

Nutrient Loading to Florida Estuaries

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Loading Sources

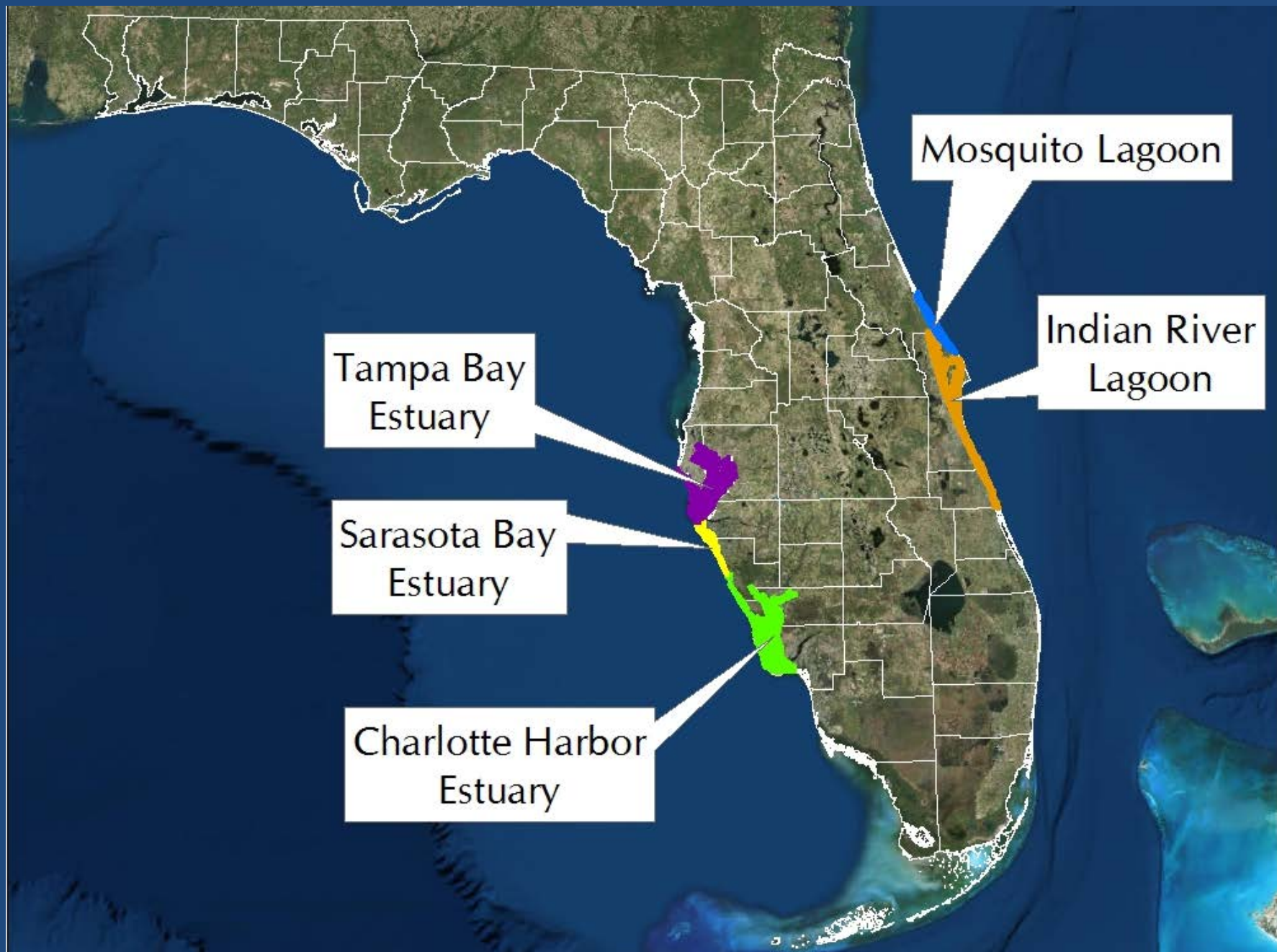
- Point sources – domestic and industrial
- Nonpoint sources – urban, agriculture, natural
- Groundwater / Baseflow
- Atmospheric deposition

- Biosolids????

Loading Sources

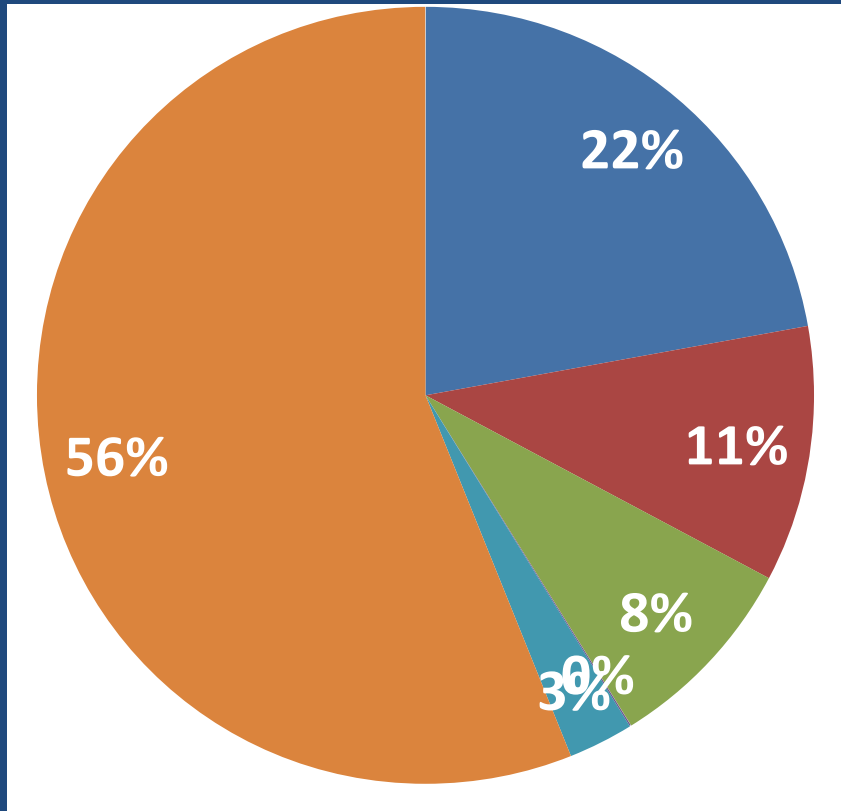
How do you estimate?

- Typically involves modeling to some degree
- Requires good information on land uses, soils, rainfall, hydrology
- Monitoring is another means by which loadings are estimated
- Can be costly, need to capture a wide range of especially rainfall
- If modeling is the primary method that some degree of concordance with empirical data is important

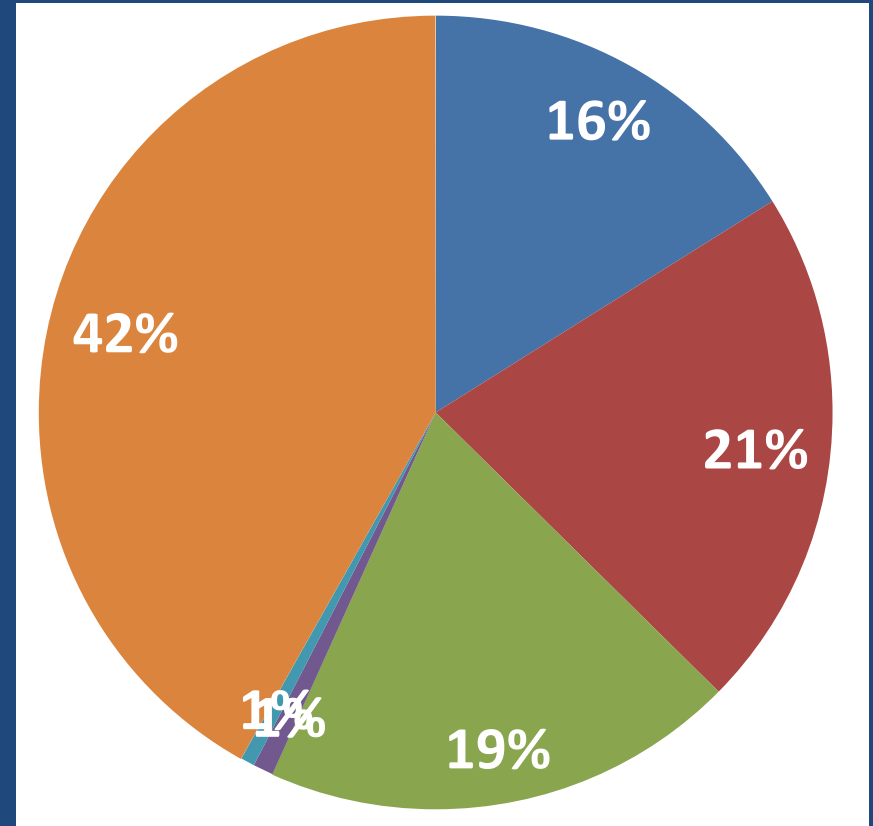


TAMPA BAY

TN



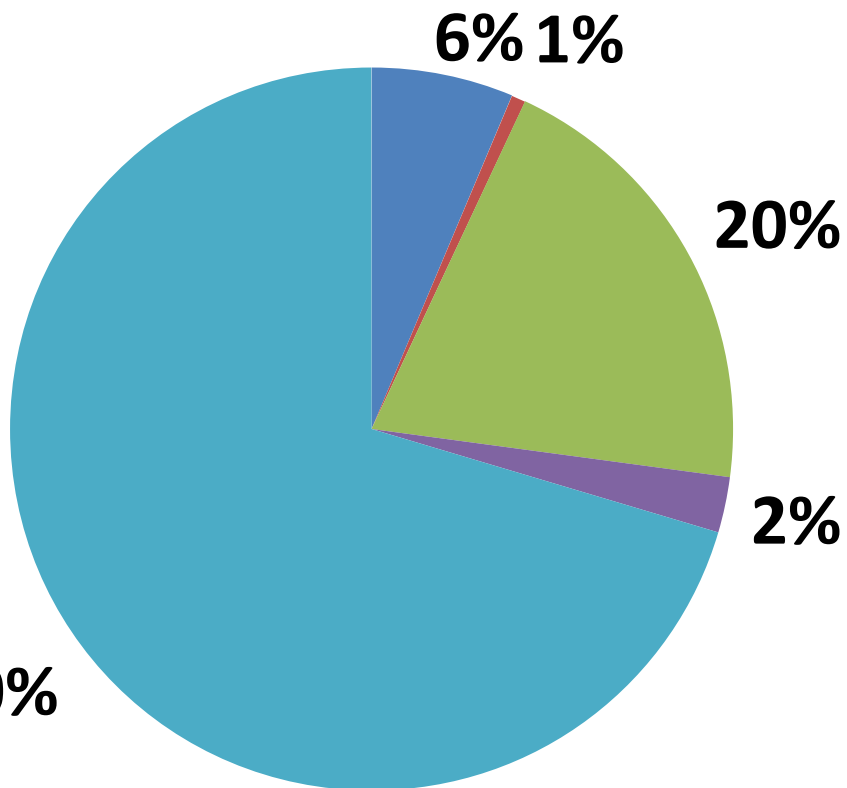
TP



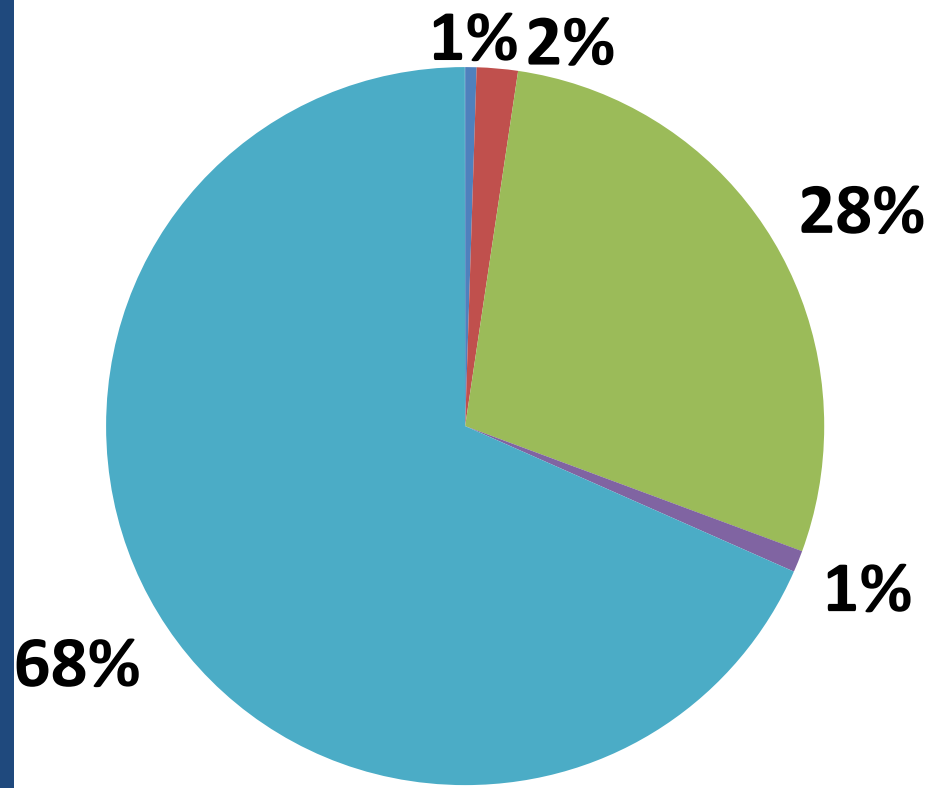
- Atmospheric Deposition
- Domestic Point Source
- Industrial Point Sources
- Groundwater
- Springs
- Nonpoint Source

CHARLOTTE HARBOR

TN



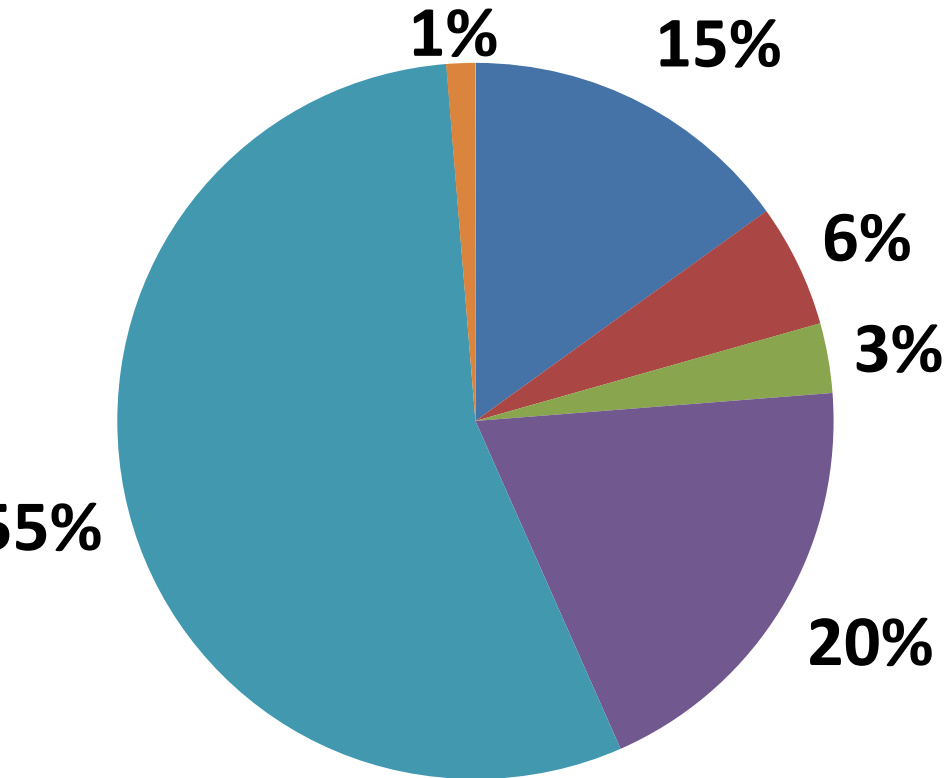
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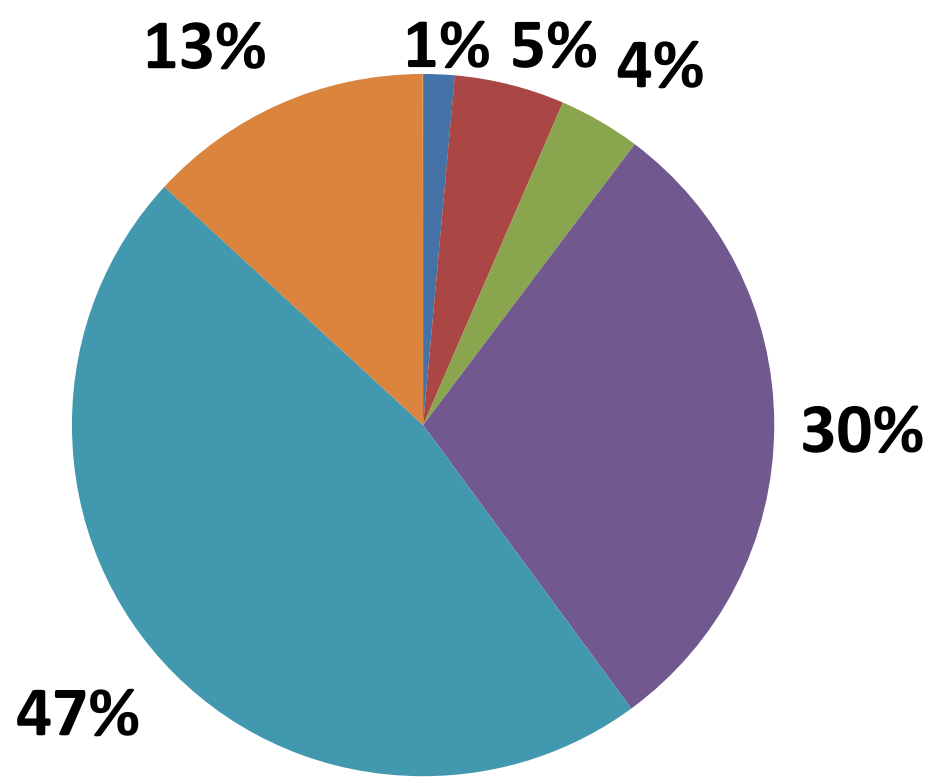
- Atmospheric Deposition
- Domestic Point Sources
- Industrial Point Sources
- Septics
- Nonpoint Source

SARASOTA BAY

TN

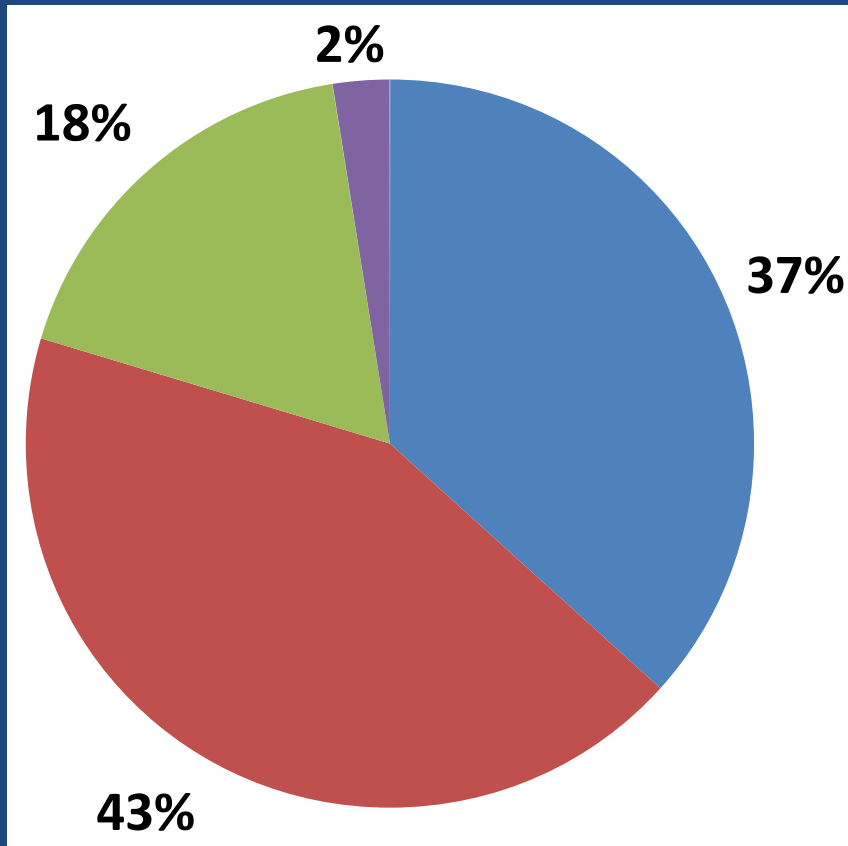


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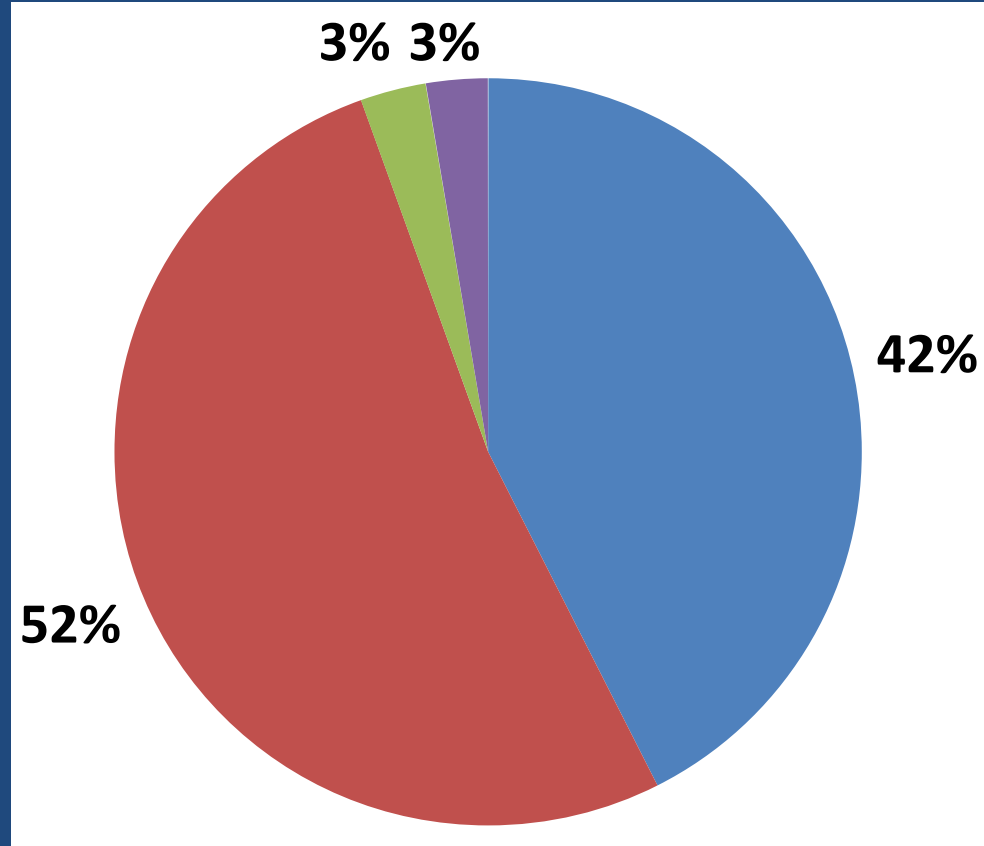


INDIAN RIVER LAGOON

TN



TP



■ Runoff

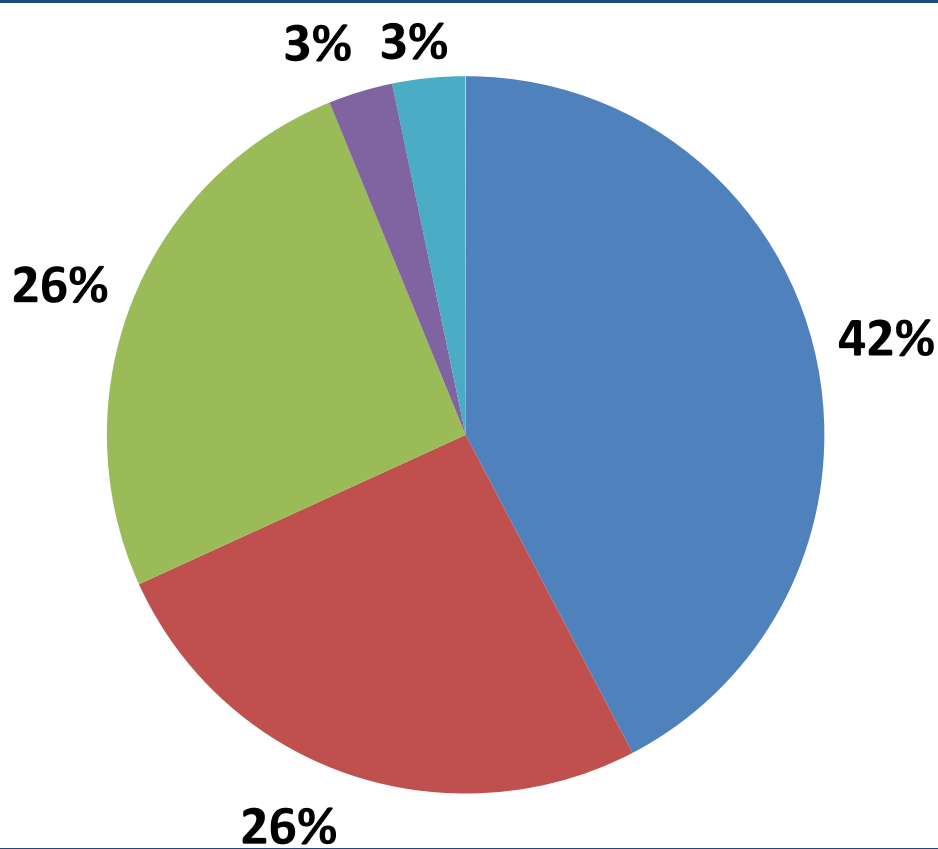
■ Baseflow

■ Atmospheric Deposition

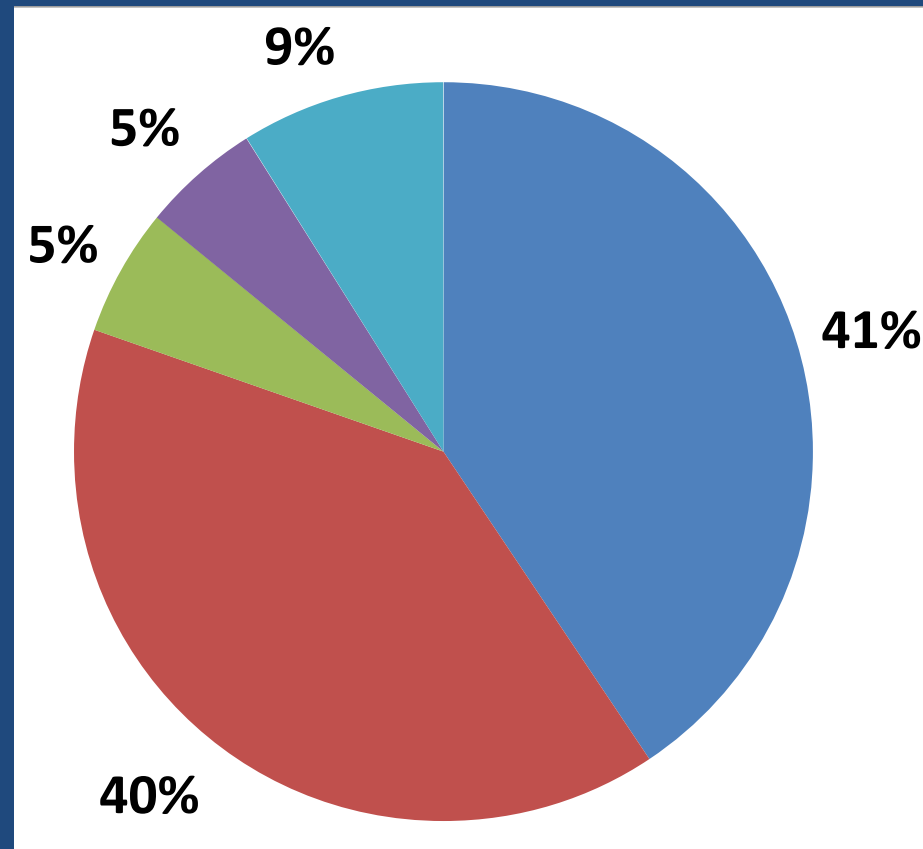
■ Point Source

MOSQUITO LAGOON

TN



TP



 **Runoff**

 **Baseflow**

 **Atmospheric Deposition**

 **Point Source**

 **Septics**