

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

**Section 1** TN Loading has decreased by 97% from 2001-2016  
 Septic Systems was the component that saw the greatest increase in loading from 2001-2016.

**Section 2** Atmospheric Deposition is the greatest contributor to TN in the Dona/Roberts Bay Basin, contributing 100% of the total load.

**Section 3** Dona/Roberts Bay Basin is not a major TN contributor to the Dona/Roberts Bay watershed.

**Section 1**  
**Dona/Roberts Bay**

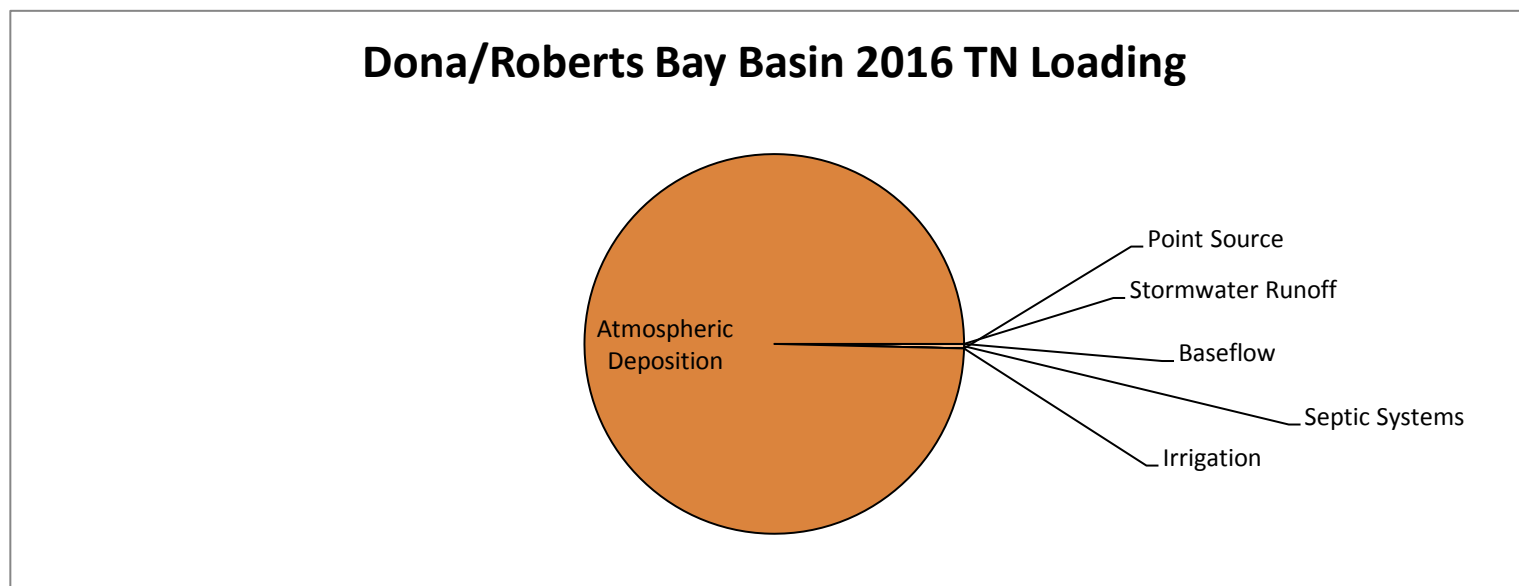
|                         |                        | <b>Total Nitrogen</b> |                  |              |
|-------------------------|------------------------|-----------------------|------------------|--------------|
| Pollutant Loading Trend |                        | Decrease              | -97%             | 2001 to 2016 |
| Components of the Trend |                        |                       |                  |              |
|                         | Stormwater Runoff      |                       | Cannot calculate | 2001 to 2016 |
|                         | Baseflow               |                       | Cannot calculate | 2001 to 2016 |
|                         | Septic Systems         |                       | Cannot calculate | 2001 to 2016 |
|                         | Point Source           | No Change             | 0%               | 2001 to 2016 |
|                         | Irrigation             |                       | Cannot calculate | 2001 to 2016 |
|                         | Atmospheric Deposition | No Change             | 0%               | 2001 to 2016 |

| Year | Total    | Runoff | Baseflow | Septic | Point Source | Irrigation | Atmospheric |
|------|----------|--------|----------|--------|--------------|------------|-------------|
| 2001 | 10188.97 | 0.00   | 0.00     | 0.00   | 0.00         | 0.00       | 311.82      |
| 2006 | 698.04   | 0.00   | 0.00     | 1.19   | 0.00         | 0.00       | 696.85      |
| 2011 | 134.15   | 0.00   | 0.00     | 1.19   | 0.00         | 0.00       | 132.96      |
| 2016 | 313.01   | 0.00   | 0.00     | 1.19   | 0.00         | 0.00       | 311.82      |

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**

|   |                        | <b>Total Nitrogen</b> |  |
|---|------------------------|-----------------------|--|
| 2016 Pollutant loading is influenced by some sources more than others |                        |                       |  |
|   | Stormwater Runoff      | 0%                    |  |
|   | Baseflow               | 0%                    |  |
|   | Septic Systems         | 0%                    |  |
|   | Point Source           | 0%                    |  |
|   | Irrigation             | 0%                    |  |
|   | Atmospheric Deposition | 100%                  |  |



### Section 3

#### Dona/Roberts Bay

#### Total Nitrogen

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

Proportion of loading is **Low** when % load is compared to % acreage.  
Dona/Roberts Bay Basin acreage is 1% and % loading is 0%

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

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

The following basins contribute 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%                              |

