

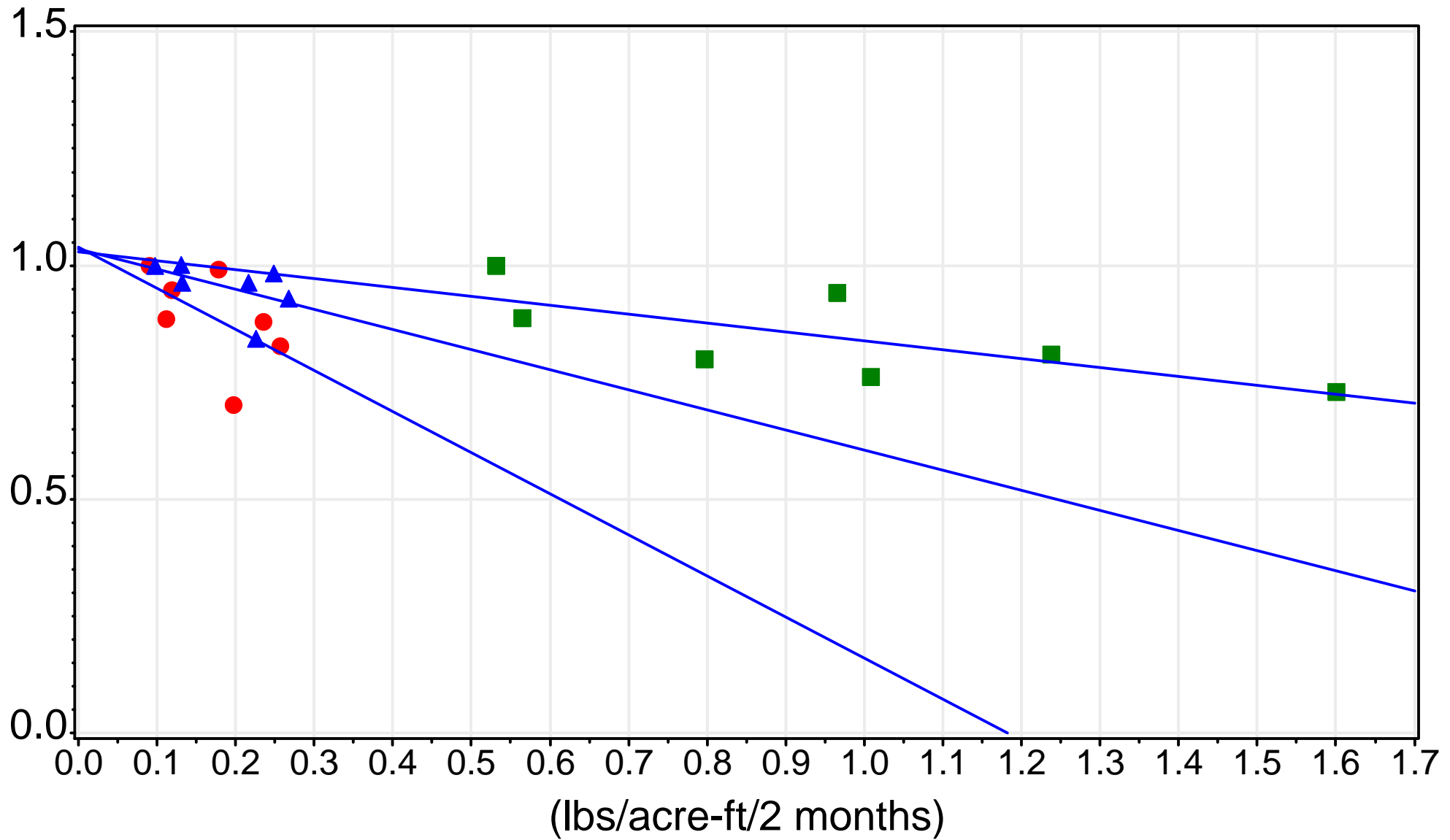
## **APPENDIX D**

### **Seagrass-Loading Regressions**

#### **Three Sublagoon Models**

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 2-Months Cumulative TN Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon                      ■■■ Central Indian River Lagoon  
                  ▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 2-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 2-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.09624711	0.01924942	3.33	0.0321
Error	15	0.08681716	0.00578781		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.525756	8.478640	0.076078	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag2	1	0.05806957	0.05806957	10.03	0.0064
tn_lag2*sublagoon	2	0.03812604	0.01906302	3.29	0.0652
sublagoon	2	0.00005150	0.00002575	0.00	0.9956

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag2	1	0.02857371	0.02857371	4.94	0.0421
tn_lag2*sublagoon	2	0.01278844	0.00639422	1.10	0.3568
sublagoon	2	0.00005150	0.00002575	0.00	0.9956

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 2-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

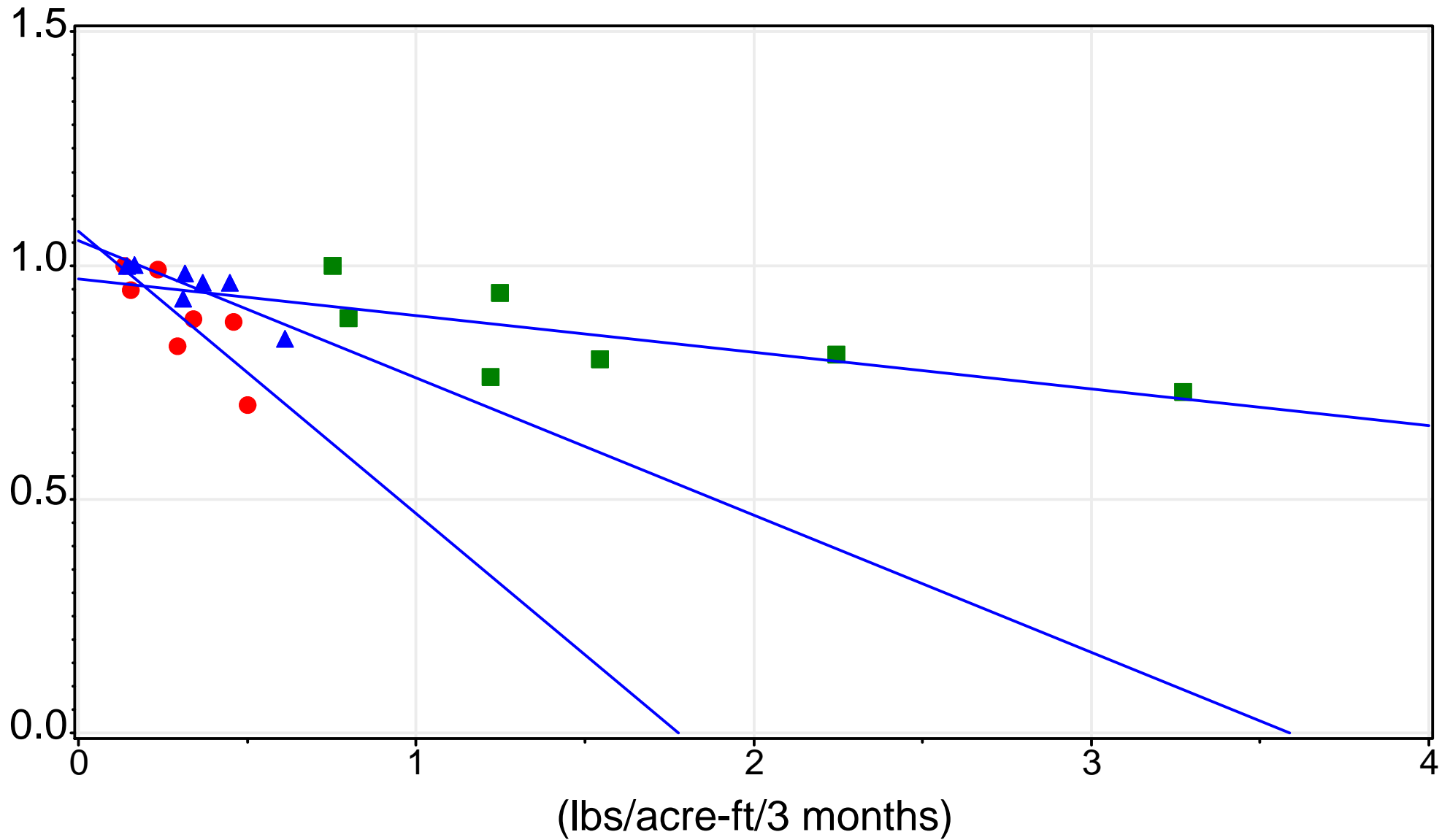
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.035867899	B	0.09209249	11.25	<.0001
tn_lag2	-0.430585348	B	0.46479016	-0.93	0.3689
tn_lag2*sublagoon Banana River Lagoon	-0.448902471	B	0.66985940	-0.67	0.5130
tn_lag2*sublagoon Central Indian River Lagoon	0.241142997	B	0.47199330	0.51	0.6169
tn_lag2*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.003709666	B	0.12661643	0.03	0.9770
sublagoon            Central Indian River Lagoon	-0.007446549	B	0.12449285	-0.06	0.9531
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 3-Months Cumulative TN Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon                      ■■■ Central Indian River Lagoon  
                  ▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 3-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 3-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.12798780	0.02559756	6.97	0.0015
Error	15	0.05507647	0.00367176		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.699141	6.753151	0.060595	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag3	1	0.06951577	0.06951577	18.93	0.0006
tn_lag3*sublagoon	2	0.05057129	0.02528564	6.89	0.0076
sublagoon	2	0.00790074	0.00395037	1.08	0.3659

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag3	1	0.06351212	0.06351212	17.30	0.0008
tn_lag3*sublagoon	2	0.03834728	0.01917364	5.22	0.0190
sublagoon	2	0.00790074	0.00395037	1.08	0.3659



**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 3-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

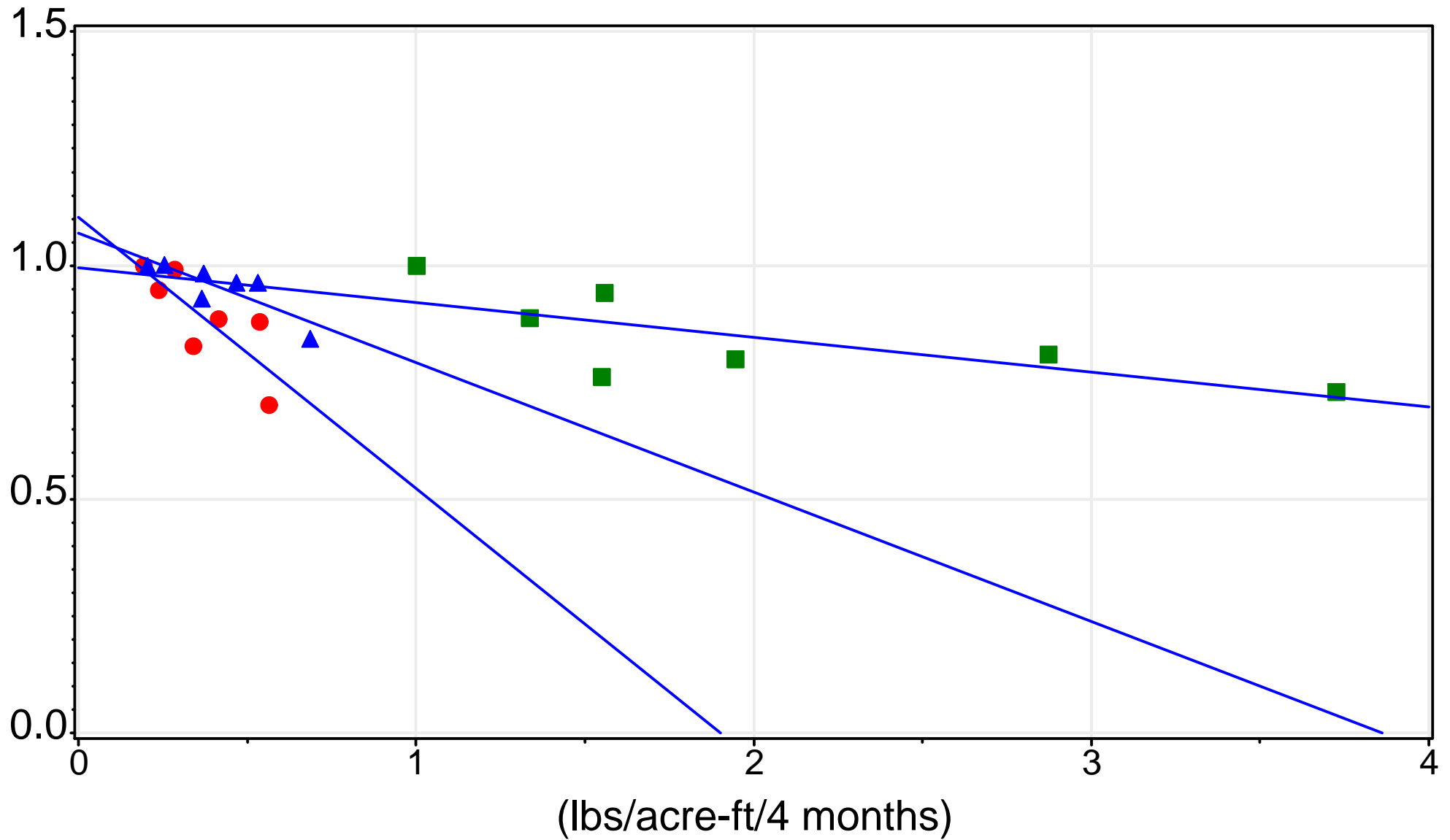
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.054113015	B	0.05667536	18.60	<.0001
tn_lag3	-0.293924849	B	0.15345749	-1.92	0.0747
tn_lag3*sublagoon Banana River Lagoon	-0.310430382	B	0.23322919	-1.33	0.2031
tn_lag3*sublagoon Central Indian River Lagoon	0.215455817	B	0.15591108	1.38	0.1872
tn_lag3*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.019294165	B	0.08108831	0.24	0.8151
sublagoon            Central Indian River Lagoon	-0.082917089	B	0.07509388	-1.10	0.2869
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 4-Months Cumulative TN Load/Sublagoon Volume



sublagoon    ● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 4-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 4-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.12662133	0.02532427	6.73	0.0018
Error	15	0.05644294	0.00376286		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.691677	6.836412	0.061342	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag4	1	0.06608139	0.06608139	17.56	0.0008
tn_lag4*sublagoon	2	0.05449045	0.02724523	7.24	0.0063
sublagoon	2	0.00604949	0.00302475	0.80	0.4660

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag4	1	0.06074747	0.06074747	16.14	0.0011
tn_lag4*sublagoon	2	0.03700836	0.01850418	4.92	0.0228
sublagoon	2	0.00604949	0.00302475	0.80	0.4660

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 4-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

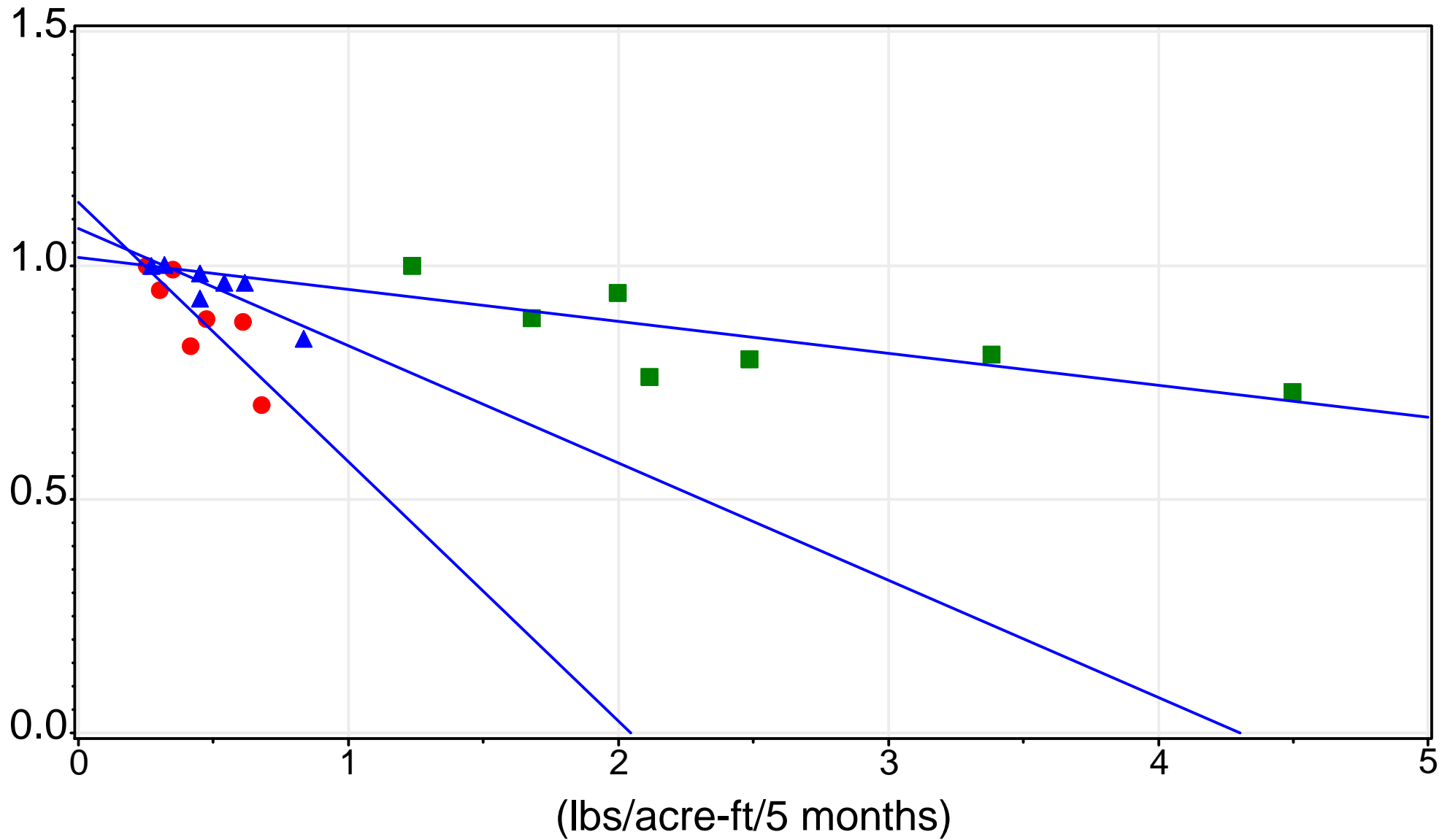
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.068802724	B	0.06639456	16.10	<.0001
tn_lag4	-0.276774086	B	0.15106817	-1.83	0.0869
tn_lag4*sublagoon Banana River Lagoon	-0.303407317	B	0.23033712	-1.32	0.2075
tn_lag4*sublagoon Central Indian River Lagoon	0.202373554	B	0.15328729	1.32	0.2066
tn_lag4*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.034659511	B	0.09505623	0.36	0.7205
sublagoon            Central Indian River Lagoon	-0.073104234	B	0.08743461	-0.84	0.4162
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 5-Months Cumulative TN Load/Sublagoon Volume



sublagoon    ●● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 5-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 5-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.13551278	0.02710256	8.55	0.0005
Error	15	0.04755149	0.00317010		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.740247	6.274881	0.056304	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag5	1	0.06723063	0.06723063	21.21	0.0003
tn_lag5*sublagoon	2	0.06234831	0.03117415	9.83	0.0019
sublagoon	2	0.00593384	0.00296692	0.94	0.4140

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag5	1	0.06689033	0.06689033	21.10	0.0004
tn_lag5*sublagoon	2	0.04104578	0.02052289	6.47	0.0094
sublagoon	2	0.00593384	0.00296692	0.94	0.4140



***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 5-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

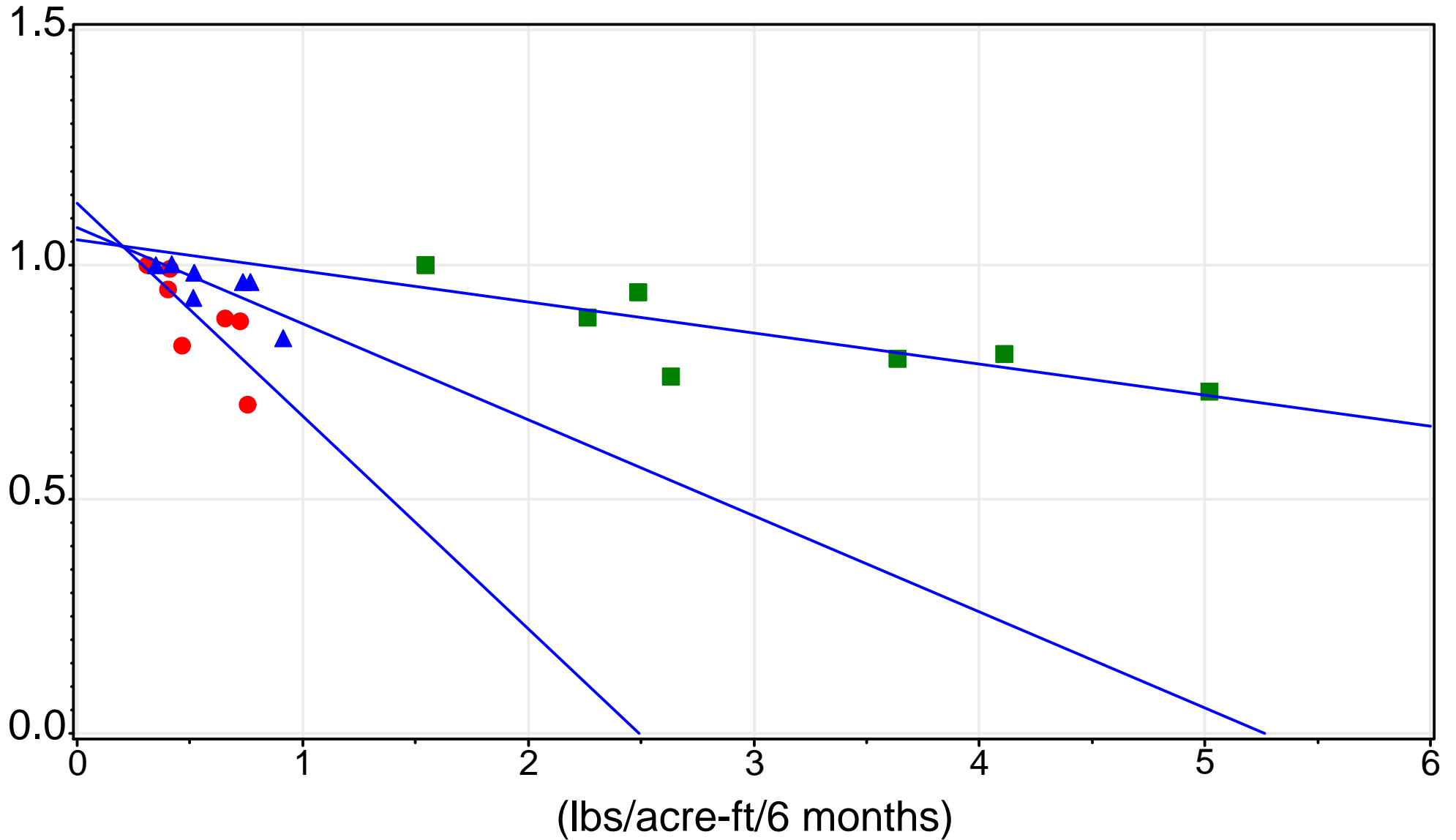
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
<b>Intercept</b>	<b>1.079515831</b>	<b>B</b>	<b>0.06362932</b>	<b>16.97</b>	<b>&lt;.0001</b>
<b>tn_lag5</b>	<b>-0.250880743</b>	<b>B</b>	<b>0.12064451</b>	<b>-2.08</b>	<b>0.0551</b>
<b>tn_lag5*sublagoon Banana River Lagoon</b>	<b>-0.303845277</b>	<b>B</b>	<b>0.18909398</b>	<b>-1.61</b>	<b>0.1289</b>
<b>tn_lag5*sublagoon Central Indian River Lagoon</b>	<b>0.182716429</b>	<b>B</b>	<b>0.12239932</b>	<b>1.49</b>	<b>0.1562</b>
<b>tn_lag5*sublagoon North Indian River Lagoon</b>	<b>0.000000000</b>	<b>B</b>	<b>.</b>	<b>.</b>	<b>.</b>
<b>sublagoon            Banana River Lagoon</b>	<b>0.055228731</b>	<b>B</b>	<b>0.09287702</b>	<b>0.59</b>	<b>0.5609</b>
<b>sublagoon            Central Indian River Lagoon</b>	<b>-0.063214404</b>	<b>B</b>	<b>0.08446026</b>	<b>-0.75</b>	<b>0.4658</b>
<b>sublagoon            North Indian River Lagoon</b>	<b>0.000000000</b>	<b>B</b>	<b>.</b>	<b>.</b>	<b>.</b>

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 6-Months Cumulative TN Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon                      ■ Central Indian River Lagoon  
                   ▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 6-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 6-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.12860428	0.02572086	7.08	0.0014
Error	15	0.05445999	0.00363067		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.702509	6.715250	0.060255	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag6	1	0.06465392	0.06465392	17.81	0.0007
tn_lag6*sublagoon	2	0.06175910	0.03087955	8.51	0.0034
sublagoon	2	0.00219125	0.00109563	0.30	0.7439

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag6	1	0.05581493	0.05581493	15.37	0.0014
tn_lag6*sublagoon	2	0.03164925	0.01582462	4.36	0.0322
sublagoon	2	0.00219125	0.00109563	0.30	0.7439

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 6-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

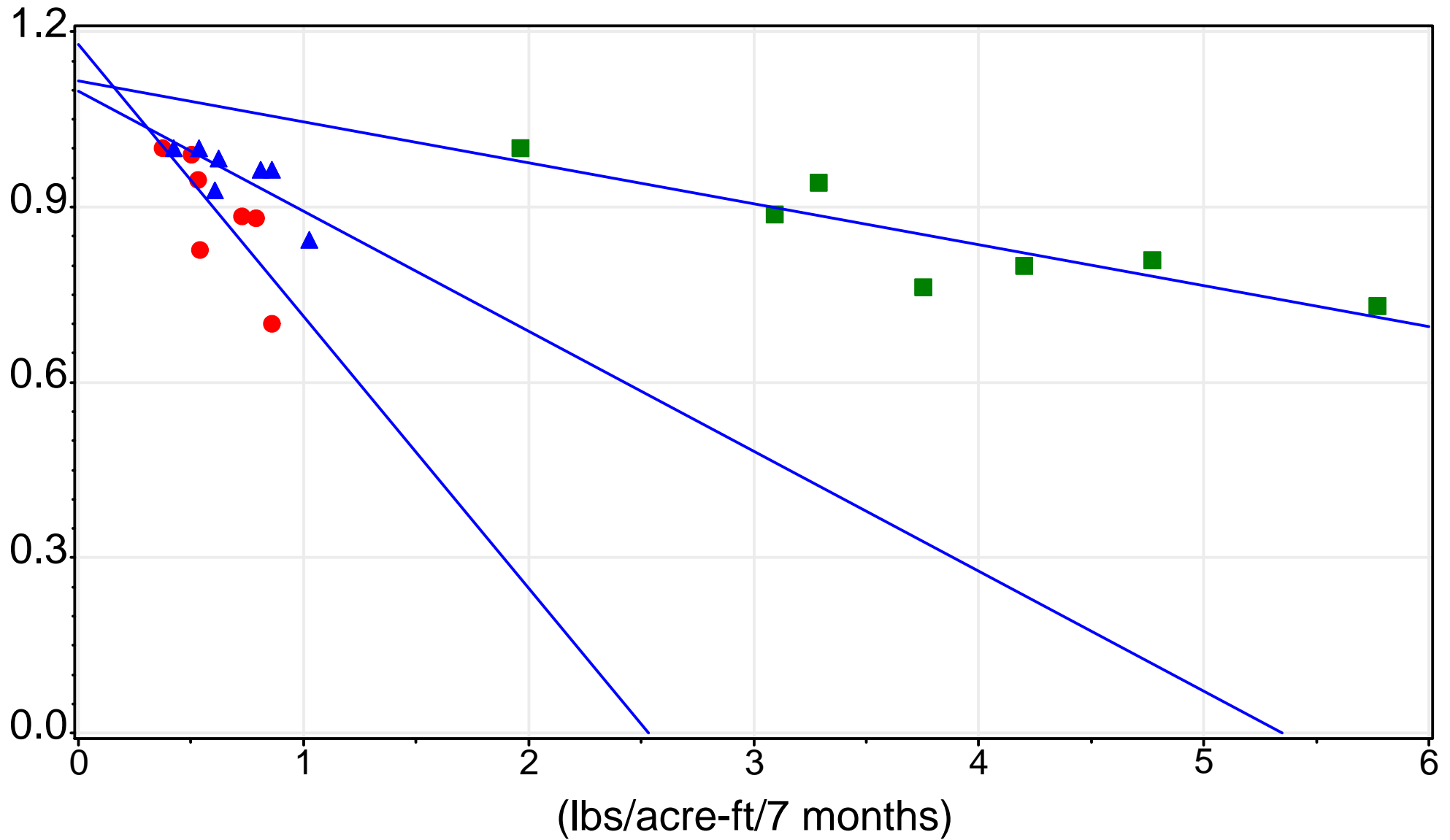
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.078186685	B	0.07558594	14.26	<.0001
tn_lag6	-0.204835996	B	0.11966751	-1.71	0.1075
tn_lag6*sublagoon Banana River Lagoon	-0.249608486	B	0.18392264	-1.36	0.1948
tn_lag6*sublagoon Central Indian River Lagoon	0.138551344	B	0.12139650	1.14	0.2716
tn_lag6*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.053516043	B	0.10838275	0.49	0.6286
sublagoon            Central Indian River Lagoon	-0.025766204	B	0.10117375	-0.25	0.8024
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 7-Months Cumulative TN Load/Sublagoon Volume



sublagoon    ● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 7-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 7-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.13715743	0.02743149	8.96	0.0004
Error	15	0.04590685	0.00306046		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.749231	6.165412	0.055321	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag7	1	0.06233171	0.06233171	20.37	0.0004
tn_lag7*sublagoon	2	0.07318020	0.03659010	11.96	0.0008
sublagoon	2	0.00164551	0.00082276	0.27	0.7679

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag7	1	0.05881911	0.05881911	19.22	0.0005
tn_lag7*sublagoon	2	0.03240547	0.01620273	5.29	0.0182
sublagoon	2	0.00164551	0.00082276	0.27	0.7679



**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 7-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

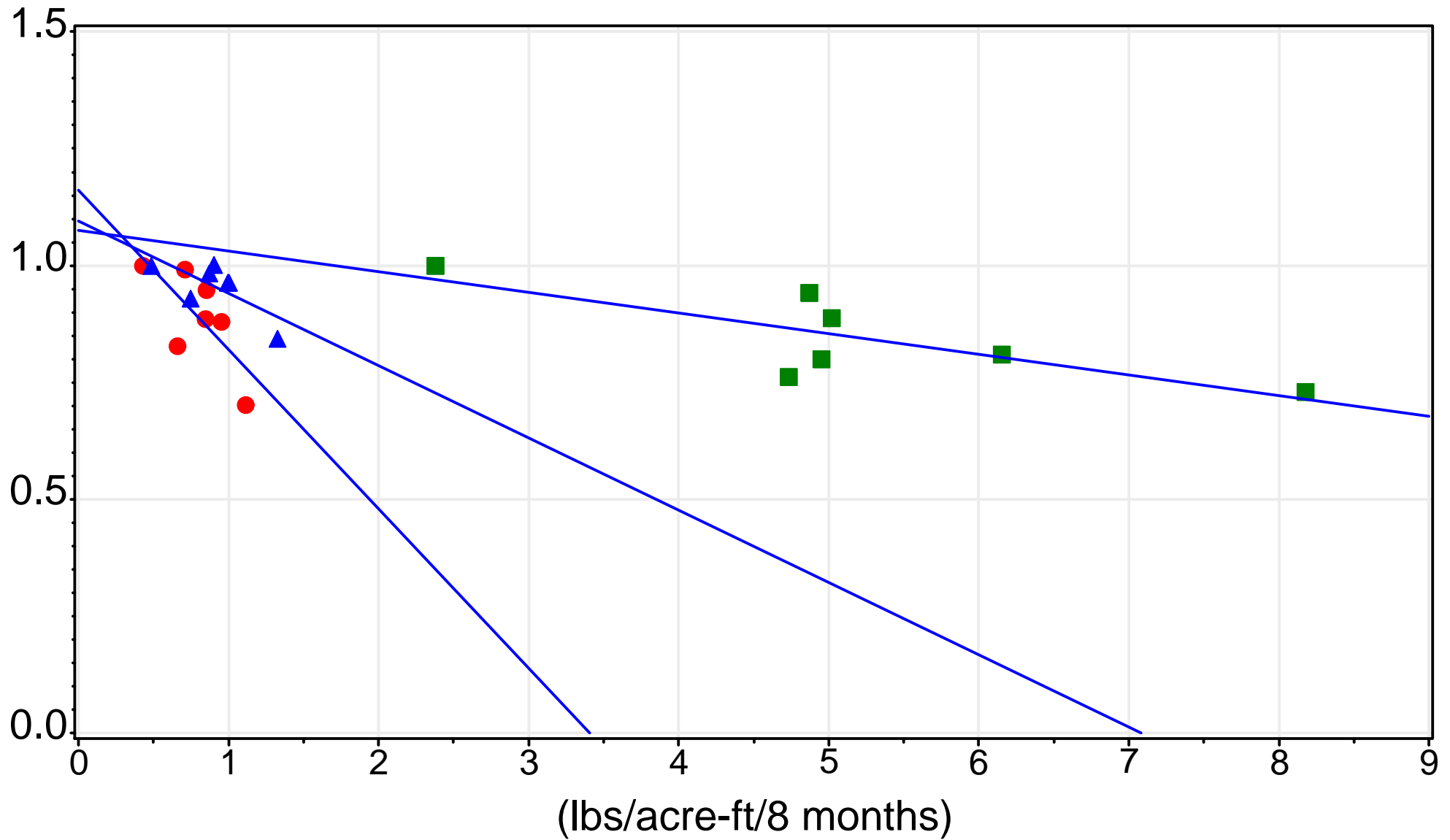
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
<b>Intercept</b>	<b>1.098120444</b>	<b>B</b>	<b>0.07818983</b>	<b>14.04</b>	<b>&lt;.0001</b>
<b>tn_lag7</b>	<b>-0.205388651</b>	<b>B</b>	<b>0.10798443</b>	<b>-1.90</b>	<b>0.0765</b>
<b>tn_lag7*sublagoon Banana River Lagoon</b>	<b>-0.259894838</b>	<b>B</b>	<b>0.16799823</b>	<b>-1.55</b>	<b>0.1427</b>
<b>tn_lag7*sublagoon Central Indian River Lagoon</b>	<b>0.135186884</b>	<b>B</b>	<b>0.10953132</b>	<b>1.23</b>	<b>0.2361</b>
<b>tn_lag7*sublagoon North Indian River Lagoon</b>	<b>0.000000000</b>	<b>B</b>	<b>.</b>	<b>.</b>	<b>.</b>
<b>sublagoon Banana River Lagoon</b>	<b>0.079657151</b>	<b>B</b>	<b>0.11350616</b>	<b>0.70</b>	<b>0.4936</b>
<b>sublagoon Central Indian River Lagoon</b>	<b>0.018092284</b>	<b>B</b>	<b>0.10723891</b>	<b>0.17</b>	<b>0.8683</b>
<b>sublagoon North Indian River Lagoon</b>	<b>0.000000000</b>	<b>B</b>	<b>.</b>	<b>.</b>	<b>.</b>

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 8-Months Cumulative TN Load/Sublagoon Volume



sublagoon

- Banana River Lagoon
- ▲ North Indian River Lagoon
- Central Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 8-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 8-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.11991839	0.02398368	5.70	0.0039
Error	15	0.06314588	0.00420973		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.655062	7.230959	0.064882	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag8	1	0.05696975	0.05696975	13.53	0.0022
tn_lag8*sublagoon	2	0.06104179	0.03052090	7.25	0.0063
sublagoon	2	0.00190685	0.00095343	0.23	0.8000

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag8	1	0.04826762	0.04826762	11.47	0.0041
tn_lag8*sublagoon	2	0.02950939	0.01475470	3.50	0.0564
sublagoon	2	0.00190685	0.00095343	0.23	0.8000

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 8-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

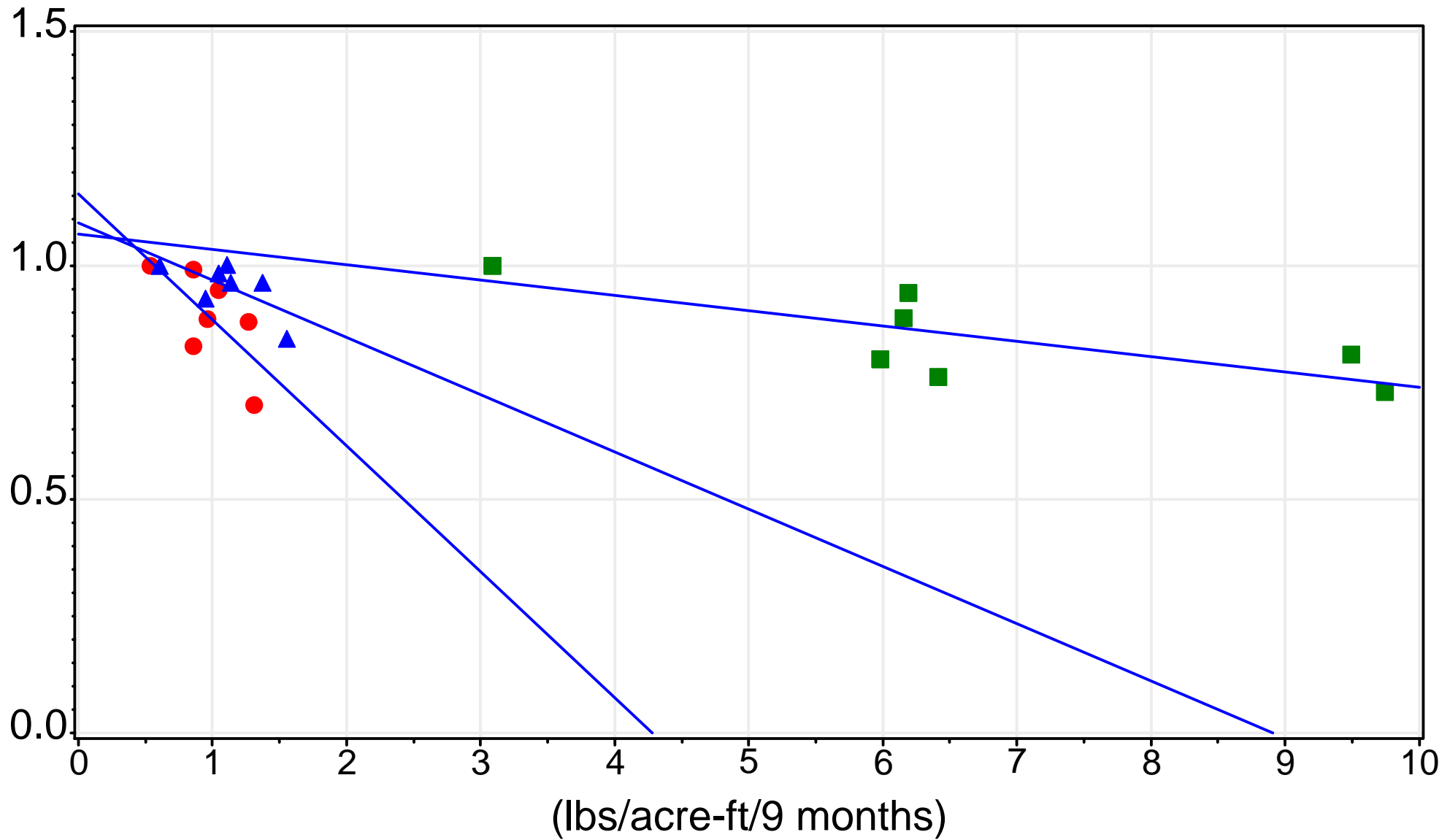
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.094899507	B	0.09690356	11.30	<.0001
tn_lag8	-0.154629484	B	0.10348544	-1.49	0.1559
tn_lag8*sublagoon Banana River Lagoon	-0.185780007	B	0.15852212	-1.17	0.2595
tn_lag8*sublagoon Central Indian River Lagoon	0.110420949	B	0.10460129	1.06	0.3078
tn_lag8*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.065925049	B	0.13825369	0.48	0.6403
sublagoon            Central Indian River Lagoon	-0.018802054	B	0.12739318	-0.15	0.8846
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 9-Months Cumulative TN Load/Sublagoon Volume



sublagoon

- Banana River Lagoon
- ▲▲
North Indian River Lagoon
- Central Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 9-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 9-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.11391277	0.02278255	4.94	0.0072
Error	15	0.06915151	0.00461010		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.622256	7.567009	0.067898	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag9	1	0.05520287	0.05520287	11.97	0.0035
tn_lag9*sublagoon	2	0.05684404	0.02842202	6.17	0.0111
sublagoon	2	0.00186586	0.00093293	0.20	0.8190

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag9	1	0.04275218	0.04275218	9.27	0.0082
tn_lag9*sublagoon	2	0.02744961	0.01372481	2.98	0.0815
sublagoon	2	0.00186586	0.00093293	0.20	0.8190



***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 9-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

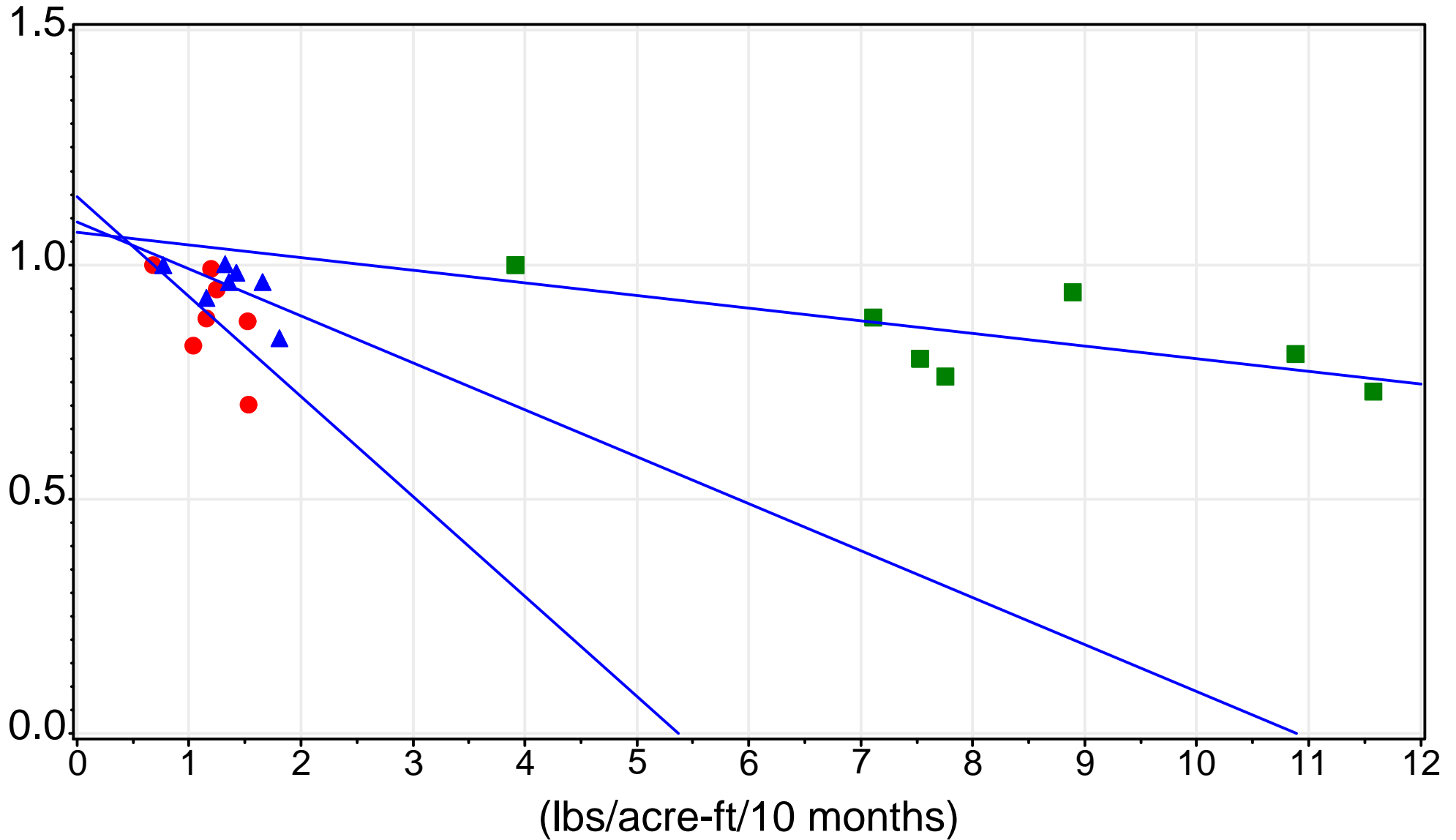
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.090810988	B	0.10518747	10.37	<.0001
tn_lag9	-0.122486782	B	0.09187790	-1.33	0.2024
tn_lag9*sublagoon Banana River Lagoon	-0.146703219	B	0.13886814	-1.06	0.3075
tn_lag9*sublagoon Central Indian River Lagoon	0.089658769	B	0.09267782	0.97	0.3487
tn_lag9*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.062199289	B	0.14855316	0.42	0.6814
sublagoon            Central Indian River Lagoon	-0.023110882	B	0.13563719	-0.17	0.8670
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 10-Months Cumulative TN Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 10-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 10-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.10025761	0.02005152	3.63	0.0237
Error	15	0.08280666	0.00552044		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.547663	8.280490	0.074300	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag10	1	0.05008111	0.05008111	9.07	0.0088
tn_lag10*sublagoon	2	0.04898128	0.02449064	4.44	0.0306
sublagoon	2	0.00119522	0.00059761	0.11	0.8981

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag10	1	0.03375353	0.03375353	6.11	0.0259
tn_lag10*sublagoon	2	0.02103266	0.01051633	1.90	0.1831
sublagoon	2	0.00119522	0.00059761	0.11	0.8981

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 10-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

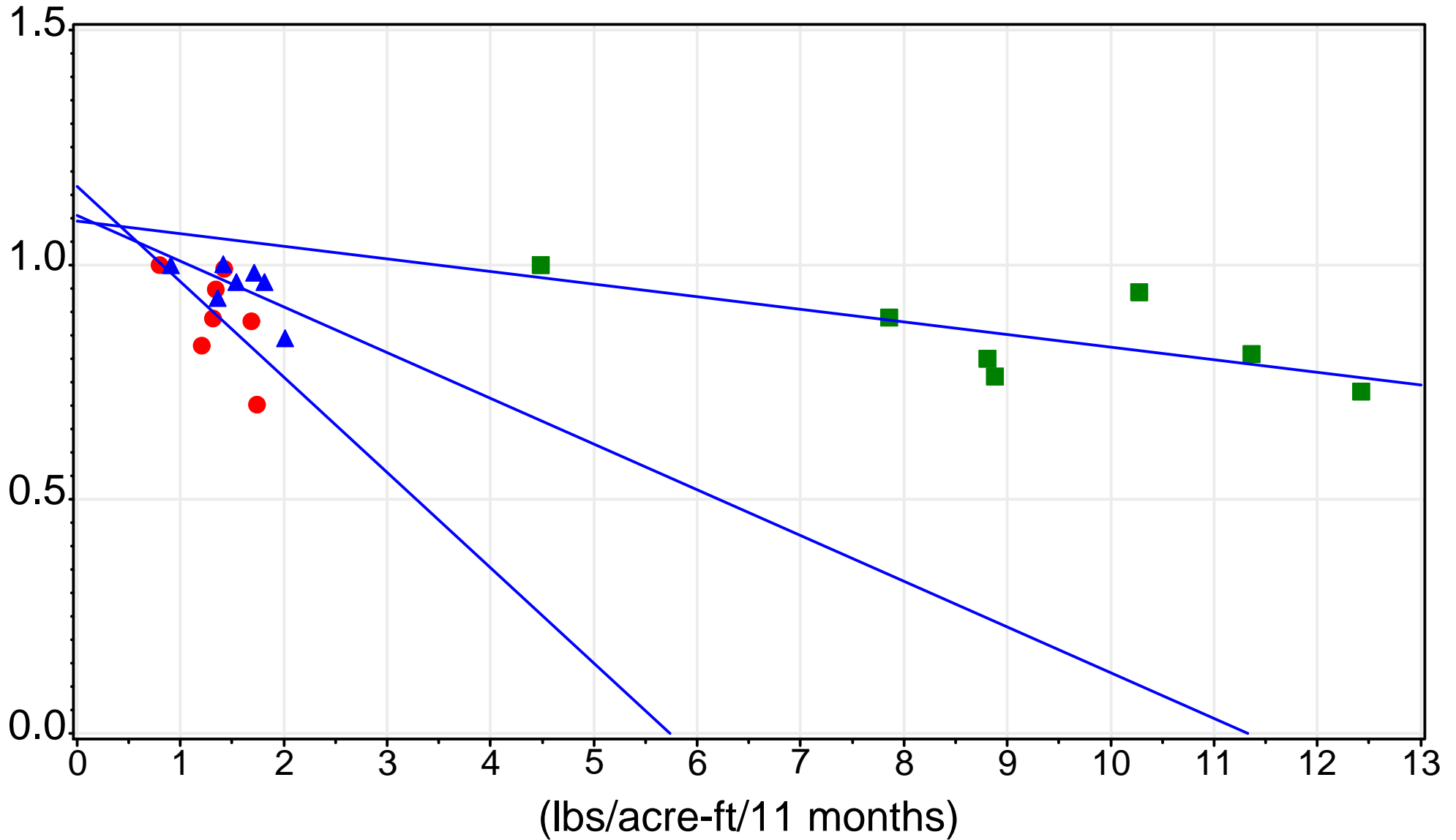
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.090573411	B	0.12546447	8.69	<.0001
tn_lag10	-0.100156760	B	0.09021591	-1.11	0.2844
tn_lag10*sublagoon Banana River Lagoon	-0.112937196	B	0.13710193	-0.82	0.4230
tn_lag10*sublagoon Central Indian River Lagoon	0.073128874	B	0.09099197	0.80	0.4341
tn_lag10*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon                      Banana River Lagoon	0.053924515	B	0.17811088	0.30	0.7662
sublagoon                      Central Indian River Lagoon	-0.020987606	B	0.16146295	-0.13	0.8983
sublagoon                      North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 11-Months Cumulative TN Load/Sublagoon Volume



sublagoon    ●● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲▲ North Indian River Lagoon

***Indian River Lagoon***  
***Annual Seagrass Coverage/2007 Seagrass Coverage***  
***Related to 11-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 11-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.10242728	0.02048546	3.81	0.0199
Error	15	0.08063699	0.00537580		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.559515	8.171289	0.073320	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag11	1	0.04905762	0.04905762	9.13	0.0086
tn_lag11*sublagoon	2	0.05230063	0.02615031	4.86	0.0235
sublagoon	2	0.00106903	0.00053452	0.10	0.9059

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag11	1	0.03582180	0.03582180	6.66	0.0209
tn_lag11*sublagoon	2	0.02185118	0.01092559	2.03	0.1656
sublagoon	2	0.00106903	0.00053452	0.10	0.9059



**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 11-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

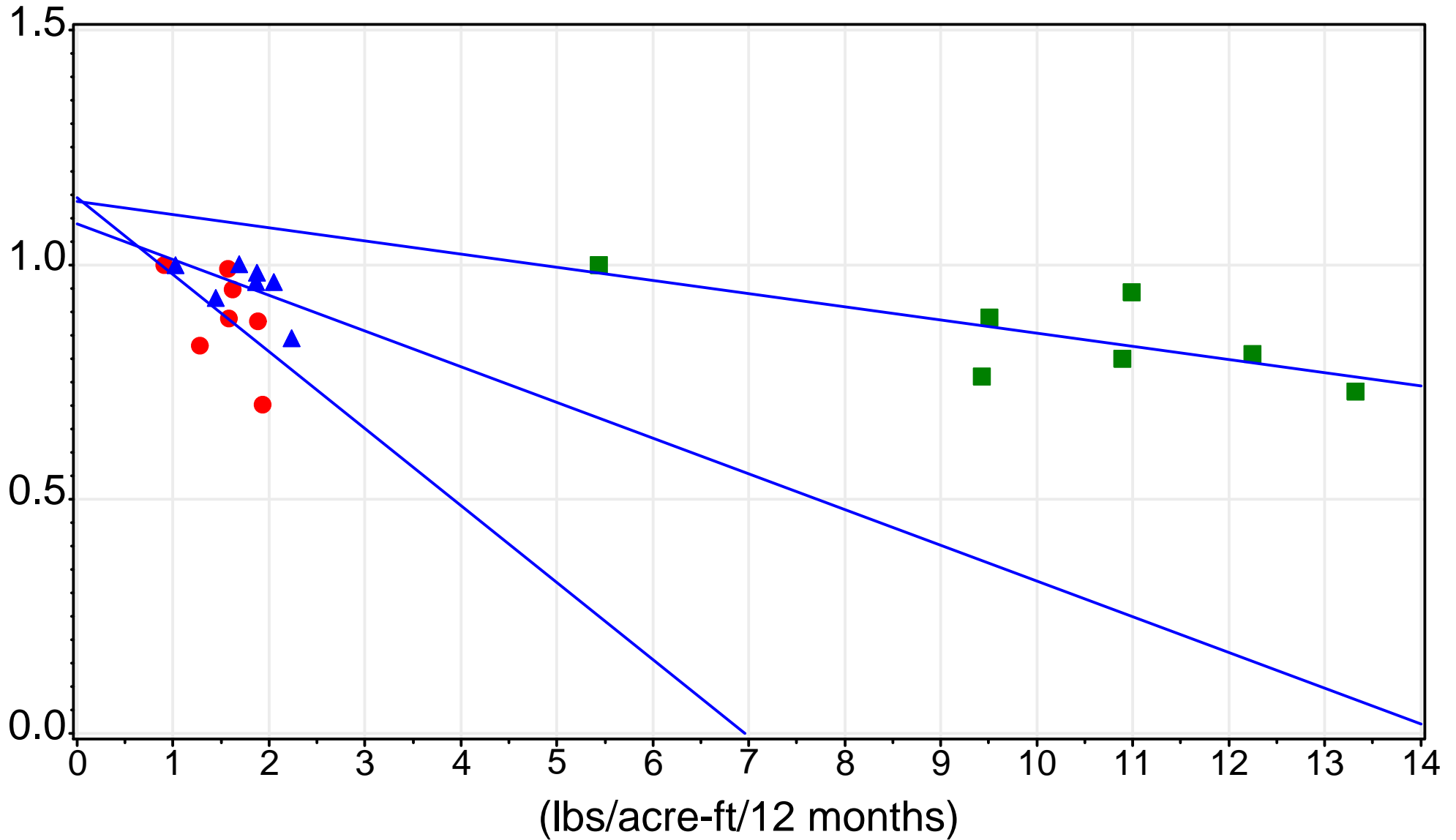
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.104695092	B	0.13139421	8.41	<.0001
tn_lag11	-0.097524625	B	0.08357468	-1.17	0.2615
tn_lag11*sublagoon Banana River Lagoon	-0.105865829	B	0.12644100	-0.84	0.4156
tn_lag11*sublagoon Central Indian River Lagoon	0.070694869	B	0.08436520	0.84	0.4152
tn_lag11*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon                      Banana River Lagoon	0.061668111	B	0.18613214	0.33	0.7450
sublagoon                      Central Indian River Lagoon	-0.012067222	B	0.17077035	-0.07	0.9446
sublagoon                      North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 12-Months Cumulative TN Load/Sublagoon Volume



sublagoon

- Banana River Lagoon
- ▲ North Indian River Lagoon
- Central Indian River Lagoon

***Indian River Lagoon***  
***Annual Seagrass Coverage/2007 Seagrass Coverage***  
***Related to 12-Months Cumulative TN Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 12-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.09787750	0.01957550	3.45	0.0284
Error	15	0.08518678	0.00567912		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.534662	8.398650	0.075360	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tn_lag12	1	0.04728298	0.04728298	8.33	0.0113
tn_lag12*sublagoon	2	0.05002437	0.02501218	4.40	0.0313
sublagoon	2	0.00057015	0.00028508	0.05	0.9512

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tn_lag12	1	0.03028884	0.03028884	5.33	0.0356
tn_lag12*sublagoon	2	0.01561584	0.00780792	1.37	0.2830
sublagoon	2	0.00057015	0.00028508	0.05	0.9512

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 12-Months Cumulative TN Load/Sublagoon Volume**

The GLM Procedure

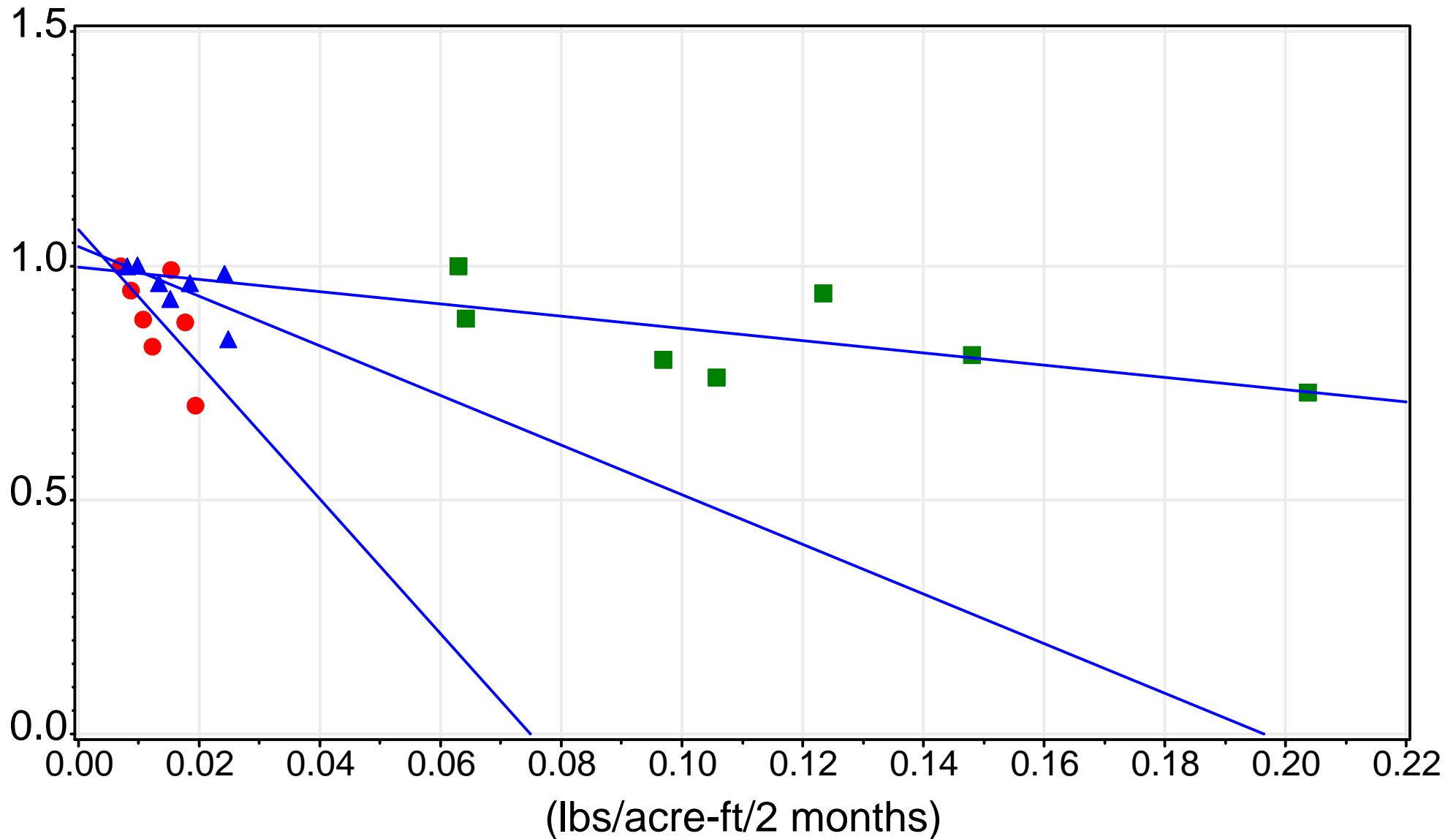
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.087437721	B	0.13568769	8.01	<.0001
tn_lag12	-0.076194449	B	0.07622017	-1.00	0.3333
tn_lag12*sublagoon Banana River Lagoon	-0.088215017	B	0.11573446	-0.76	0.4577
tn_lag12*sublagoon Central Indian River Lagoon	0.048063932	B	0.07717427	0.62	0.5428
tn_lag12*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon                      Banana River Lagoon	0.055890479	B	0.19292560	0.29	0.7760
sublagoon                      Central Indian River Lagoon	0.048147513	B	0.18608716	0.26	0.7994
sublagoon                      North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 2-Months Cumulative TP Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon    ■ Central Indian River Lagoon  
                 ▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 2-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 2-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.10007820	0.02001564	3.62	0.0240
Error	15	0.08298607	0.00553240		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.546683	8.289456	0.074380	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag2	1	0.05224762	0.05224762	9.44	0.0077
tp_lag2*sublagoon	2	0.04516478	0.02258239	4.08	0.0384
sublagoon	2	0.00266580	0.00133290	0.24	0.7889

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag2	1	0.03770202	0.03770202	6.81	0.0197
tp_lag2*sublagoon	2	0.02570619	0.01285309	2.32	0.1321
sublagoon	2	0.00266580	0.00133290	0.24	0.7889



**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 2-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

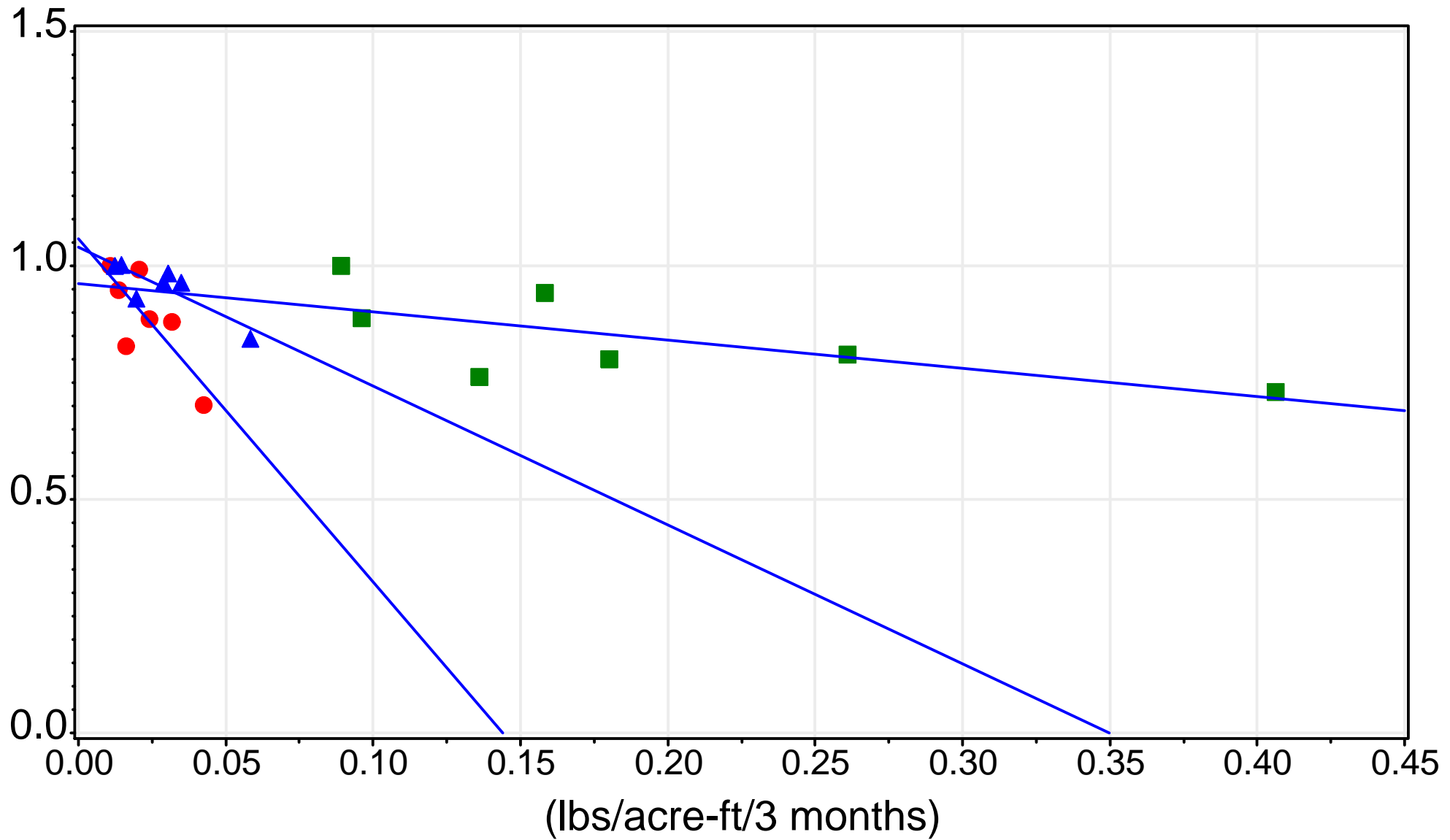
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.040883140	B	0.07995427	13.02	<.0001
tp_lag2	-5.300861968	B	4.61003678	-1.15	0.2682
tp_lag2*sublagoon Banana River Lagoon	-9.081175246	B	8.01440120	-1.13	0.2750
tp_lag2*sublagoon Central Indian River Lagoon	4.000987940	B	4.65060757	0.86	0.4032
tp_lag2*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.036073945	B	0.12016673	0.30	0.7681
sublagoon            Central Indian River Lagoon	-0.044453294	B	0.11022795	-0.40	0.6924
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 3-Months Cumulative TP Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon    ■■ Central Indian River Lagoon  
                 ▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 3-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 3-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.12134688	0.02426938	5.90	0.0033
Error	15	0.06171739	0.00411449		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.662865	7.148702	0.064144	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag3	1	0.06117114	0.06117114	14.87	0.0016
tp_lag3*sublagoon	2	0.05248309	0.02624155	6.38	0.0099
sublagoon	2	0.00769265	0.00384632	0.93	0.4144

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag3	1	0.05833452	0.05833452	14.18	0.0019
tp_lag3*sublagoon	2	0.04102642	0.02051321	4.99	0.0219
sublagoon	2	0.00769265	0.00384632	0.93	0.4144

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 3-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

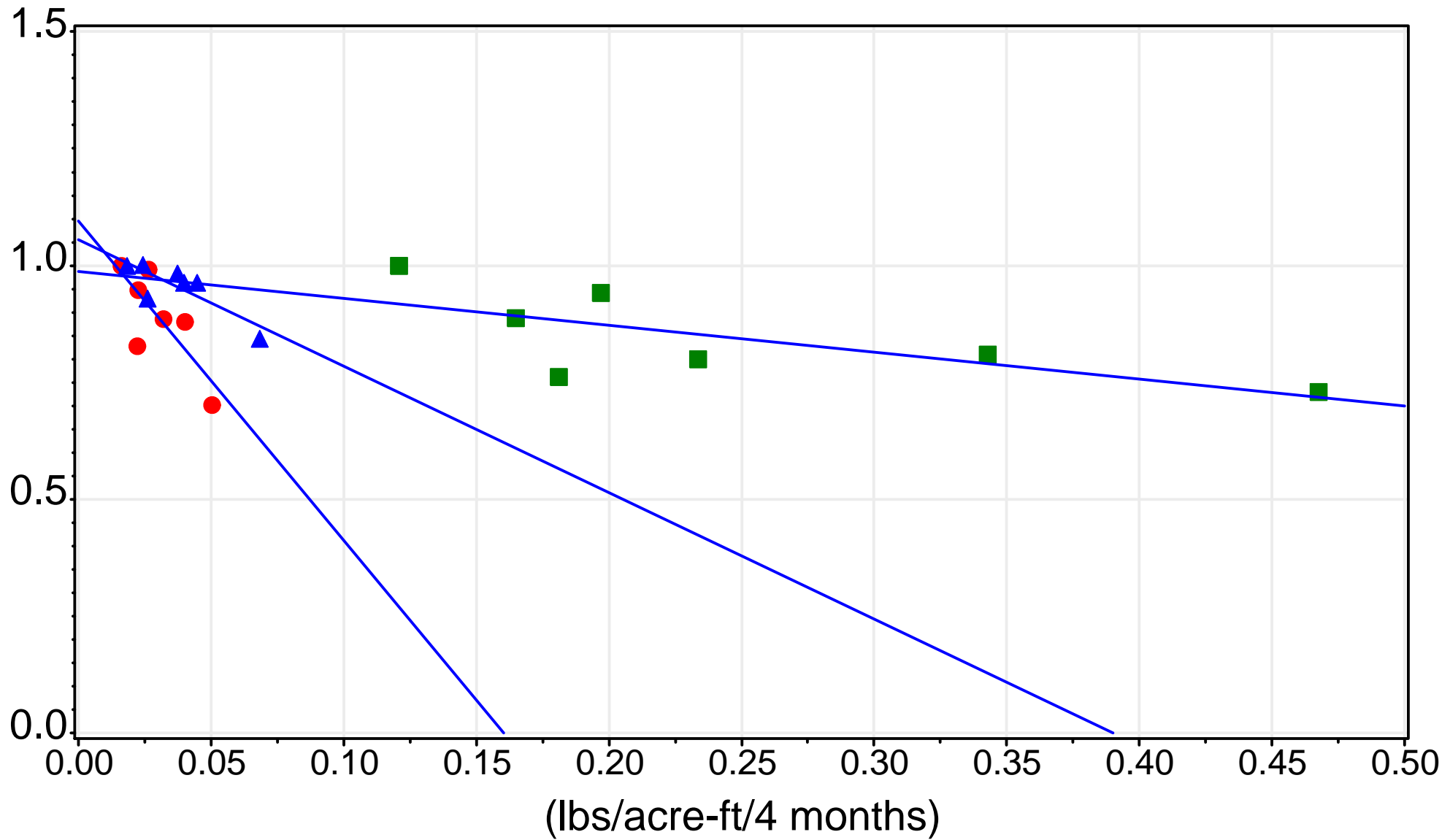
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.039539634	B	0.05357979	19.40	<.0001
tp_lag3	-2.971350811	B	1.67576780	-1.77	0.0965
tp_lag3*sublagoon Banana River Lagoon	-4.374738537	B	2.89053667	-1.51	0.1509
tp_lag3*sublagoon Central Indian River Lagoon	2.369158133	B	1.69210028	1.40	0.1818
tp_lag3*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.018238013	B	0.07968403	0.23	0.8221
sublagoon            Central Indian River Lagoon	-0.078450636	B	0.07371576	-1.06	0.3041
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 4-Months Cumulative TP Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon                      ■■■ Central Indian River Lagoon  
                   ▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 4-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 4-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.12214473	0.02442895	6.02	0.0030
Error	15	0.06091954	0.00406130		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.667223	7.102344	0.063728	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag4	1	0.05988715	0.05988715	14.75	0.0016
tp_lag4*sublagoon	2	0.05621775	0.02810887	6.92	0.0074
sublagoon	2	0.00603983	0.00301991	0.74	0.4921

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag4	1	0.05713897	0.05713897	14.07	0.0019
tp_lag4*sublagoon	2	0.03981503	0.01990751	4.90	0.0230
sublagoon	2	0.00603983	0.00301991	0.74	0.4921



**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 4-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

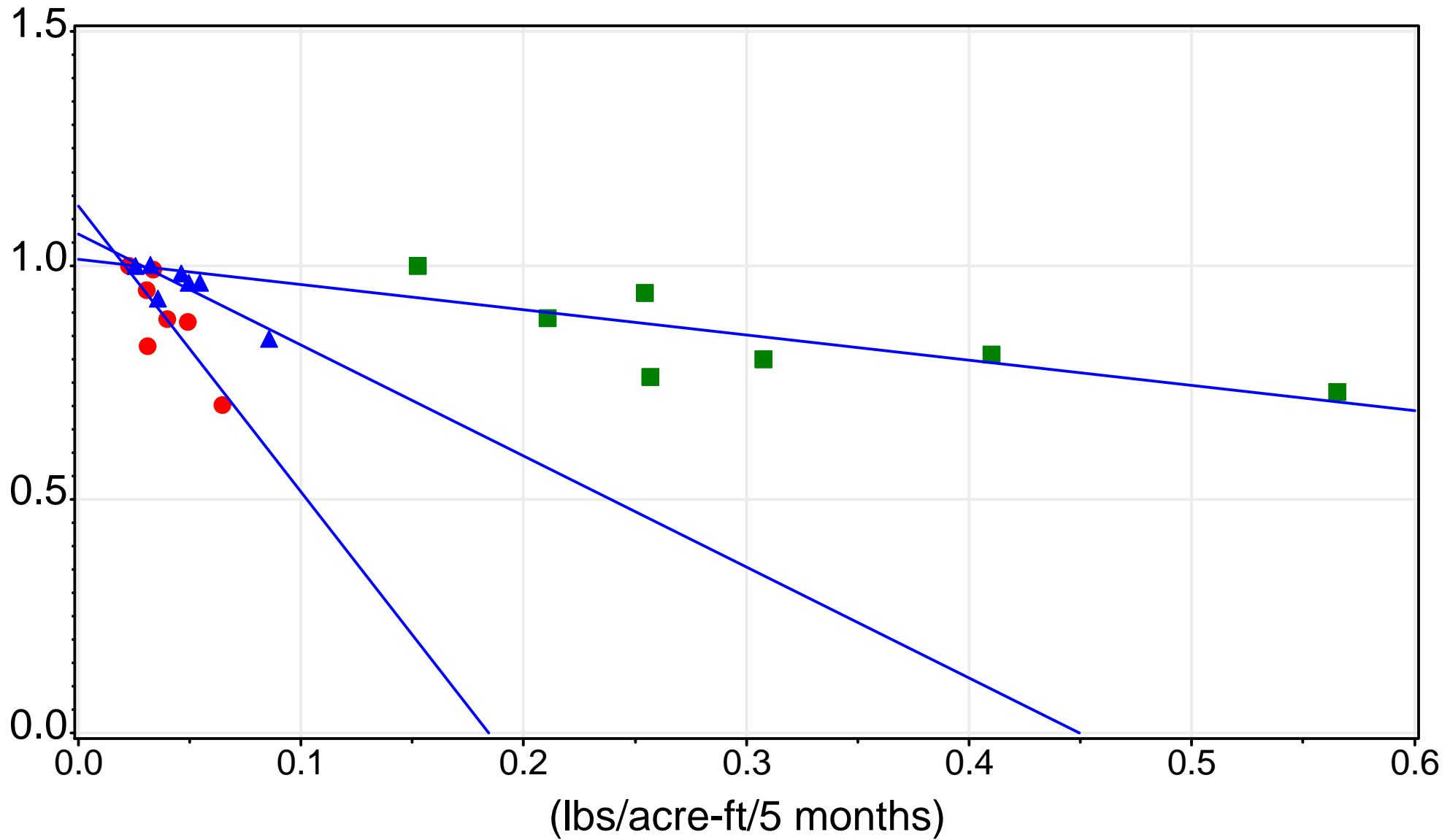
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.054775125	B	0.06240213	16.90	<.0001
tp_lag4	-2.704249184	B	1.55739595	-1.74	0.1030
tp_lag4*sublagoon Banana River Lagoon	-4.127224349	B	2.68755033	-1.54	0.1454
tp_lag4*sublagoon Central Indian River Lagoon	2.126913686	B	1.57224206	1.35	0.1962
tp_lag4*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.040309467	B	0.09378063	0.43	0.6734
sublagoon            Central Indian River Lagoon	-0.066919116	B	0.08509477	-0.79	0.4439
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 5-Months Cumulative TP Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 5-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 5-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.13213786	0.02642757	7.78	0.0009
Error	15	0.05092641	0.00339509		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.721811	6.493741	0.058267	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag5	1	0.06200340	0.06200340	18.26	0.0007
tp_lag5*sublagoon	2	0.06461042	0.03230521	9.52	0.0021
sublagoon	2	0.00552405	0.00276202	0.81	0.4619

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag5	1	0.06352416	0.06352416	18.71	0.0006
tp_lag5*sublagoon	2	0.04360919	0.02180459	6.42	0.0097
sublagoon	2	0.00552405	0.00276202	0.81	0.4619

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 5-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

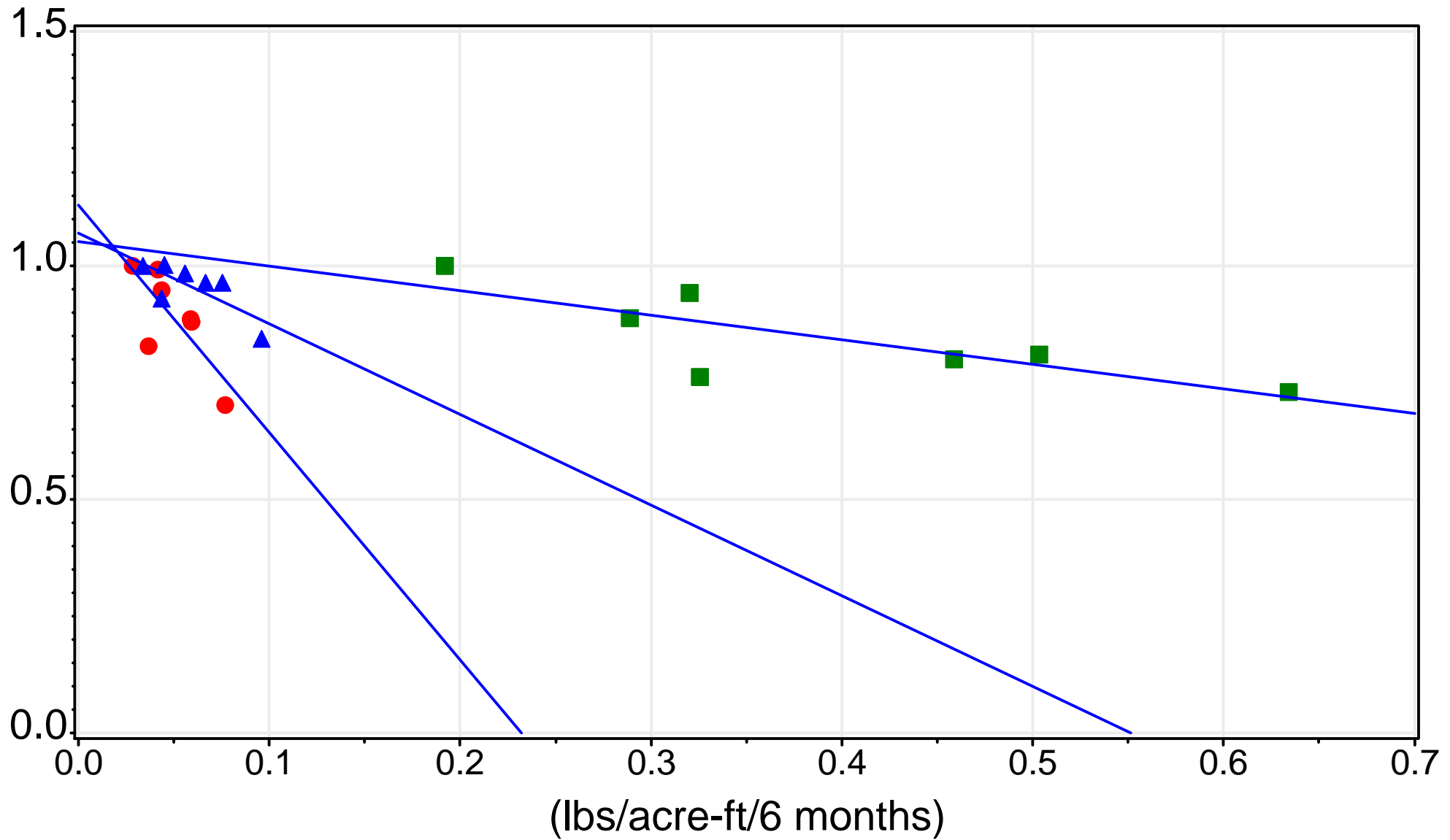
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.066530241	B	0.06079390	17.54	<.0001
tp_lag5	-2.371602687	B	1.20296728	-1.97	0.0674
tp_lag5*sublagoon Banana River Lagoon	-3.744898399	B	2.07965447	-1.80	0.0919
tp_lag5*sublagoon Central Indian River Lagoon	1.833600163	B	1.21508074	1.51	0.1521
tp_lag5*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.060486265	B	0.09219338	0.66	0.5217
sublagoon            Central Indian River Lagoon	-0.053754924	B	0.08344451	-0.64	0.5292
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 6-Months Cumulative TP Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon                      ■■■ Central Indian River Lagoon  
                  ▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 6-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 6-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.12797658	0.02559532	6.97	0.0015
Error	15	0.05508769	0.00367251		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.699080	6.753839	0.060601	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag6	1	0.06056714	0.06056714	16.49	0.0010
tp_lag6*sublagoon	2	0.06518439	0.03259219	8.87	0.0029
sublagoon	2	0.00222505	0.00111252	0.30	0.7431

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag6	1	0.05478426	0.05478426	14.92	0.0015
tp_lag6*sublagoon	2	0.03537898	0.01768949	4.82	0.0242
sublagoon	2	0.00222505	0.00111252	0.30	0.7431



***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 6-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

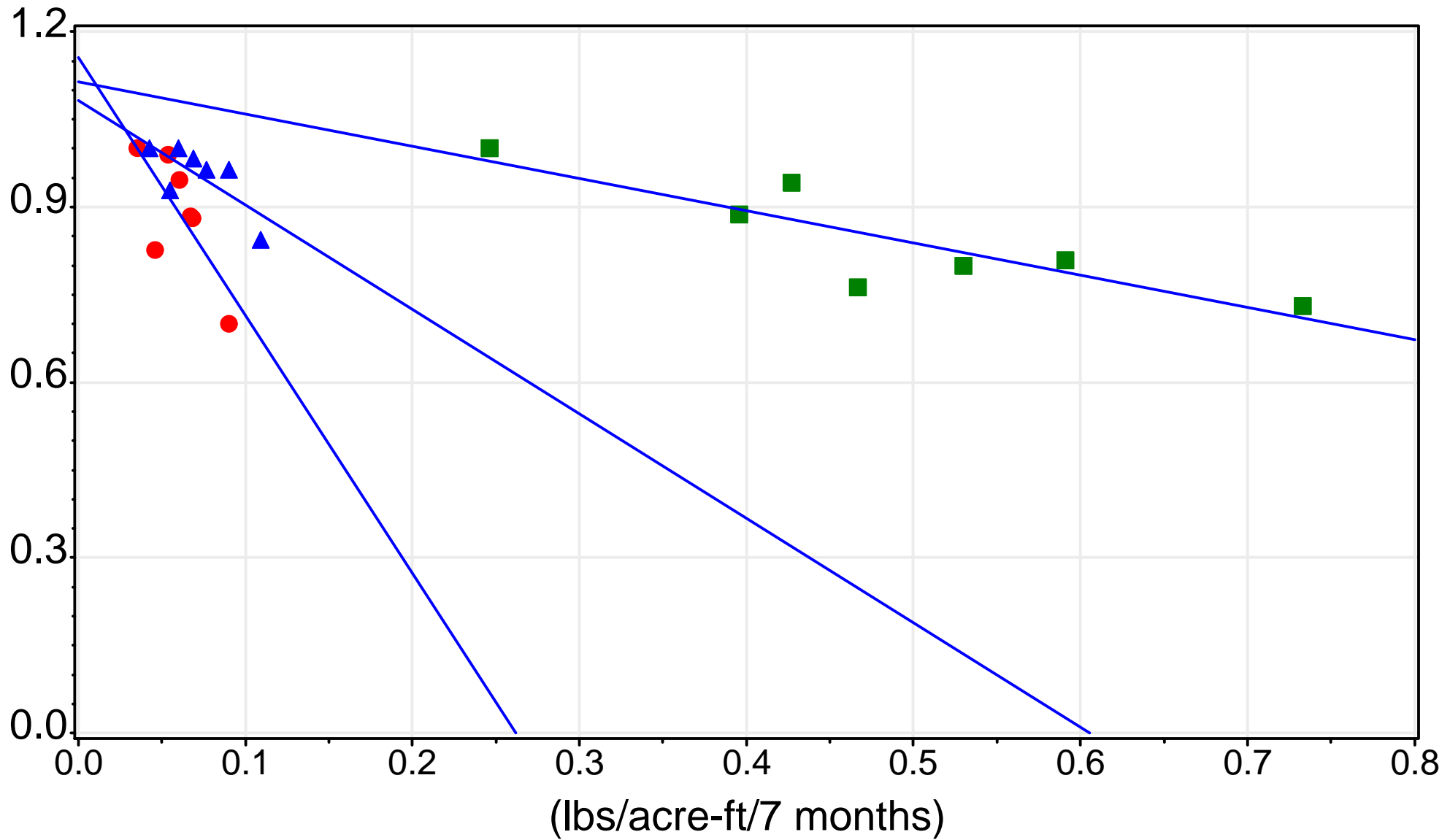
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.069973114	B	0.07208580	14.84	<.0001
tp_lag6	-1.941355738	B	1.15228642	-1.68	0.1127
tp_lag6*sublagoon Banana River Lagoon	-2.923548398	B	1.89155581	-1.55	0.1430
tp_lag6*sublagoon Central Indian River Lagoon	1.414253162	B	1.16398098	1.22	0.2431
tp_lag6*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.060032560	B	0.10580378	0.57	0.5788
sublagoon            Central Indian River Lagoon	-0.017991418	B	0.09908964	-0.18	0.8584
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 7-Months Cumulative TP Load/Sublagoon Volume



sublagoon ● Banana River Lagoon ■ Central Indian River Lagoon  
▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 7-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 7-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.13086987	0.02617397	7.52	0.0010
Error	15	0.05219441	0.00347963		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.714885	6.574086	0.058988	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag7	1	0.05842789	0.05842789	16.79	0.0010
tp_lag7*sublagoon	2	0.07110404	0.03555202	10.22	0.0016
sublagoon	2	0.00133793	0.00066896	0.19	0.8271

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag7	1	0.05230498	0.05230498	15.03	0.0015
tp_lag7*sublagoon	2	0.03159597	0.01579798	4.54	0.0287
sublagoon	2	0.00133793	0.00066896	0.19	0.8271

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 7-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

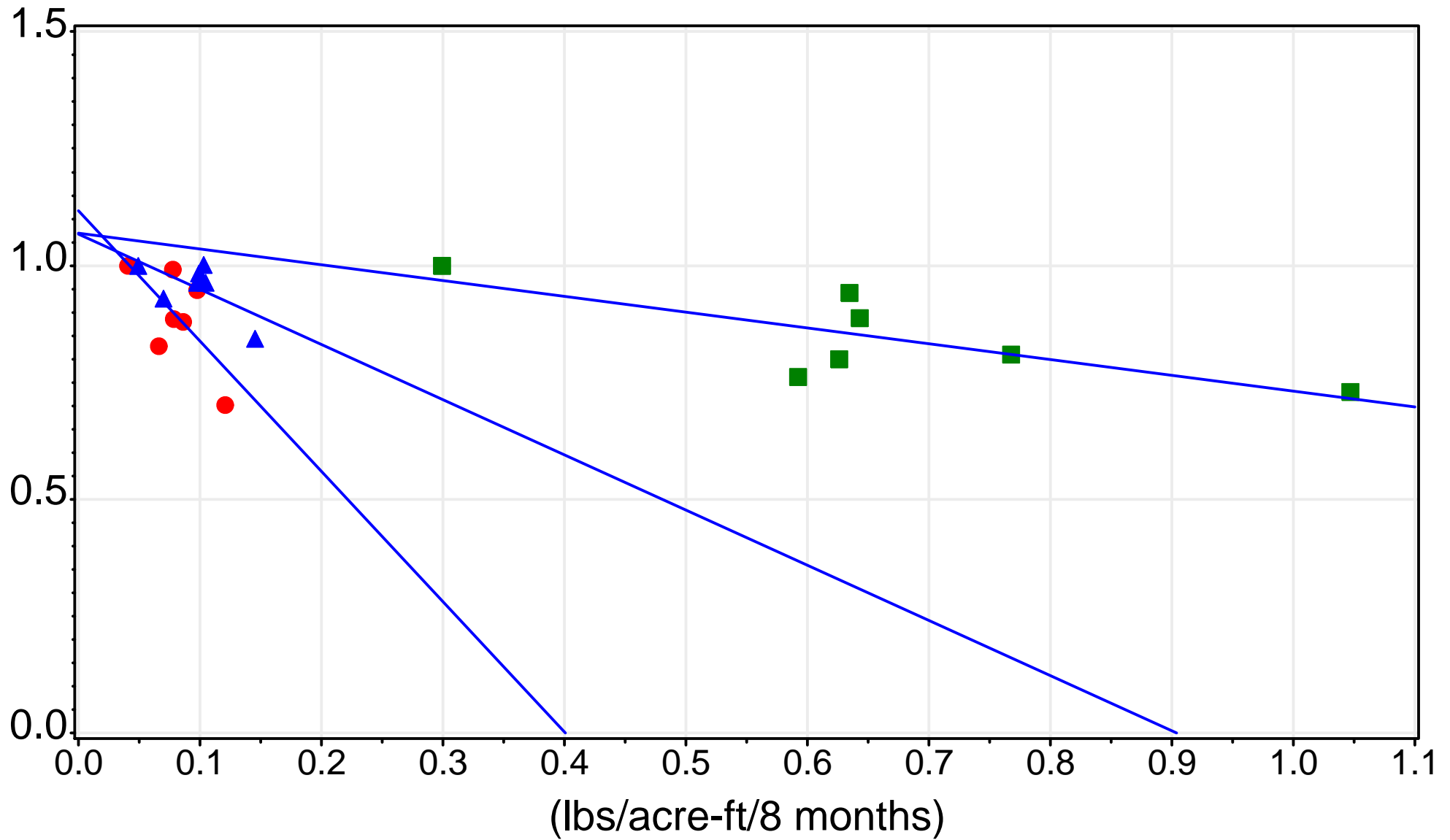
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.082958993	B	0.07965296	13.60	<.0001
tp_lag7	-1.788002584	B	1.06700284	-1.68	0.1145
tp_lag7*sublagoon Banana River Lagoon	-2.620395819	B	1.73346304	-1.51	0.1514
tp_lag7*sublagoon Central Indian River Lagoon	1.236541400	B	1.07831334	1.15	0.2695
tp_lag7*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.072218335	B	0.11658184	0.62	0.5449
sublagoon            Central Indian River Lagoon	0.031002879	B	0.11193515	0.28	0.7856
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 8-Months Cumulative TP Load/Sublagoon Volume



sublagoon ●●● Banana River Lagoon ■ Central Indian River Lagoon  
▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 8-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 8-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.11153828	0.02230766	4.68	0.0090
Error	15	0.07152599	0.00476840		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.609285	7.695828	0.069054	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag8	1	0.05422929	0.05422929	11.37	0.0042
tp_lag8*sublagoon	2	0.05646979	0.02823490	5.92	0.0127
sublagoon	2	0.00083920	0.00041960	0.09	0.9162

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag8	1	0.04067319	0.04067319	8.53	0.0105
tp_lag8*sublagoon	2	0.02568790	0.01284395	2.69	0.1001
sublagoon	2	0.00083920	0.00041960	0.09	0.9162



***Indian River Lagoon***  
***Annual Seagrass Coverage/2007 Seagrass Coverage***  
***Related to 8-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

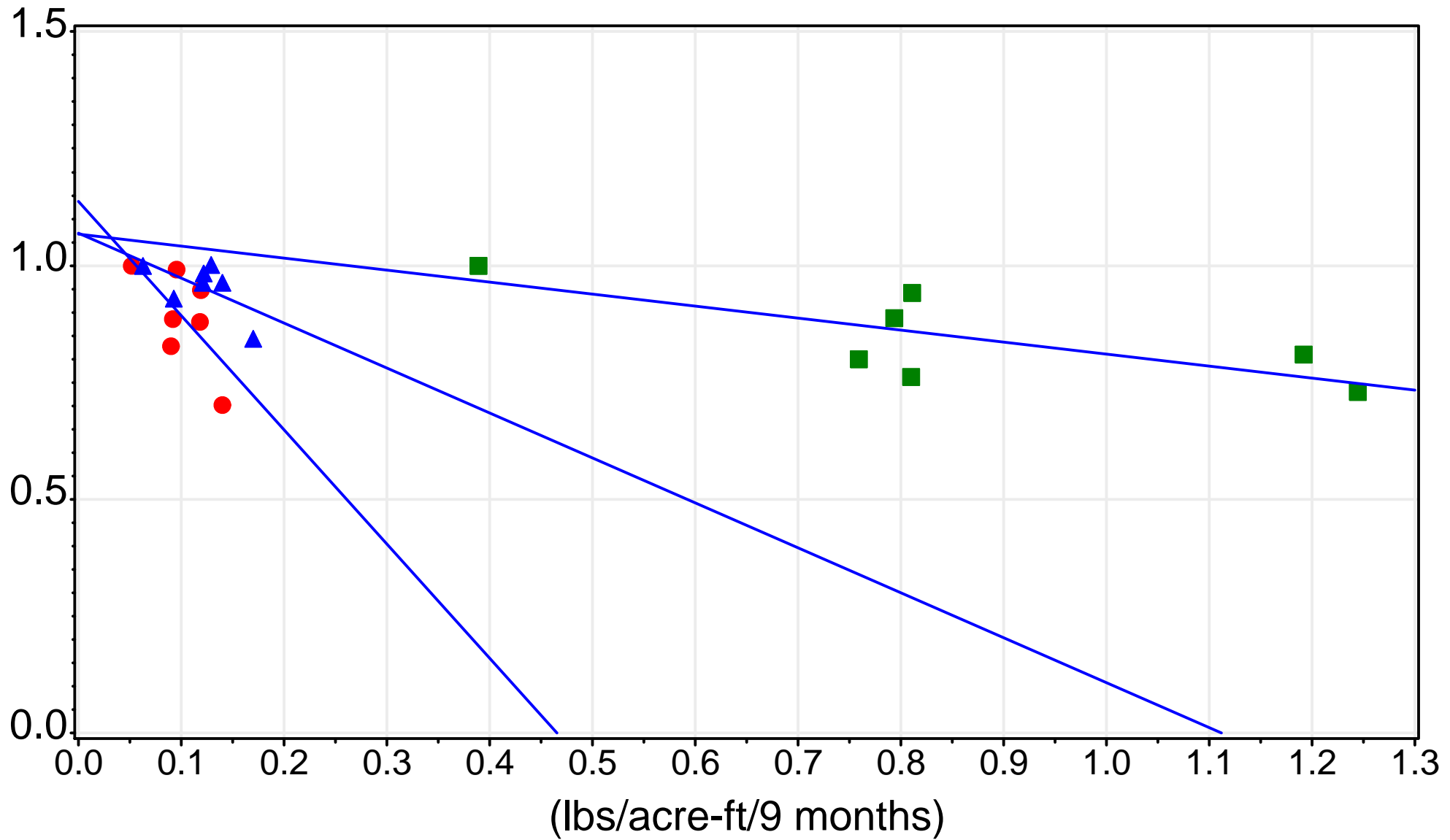
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.067909775	B	0.09349020	11.42	<.0001
tp_lag8	-1.181283159	B	0.93771254	-1.26	0.2270
tp_lag8*sublagoon Banana River Lagoon	-1.604712364	B	1.46806835	-1.09	0.2916
tp_lag8*sublagoon Central Indian River Lagoon	0.845087887	B	0.94620001	0.89	0.3859
tp_lag8*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.048392108	B	0.13354724	0.36	0.7221
sublagoon            Central Indian River Lagoon	0.000486861	B	0.12789765	0.00	0.9970
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 9-Months Cumulative TP Load/Sublagoon Volume



sublagoon    ●● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 9-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 9-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.10904080	0.02180816	4.42	0.0113
Error	15	0.07402347	0.00493490		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.595642	7.829033	0.070249	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag9	1	0.05271630	0.05271630	10.68	0.0052
tp_lag9*sublagoon	2	0.05484321	0.02742161	5.56	0.0156
sublagoon	2	0.00148129	0.00074064	0.15	0.8619

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag9	1	0.03792328	0.03792328	7.68	0.0142
tp_lag9*sublagoon	2	0.02587102	0.01293551	2.62	0.1056
sublagoon	2	0.00148129	0.00074064	0.15	0.8619

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 9-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

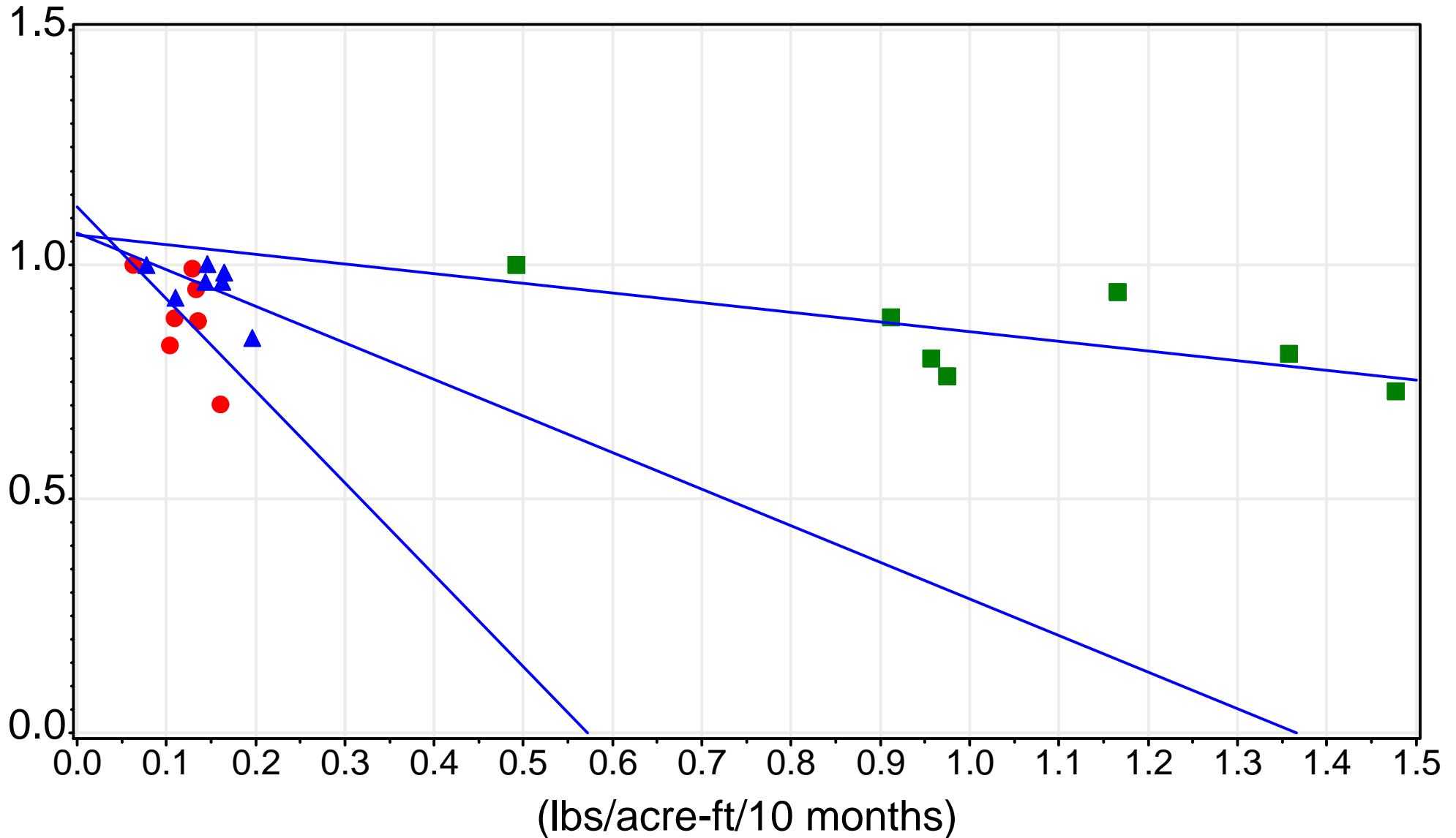
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.069827717	B	0.10350848	10.34	<.0001
tp_lag9	-0.961740549	B	0.83660307	-1.15	0.2683
tp_lag9*sublagoon Banana River Lagoon	-1.480388725	B	1.31650852	-1.12	0.2785
tp_lag9*sublagoon Central Indian River Lagoon	0.705699098	B	0.84248110	0.84	0.4154
tp_lag9*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon            Banana River Lagoon	0.066896477	B	0.14818692	0.45	0.6581
sublagoon            Central Indian River Lagoon	-0.003358037	B	0.13664789	-0.02	0.9807
sublagoon            North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 10-Months Cumulative TP Load/Sublagoon Volume



sublagoon    Banana River Lagoon      Central Indian River Lagoon  
 North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 10-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 10-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.09605882	0.01921176	3.31	0.0326
Error	15	0.08700545	0.00580036		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.524727	8.487829	0.076160	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag10	1	0.04762742	0.04762742	8.21	0.0118
tp_lag10*sublagoon	2	0.04745223	0.02372611	4.09	0.0382
sublagoon	2	0.00097918	0.00048959	0.08	0.9195

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag10	1	0.03063569	0.03063569	5.28	0.0364
tp_lag10*sublagoon	2	0.02052431	0.01026216	1.77	0.2042
sublagoon	2	0.00097918	0.00048959	0.08	0.9195



***Indian River Lagoon***  
***Annual Seagrass Coverage/2007 Seagrass Coverage***  
***Related to 10-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

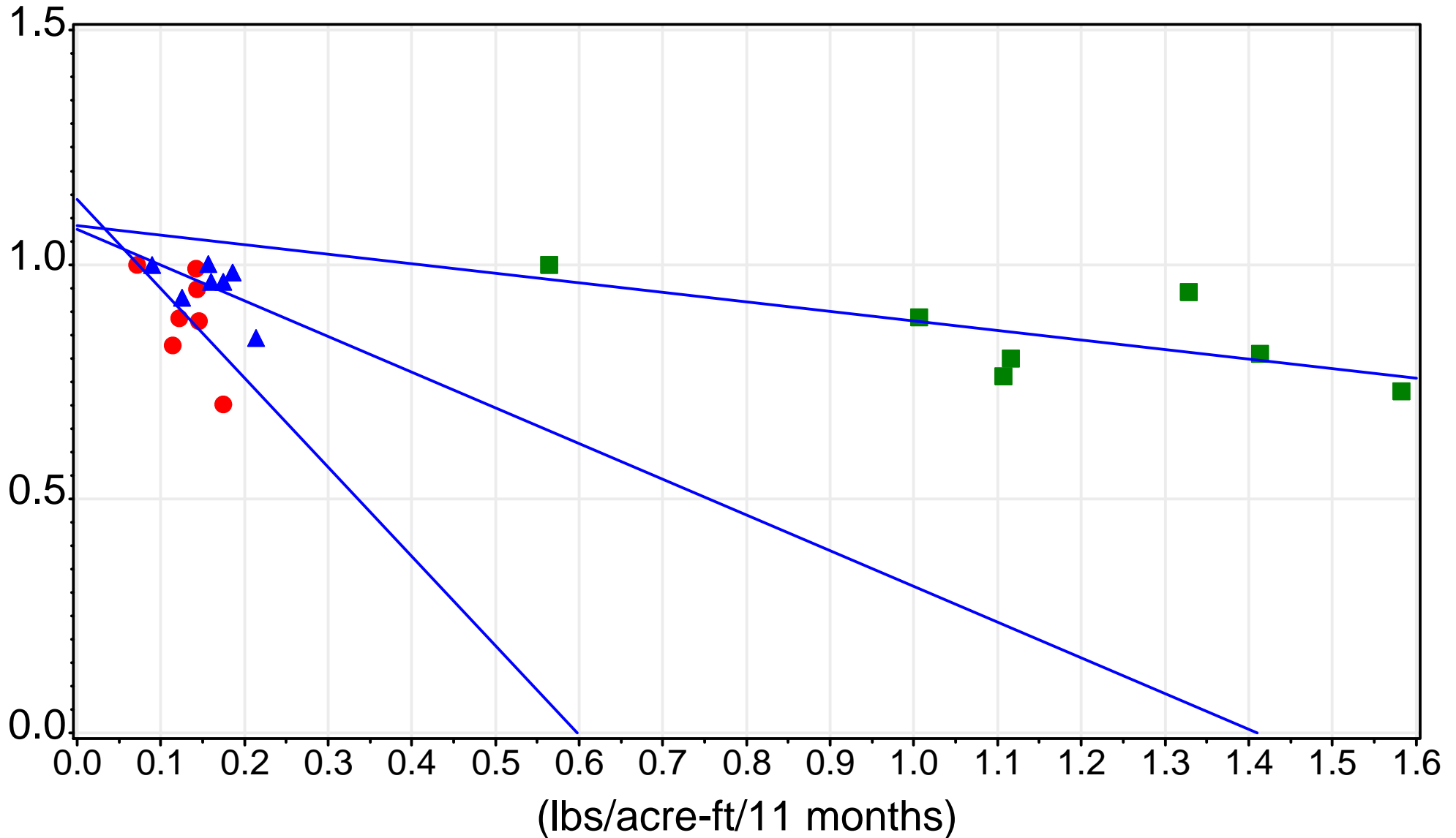
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.066635663	B	0.11780719	9.05	<.0001
tp_lag10	-0.780796397	B	0.79768499	-0.98	0.3432
tp_lag10*sublagoon Banana River Lagoon	-1.183114827	B	1.28030493	-0.92	0.3701
tp_lag10*sublagoon Central Indian River Lagoon	0.574939547	B	0.80338431	0.72	0.4852
tp_lag10*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon                      Banana River Lagoon	0.057453191	B	0.17013771	0.34	0.7403
sublagoon                      Central Indian River Lagoon	-0.003921805	B	0.15725728	-0.02	0.9804
sublagoon                      North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 11-Months Cumulative TP Load/Sublagoon Volume



sublagoon    ● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 11-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 11-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.09740100	0.01948020	3.41	0.0295
Error	15	0.08566327	0.00571088		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.532059	8.422107	0.075570	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag11	1	0.04647377	0.04647377	8.14	0.0121
tp_lag11*sublagoon	2	0.05004035	0.02502017	4.38	0.0317
sublagoon	2	0.00088688	0.00044344	0.08	0.9257

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag11	1	0.03171500	0.03171500	5.55	0.0325
tp_lag11*sublagoon	2	0.02106164	0.01053082	1.84	0.1923
sublagoon	2	0.00088688	0.00044344	0.08	0.9257

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 11-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

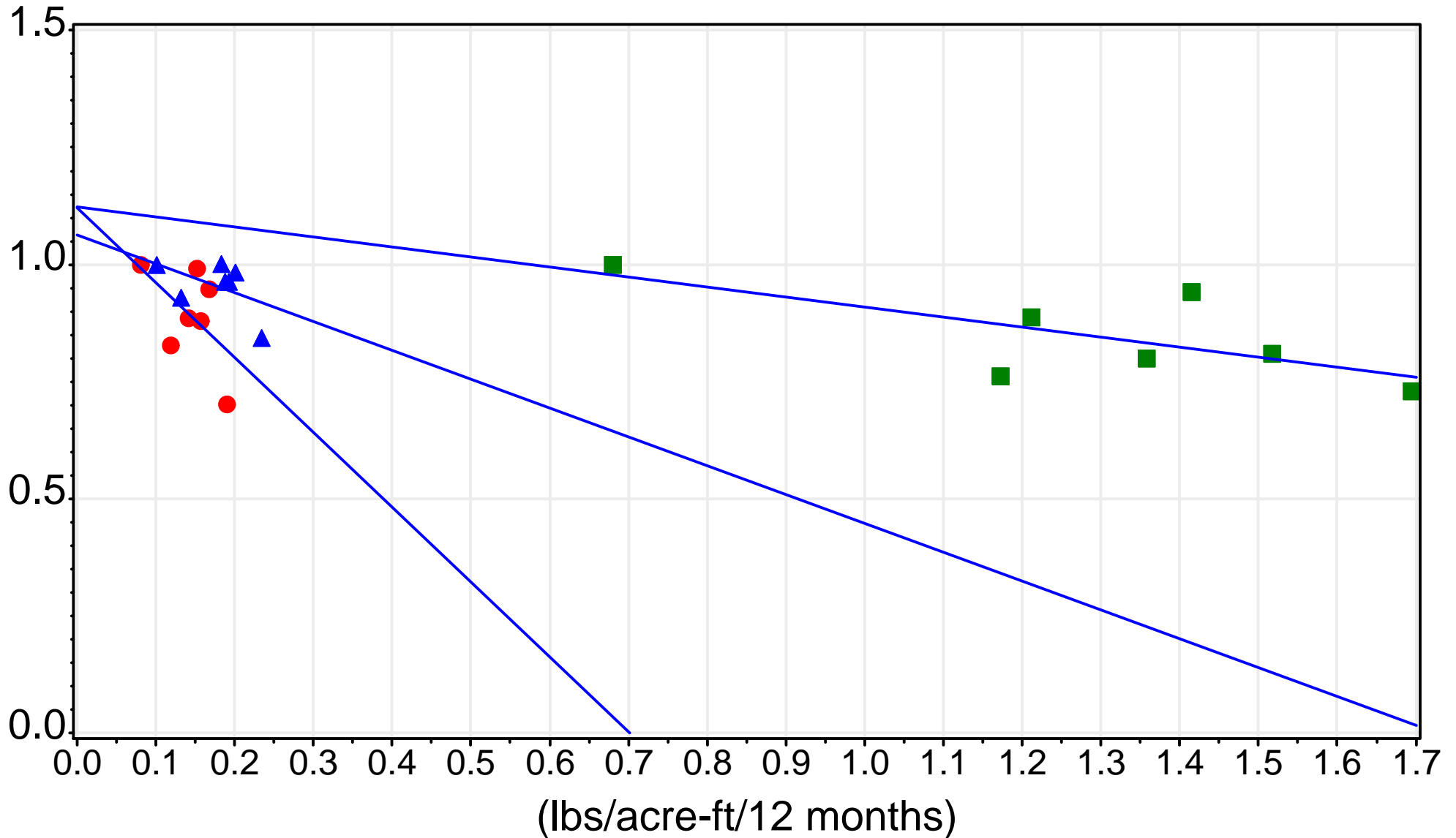
Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.075306499	B	0.12343300	8.71	<.0001
tp_lag11	-0.762730962	B	0.76016283	-1.00	0.3316
tp_lag11*sublagoon Banana River Lagoon	-1.145065700	B	1.21637339	-0.94	0.3614
tp_lag11*sublagoon Central Indian River Lagoon	0.558348537	B	0.76587989	0.73	0.4772
tp_lag11*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon                      Banana River Lagoon	0.064132600	B	0.17736229	0.36	0.7227
sublagoon                      Central Indian River Lagoon	0.008679647	B	0.16668733	0.05	0.9592
sublagoon                      North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

# Indian River Lagoon

## Annual Seagrass Coverage/2007 Seagrass Coverage Related to 12-Months Cumulative TP Load/Sublagoon Volume



sublagoon    ●●● Banana River Lagoon                      ■ Central Indian River Lagoon  
▲▲▲ North Indian River Lagoon

***Indian River Lagoon  
Annual Seagrass Coverage/2007 Seagrass Coverage  
Related to 12-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>sublagoon</b>	<b>3</b>	<b>Banana River Lagoon Central Indian River Lagoon North Indian River Lagoon</b>

<b>Number of Observations Read</b>	<b>21</b>
<b>Number of Observations Used</b>	<b>21</b>

**Indian River Lagoon**  
**Annual Seagrass Coverage/2007 Seagrass Coverage**  
**Related to 12-Months Cumulative TP Load/Sublagoon Volume**

The GLM Procedure

Dependent Variable: N\_Acres

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.09360697	0.01872139	3.14	0.0389
Error	15	0.08945730	0.00596382		
Corrected Total	20	0.18306427			

R-Square	Coeff Var	Root MSE	N_Acres Mean
0.511334	8.606594	0.077226	0.897286

Source	DF	Type I SS	Mean Square	F Value	Pr > F
tp_lag12	1	0.04474223	0.04474223	7.50	0.0152
tp_lag12*sublagoon	2	0.04803998	0.02401999	4.03	0.0398
sublagoon	2	0.00082476	0.00041238	0.07	0.9335

Source	DF	Type III SS	Mean Square	F Value	Pr > F
tp_lag12	1	0.02718325	0.02718325	4.56	0.0497
tp_lag12*sublagoon	2	0.01605108	0.00802554	1.35	0.2900
sublagoon	2	0.00082476	0.00041238	0.07	0.9335



***Indian River Lagoon***  
***Annual Seagrass Coverage/2007 Seagrass Coverage***  
***Related to 12-Months Cumulative TP Load/Sublagoon Volume***

The GLM Procedure

Dependent Variable: N\_Acres

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	1.063136986	B	0.12672075	8.39	<.0001
tp_lag12	-0.615468218	B	0.70066643	-0.88	0.3936
tp_lag12*sublagoon Banana River Lagoon	-0.981467235	B	1.13193950	-0.87	0.3996
tp_lag12*sublagoon Central Indian River Lagoon	0.402283234	B	0.70741921	0.57	0.5780
tp_lag12*sublagoon North Indian River Lagoon	0.000000000	B	.	.	.
sublagoon                      Banana River Lagoon	0.057020898	B	0.18252964	0.31	0.7590
sublagoon                      Central Indian River Lagoon	0.059421347	B	0.18110808	0.33	0.7474
sublagoon                      North Indian River Lagoon	0.000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.