Oregon Water Resources Department
Strategic Measurement Plan

Approved by Water Resources Commission
2000-2001

Information Provided by OWRD
March 8, 2007

Contact: Debbie Colbert
503 986-0878

Introduction

The Oregon Water Resources Department OWRD) and the Oregon Department of Fish and Wildlife (ODFW) completed a cooperative effort that identifies watersheds that have a high priority for fish restoration. These high priority watersheds are known as "Priority Water Availability Basins" or "Priority WABs." The result of the effort combines an assessment from ODFW of the potential for fish restoration, and an assessment from OWRD of the potential for flow restoration. A more detailed summary of the cooperative effort is provided as Appendix a.

In 2000 OWRD developed a strategy for improving water measurement statewide. The strategy was endorsed by the Water Resources Commission and includes a program to develop an inventory of significant diversions. A Water Resources Commission staff report provides more information on the strategy and is provided as Appendix b. Significant diversions are defined as:

Diversions that reside within Priority WABs **and**

1. Surface water diversions that are required by OWRD to measure and report through a water right condition; **or**

2. Surface water diversions without a measurement condition in the water right that are:

a. Greater than 5 cfs, **or**

b. Greater than 10 percent of the lowest monthly 50 percent exceedance flow as defined in the water availability model, and greater than 0.25 cfs.

Even though additional resources have not been available for implementation, considerable work has been accomplished. Currently 2418 priority diversions have been identified within 293 Priority WABs statewide.

The initial inventory and field assessments of priority diversions are nearly complete. The resulting information includes accurate locations, accurate descriptions and ownership information. The next step will be to implement a strategy for increased measurement. WABs will be assigned priorities based on various considerations including:

1. Enforcement of existing measurement requirements;
2. Identification of WABs where increased measurement has the potential to improve instream flow and provide protection for existing water rights.
3. identification of WABs where instream water right needs and/or 303d listings indicate flow restoration is needed; and
4. identification of WABs where a majority of significant diversions are not measured, and there are no stream gages.

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   h. Grand Ronde
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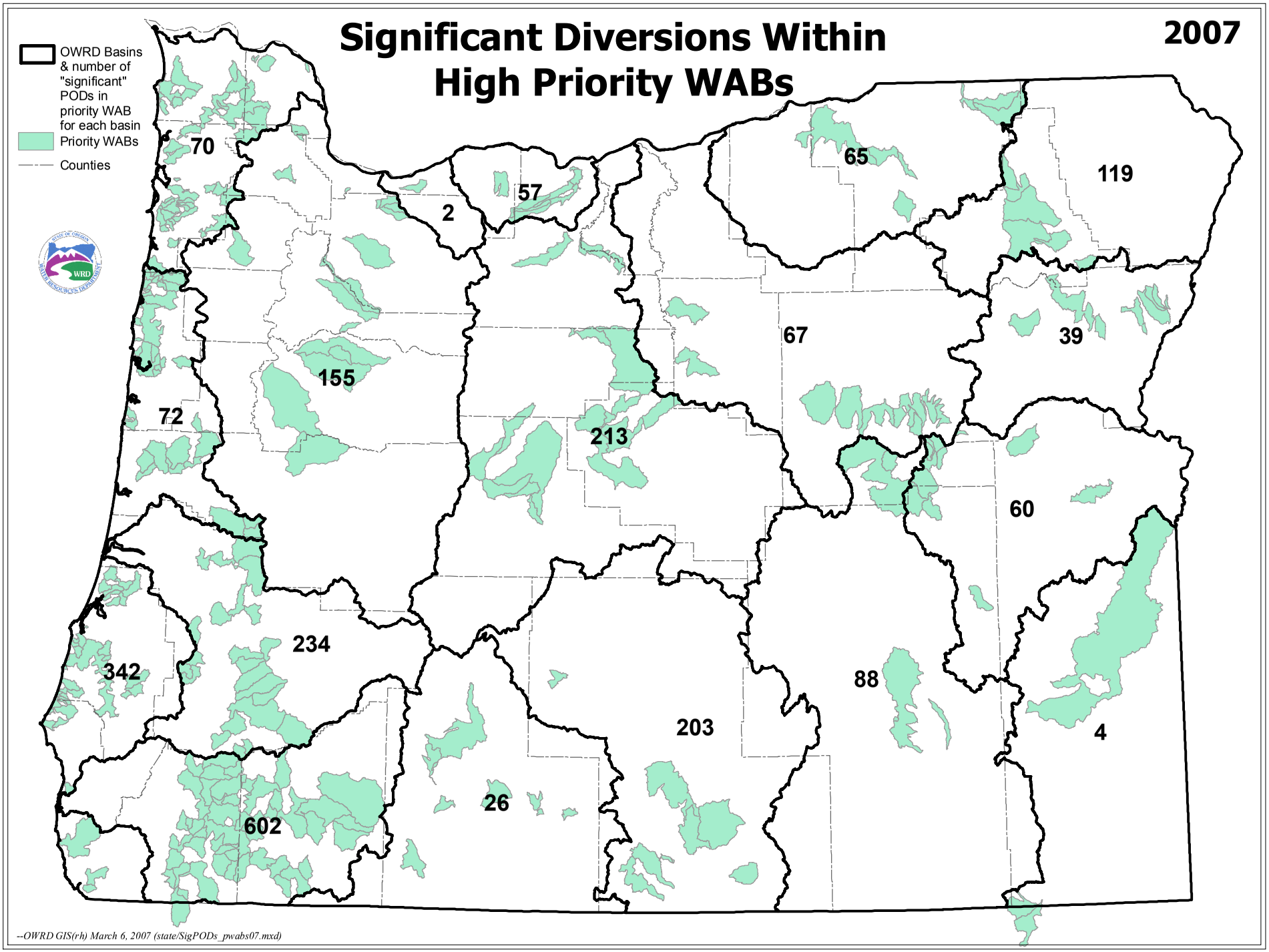
3. Appendix
   a. Oregon Water Resources Department and Oregon Department of Fish and Wildlife Watershed Prioritization Report
   b. Water Resources Commission signed Division Staff Report

Significant Diversions Within High Priority WABs

2007



--OWRD GIS(rh) March 6, 2007 (state/SigPODs_pwabs07.mxd)

North Coast

3/9/2007

Measurement Activities in Priority Watersheds in the North Coast Basin

WS_ID#	Watershed	# significant diversions	# measuring device(s)	# with measuring conditions	Instream Water Rights?	303d stream/lakes?	# gages on streams
11	Ecola Cr @ Mouth				Yes		
31	N Fk Trask R Ab Bark				Yes		
38	Nehalem R Ab Salmonb				Yes	Yes	
39	Nehalem R Ab Humbug	1			Yes	Yes	
40	Nehalem R Ab Beneke	3	1		Yes	Yes	
42	Nehalem R Ab Rock Cr	3	6		Yes	Yes	1
48	Nestucca R Ab Bible	2	2		Yes		2
50	Rock Cr @ Mouth	3	1		Yes	Yes	
57	Three R Ab Cedar Cr	4			Yes		
59	Tillamook R Ab Beave				Yes	Yes	
70288	Foley Cr @ Mouth	3			Yes	Yes	
70945	Clatskanie R @ Mouth	2	1		Yes	Yes	
70947	Lewis & Clark R Ab H	4			Yes	Yes	
70955	Necanicum R @ Mouth	3	2		Yes	Yes	
70958	Peterson Cr @ Mouth	2	1		Yes		
71223	Sand Cr @ Mouth	1			Yes		
71229	Simmions Cr @ Mouth	1			Yes	Yes	
71233	W Beaver Cr @ Mouth				Yes		
71235	Trask R @ Mouth	3	2		Yes	Yes	
71241	Neskowin Cr @ Mouth	4			Yes		
71244	Nestucca R Ab Niagar				Yes		
71247	N Fk Trask R @ Mouth				Yes		
71251	Killiam Cr @ Mouth				Yes		

Measurement Activities in Priority Watersheds in the North Coast Basin

3/9/2007

WS_ID#	Watershed	# significant diversions	# measuring device(s)	# with measuring conditions	Instream Water Rights?	303d stream/lakes?	# gages on streams
71257	M Fk Of N Fk Trask @				Yes		
71259	Farmer Cr @ Mouth	3			Yes	Yes	
71260	Fawcett Cr @ Mouth	8	3		Yes	Yes	
71261	Green Cr @ Mouth	6			Yes	Yes	
71265	E Beaver Cr @ Mouth				Yes		
71278	Coal Cr @ Mouth	1			Yes		
71289	Beaver Cr @ Mouth				Yes	Yes	
71290	Bewley Cr @ Mouth	1			Yes	Yes	
71924	Deep Cr @ Mouth				Yes		
71925	Northrup Cr @ Mouth	3			Yes	Yes	
71928	Cow Cr @ Mouth				Yes	Yes	
71935	W Fk Ecola Cr @ Mout	2	1		Yes		1
71938	Nehalem R Ab Robinso				Yes	Yes	
71943	S Fk Necanicum R @ M	1			Yes	Yes	1
14301000	Nehalem R @ 14301000				Yes	Yes	
14301300	Miami R @ 14301300				Yes		1
14302700	Tillamook R @ 143027				Yes	Yes	
14303600	Nestucca R @ 1430360					Yes	1
30100306	Ok Cr @ Mouth						
30100307	Tandy Cr @ Mouth						
30100312	Fox Cr @ Mouth	4	4				

Consumptive use as a percent of natural streamflow (50% exceedance) in priority watersheds in the North Coast Basin

Legend		
	< 30%	18
	30% - 60%	53
	60% - 90%	78
	> 90%	94

WS_ID#	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*
11	1.85	1.69	2.2	3.88	6.23	8.61	14.3	18.6	16.5	9.33	2.35	1.59
31	23.9	24.4	8.03	11.3	19	34.2	60.8	97.7	96.5	54.1	27.1	24.2
38	0.05	0.05	0.07	0.12	0.31	1.24	4.54	6.28	1.93	0.71	0.09	0.05
39	0.04	0.05	0.06	0.11	0.32	1.41	5.33	7.08	1.82	0.63	0.09	0.05
40	0.08	0.08	0.1	0.18	0.48	1.96	6.75	8.95	2.71	1.11	0.17	0.08
42	0.04	0.04	0.05	0.14	0.61	1.58	4.04	6.4	3.59	0.59	0.07	0.04
48	10.6	10.5	6.26	5.07	11.8	18.1	32	52.5	45.7	21.1	7.29	11.1
50	0.52	0.58	0.71	1.17	2.44	5.77	13	23.7	20.6	9.26	1.13	0.57
57	0.03	0.03	0.03	0.05	0.1	0.27	1.13	1.85	0.75	0.23	0.03	0.02
59	9.23	9.82	9.64	18.1	29.2	47.5	102	182	172	69.2	12.8	8.57
70288	0.02	0.02	0.03	0.06	0.23	0.77	3.61	5.86	1.67	0.49	0.04	0.02
70945	0.23	0.24	0.35	0.44	0.67	1.33	2.43	3.15	3.18	3.82	1.37	0.3
70947	7.81	8.11	11	17.6	31.6	57.5	110	182	129	52.3	10.1	7.06
70955	1.63	1.47	1.87	3.24	5.79	7.5	13.6	17.3	16.5	10.8	2.02	1.31
70958	19.2	21.6	27.5	57.7	161	9.65	11.7	13.5	13.9	11.3	39	21.4
71223	0.08	0.08	0.1	0.23	0.63	1.95	6.72	8.19	1.82	0.59	0.14	0.08
71229	4.75	5.08	5.1	9.33	13.8	24.6	54.7	99.2	83	31	5.81	4.43
71233	0.09	0.09	0.12	0.22	0.59	1.33	3.96	5.19	2.13	1.07	0.19	0.08
71235	8.72	8.92	3.12	4.69	8.71	14.4	26.3	40.6	39.8	22.8	10.1	8.82
71241	0.42	0.44	0.47	0.96	1.79	4.19	12.5	21.5	15.6	4.55	0.68	0.4
71244	8.07	7.97	4.81	3.95	9.42	13.9	24.4	39.9	35.6	16.6	5.63	8.45
71247	18.4	18.8	6.26	8.94	15.3	26.9	47.8	76.8	76.3	42.4	20.9	18.7
71251	10.9	11.7	11.8	21.4	31.5	50	99.4	169	140	55.1	12.2	10.2
71257	55.3	56.3	18.2	25.6	42.5	79.1	142	230	224	129	64.1	56.3
71259	0.1	0.1	0.11	0.24	0.51	1.21	5.25	9.54	4.95	1.74	0.2	0.09
71260	46.3	49.2	44.3	78.3	111	202	431	791	686	257	54	43.3

Consumptive use as a percent of natural streamflow (50% exceedance) in priority watersheds in the North Coast Basin

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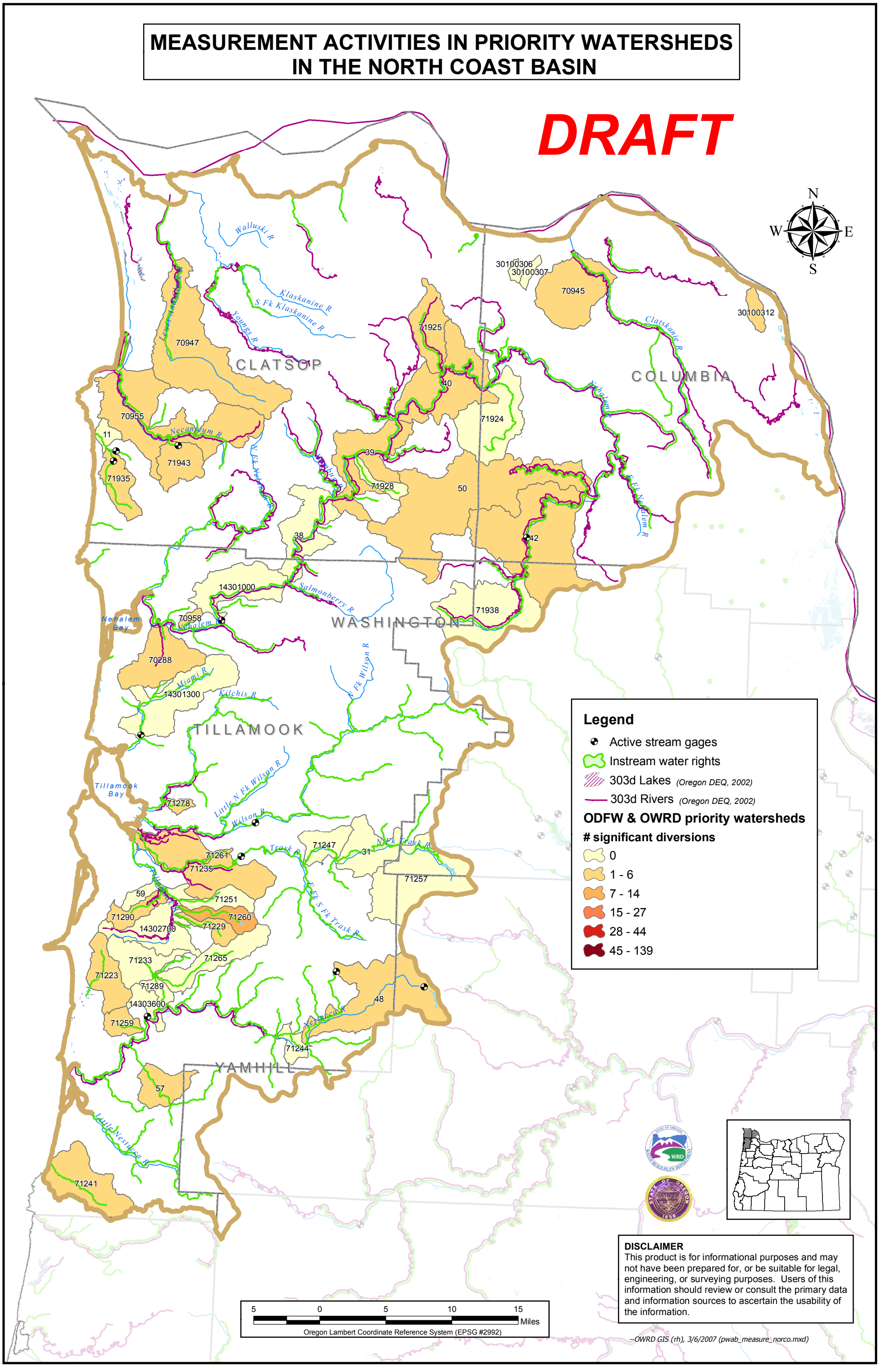
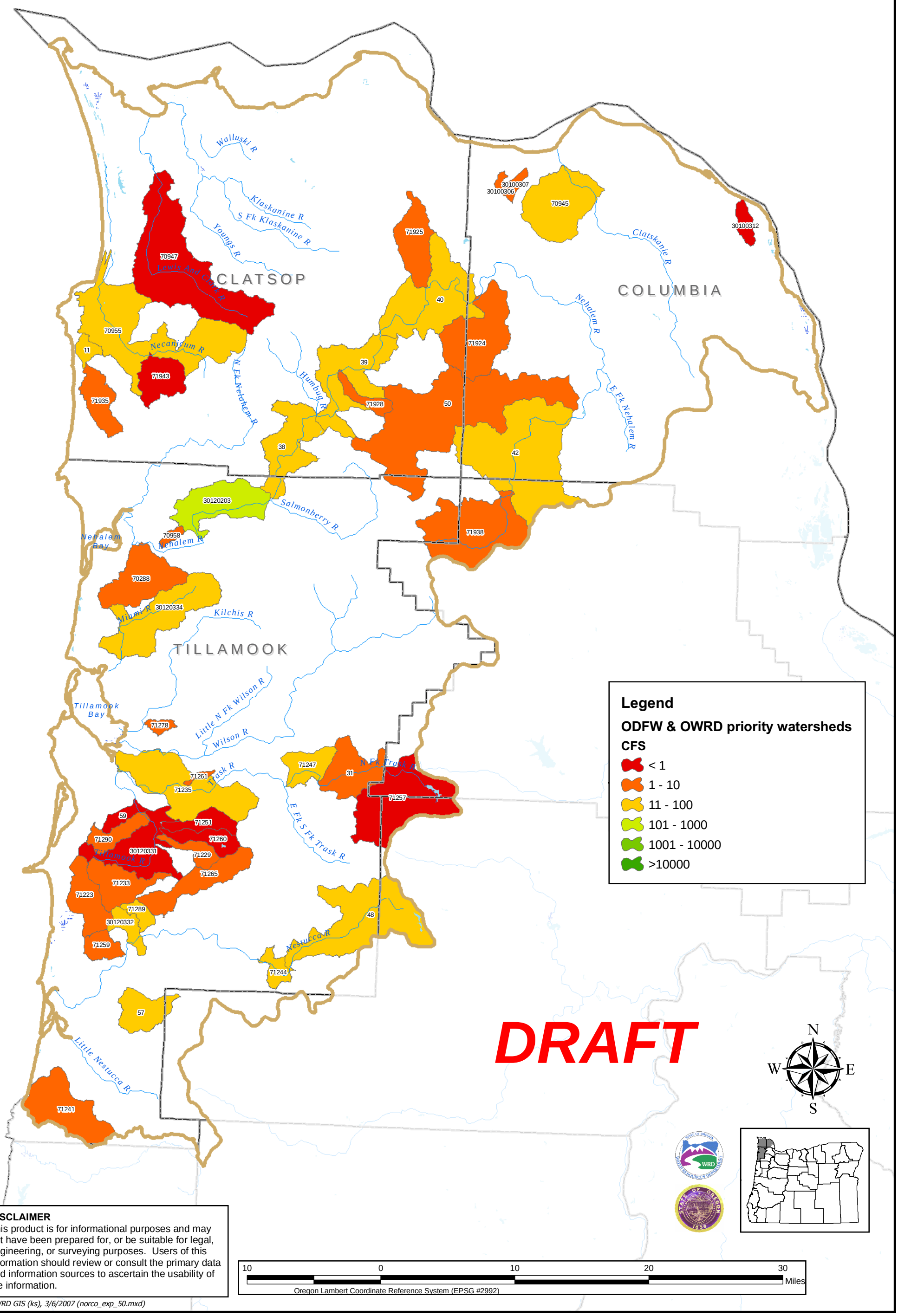
	> 90%	94

WS_ID#	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*
71261	0.09	0.1	0.12	0.39	2.04	5.84	21.8	27.8	6.06	1.89	0.19	0.1
71265	0	0	0.01	0.02	0.12	0.58	2.43	2.92	0.41	0.08	0.01	0
71278	1.32	1.16	1.48	3.4	7.81	9.43	13.7	19.1	14.1	6.31	2.82	1.31
71289	0.23	0.23	0.3	0.51	1.08	2.03	4.86	6.67	4.04	2.14	0.41	0.22
71290	0.05	0.05	0.06	0.14	0.38	1.23	6.01	9.61	2.81	0.82	0.1	0.05
71924	0	0	0	0.06	0.41	1	2.63	3.91	1.9	0.11	0.01	0
71925	0.02	0.02	0.03	0.07	0.31	1.52	7.1	10.1	1.85	0.52	0.05	0.02
71928	0.02	0.02	0.02	0.04	0.1	0.23	0.71	1.13	0.59	0.21	0.03	0.02
71935	4.09	3.64	4.54	7.6	12.3	15.4	24.2	30.7	29.3	20.4	4.48	3.25
71938	0.04	0.04	0.05	0.09	0.17	0.42	0.93	1.79	1.77	0.82	0.1	0.04
71943	11.8	10.5	13.3	22.8	38.2	48.7	83.6	114	115	77.3	14.6	9.37
30100306	1.75	1.79	2.58	3.5	5.74	9.29	17.3	25.2	27.9	35.5	11	2.36
30100307	0.31	0.32	0.49	1.4	5.08	9.01	19.3	21.2	11.8	4.6	1.58	0.42
30100312	48.6	38.2	51.5	83.4	146	219	405	610	550	469	234	53.3
30120203	0.04	0.05	0.06	0.1	0.25	0.92	3.39	4.85	1.64	0.59	0.07	0.04
30120331	10.3	11	11.6	21.4	33.7	55.2	118	209	193	76.5	13.8	9.47
30120332	3.5	3.46	2.19	1.94	5.02	7	12.9	19.7	16.8	8.31	2.62	3.66
30120334	0.01	0.01	0.01	0.01	0.04	0.17	0.69	0.9	0.16	0.04	0.01	0

MEASUREMENT ACTIVITIES IN PRIORITY WATERSHEDS IN THE NORTH COAST BASIN



Expected Stream Flow for August in the North Coast Basin
Calculated at 50% Exceedance



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--OWRD GIS (ks), 3/6/2007 (norco_exp_50.mxd)

Willamette

3/9/2007

Measurement Activities in Priority Watersheds in the Willamette Basin

WS_ID#	Watershed	# significant diversions	# measuring device(s)	# with measuring conditions	Instream Water Rights?	303d stream/lakes?	# gages on streams
71	Abiqua Cr @ Mouth	23	9				1
88	Crabtree Cr @ Mouth	3	7			Yes	1
89	Deep Cr @ Mouth	14	7	3	Yes	Yes	
91	Deer Cr @ Mouth	21			Yes	Yes	
104	Gourlay Cr @ Mouth				Yes		
131	Milk Cr @ Mouth	11	15				
137	N Fk Deep Cr @ Mouth	13	4	2	Yes	Yes	
161	S Scappoose Cr Ab Ra	3	2		Yes		
171	Thomas Cr @ Mouth	3	2	2	Yes	Yes	1
172	Tickle Cr @ Mouth	6	1	1		Yes	
69799	Butte Cr @ Mouth	18	5		Yes	Yes	
70783	Neal Cr @ Mouth	5	1	1	Yes	Yes	
70785	Stout Cr @ Mouth	5			Yes	Yes	
71551	Crystal Springs Cr @	3			Yes		
14165000	Mohawk R @ 14165000					Yes	1
14173500	Calapooia R @ 141735				Yes	Yes	
30201002	Dairy Cr @ Mouth	6	6				1

Consumptive use as a percent of natural streamflow (50% exceedance) in priority watersheds in the Willamette Basin

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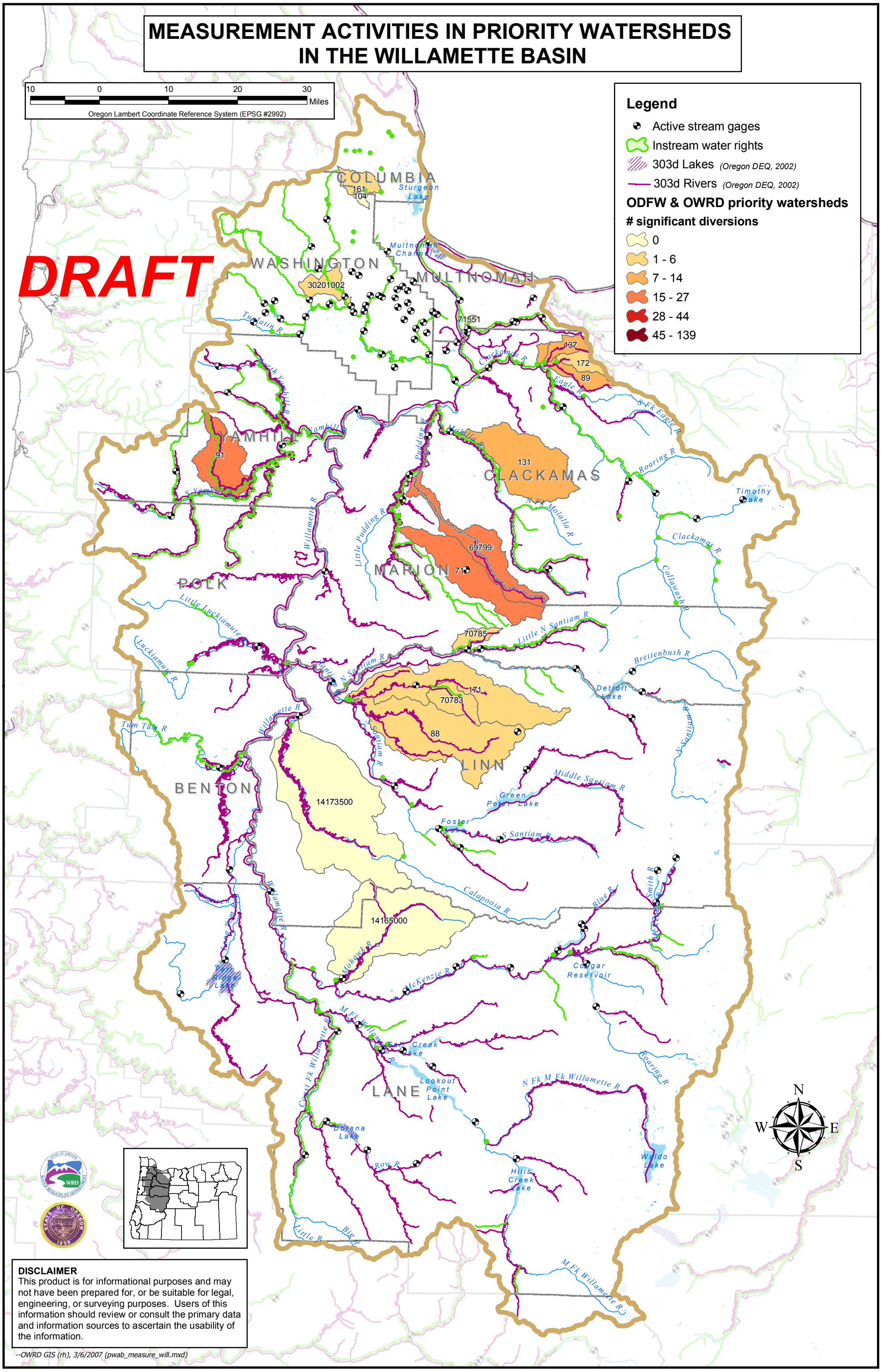
WS_ID#	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*
71	1.53	1.7	2.13	2.84	4.85	20.1	76.5	135	89.7	15.9	1	1.59
76	0.12	0.12	0.14	0.19	1.55	6.7	26	38.8	21	1.45	0.24	0.12
88	0.06	0.06	0.07	0.24	1.99	8.28	31.4	46	22.8	1.04	0.08	0.06
89	1.26	1.32	0.85	0.99	3.73	9.57	50.9	89	38.3	7.86	1.23	1.21
91	1.14	1.18	1.46	2.63	8.26	21.3	56.6	79	67	34.5	4.77	1.29
104	0.04	0.03	0.04	0.06	0.1	0.2	0.59	1.25	1.38	1.08	0.26	0.04
131	0.93	1.04	1.07	1.3	4.29	12.8	57	86.8	32.3	6.73	1.82	0.86
134	0.09	0.1	0.12	0.21	0.82	2.84	9.81	14.8	7.79	1.99	0.25	0.1
137	1.17	1.25	0.75	0.88	3	8.04	39.4	72.3	40.6	15.2	2.1	1.13
161	6.44	5.02	6.78	10.6	18.5	32.8	79.2	140	144	111	35.6	6.86
171	0.41	0.42	0.44	0.62	2.29	8.84	31.6	49.2	27.7	3.55	0.63	0.4
172	1.85	1.79	0.34	0.5	3.22	10.4	57	97.5	37.2	4.18	1.47	1.88
69799	1.03	1.03	0.93	0.94	3.76	15.3	65.4	96.3	43.1	3.79	0.98	1.04
70783	0.87	0.87	1.06	1.48	3.16	7.73	22.8	36.8	30.5	11.7	1.91	0.88
70785	1.39	1.39	1.74	2.51	5.43	13.6	39.1	64.9	54.4	21.6	3.5	1.44
71551	1.01	1.02	0.99	1.21	2.68	6.01	8.37	7.38	4.81	1.87	1.23	1.04
30201002	4.35	3.35	5.2	8.77	35.5	78.5	188	253	166	65.2	23	4.48

MEASUREMENT ACTIVITIES IN PRIORITY WATERSHEDS IN THE WILLAMETTE BASIN



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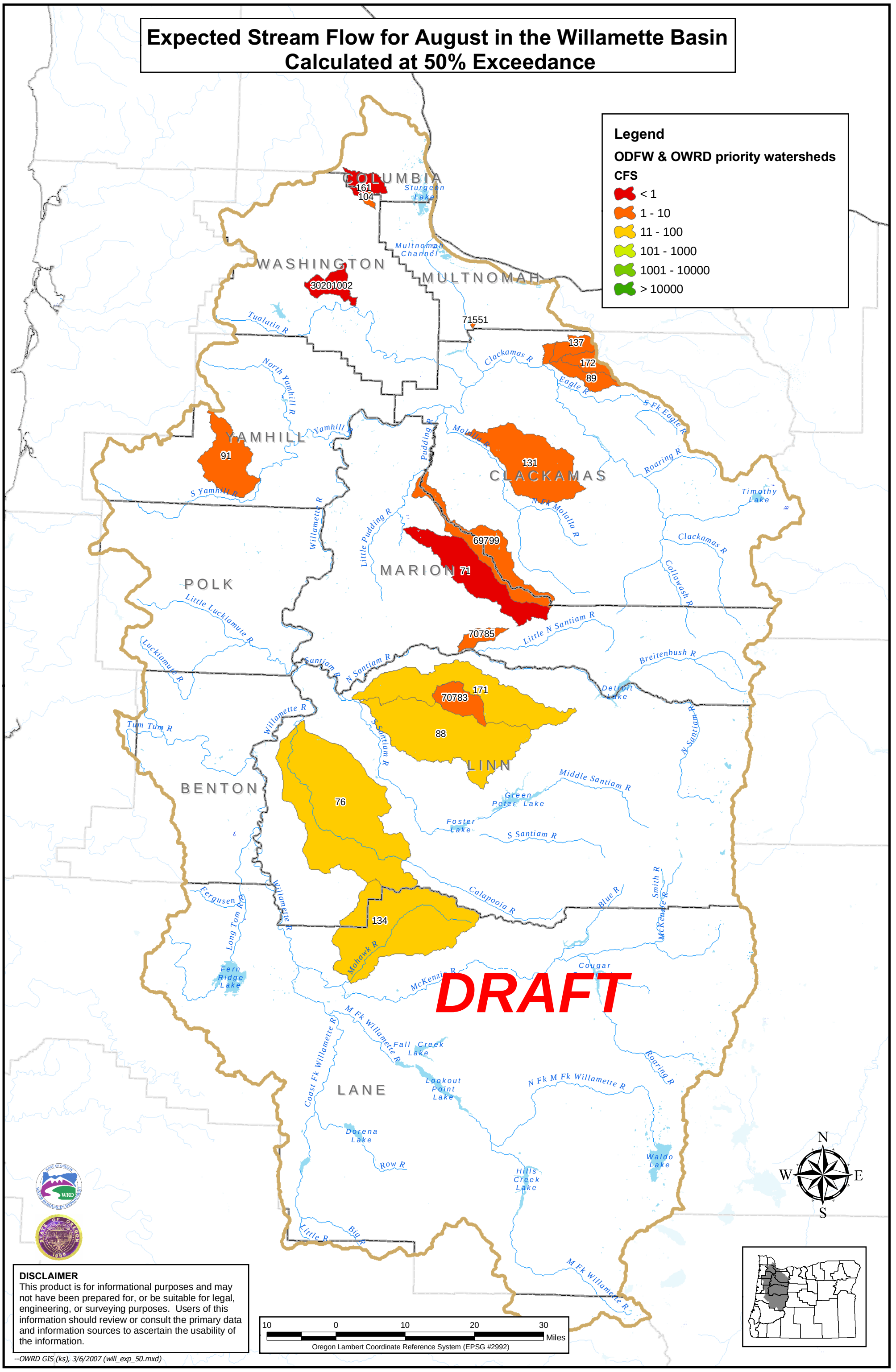
Expected Stream Flow for August in the Willamette Basin
Calculated at 50% Exceedance



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