## SIMPLE-Monthly Pollutant Loading Model Results - Dona Roberts Bay Coastal Basin TN

Section 1 TN Loading has decreased by 17% from 2001-2016			
	Irrigation was the component that saw the greatest increase in loading from 2001-2016 (+39%)		
Section 2	Stormwater Runoff is the greatest contributor to TN in the Dona Roberts Bay Coastal, contributing 54% of		
Section 2	the total load.		
Section 3	Dona Roberts Bay Coastal is not a major TN contributor to the Dona/Roberts Bay watershed.		

## Section 1

Dona Roberts Bay Coastal	Total Nitrogen	Total Nitrogen			
Pollutant Loading Trend	Decrease	-17%	2001 to 2016		
Components of the Trend					
Stormwater Runoff	No Change	0%	2001 to 2016		
Baseflow	No Change	0%	2001 to 2016		
Septic Systems	Decrease	-49%	2001 to 2016		
Point Source	No Change	0%	2001 to 2016		
Irrigation	Increase	39%	2001 to 2016		
Atmospheric Deposition	Not Modeled		2001 to 2016		

Year	Total	Runoff	Baseflow	Septic	Point Source	Irrigation	Atmospheric
2001	566.67	252.75	85.32	199.49	0.00	16.47	0.00
2006	562.15	253.12	85.51	192.58	8.00	22.96	0.00
2011	494.64	252.83	85.41	127.69	5.78	22.93	0.00
2016	468.03	252.83	85.41	100.80	6.06	22.93	0.00

Units are pounds per year and modeled using a typical rainfall year.

Jones Edmunds and Associates conducted this modeling for Sarasota County in 2017.

Modeling was conducted only for the parts of basins located within Sarasota County.

Pollutant loading from Atmospheric Deposition (wet and dry) was conducted only for bays.

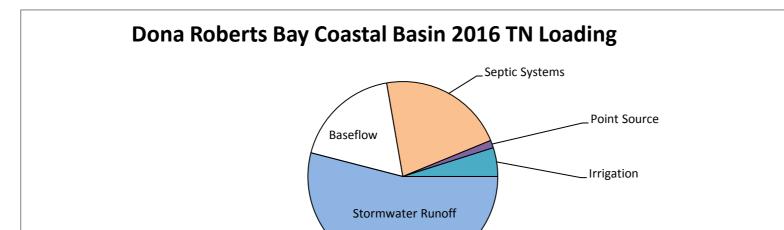
## **Section 2**

### **Dona Roberts Bay Coastal**

**Total Nitrogen** 

2016 Pollutant loading is influenced by some sources more than others

Stormwater Runoff	54%
Baseflow	18%
Septic Systems	22%
Point Source	1%
Irrigation	5%
Atmospheric Deposition	Not Modeled





# Section 3

### **Dona Roberts Bay Coastal**

#### **Total Nitrogen**

2016 Pollutant loading to the Dona/Roberts Bay watershed has more than one source

Proportion of loading is when % load is compared to % acreage. Low Dona Roberts Bay Coastal acreage is 3% and % loading is

0%

Dona Roberts Bay Coastal is a part of the Dona/Roberts Bay watershed

	Pounds TN 2016	Acreage
Dona/Roberts Bay watershed	231,229	55,778

The following basins contribue to the loading to the Dona/Roberts Bay watershed

	Pounds TN 2016	% of Watershed Load	Acreage	% of Dona/Roberts Bay watershed
Cow Pen Slough	221,906	96%	41,143	74%
Curry Creek	5,938	3%	6,399	11%
Dona/Roberts Bay Coastal	468	0%	1,631	3%
Hatchett Creek	1,480	1%	3,388	6%
Island of Venice	1,048	0%	2,653	5%
Dona/Roberts Bay	313	0%	501	1%
Casey Key Dona Roberts Bay	77	0%	63	0%

