

PSC - SELECTIVE FISHERY EVALUATION COMMITTEE

**2011 UPDATE
TO MARK COMMITTEE**

Primary Duties of SFEC

- ⦿ Serve as clearinghouse for coordination and reporting on MM and MSF programs
- ⦿ Provide advice to the PSC regarding potential adverse impacts of MM and MSFs on the CWT program
- ⦿ Assess and monitor the cumulative impacts of MSFs on stocks of concern to the PSC
- ⦿ Review MM and MSF proposals

2010 Membership of the RCWG

Canada

Roberta Cook*, DFO

Cheryl Lynch, DFO

U.S.

Ron Olson*, NWIFC

George Nandor, PSMFC

Ron Josephson, ADFG

Marianne McClure, CRIFC

Mark Kimbel, WDFW

Carrie Cook-Tabor, USFWS

Ken Johnson, ODFW

* *Co-Chairs*

Primary RCWG Tasks

- ◎ SFEC Annual Review of MM Proposals
 - Determine potential impacts on sampling and tagging programs, and suggest modifications.
- ◎ Annual Coordination Report
 - Documentation of MM, DIT, MSF, and CWT sampling activities
- ◎ Coordinate and report on continuing research on ETD and MM technologies

2010 Membership of the AWG

Canada

Gayle Brown ^{a b}
Arlene Tompkins
Joel Sawada

U.S.

Marianna Alexandersdottir ^b,
NWIFC
Gary Morishima ^a
Kirt Hughes, WDFW
Rishi Sharma, CRIFC
Kristin Ryding, WDFW
Norma Jean Sands, NMFS
Shaun Clements, ODFW
Annette Hoffmann, WDFW
Laurie Peterson, WDFW

^a Co-Chairs of SFEC

^b Co-Chairs of AWG

Primary AWG Tasks

- ◎ SFEC Annual Review of MSF Proposals
 - Provide advice to proponents regarding the design of MSFs and the conduct of sampling and monitoring programs
- ◎ Develop analytical tools for the evaluation of MM programs and MSFs and their potential impacts on the CWT program
- ◎ Design marking and sampling strategies that will achieve desired precision for CWT-based estimates

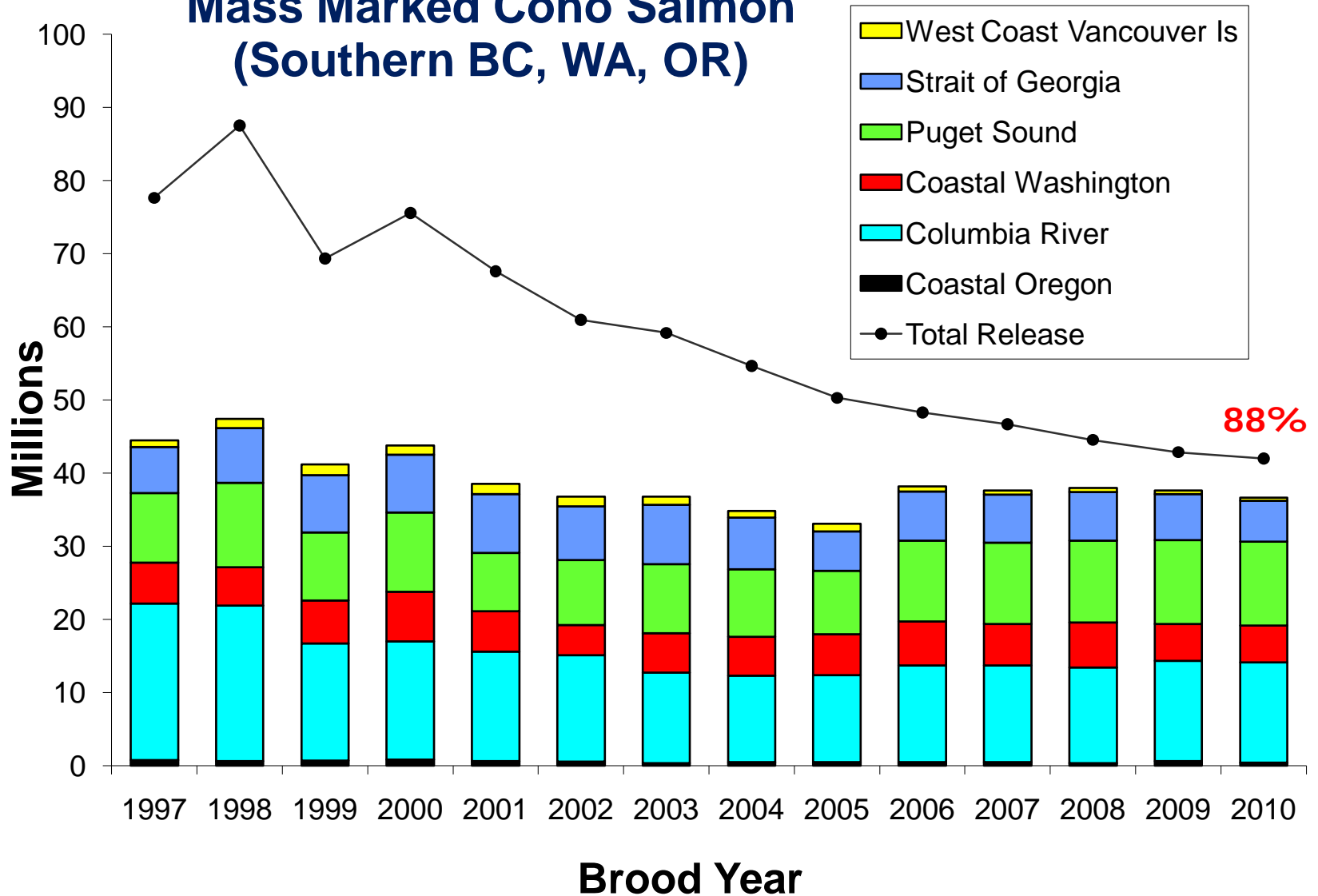
Current SFEC Projects

- ⦿ Review of proposed MM & MSFs (2011)
- ⦿ Review of 2005-2009 MM and MSFs
 - Releases
 - MSFs
 - Sampling methods
 - MM machines
 - Data Quality
- ⦿ DIT analyses for Chinook and Coho

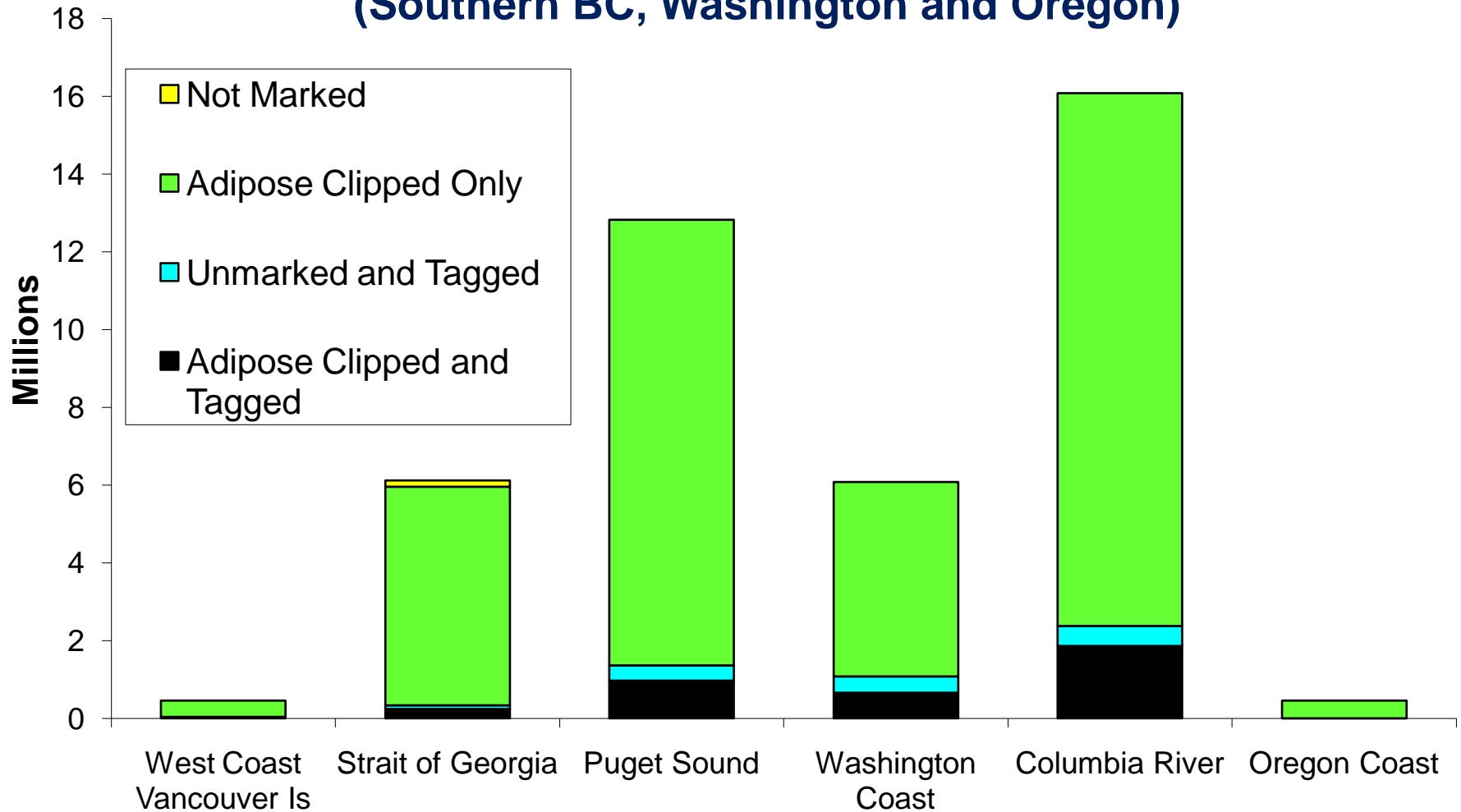
Coho Mass Marking Proposals (18)

Area	Agency	DIT Group	2010 MM (millions)	2011 MM (millions)
Southern BC	CDFO	2	6.8	6.0
Puget Sound	WDFW/Tribes	7 6	11.2	11.1
	USFWS	1	0.3	0.3
WA Coast	USFWS	2	0.7	0.7
	WDFW/Tribes	4	4.4	4.4
Columbia River	USFWS	1	0.3	0.3
	WDFW	2	8.5	8.5
	ODFW	1	4.9	4.9
OR Coast	ODFW	0	0.6	0.4
	Total	20	37.7	36.7

Mass Marked Coho Salmon (Southern BC, WA, OR)



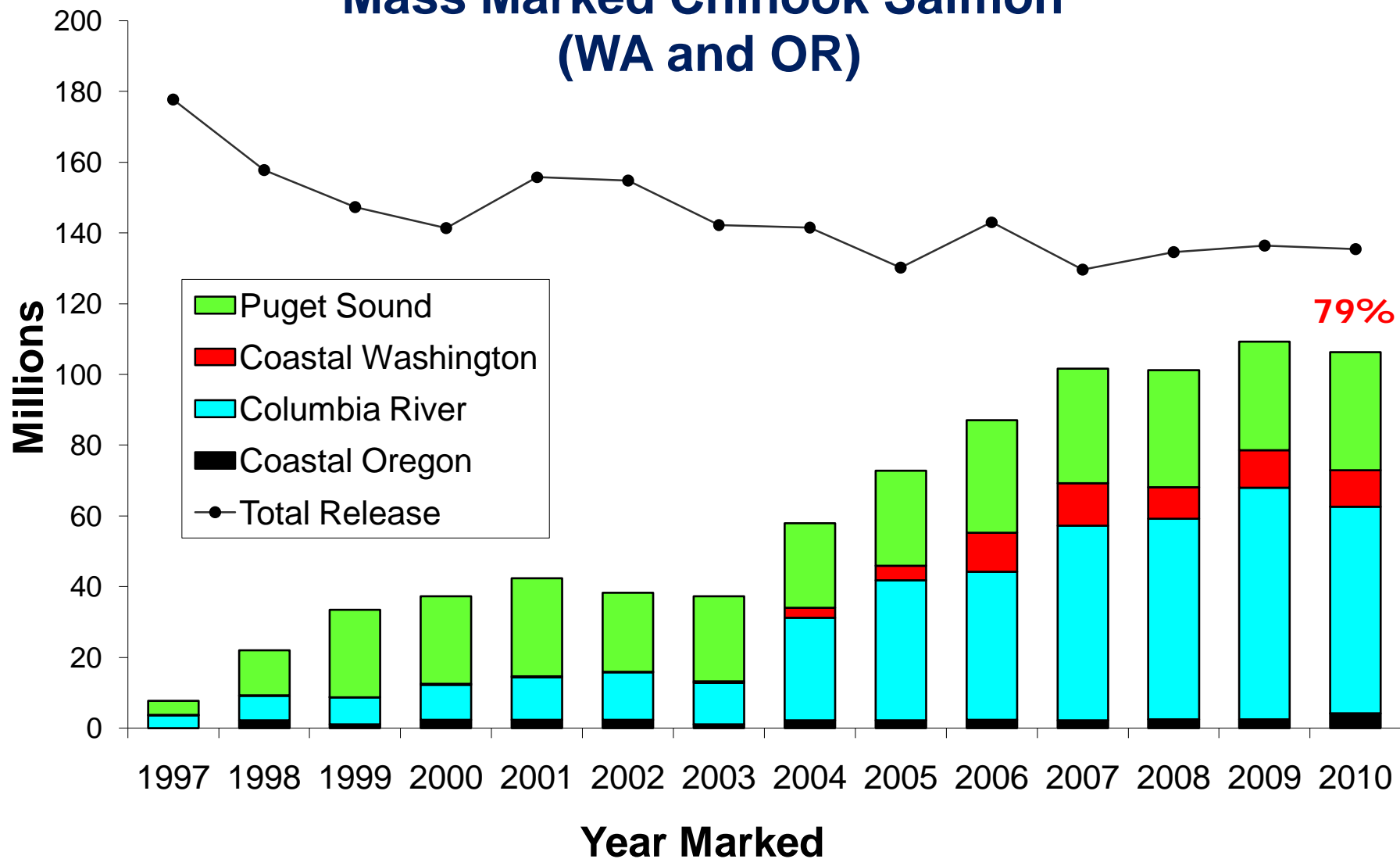
Brood Year 2010 Coho Marking Plans (Southern BC, Washington and Oregon)



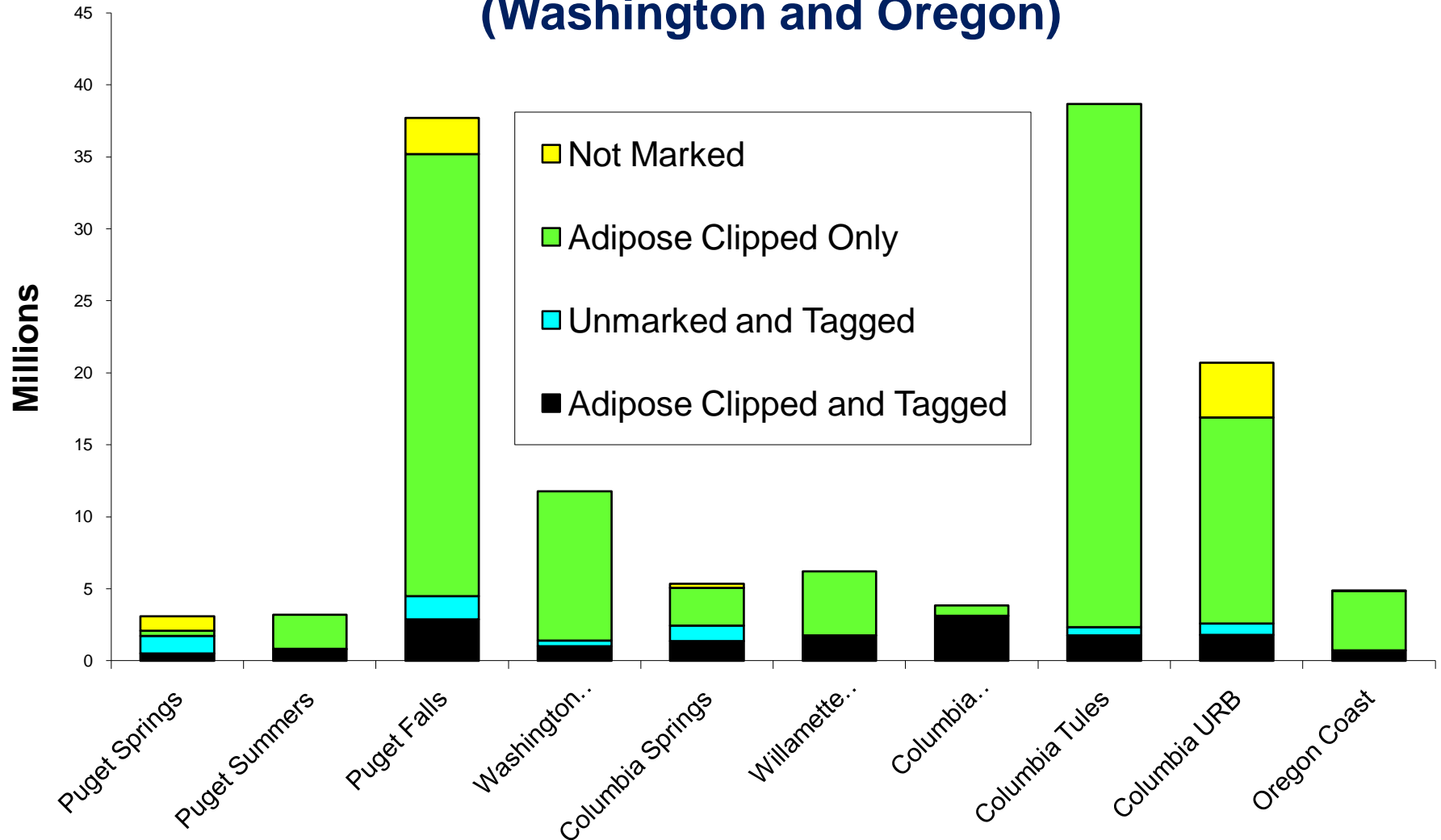
Chinook Mass Marking Proposals

Area	Run	Agency	DIT Groups	Mass Marking (millions)	
				2010	2011
Puget Sound	Spring	WDFW/Tribal	2	0.4	0.4
	Summer	WDFW/Tribal	1	2.4	2.4
	Fall	WDFW/Tribal	65	28.2	30.7
WA Coast	Spr./Sum.	WDFW/Tribal	0	0.4	0.3
	Fall	USFWS	0	2.3	1.9
		WDFW/Tribal	2	8.0	8.1
OR Coast	N. Spring	ODFW	0	0.4	0.5
	S. Spring	ODFW	0	2.1	2.0
	Fall	ODFW	0		1.6
Columbia Basin	Spring	ODFW	0	4.2	4.5
		WDFW	1	2.7	2.6
	Fall Tule	USFWS	1	11.3	11.3
		WDFW	1	20.3	17.1
		ODFW	1	8.2	7.9
	Fall URB	WDFW	1	9.6	8.4
		ODFW	0	7.6	4.3
		USFWS	1	1.6	1.6
	Snake R. Fall	IDFG	0	0.6	
Total Chinook			16	110.3	106.3

Mass Marked Chinook Salmon (WA and OR)



Brood Year 2010 Chinook Marking Plans (Washington and Oregon)



Coho CWT Sampling Methodologies

Region	Fishery	Sampling Type
Alaska	All	Visual (7-30% increase in heads)
Northern BC	Commercial	Visual
	Sport	Voluntary (Visual)
West Coast Van. Is.	Commercial	Electronic
	Sport	Voluntary (Visual)
Strait of Georgia	Commercial	Electronic
	Sport	Voluntary (Visual)
Puget Sound	All	Electronic
Washington Coast	All	Electronic
Oregon Coast	Commercial	Electronic
	Sport	Electronic
Columbia Basin	Commercial	Electronic
	Sport	Electronic
California	All	Visual

Chinook CWT Sampling Methodologies

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Alaska	All	Visual
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	Sport	Voluntary (Visual)
Southern BC.	Commercial	Electronic
	Sport	Voluntary (Visual)
Puget Sound	All	Electronic
Washington Coast	All	Electronic
Columbia Basin	Commercial	Electronic / Visual for Falls
	Sport	Electronic / Visual for Falls
Oregon Coast	Commercial	Visual
	Sport	Visual
California	All	Visual

Projected Sampling Encounters of 2011 Marked & Untagged Chinook

State/Province	# Fish Encountered	Change from 2010 Marking
Alaska	8,564	-45%
British Columbia	25,771	-15%
Oregon	9,735	-31%
California	3,887	-49%

MSF Updates

- ⦿ Expansion of Chinook MSFs in recent years
 - 2007: 12 Chinook MSFs
 - 2010: 24 Chinook MSFs
 - Primarily in marine areas – WA areas 1,2,3 and 4
- ⦿ No New fisheries were proposed for 2011

MM and Regional Coordination Issues

- ◎ Need for new Chinook DITs
 - Primarily in Columbia, for Ocean MSFs
- ◎ Lack of coastwide electronic tag detection
 - In all areas where unmarked + tagged fish are present in the samples
 - More important now that more fish are being caught in MSFs outside of terminal areas

MM and Regional Coordination Issues

- ⦿ Questions continue on efficacy of ETD
 - Training
 - Sampler fatigue
 - Potential for biased estimates of MSF



Sampling for coded wire tag with Wand Detector; checking for snout tag

MSF Issues

- ⦿ Agencies not submitting post-season MSF reports
- ⦿ Inadequate modeling capacity to evaluate impacts of large-scale MSFs on Chinook
- ⦿ **Mixed bag regulations**
 - Becoming more complex
 - No analytical methods to estimate mortality of unmarked DIT groups and associated wild stocks
- ⦿ **Escapement sampling is now more important**
- ⦿ Need for expanded DIT groups

DITs in WA coastal Chinook MSF

Indicator stocks		DIT		DIT in 2009/10 by age				
Stock	Hatchery	Recommend	Current	2	3	4	5	6
Chilliwack			Yes					
Col R springs	LEWIS RIVER	Yes	Yes	x	x	x	x	x
Lower River Tules	BIG CR	Yes	Yes	x	x			
	COWLITZ	Yes	No					
Mid Columbia Tules	SPRING CR NFH	Yes	Yes	x	x	x	x	
Summer Chinook	TURTLE ROCK							
	WELLS	Yes	No					
U Col R summers	SIMILKAMEEN							
Upriver Brights	PRIEST RAPIDS	Yes	No					
Snake River yearlings	LYONS FERRY		Yes	x	x	x	x	x
Snake River fingerling		Yes	No					
Oregon coast	ELK R	Yes	No					
	SALMON R	Yes	No					

Summary of Review

- ⦿ Proposed 2011 MM
 - 37 (-1) million coho and
 - 106 (-4) million Chinook
- ⦿ Sampling methodologies are not coordinated with MM and DIT
- ⦿ Adequately sampling and reporting of CWT recoveries of unmarked DIT releases is only occurring in WA

Summary of Review (cont.)

- ⦿ ETD needs to be implemented by ODFW, beginning in 2011, for Oregon Coastal Chinook and Columbia River fall Chinook fisheries to recover DITs for Chinook Indicator stocks
- ⦿ New Chinook DIT groups are recommended
 - Columbia River summers (Similkameen Ponds or Wells)
 - Snake River fall subyearlings
 - Willamette Spring (reinstate DIT program with electronic terminal sampling)
 - North Oregon Coast (Salmon River)
 - Mid Oregon Coast
- ⦿ Coho DIT needs:
 - USFWS Eagle Creek – increase DIT release group size from 25K to the standard 50K

Summary of Review (cont.)

- The CWT system remains functional for ad-marked CWT fish
- MM, DIT, and CWT sampling programs are still not sufficiently coordinated to support analysis by PSC technical committees
- Support is still needed - for technical and policy processes to develop agreements to clarify responsibilities for maintaining a functional CWT system



Questions?