

# Rain Barrel Workshop

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**ENVIRONMENTAL EDUCATION COORDINATOR**

**MARINE RESOURCES COUNCIL**



# Who We Are

- ▶ Charitable organization founded in 1983 by a group of Florida Tech professors
- ▶ Dedicated to protecting and restoring all 5 counties of the Indian River Lagoon through:
  - ▶ Science
  - ▶ Restoration
  - ▶ Education





# Science

## ► LagoonWatch

- Tests for dissolved oxygen, salinity, pH, water clarity, wind direction and wave size



## ► Muck Finders

- Measures muck depths to help counties prioritize dredging projects

## ► Ground Water

- Monitors groundwater throughout the County to evaluate nutrient loading





# Restoration

- ▶ Recently expanded nursery capacity!
- ▶ Mangrove Workshops
  - ▶ Monthly maintenance
- ▶ Mangrove Shoreline Plantings
  - ▶ 2018: almost 1 mile of shoreline
  - ▶ 2020: will plant 900ft





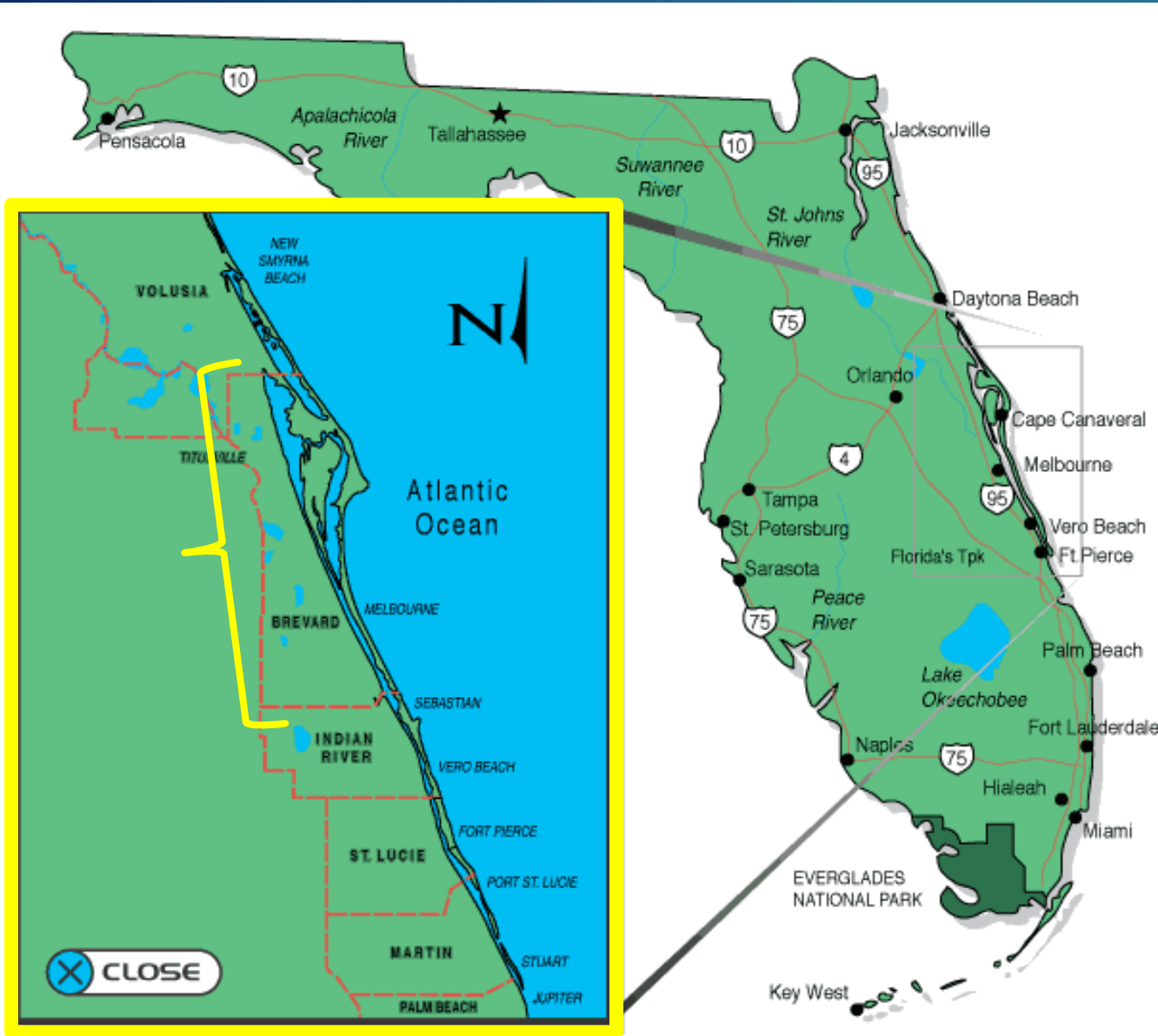
# Education

- ▶ Visitors
- ▶ Lagoon Loyal
- ▶ Summer camp
- ▶ Field trips
- ▶ Brown Bag Presentations
- ▶ Rain Barrel Workshop
- ▶ Assemblies, conferences, meetings





# Indian River Lagoon (IRL)



- ▶ >30% of Florida's east coast
- ▶ 156 miles long
  - ▶ OVER 2,745 FOOTBALL FIELDS!!
  - ▶ Going to Disney World and Back!



# The Lagoon supports more species than almost anywhere else on Earth





# Once a naturally resilient system













But we have changed the Lagoon...





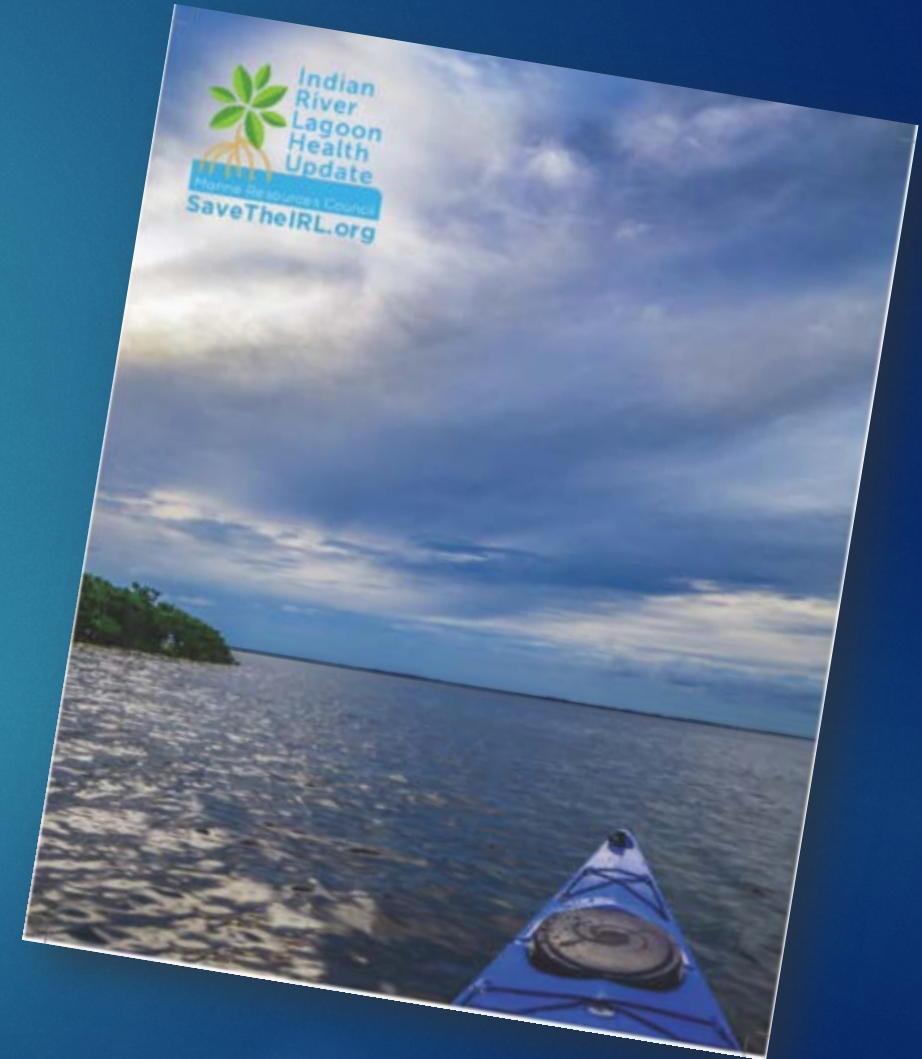




# Indian River Lagoon Report Card

- ▶ 20+ years of state monitoring data
- ▶ Evaluates water quality and sea grass health
- ▶ Calculates scores by comparing observed values to regulatory standards
- ▶ Translates science for the community

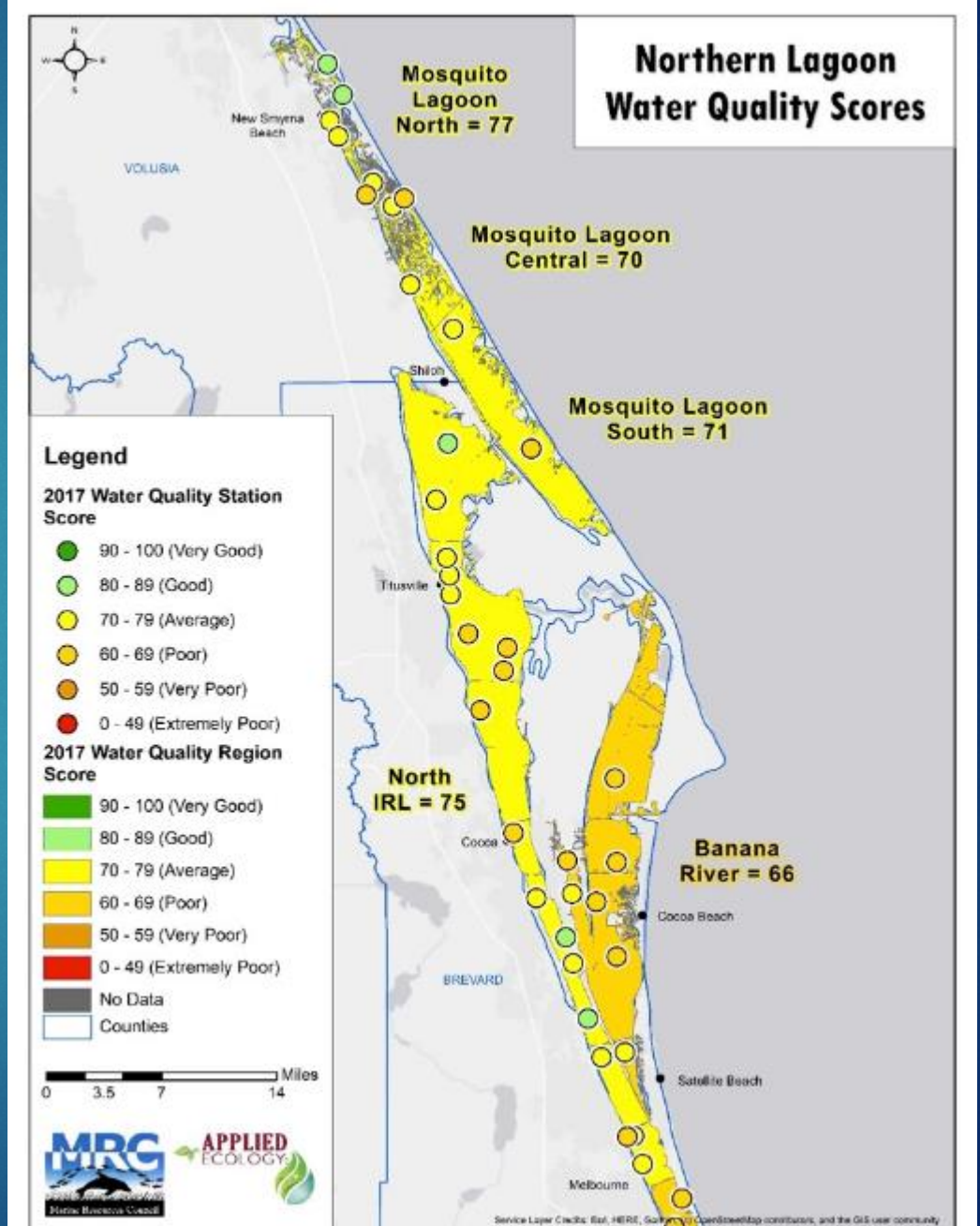
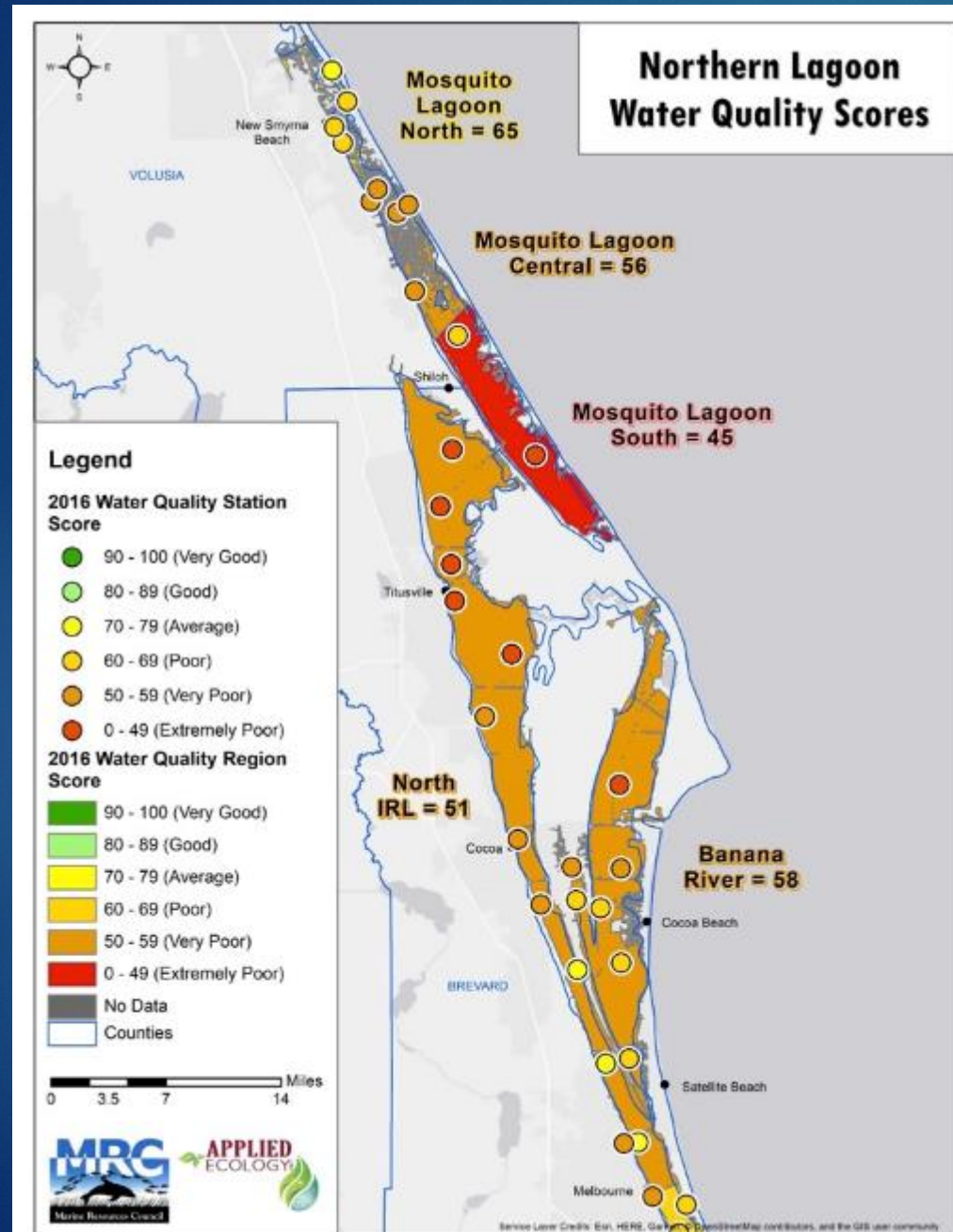
[www.SaveTheIRL.org](http://www.SaveTheIRL.org)





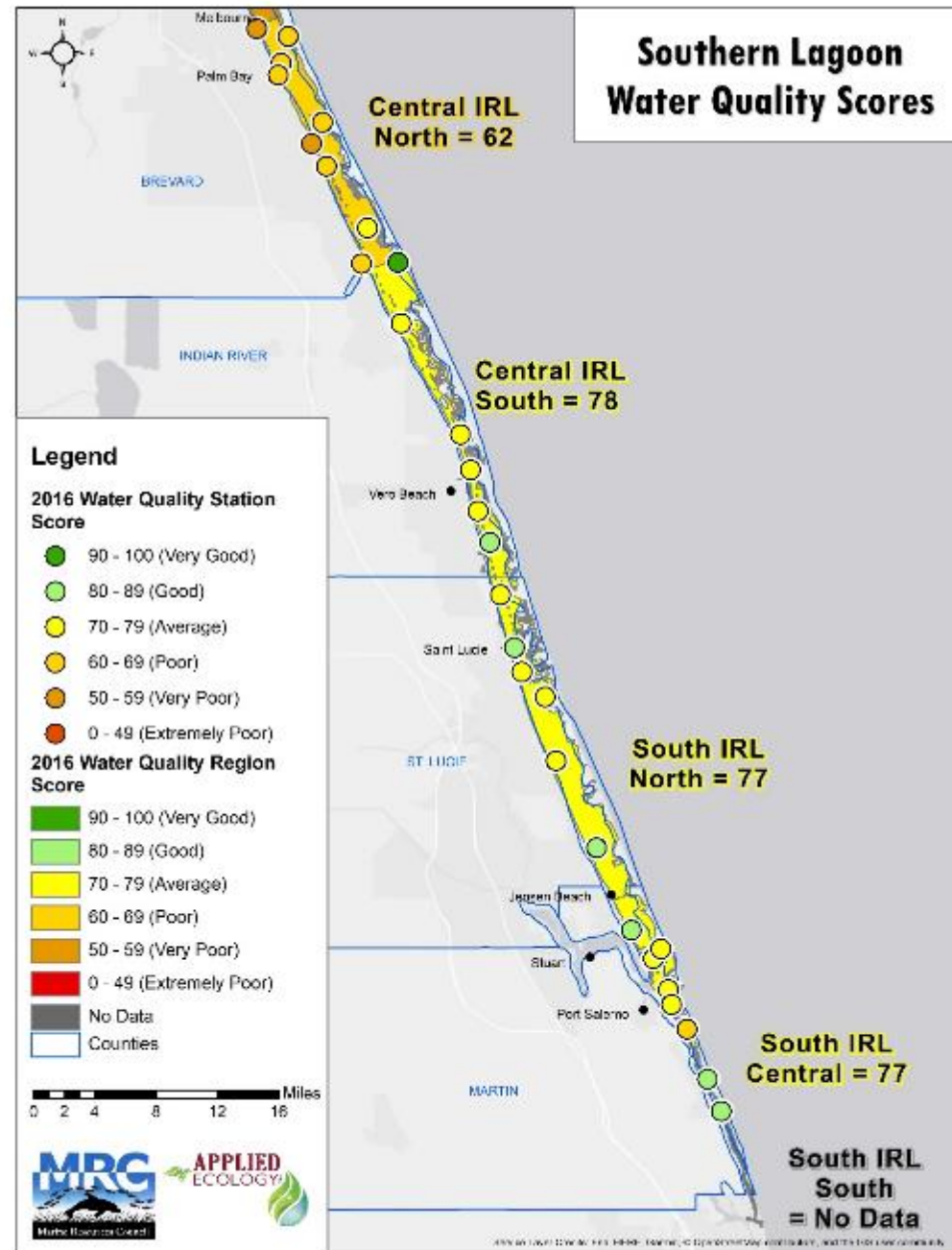
# 2016 Water Quality Scores

# 2017 Water Quality Scores

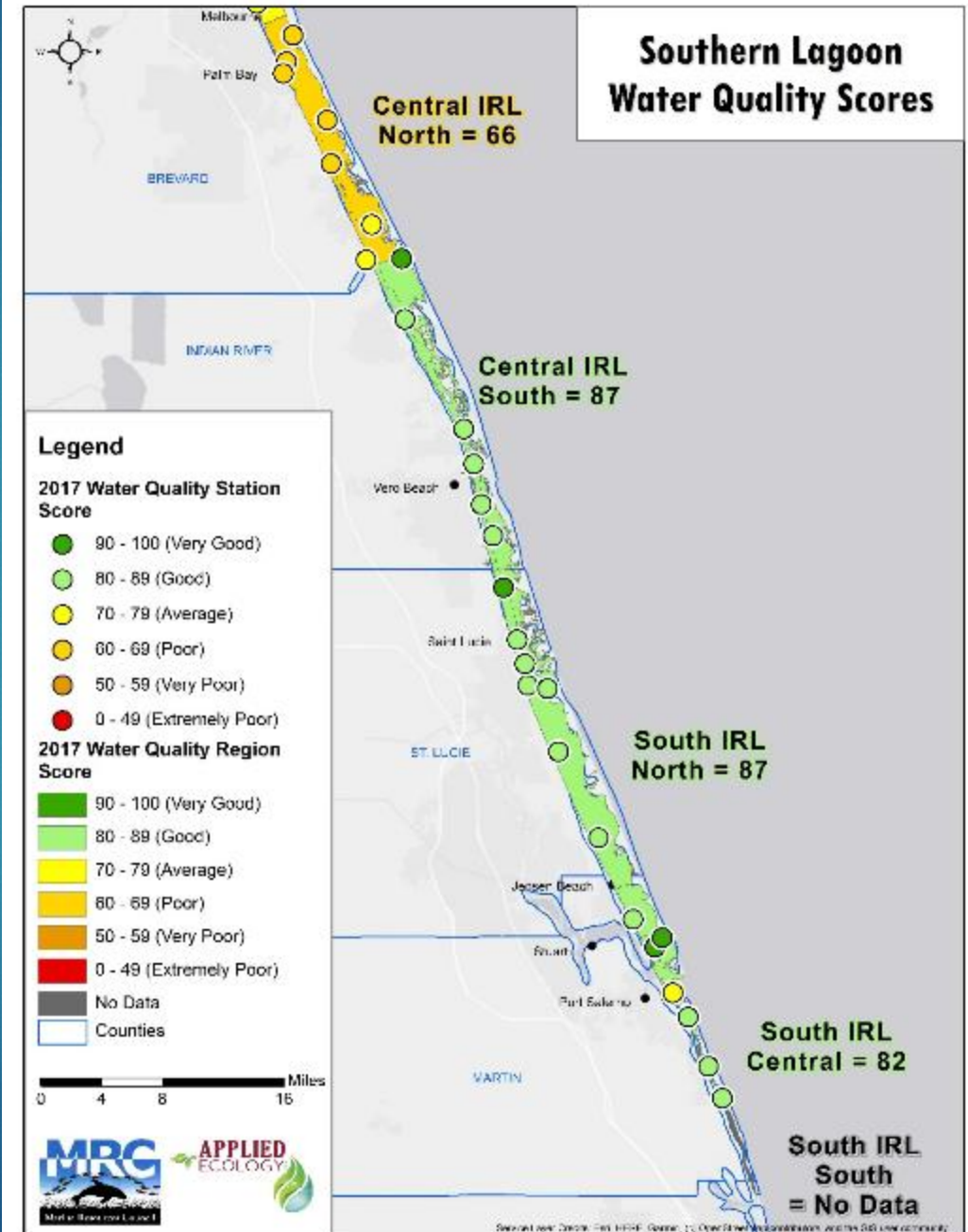




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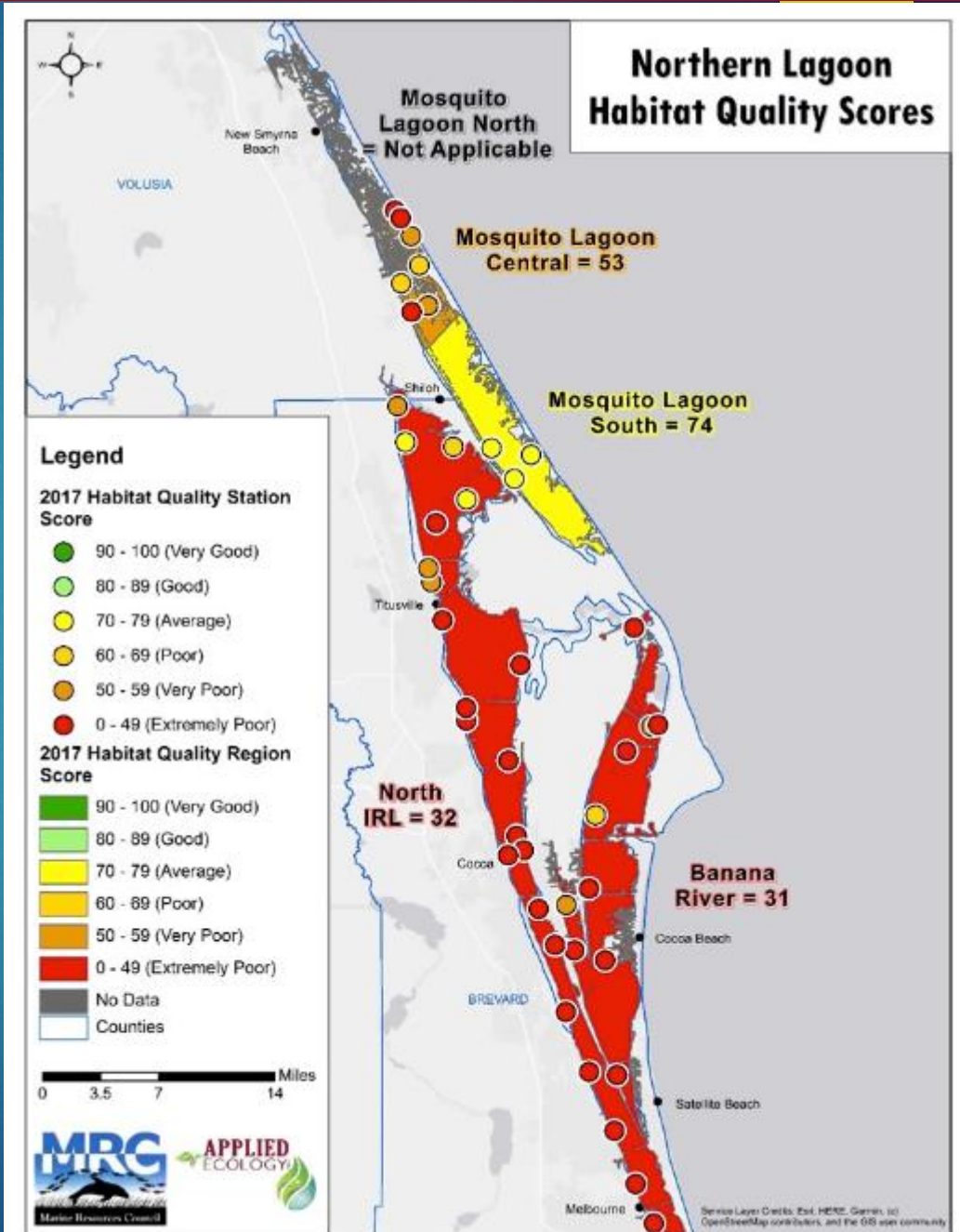
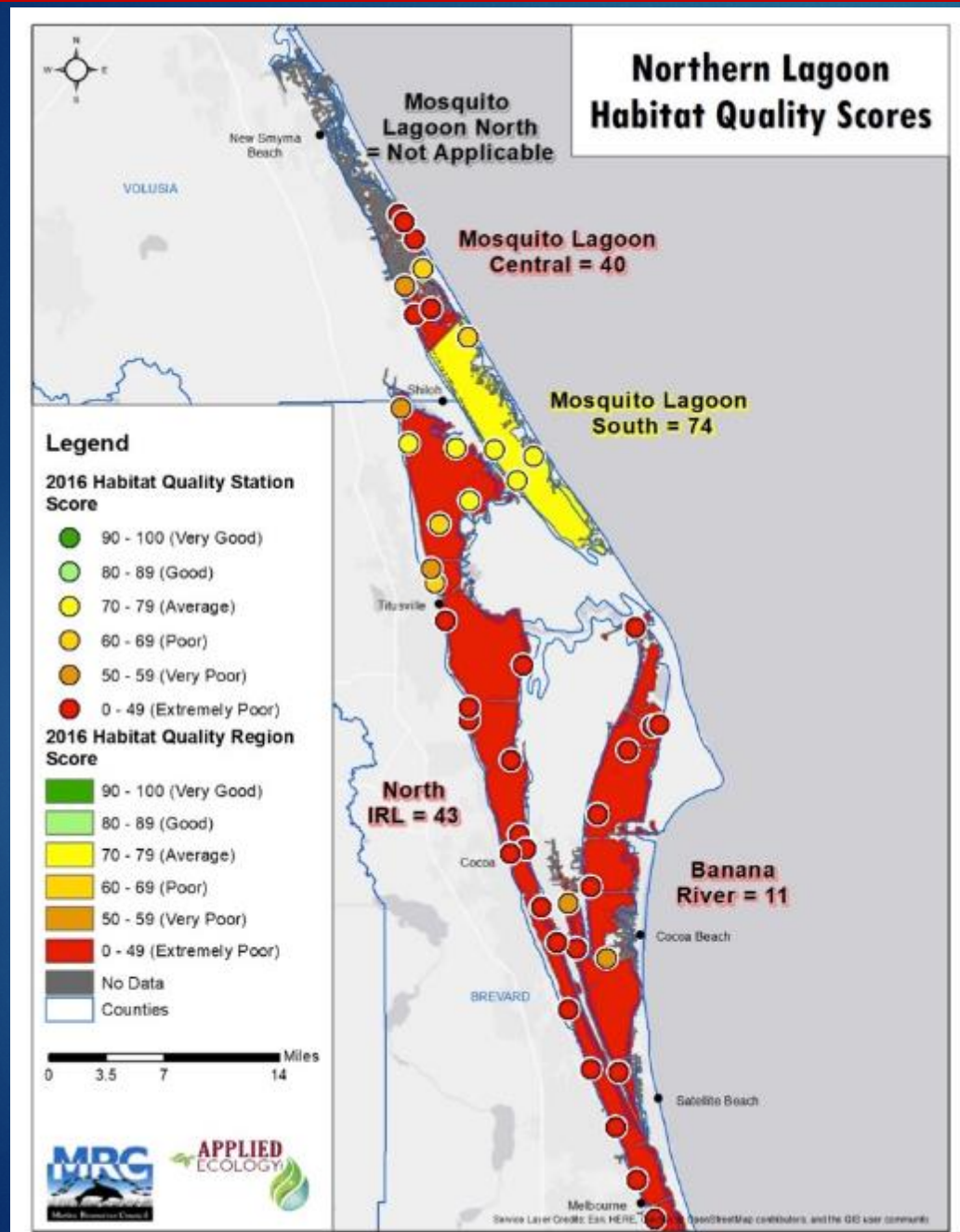
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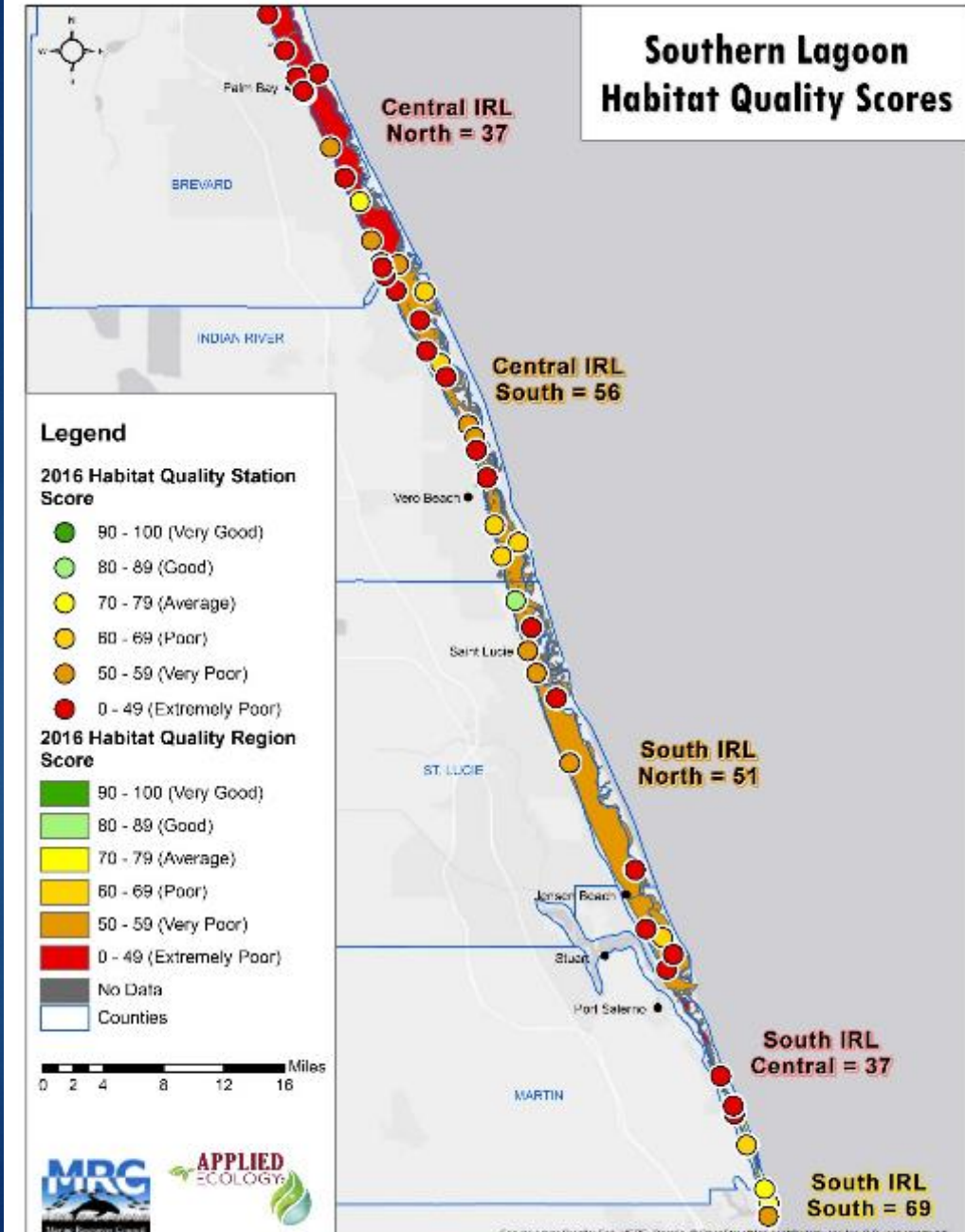
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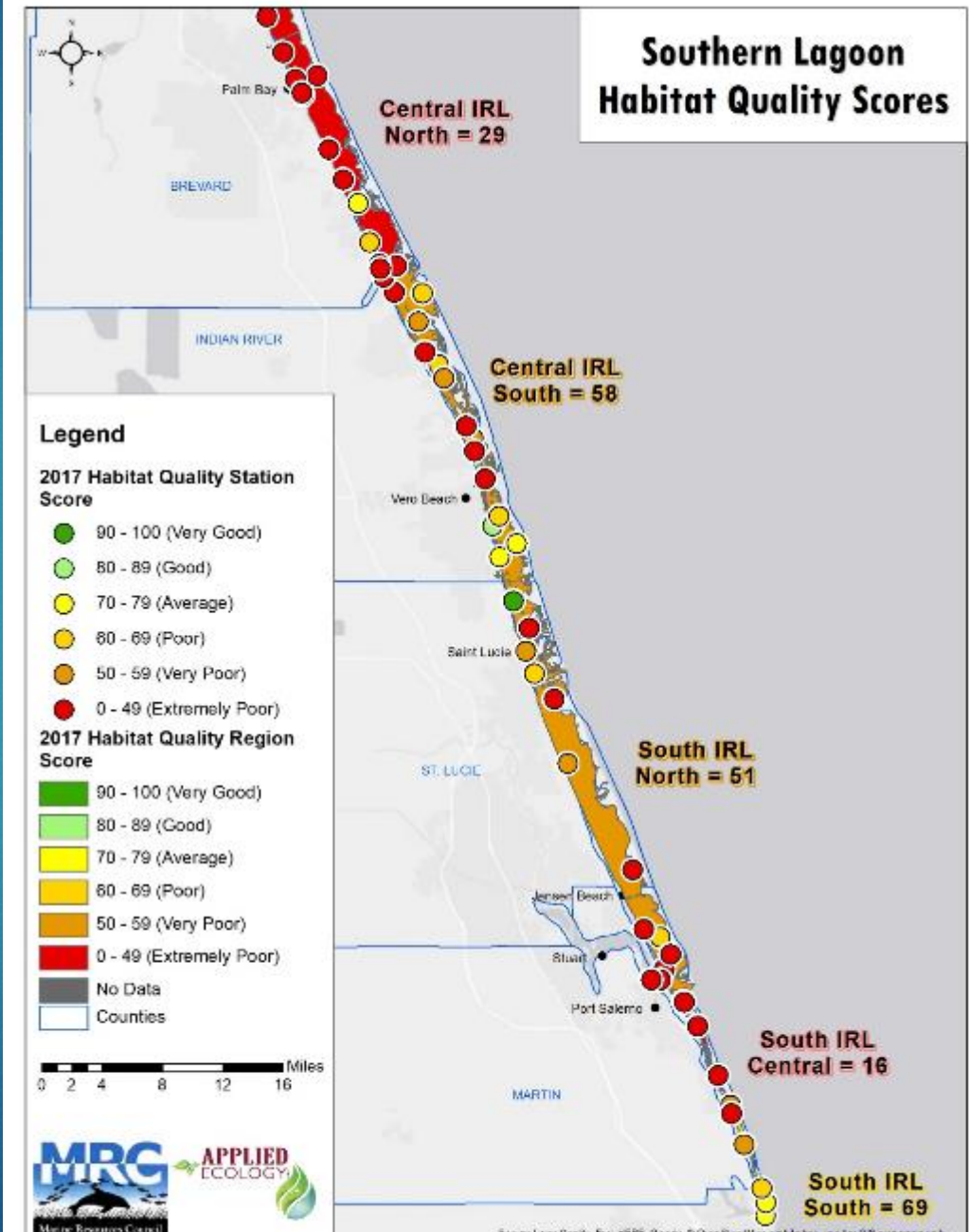




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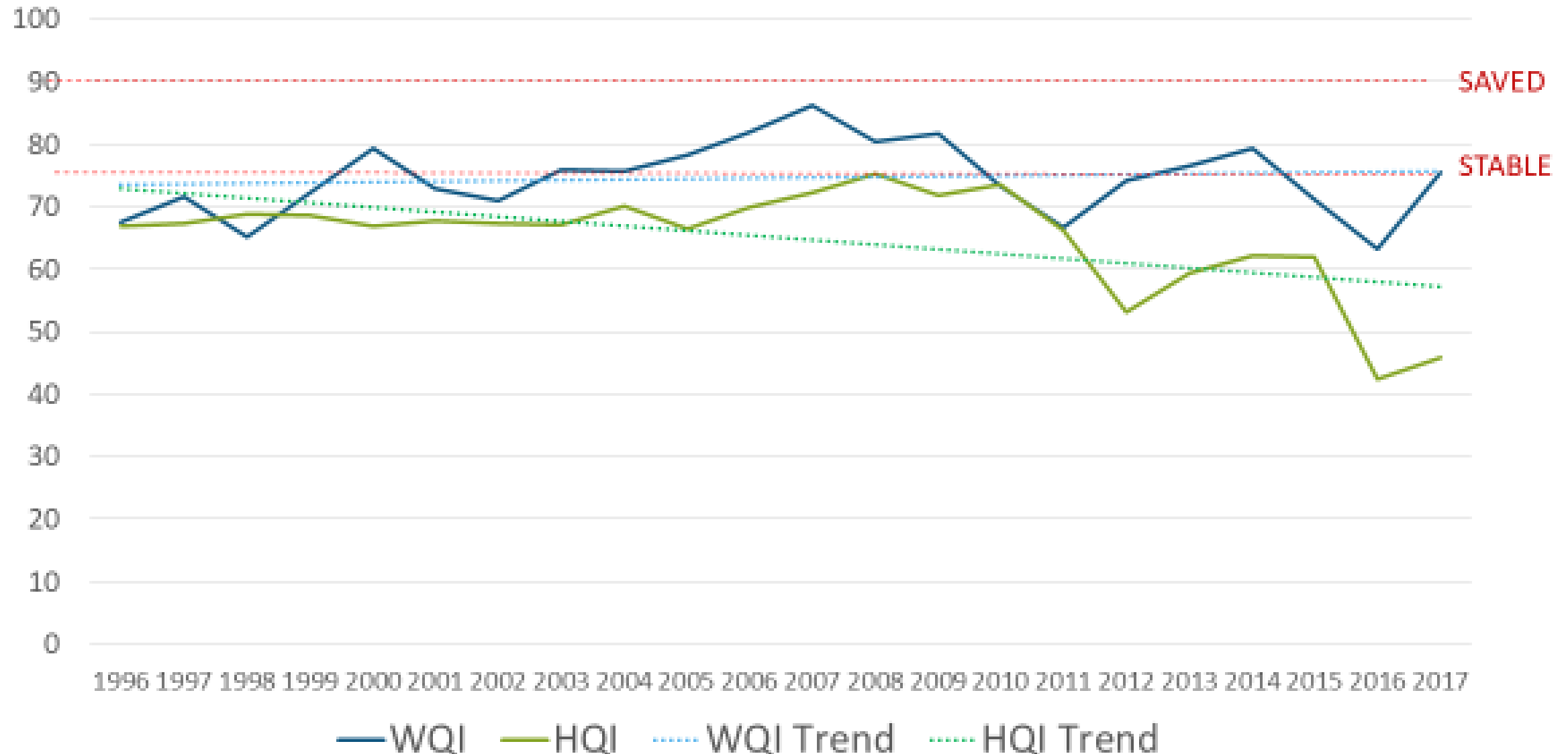
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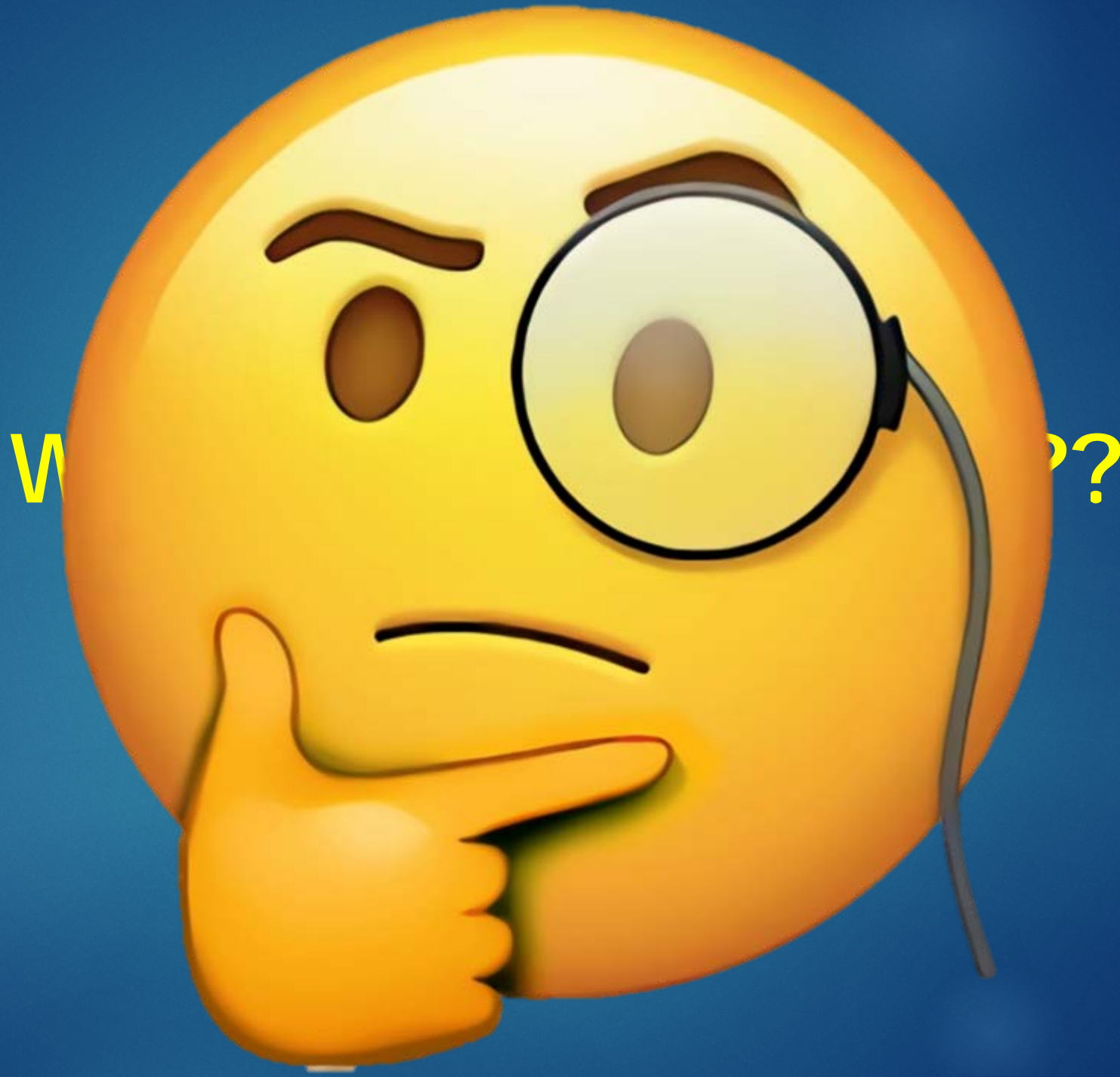


# Is the Lagoon's Health Improving?

## Lagoon Scores









# Become Lagoon Loyal

[Home](#)[About](#)[For Residents](#)[For Businesses](#)[Resources](#)[Contact](#)[Sign Up](#)

## LET'S BE CLEAR...

### A HEALTHY LAGOON STARTS WITH YOU.

Every year, Brevard County residents contribute thousands of pounds of excess algae-feeding nutrients to the Indian River Lagoon by polluting both groundwater and stormwater. What actions produce these nutrients? How can you reduce your lagoon footprint?

[BECOME LAGOON LOYAL](#)



# Skip the Fertilizer



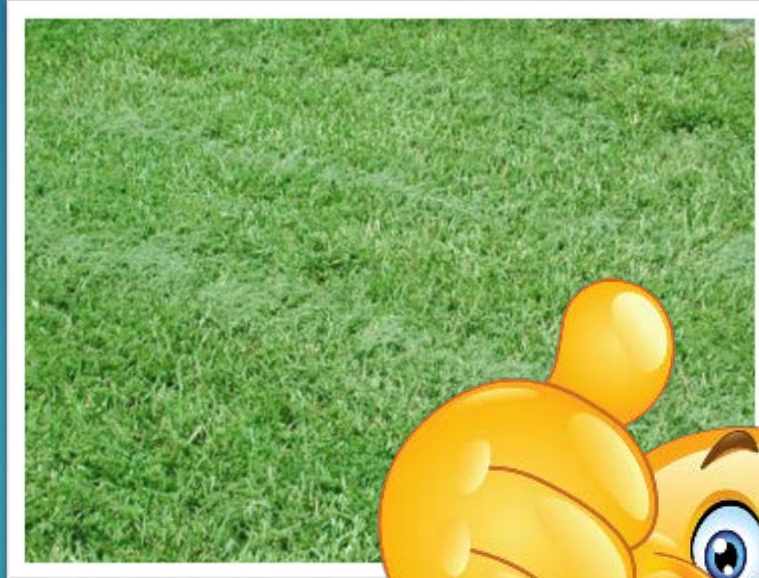
- ▶ DO NOT apply fertilizer in the summer
  - ▶ June 1-Sept 30
- ▶ DO NOT apply within 10' of water





# Grass Clippings

- ▶ Grass is full of excess nutrients that cause algae blooms!
- ▶ Reuse grass clippings:
  - ▶ Lawn fertilizer
  - ▶ Mulch for garden beds
  - ▶ Compost material





# Hire Responsible Professionals

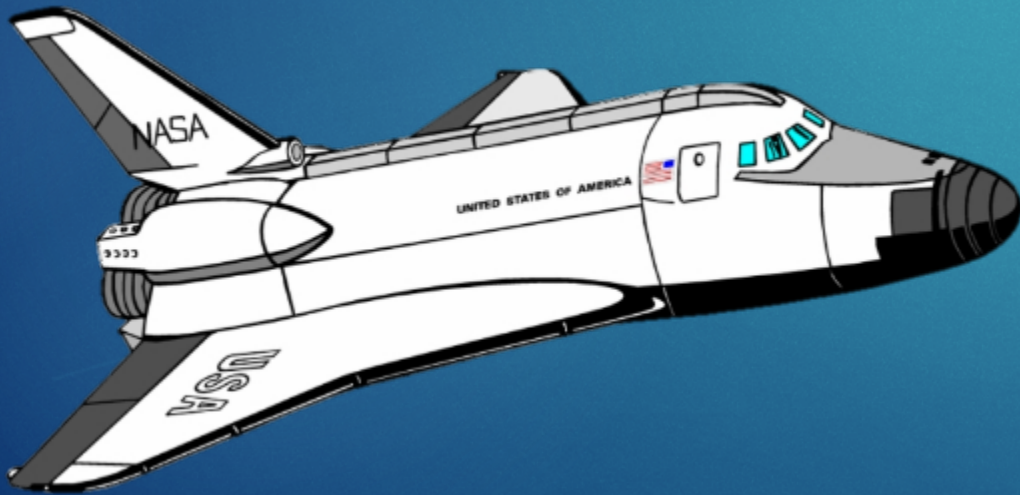
- ▶ Divert mower chute away from permeable surfaces and waterways
- ▶ Blow grass clipping back on the lawn
- ▶ Apply fertilizers and pesticides only when needed





# Pick Up After Your Pet!

- ▶ 102 tons of dog waste are left in the lagoon watershed every day!!
- ▶ Dog waste contains harmful bacteria and parasites
  - ▶ Can enter the IRL through stormwater







# Plant Florida Friendly Plants!





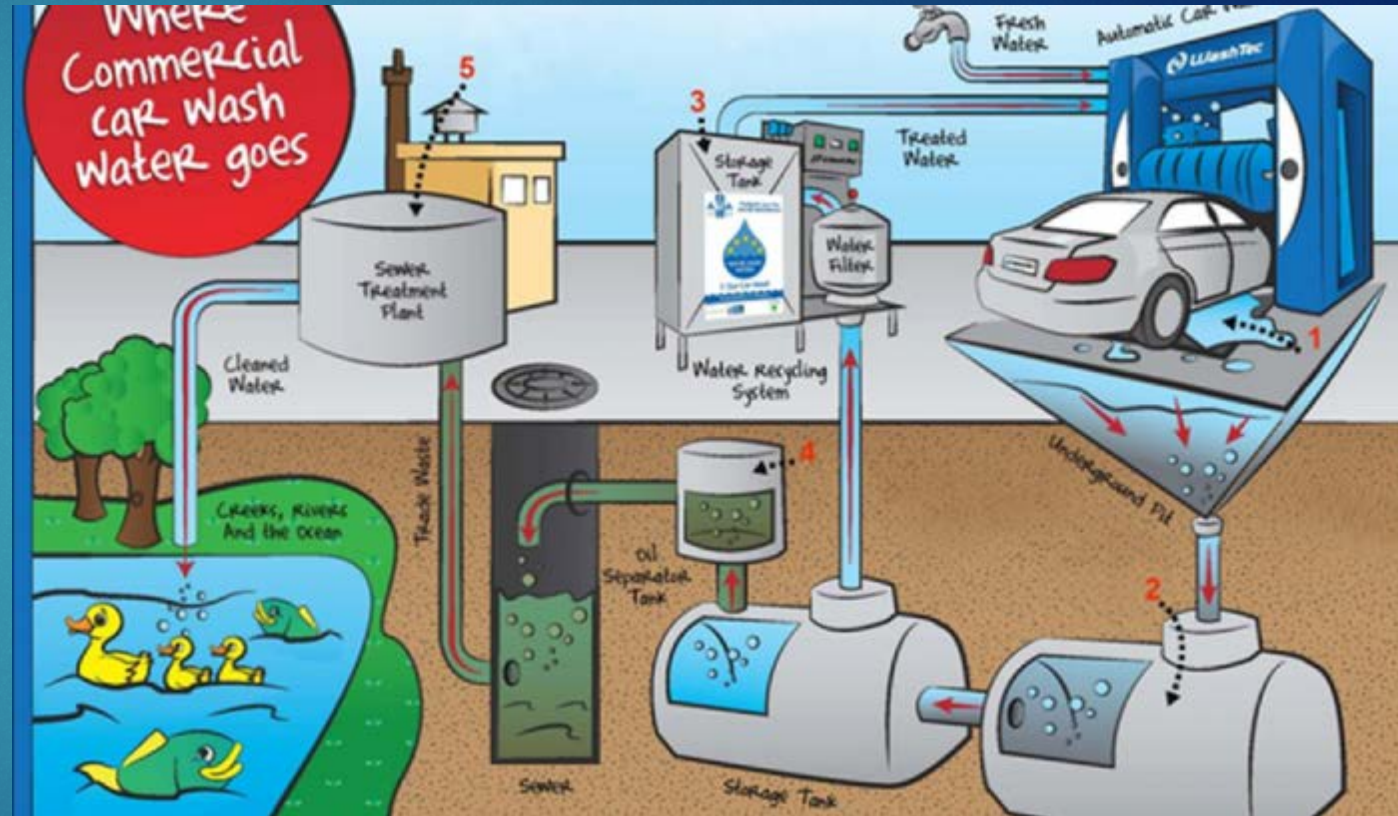
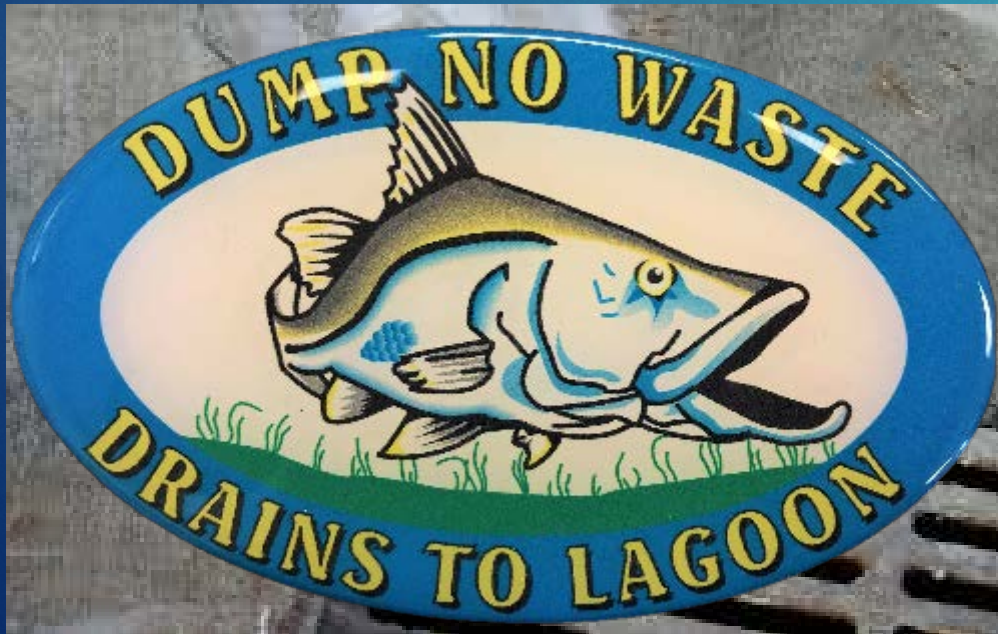
# Start Your Own Mangrove Nursery!





# Wash the Car Right

- ▶ Commercial car wash
  - ▶ Must properly dispose of wastewater
- ▶ Home car wash
  - ▶ Wash on the grass or gravel
  - ▶ Do not pour soap into storm drains!





# Reduce Your Water Use

- ▶ Water the grass less
- ▶ Don't water the sidewalk
- ▶ Use a spray nozzle
- ▶ Use a rain barrel





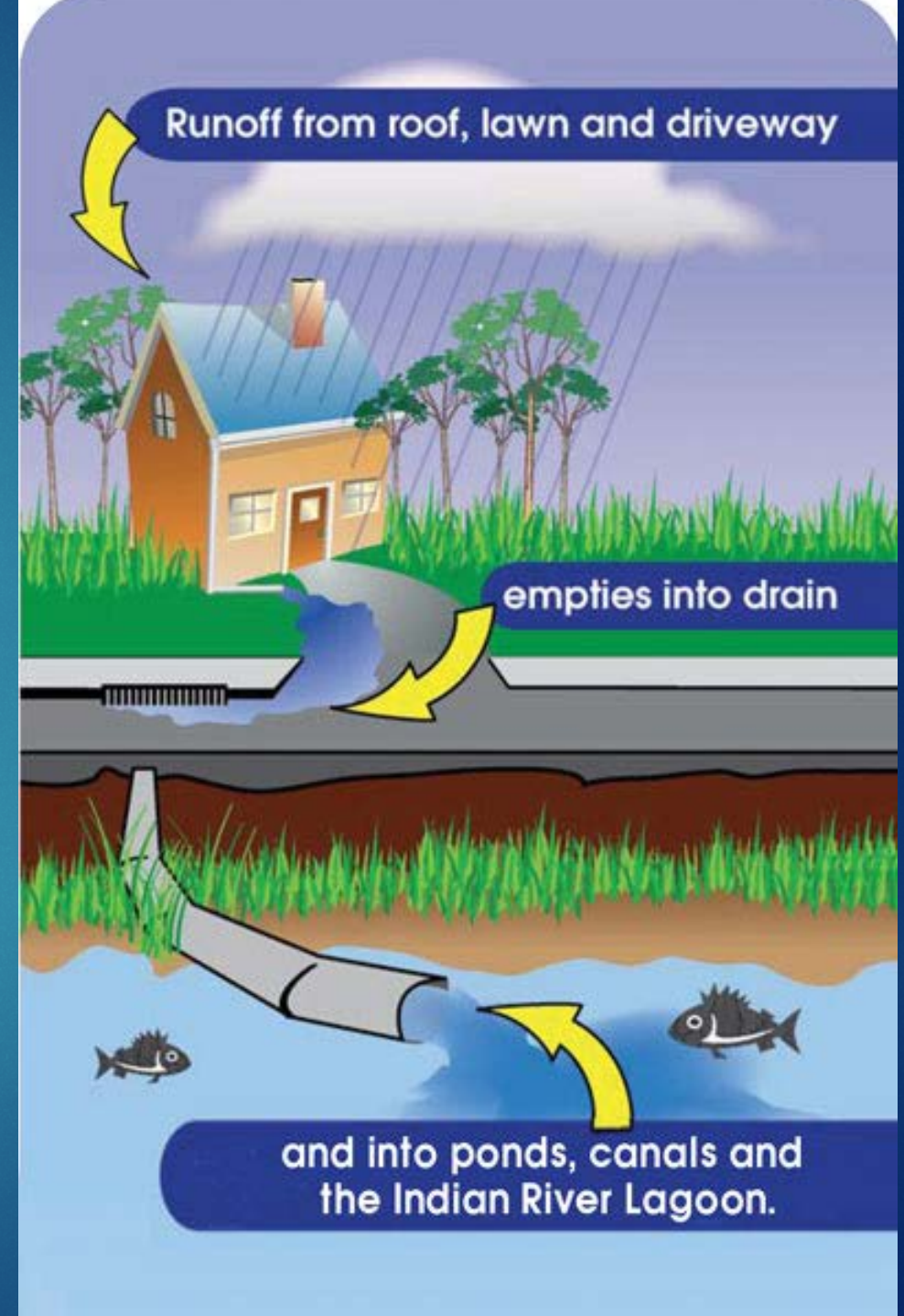
# Rain Barrels!!





# Rain in Brevard County

- ▶ Average rainfall: 54in/yr
  - ▶ US average: 38in/yr
- ▶ 40' x 80' roof will produce over 100,000gal/yr
- ▶ Month of April: 2.1in of rain
  - ▶ Runoff: 4,189gal
  - ▶ Rain Barrels: 76, 55-gal rain barrels





# Our Rain Barrels

- ▶ 55-gallon food grade barrels
- ▶ Entire tops cut off
- ▶ Covered with mosquito netting
- ▶ Attached with recycled bicycle tire
- ▶ 3/4 inch spigot





# Installation

- ▶ Proximity to use location
- ▶ Downspout/V in Roof
- ▶ Out of direct sunlight
- ▶ Solid level surface
  - ▶ Gravel bed, paving tiles, bricks, etc
- ▶ Raise elevation
  - ▶ Two levels of cinder blocks with paving tiles
  - ▶ Pre-made stands from hardware retailers
  - ▶ Wooden stands
  - ▶ Higher the barrel, better the flow





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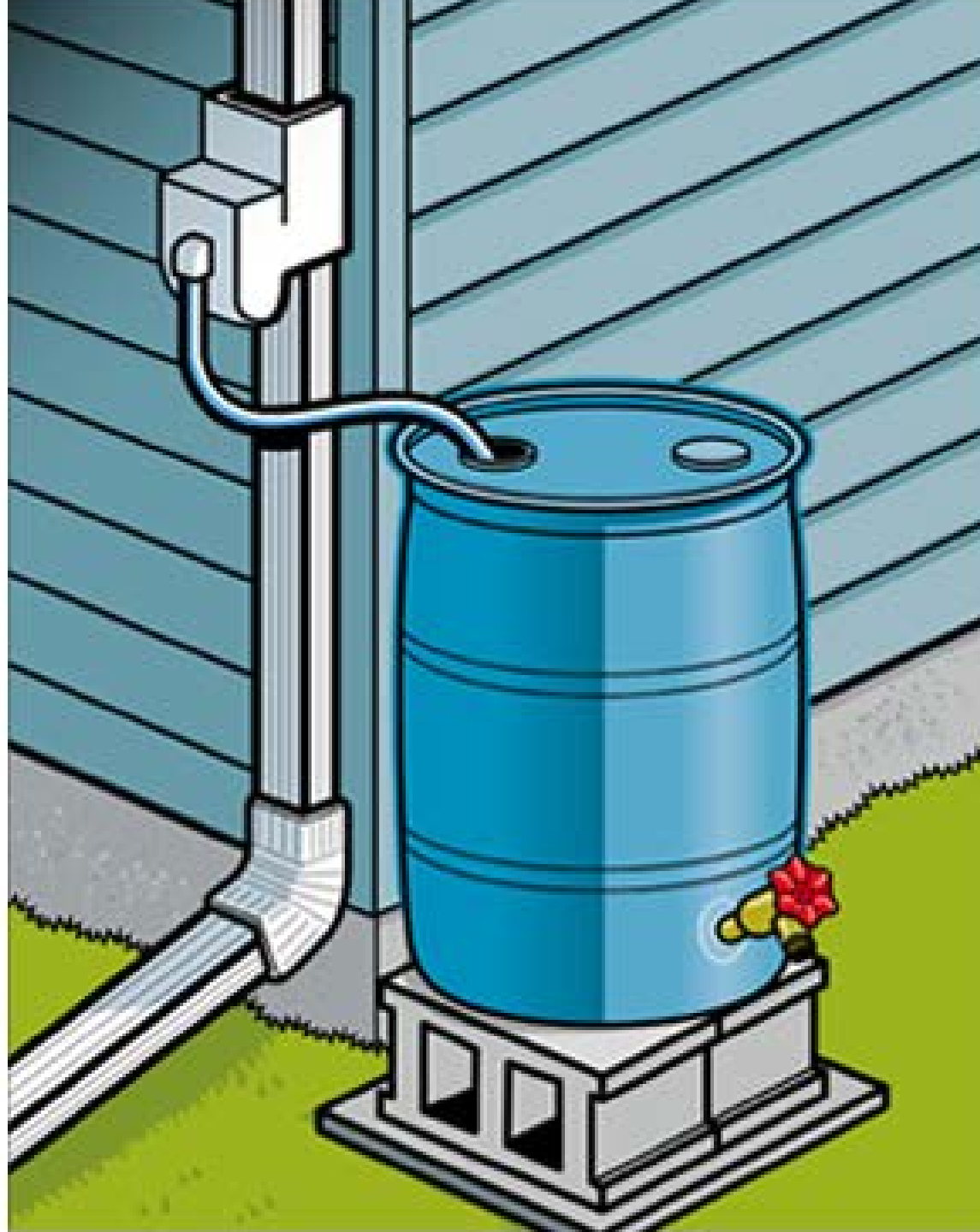
- ▶ Adjust downspout
  - ▶ Determine if straight cutting or adding a flexible downspout extension
  - ▶ Use hacksaw or tin snips
  - ▶ Secure with metal screws or zip ties if needed
- ▶ Determine if you need an overflow hose/diverter system
  - ▶ Direct overflow away from home
  - ▶ Add additional rain barrel(s)
  - ▶ Soaker hose

















# Maintenance

- ▶ Drain barrel monthly if not regularly using water
- ▶ Keep your gutters clean
- ▶ Keep barrels/spigot free of debris
- ▶ Algae growth
  - ▶ Dump, rinse, small capful of bleach
- ▶ Check for leaks
  - ▶ Use aquarium caulk
- ▶ Once a year:
  - ▶ Drain, rinse, scrub with soap/water or bleach
  - ▶ Let dry





# Usage

- ▶ Watering grass/flower gardens
- ▶ Watering house plants
- ▶ Filling bird baths, dog pools, ponds
- ▶ Washing your car
- ▶ Watering vegetable gardens?
  - ▶ Rutgers study
    - ▶ 3% bleach solution
    - ▶ 1 oz of bleach for 55-gal
  - ▶ Apply to soil of vegetable gardens, not the plant
  - ▶ Water in the morning







# Rain Barrel Pick Up Locations

Rockledge Gardens  
2153 US-1, Rockledge, FL 32955  
Monday-Saturday, 9am-5pm  
Sunday, 11am-4pm

Lagoon House  
3275 Dixie Hwy NE, Palm Bay, FL  
32905  
Monday-Friday, 9am-5pm  
Always have additional barrels  
Through our online gift shop



The Lagoon unites us all...  
Thank you!





**1 SIGN UP**  
LagoonLoyal.com/signup

**2 SCAN ME**  
Earn Lagoon Loyal points!



Aug 29, 2020: Rockledge Gardens hosts MRC's Virtual Rain Barrel Workshop



# Questions?

- ▶ Marine Resources Council
- ▶ 3275 Dixie Hwy NE, Palm Bay, FL 32905
- ▶ (321)725-7775
- ▶ [www.SaveTheIRL.org](http://www.SaveTheIRL.org)
- ▶ Nicole Broquet
- ▶ nicole@mrcirl.org





