

Upper Willamette River Steelhead Monitoring in 2016

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Oregon Department of Fish and Wildlife
2017 Willamette Research Review



Acknowledgments

- Funding: US Army Corps of Engineers

Administrative/ Technical Support:

Tom Friesen
Matt Weeber

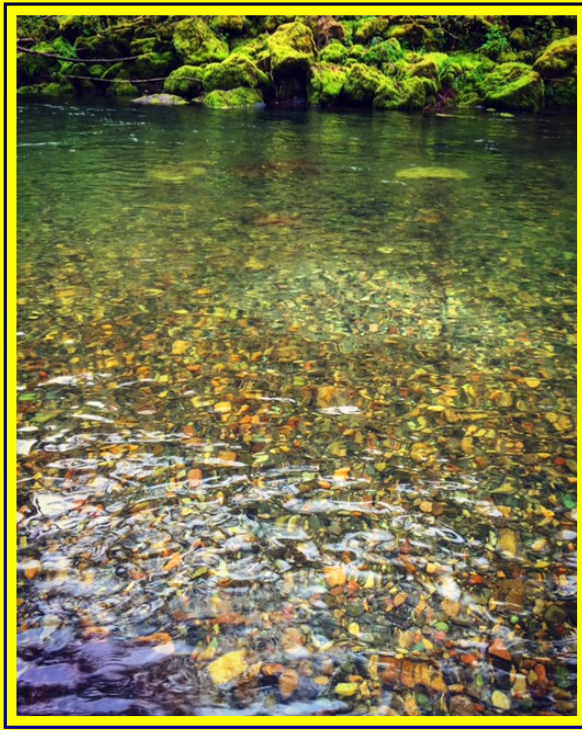
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Brian Cannon
Bart BeBow

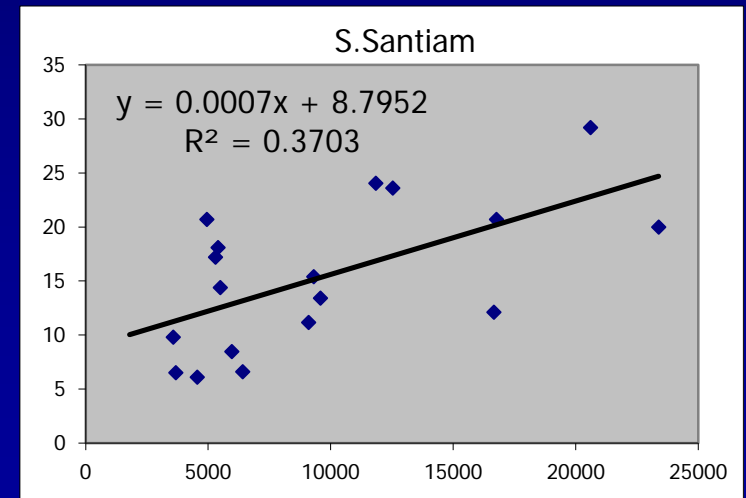
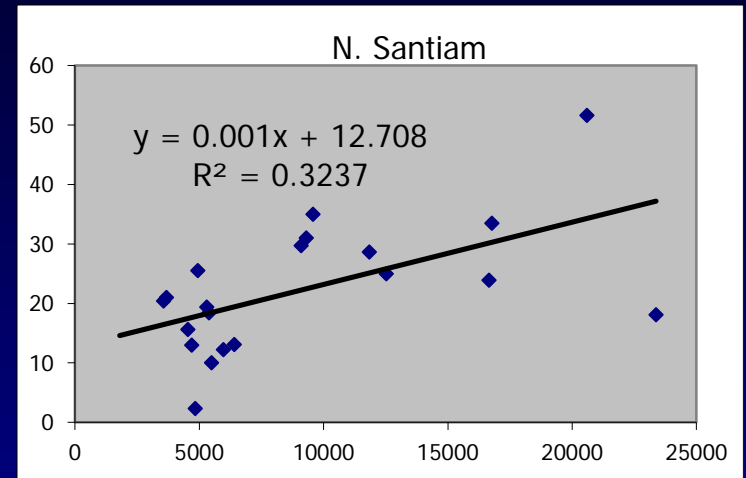
TOPICS



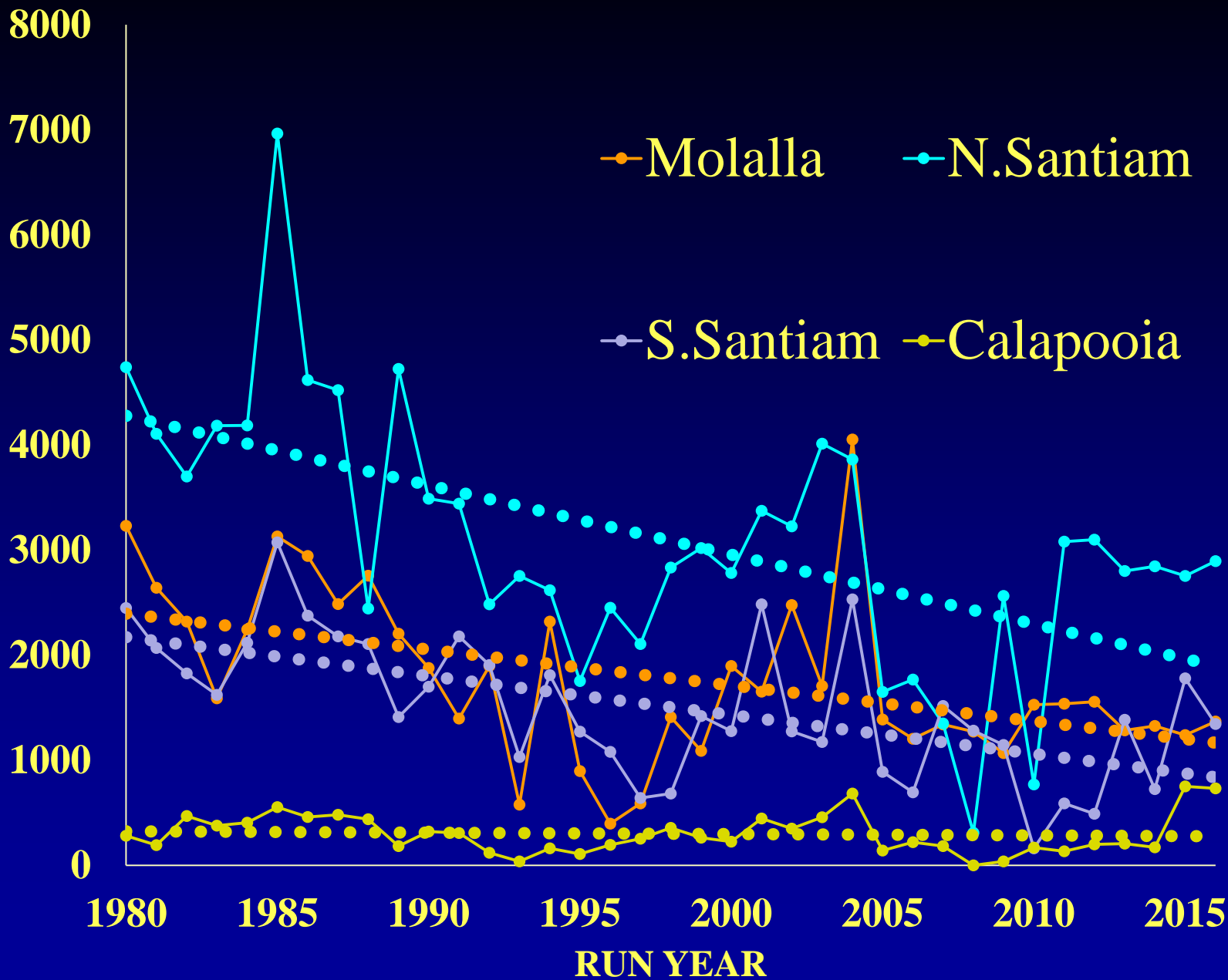
- Long-term index surveys
- GRTS Survey in 2016
- Comparison to independent abundance estimates

INDEX SURVEYS

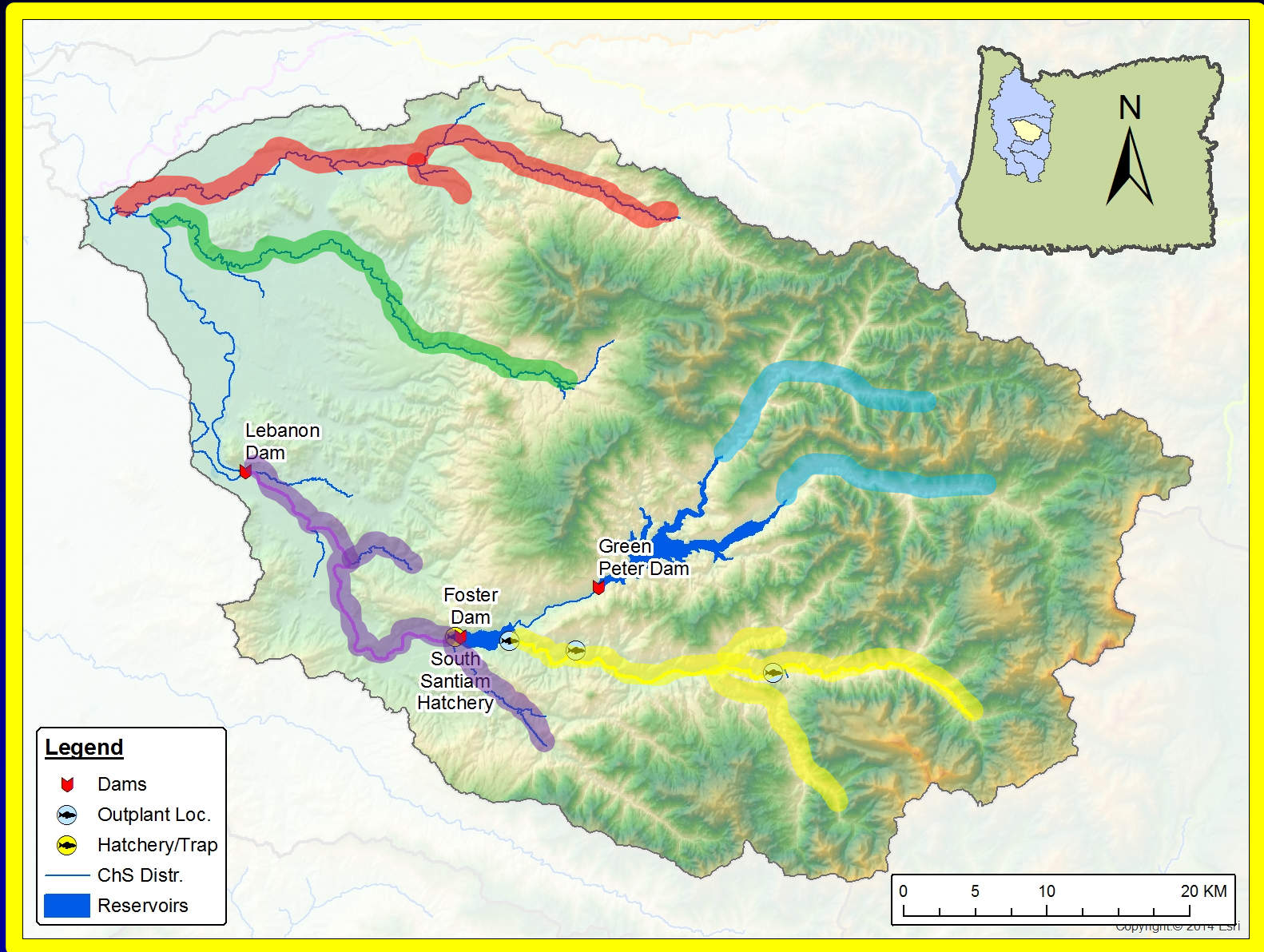
Year	Willamette Falls Count	Estimated Spawner Escapement			
		Molalla	N.Santiam	S.Santiam	Calapooia
1980	22,356	3,232	4,741	2,449	281
1981	16,666	2,642	4,108	2,070	193
1982	13,011	2,321	3,701	1,826	470
1983	9,298	1,590	4,185	1,622	379
1984	17,384	2,244	4,188	2,118	407
1985	20,592	3,129	6,966	3,075	555
1986	21,251	2,944	4,618	2,375	459
1987	16,765	2,487	4,523	2,180	481
1988	23,378	2,757	2,444	2,106	439
1989	9,572	2,206	4,725	1,411	183
1990	11,107	1,879	3,488	1,700	321
1991	4,943	1,398	3,443	2,180	309
1992	5,396	1,898	2,484	1,906	119
1993	3,568	577	2,754	1,032	39
1994	5,300	2,321	2,619	1,811	161
1995	4,693	898	1,755	1,272	109
1996	1,801	398	2,452	1,080	195
1997	4,544	590	2,106	642	253
1998	3,678	1,411	2,835	684	358
1999	6,904	1,090	3,020	1,420	264
2000	4,761	1,898	2,782	1,277	225
2001	12,525	1,654	3,375	2,485	446
2002	16,656	2,476	3,227	1,274	351
2003	9,092	1,707	4,013	1,175	458
2004	11,842	4,053	3,863	2,531	684
2005	5,963	1,388	1,650	891	140
2006	6,404	1,206	1,769	695	221
2007	5,494	1,341	1,350	1,516	183
2008	4,830	1,273	311	1,282	0
2009	2,813	1,068	2,565	1,147	39
2010	7,337	1,528	770	162	168
2011	7,441	1,539	3,080	590	133
2012	7,616	1,557	3,100	492	200
2013	4,944	1,285	2,802	1,386	207
2014	5,349	1,326	2,847	726	172
2015	4,508	1,240	2,754	1,781	751
2016	5,778	1,370	2,895	1,580	734



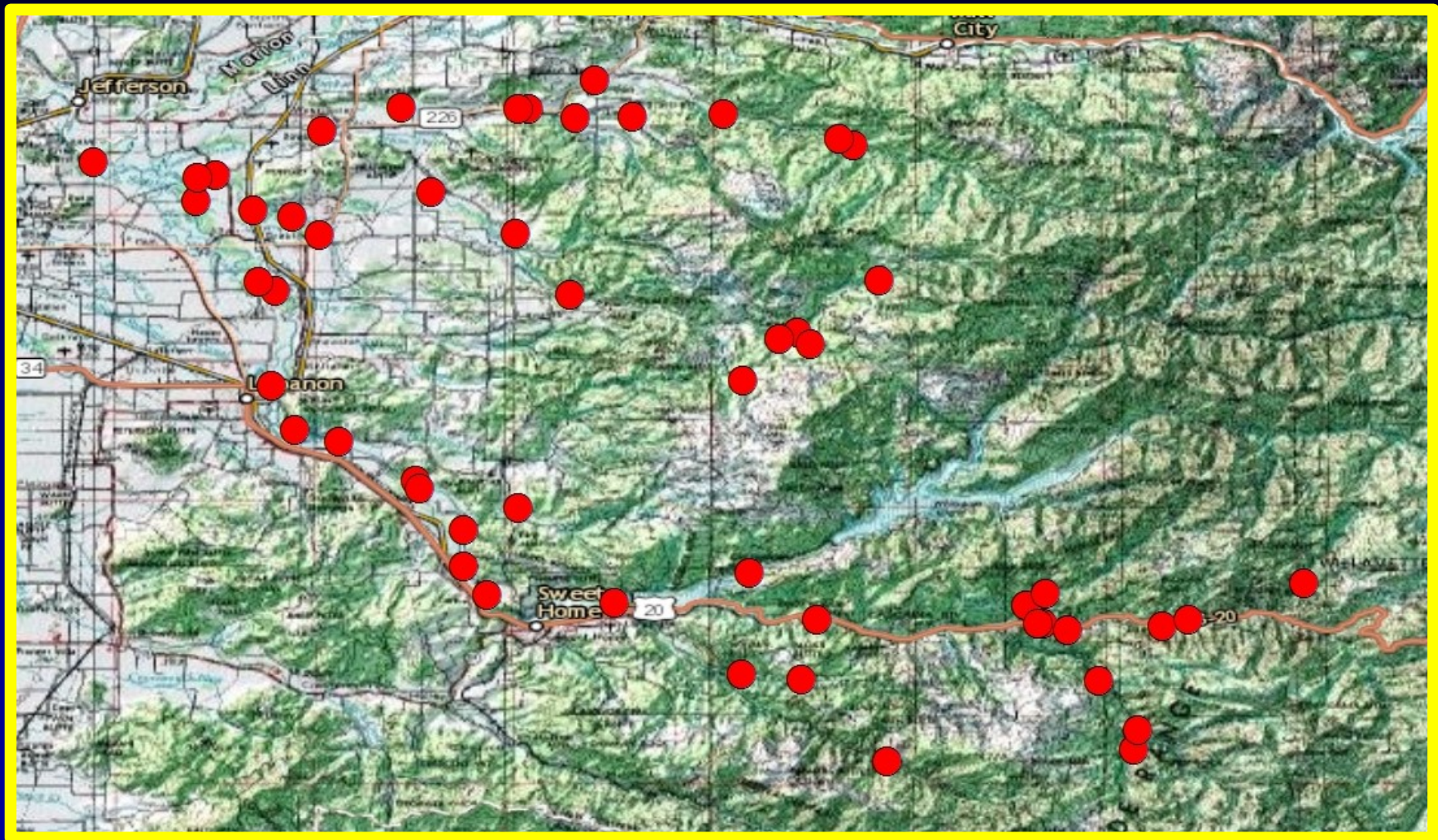
**INDEX SURVEY WINTER-RUN
STEELHEAD ABUNDANCE**



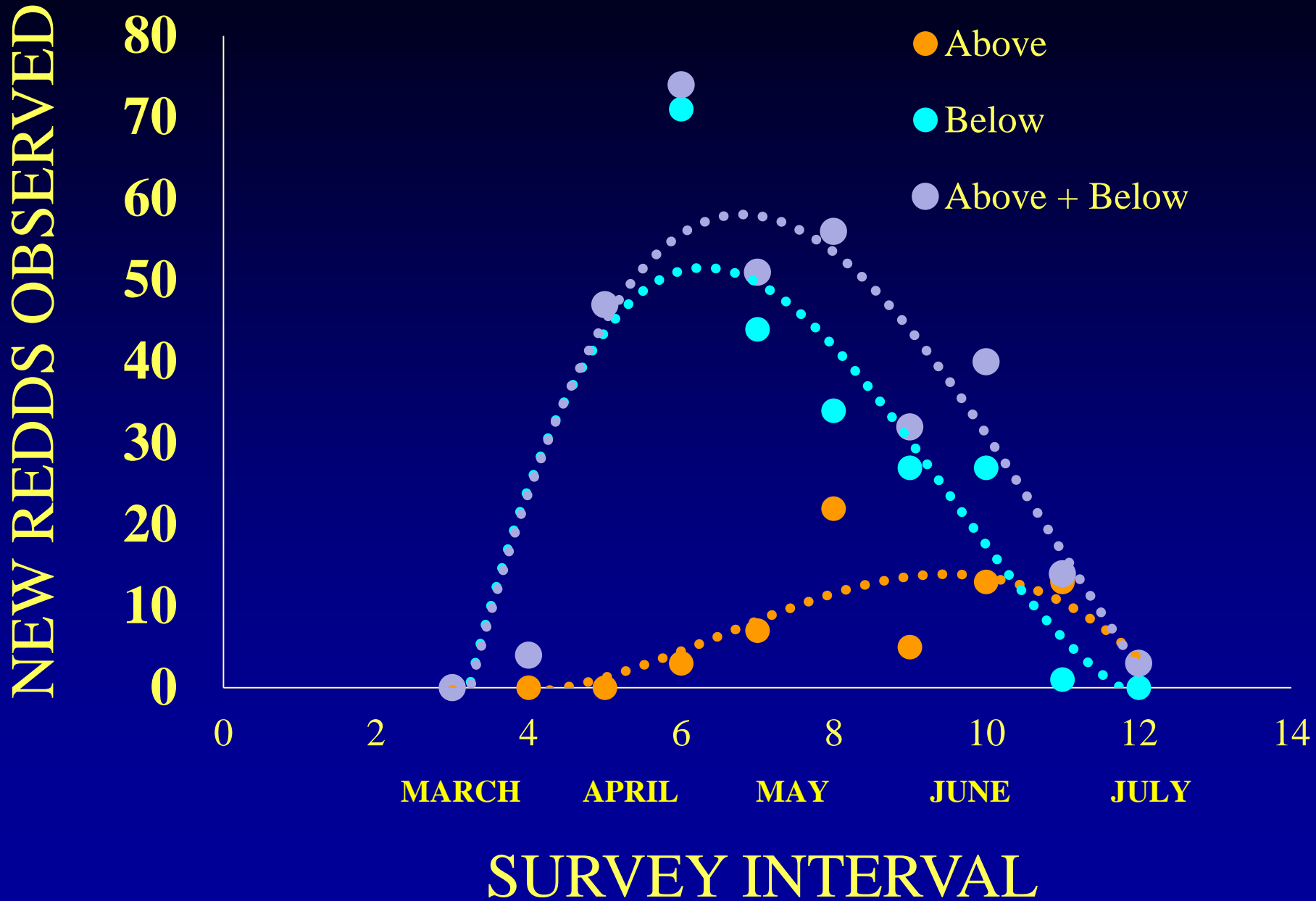
South Santiam



GRTS POINTS



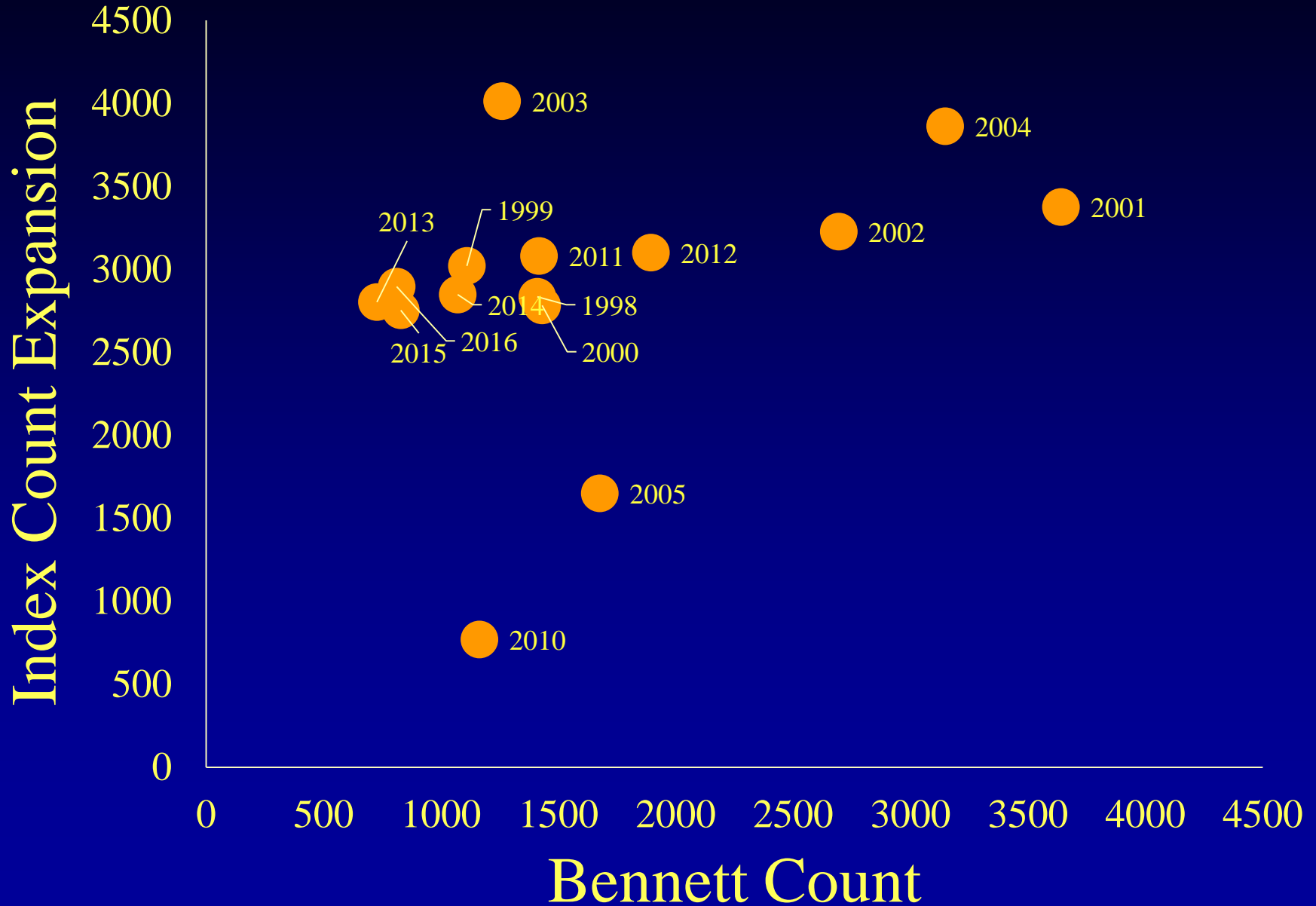




Oregon Spatial Data Library Frame miles (Thomas, Crabtree, Mainstem)

Strata (stream)	Adj. WT	Sum (redds/mile)	Population Estimate
Thomas	3.56	24.00	85.33
Crabtree	1.47	40.00	58.82
Wiley	2.46	65.00	159.71
Canyon	2.33	58.00	135.33
Mainstem	2.67	134.00	357.33
McDowell	2.85	0.00	0.00
South Santiam Subbasin Estimate			796

NSNT: COMPARE VIDEO COUNTS TO INDEX SURVEY EXPANSIONS



**MIGRATORY BEHAVIOR, RUN TIMING, AND DISTRIBUTION OF RADIO-TAGGED ADULT WINTER STEELHEAD, SUMMER STEELHEAD, SPRING CHINOOK SALMON, AND COHO SALMON IN THE WILLAMETTE RIVER:
2011-2014**

by

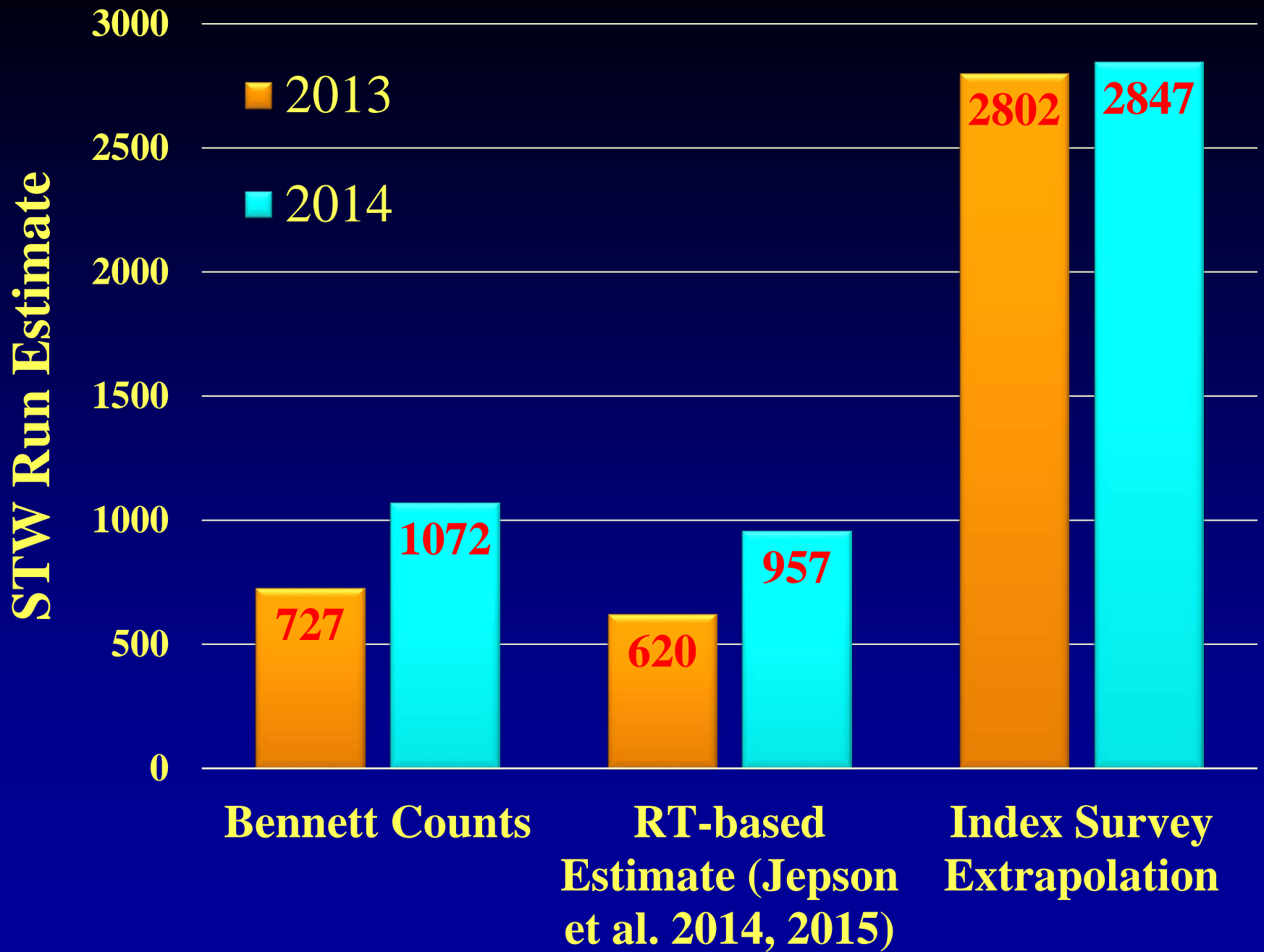
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**Inferences
From
Radiotelemetry**



**We have a Website (Sorry,
we don't tweet)**

**[http://oregonstate.edu/dept/ODFW/
willamettesalmonidrme/home](http://oregonstate.edu/dept/ODFW/willamettesalmonidrme/home)**

(Or GOOGLE Corvallis Research)



Photo by Eric Bailey, 2017

