

No relationship between storm intensity and short-term change in salinity was evident (Figure 51). Six storm systems (Bertha, Fran, Bonnie, Georges, Dennis, and Floyd) drastically altered mean daily salinity, and these altered patterns persisted for 0.5 to 3.5 months at multiple NERRs (Figures 52-56).

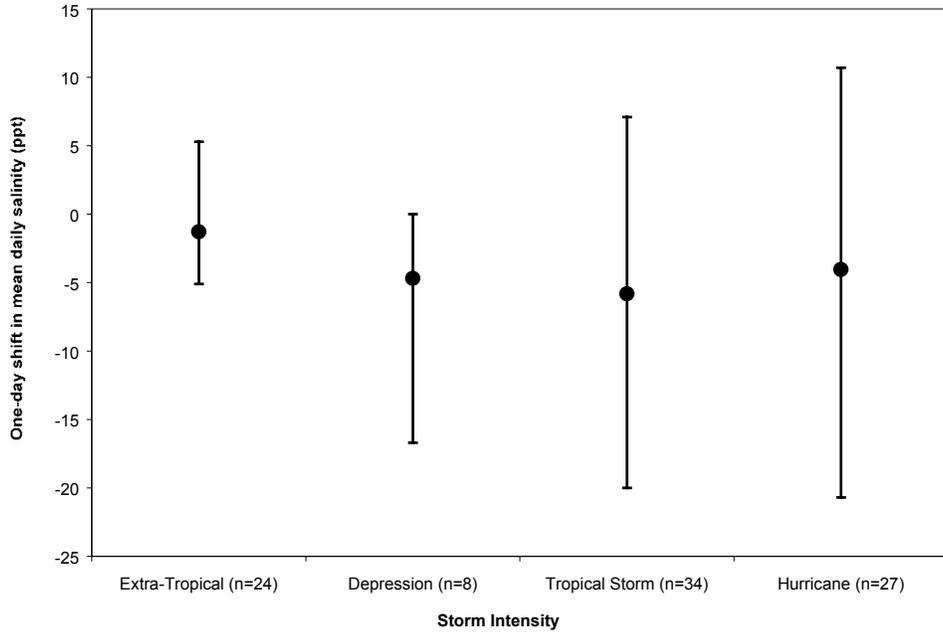


Figure 51. Storm intensity vs. maximum shift in mean daily salinity.

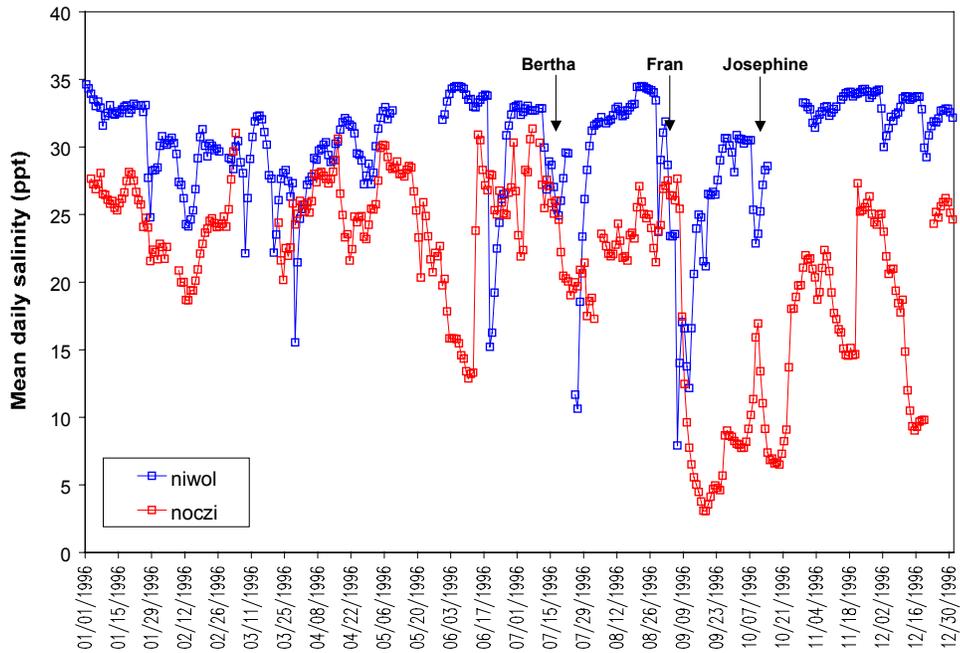


Figure 52. Sustained effects on mean daily salinity, NOC and NIW NERRs, 1996.

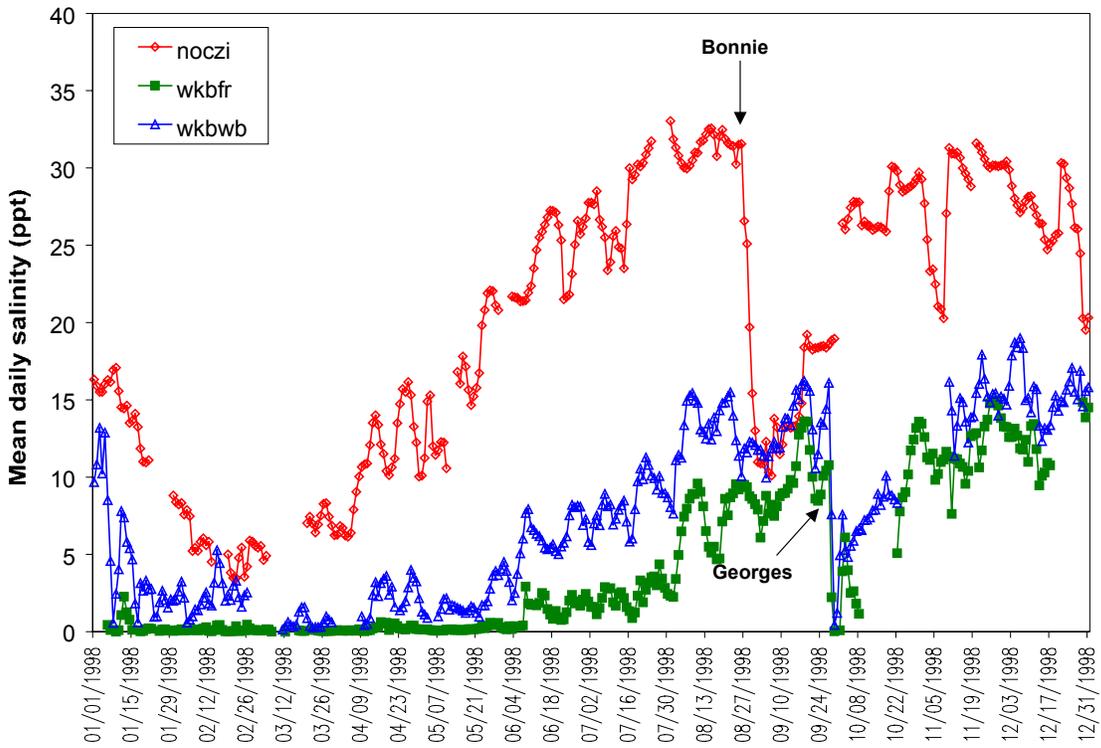


Figure 53. Sustained effects on mean daily salinity, NOC and WKB NERRs, 1998.

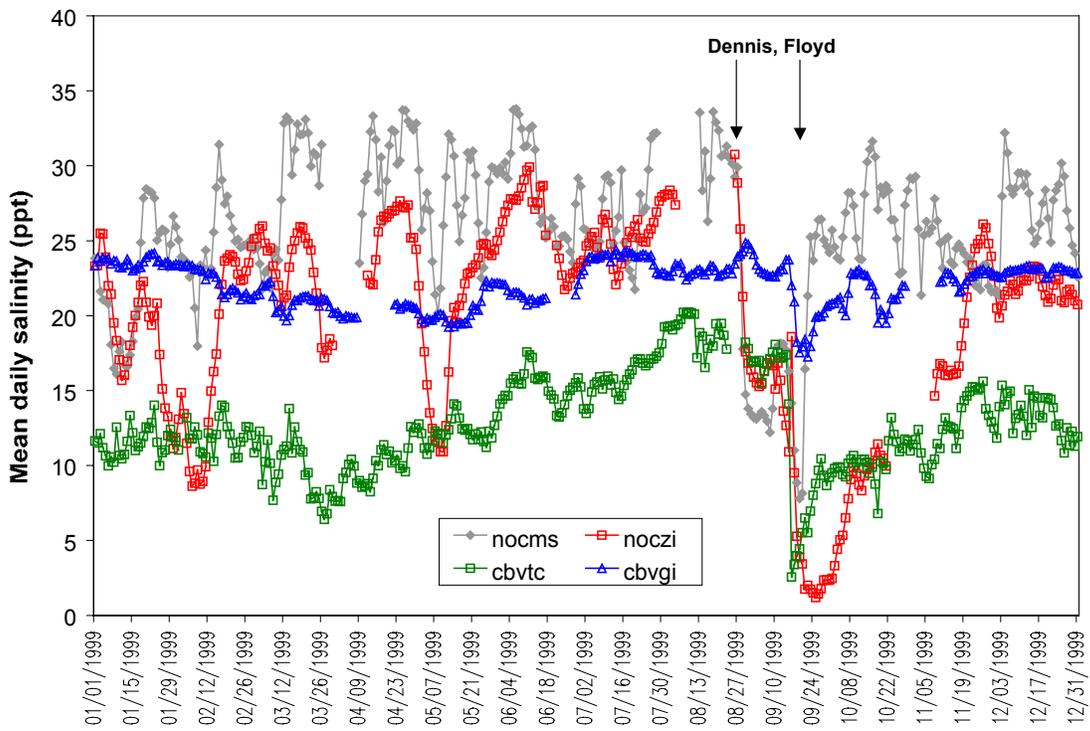


Figure 54. Sustained effects on mean daily salinity, NOC and CBV NERRs, 1999.

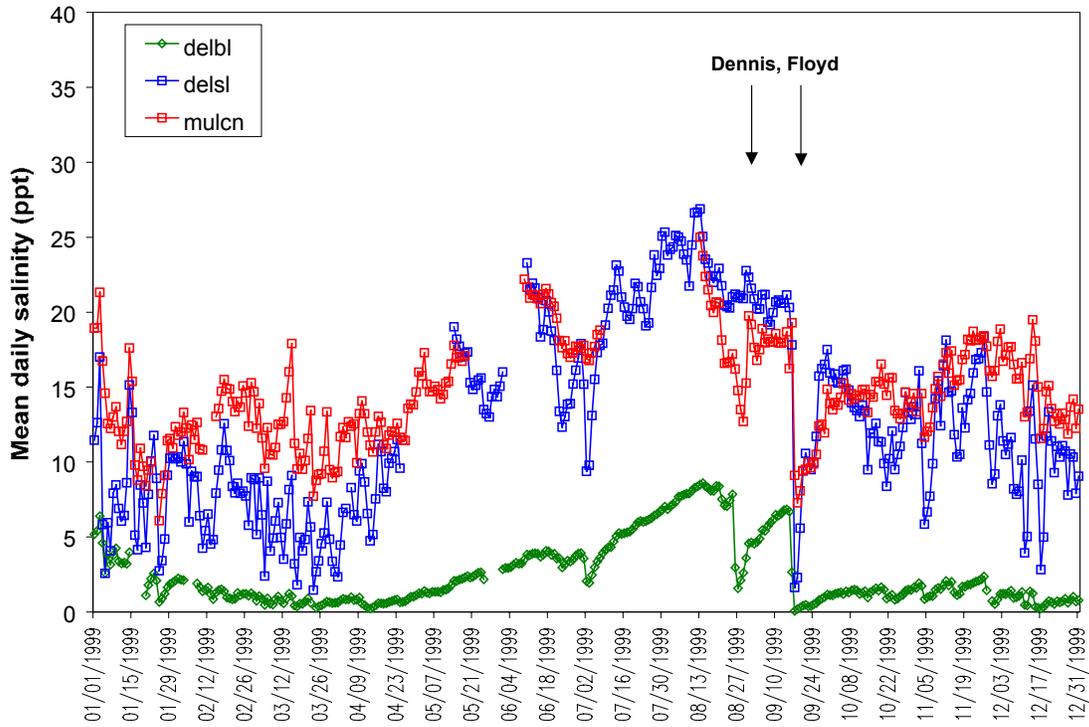


Figure 55. Sustained effects on mean daily salinity, DEL and MUL NERRs, 1999.

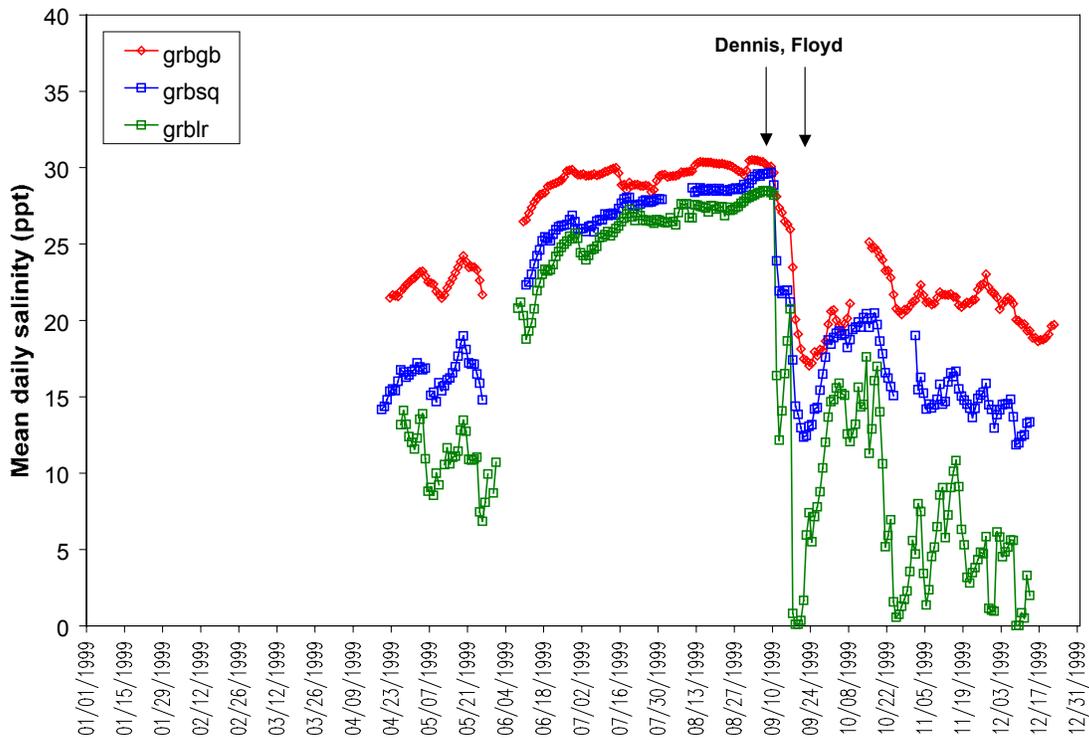


Figure 56. Sustained effects on mean daily salinity, GRB NERR, 1999.

No relationships between storm intensity and water depth and turbidity were evident (Figures 57-58). Changes in pH and DO occurred in less than 50% of the data sets examined, but were observed in at least one data set for 16 of the 21 tropical systems examined. Changes in both pH and DO occurred in 13 data sets from nine tropical systems (Table 24).

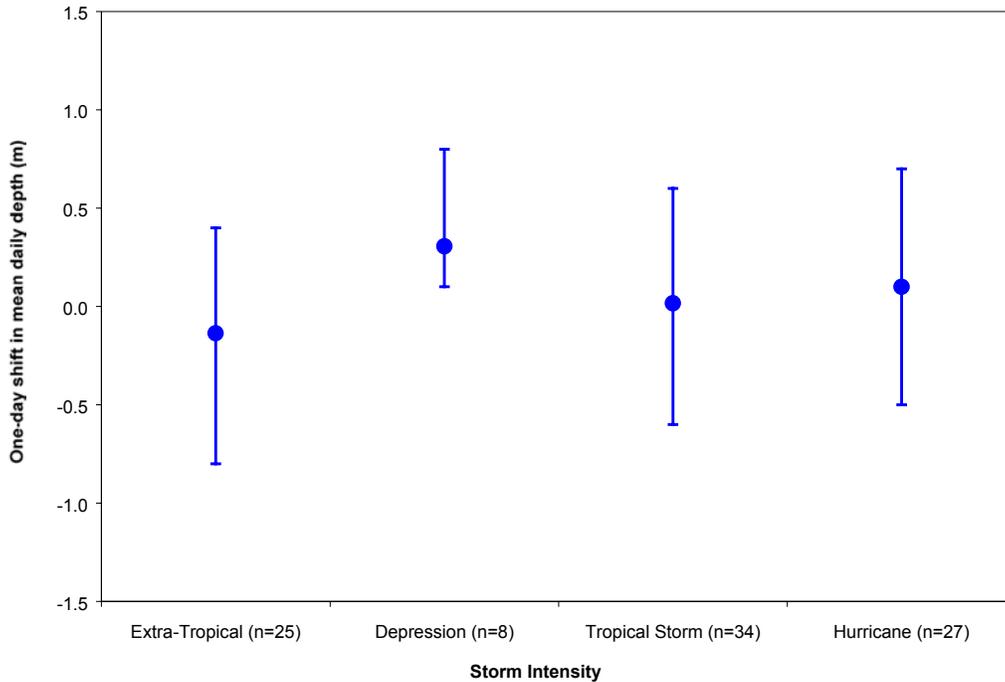


Figure 57. Storm intensity vs. shift (mean and range) in daily water depth.

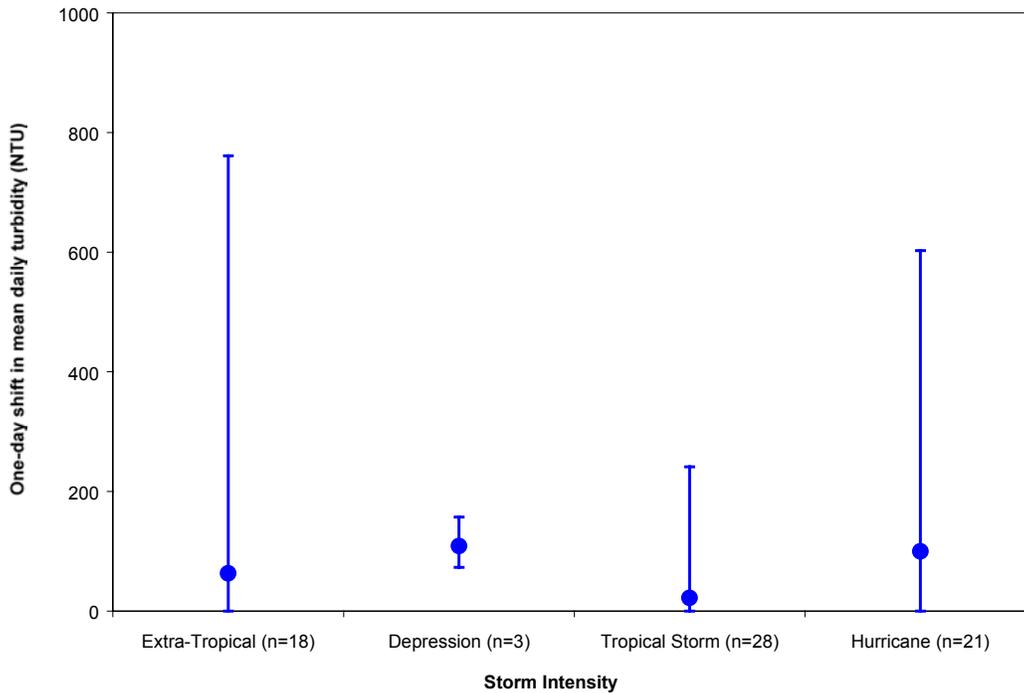


Figure 58. Storm intensity vs. shift (mean and range) in daily turbidity.

Table 24. Summary of observed changes in Dissolved Oxygen (% sat) and pH. Changes in DO and pH were only observed in 40% and 26% of data sets examined, respectively. Empty cells indicate no change was observed.

Storm	Site	DO	DO	pH	pH	pH
		Mean Daily Range	Days Present	Mean Change	Days	Daily Rate
Allison	apaeb			1	5	0.2
Erin	apaes			-2.5	2	-1.3
Erin	apaeb	8.3	1	-0.6	4	-0.2
Opal	apaes	8.4	1	-1.7	2	-0.9
Bertha	job09	50.2	1			
Bertha	job10	22	1			
Bertha	delbl	26.7	3	-0.7	2	-0.4
Bertha	delsl	43.9	4	-0.6	2	-0.3
Bertha	mulcn	8.3	1			
Bertha	nocms	15.1	1			
Bertha	noczi	14.5	1			
Bertha	welht			-1.5	1	-1.5
Bertha	wqbc			-0.3	1	-0.3
Fran	noczi	26.9	4	-1.1	9	-0.1
Fran	niwol			-0.7	1	-0.7
Fran	niwta			-0.2	1	-0.2
Fran	owcsu			-0.5	2	-0.3
Fran	owcwm			0.3	1	0.3
TS Josephine	apaeb	19.3	2	0.3	1	0.3
TS Josephine	apaes	17.1	2	-0.7	6	-0.1
TS Josephine	niwta	76.2	1	-2	4	-0.5
Danny	wkbfr	11.3	5	-0.7	3	-0.2
Bonnie	cbvqi			-0.7	3	-0.2
Bonnie	nocms			-0.4	1	-0.4
Bonnie	noczi			-0.3	2	-0.2
Earl	apaeb			1	2	0.5
Earl	apaes			1.5	2	0.8
Georges	wkbwb	18.7	3	-1.8	2	-0.9
Dennis	cbvqi	12.6	5	-0.4	6	-0.1
Dennis	nocms			-1.4	2	-0.7
Floyd	noczi			0.2	1	0.2
Floyd	cbvqi	11.4	1	-0.2	1	-0.2
Floyd	cbvtc	27.2	1	-0.6	1	-0.6
Floyd	delbl			-0.9	2	-0.5
Floyd	delpb			-0.8	2	-0.4
Floyd	mulb6			-0.2	1	-0.2
Floyd	mulba			-0.1	1	-0.1
Floyd	mulcn			-0.4	1	-0.4
Floyd	grblr			-0.7	3	-0.2
Floyd	grbgb	5.2	1			
TS Harvey	rkbb	16.6	7			
TS Harvey	rkbu	14.2	8			
Irene	rkbb	14.6	1			
Irene	rkbu	8	1			
Gordon	acesp	42.8	1			
Gordon	wqbmp	15.2	1			
TS Helene	apaeb			-2.4	4	-0.6
TS Helene	apaes			-2.4	4	-0.6