DISSOLVED OXYGEN NEARSHORE AND OFFSHORE

Andrew Muller, Ph.D., USNA Oceanography, Professor Capt. Diana Muller, Science Director, SR Keeper Maura Duffy, SRF Intern

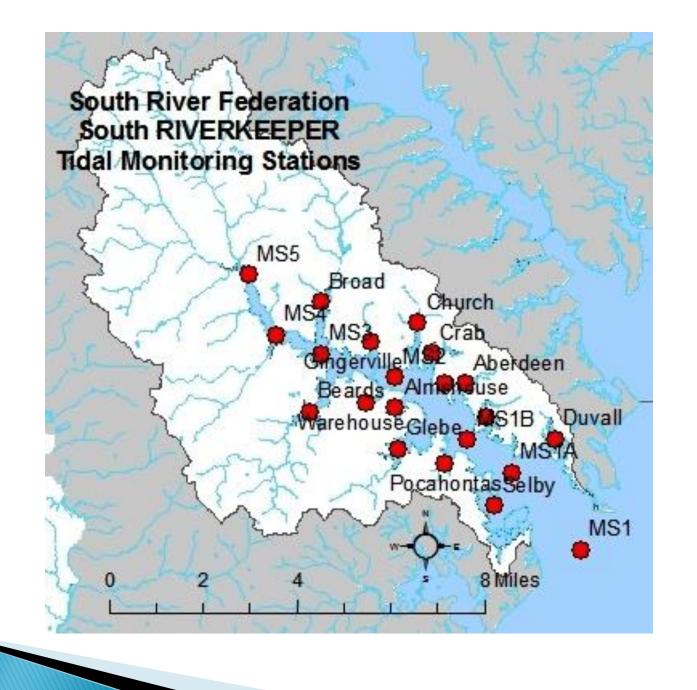
UNITED STATES NAVAL ACADEMY

OCEANOGRAPHY DEPARTMENT









V	Lander		Seasonal						June % Non-	•	•	•
Year	Location	Method	Mean	June Mean	July Mean	August Mean	Sept Mean	Attainment	Attainment	Attainment	Attainment	Attainment
2005	Beards Creek, South River	Instantaneous	6.72					3				
		7D-Week 1		9.01	6.18	6.36	N/A		0	6	11	N/A
		7D-Week 2		7.55	7.49	7.17	N/A		1	1	4	N/A
		7D-Week 3		5.70	6.53	6.02	N/A		19	12	10	N/A
		7D-Week 4		6.88	7.39	5.19	N/A		2	3	18	N/A
		30-Day		7.24	6.81	6.14	N/A		14	14	28	N/A
			Seasonal					Seasonal: %	June % Non-	July % Non-	Aug % Non-	Sept % Non-
Year	Location	Method	Mean	June Mean	July Mean	August Mean	Sept Mean	Non-	Attainment	Attainment	Attainment	Attainment
2006	Beards Creek, South River	7-Day: week 1		6.50	N/A	6.07	6.95		19.30	N/A	23.96	6.74
		7-Day: week 2		6.71	N/A	N/A	6.77		5.97	N/A	N/A	0.00
		7-Day: week 3		6.74	N/A	5.42	8.45		1.34	N/A	12.20	0.60
		7-Day: week 4		6.37	N/A	5.80	6.34		1.34	N/A	9.75	9.23
		30-Day		5.93	N/A	6.63	6.43		2.83	N/A	0.15	0.15

Year	Location	Method	Seasonal Mean	luno Moan	July Moon	August Mean	Sont Moon	Non- Attainment	June % Non- Attainment		Aug % Non- Attainment	
2004	1			Julie Meali	July Weall	August Weari	Sept Mean	Attairinent	Attairinent	Allamment	Attairinent	Attairinent
	Harness Creek, South River		6.4	F 0F	F F7	C 05	F 00	6	F	4.5	4.0	10
		7D-Week 1 7D-Week 2	4	5.85 7.76	5.57 5.12	6.05 6.93	5.66 7.15		5	15 31	16 4	16 4
		7D-Week 2 7D-Week 3	<u>-</u>	7.02	5.32	5.86	6.44		6	28	5	2
		7D-Week 4	1	6.05	5.12	6.30	10.64		6	38		0
		30-Day	1	6.68	5.27	6.27	7.41		15	43	28	14
		oo bay		0.00	0.27	0.27	7.11		10	10	20	
			Seasonal					Non-	June % Non-	July % Non-	Aug % Non-	Sept % Non-
Year	Location	Method	Mean	June Mean	July Mean	August Mean	Sept Mean	Attainment	Attainment	Attainment	Attainment	Attainment
2011	Harness Creek, South River	Instantaneous	6.39					10				
		7D-Week 1		6.47	5.17	4.72	6.79		7	25	35	1
		7D-Week 2		5.87	5.33	4.41	9.85		14	41	43	3
		7D-Week 3		5.74	6.05	N/A	8.26		16	15	N/A	0
		7D-Week 4		4.77	5.36	6.66	8.41		35	36	3	0
		30-Day		5.63	5.51	5.84(3 week)	8.22		39	43	34 (3 week)	11
	2011-Tropical Storms and H	urricanes										
			Seasonal					Non-			Aug % Non-	
Year	Location	Method	Mean	June Mean	July Mean	August Mean	Sept Mean	Attainment	Attainment	Attainment	Attainment	Attainment
2011	Annapolis Buoy	Instantaneous	6.23					3				
		7D-Week 1		7.83	5.9	4.89	5.72		0	6	18	2
		7D-Week 2		7.73	4.96	5.76	4.55		0	23	12	17
		7D-Week 3	_	7.41	7.59	5.31	6.35		0	0	15	0
		7D-Week 4	<u>-</u> 		6.37	4.62	7.71		0	4		0
	-		-	6.91		1			4	-	28	
		30-Day		7.41	6.41	6.44	6.12		1	8	53	26
	2011-Tropical Storms and H	urricanes										
			Cananal					Non-	lune 0/ Non	July 0/ Non	Aver 0/ Non	Camt 0/ Nam
Year	Location	Method	Seasonal Mean	lune Mean	July Mean	August Mean	Sont Moan	Attainment	June % Non- Attainment			Attainment
2012	Harness Creek, South River			Julie Meall	July Wealt	August Weatt	Sept Mean	Attairinent	Attairment	Attairinent	Attairment	Attairinent
	Harriess Creek, South River		5.81	0.07	E 4E	E 44		9		07	4.5	07
		7D-Week 1 7D-Week 2	1	6.07	5.15	5.41 5.02			3	27 46	15 32	27 13
	-	7D-Week 2	-	6.98 7.29	6.98 4.77	5.36			21	41	10	13
			_									0
		7D-Week 4	<u> </u>	6.26	5.68 4.91	5.55	C 24	-	8	34 57	19 45	0 19
		30-Day		6.52	4.91	5.47	6.34		15	57	45	19
	2012 Moret Drought in door											
	2012 Worst Drought in deca											
	2012 Worst Drought in deca Hottest Day was July 27- re		Seasonal					Non-	June % Non-	July % Non-	Aug % Non-	Sept % Non-
Year			Seasonal Mean	June Mean	July Mean	August Mean	Sept Mean	-			Aug % Non- Attainment	
Year 2012	Hottest Day was July 27- re	ached 107°F Method		June Mean	July Mean	August Mean	Sept Mean	-				
	Hottest Day was July 27- re Location	Method Instantaneous	Mean		-			-				
	Hottest Day was July 27- re Location	Method Instantaneous 7D-Week 1	Mean	6.48	7.38	7.06	5.53	-	Attainment		Attainment 0	Attainment
	Hottest Day was July 27- re Location	Method Instantaneous 7D-Week 1 7D-Week 2	Mean	6.48 7.25	7.38 6.86	7.06 6.88	5.53 5.65	-	Attainment 0	Attainment 1 1	Attainment 0 2	Attainment 0 0
	Hottest Day was July 27- re Location	Method Instantaneous 7D-Week 1 7D-Week 2 7D-Week 3	Mean	6.48 7.25 7.89	7.38 6.86 4.43	7.06 6.88 5.38	5.53 5.65 5.79	-	Attainment 0 0 1	Attainment 1 1 42	Attainment 0 2 20	Attainment 0 0 0
	Hottest Day was July 27- re Location	Method Instantaneous 7D-Week 1 7D-Week 2 7D-Week 3 7D-Week 4	Mean	6.48 7.25 7.89 6.24	7.38 6.86 4.43 5.39	7.06 6.88 5.38 5.90	5.53 5.65 5.79 7.16	-	Attainment 0 0 1 9	Attainment 1 1 42 13	Attainment 0 2 20 11	Attainment 0 0 0 0 0
	Hottest Day was July 27- re Location	Method Instantaneous 7D-Week 1 7D-Week 2 7D-Week 3 7D-Week 4 30-Day	Mean	6.48 7.25 7.89 6.24	7.38 6.86 4.43 5.39	7.06 6.88 5.38	5.53 5.65 5.79	-	Attainment 0 0 1	Attainment 1 1 42	Attainment 0 2 20 11	Attainment 0 0 0