-catch in this fishery is quite small, ranging from 100 to 6,800 Chinook in recent years so the number of CWT recoveries is anticipated to be small.

Rank	#	Agency	Project Description	Cost	Fund?
18	14	WDFW	Washington Regulation Database	\$125,363	NO

1. This DATABASE project provides funding to create a better regulations database for Washington state fisheries. This project would focus on the sport fishery regulations, as a start to the process.
2. Analysts have difficulty in determining regulations for WA state fisheries, particularly where Mark-Selective (MS) and non MS fisheries occur in the same area during a fishing season.
3. Access to WA state fishery regulations will remain cumbersome.

Overall: This project would, if designed correctly, provide access to analysts to incorporate regulations into analysis of CWT data and have long-lasting effects. It needs to be coordinated with the PSC technical committees and RMIS. The USCWTIT determined that without these capabilities the design was incomplete and the price tag too high for the information to be obtained.

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Rank	#	Agency	Project Description	Cost	Fund?
19	13	WDFW	Juvenile Fish Counting Systems for Enumerating Releases of Mass Marked Hatchery Releases	\$177,399	NO

1. This EQUIPMENT project proposes to fund auto fish counters in 12 of 22 auto marking trailers.
2. More precise estimates of total marked release for mass marking.
3. Some escapement CWT expansions won't be accurate.

Overall: This application is primarily for enumerating release of mass marked fish. The ERA analysis by the CTC is done only on Chinook with CWTs. The US CWTIT does not recommend funding this project.

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Appendix 1. Details of proposed projects and funding levels for the CWT Improvement Program in 2013, per USCWTIT recommendations January 31, 2013.

Rank	Project No.	Project Category	TR25 Issue	Project Title	Region / Area	Agency/ Contact	Cost this FY	Project Description	Comments
1	US-10	CWT Equipment Upgrade	12, 13	CWT Field Eq. Replacement: Handheld Wand Detectors (85)	WA	WDFW/ John Kerwin	\$248,543	Buys 85 new NMT Handheld Wands with trade-in of 85.	Increases accuracy of detecting CWTs, sampling efficiency, ease of sampling and handling Chinook.
2	US-5	Mixed-stock Sampling	7, 8, 12	Sampling Washington Ocean Salmon Fisheries	WA Coast	WDFW/ Doug Milward	\$354,492	Pays about 50% of program to maintain catch sampling rates for ocean troll & sport.	Replaces sampling lost from Anadromous Fish Act. Sampling rates have been >40%.
3	US-11	Mixed-stock Sampling	7, 8	SEAK Marine Sport Catch Sampling	SEAK	ADFG/ Mike Jaenicke	\$57,367	Increase catch sampling rates for marine sport.	Rates for SEAK sport have been <20% overall and <15% in some major ports.
4	US-17	Indicator Stock Tagging – without representation	1,3, 4, 6	Mid-Oregon Coast CWT Recovery, and Escapement of Elk River Fall Chinook	ORC	ODFW/ Shelly Miller	\$125,195	CWT indicator stock for the mid-Oregon Coast aggregate	Creel survey FW sport, hatchery & esc. CWTs, survey esc. CWT & clip 325,000 presmolts.
5	US-6	CWT Lab Equipment Upgrade	13	ADFG MTA Lab CWT Reading Station Upgrades	SEAK	ADFG/ Dion Oxman	\$29,304	Replace CWT reading stations with LCD displays in CWT Lab.	Improves efficiency, accuracy and data reporting of CWTs in SEAK.
6	US-3	Mixed-stock Sampling	4, 7, 13	SEAK Commercial Port Sampling "No Tags"	SEAK	ADFG/ Anne Reynolds	\$58,164	Pays for sampling costs associated with about 50% No-Tag rate in commercial fisheries.	Saves about \$70,000/year above project cost by not shipping heads with no tags. Increases efficiency of sampling, shipping, reporting and CWT Lab processing.
7	US-15	CWT Equipment Upgrade	12, 13	Replace Outdated CWT Handheld Wand Detectors (30)	OR	ODFW/ Ken Johnson	\$101,063	Buys 30 new NMT Handheld Wands with trade-in of 30.	Increases accuracy of detecting CWTs, sampling efficiency and ease of sampling and handling Chinook.
8	US-7	Database Reporting System and Field Data Equipment Upgrade	13, 14, 17, 18	CWT Database Reports, Training and Data Logger Acquisition	OR	ODFW/ Mark Engleking	\$99,653	Funds data loggers for 10 hatcheries to electronically upload release & recovery CWT data into new ODFW system.	Replaces archaic paper forms, trains hatchery staff for new equipment & uploading. Documents all aspects of new ODFW CWT processes & systems.
9	US-8	CWTIT Administration	19	U.S. CWTIT Co-Chair Partial	SEAK, S.U.S.	Pacific Salmon Commission /	\$14,820	Funds time spent producing U.S.	Products include annual work plan, progress reports,

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				Funding		Ken Medlock		CWTIT projects above CWTIT member.	annual RFP, annual CWTIT workshop, recommendations documents, assistance.
10	US-16	Indicator Stock Tagging – without hatchery representation	1, 2	Chilkat River Chinook CWT	Northern SEAK	ADFG/ Randy Bachman	\$86,801	CWT wild Chinook juveniles for this ERA and escapement indicator stock, and proposed model stock.	Tagging goal has been met in past, tagging rate is about 9% of wild population per brood. Was funded in 2010 and 2011, not 2012.
11	US-18	Indicator Stock Tagging – without hatchery representation	1, 2	Stikine River Chinook Smolt CWT	TBR	ADFG/ Phil Richards	\$121,883	CWT wild smolt in spring 2014 cooperatively with Canada for TBR stock.	Tagging goal is a minimum of 30,000 yearling wild smolt; goal exceeded last 4 years. Produces run reconstruction and production data for joint management of relatively large stock.
12	US-2	Mixed-stock Sampling	7, 8, 12	Ocean Sampling North of Cape Falcon	N Or Coast	ODFW/ Eric Schindler	\$100,101	Maintain catch sampling for Columbia River Management Area, for ocean troll & sport.	Replaces sampling lost from Anadromous Fish Act (about 50% of proposal) and allows full electronic sampling, which started in 2011.
13	US-9	Sampling Mixed-Stock Fisheries & CWT Lab Equipment	7, 10, 13	Staff Support & Equipment for CWT Lab	WACO	Makah Tribe/ Hap Leon	\$46,459	Provides and additional sampler for summer season. Lab eq: reading station, ward detector, corer.	Improves fishery sampling rates and timeliness, accuracy and data reporting in Makah Tribe CWT Lab.
14	US-15	CWT Lab & Sampling Equipment	7, 13	Lummi CWT Equipment Acquisition	PS	Lummi Tribe/ Nicholas Kunkel	\$12,607	Funds purchase of: 2 NMT T-Wands and Electronic microscope/CWT reading station.	Improves sampling and CWT reading efficiency, accuracy and data reporting in Lummi Tribe CWT Lab.
15				Costs of CWTIT Workshops		CWTIT/ Scott McPherson	\$13,200	Funds meeting costs for CWTIT members to attend annual CWTIT workshops.	Discussions pending with U.S. Section.
16	US-1	Indicator Stock Sampling & Tagging	2, 5, 13	Stillaguamish Chinook CWT Processing Improvement Funds	PS	Stillaguamish Tribe/ Jason Griffith	\$30,922 ¹	Funds upgrade of CWT database, buys 2 new CWT dissection and reading stations and CWTs for tagging.	Improves the timelines and accuracy of CWT reporting, CWT processing in lab, and provides 35K CWTs for tagging this fall ERA indicator stock.
				U.S. Total			\$1,500,000		

¹ A portion of this project will be funded, pending funding amounts above it.