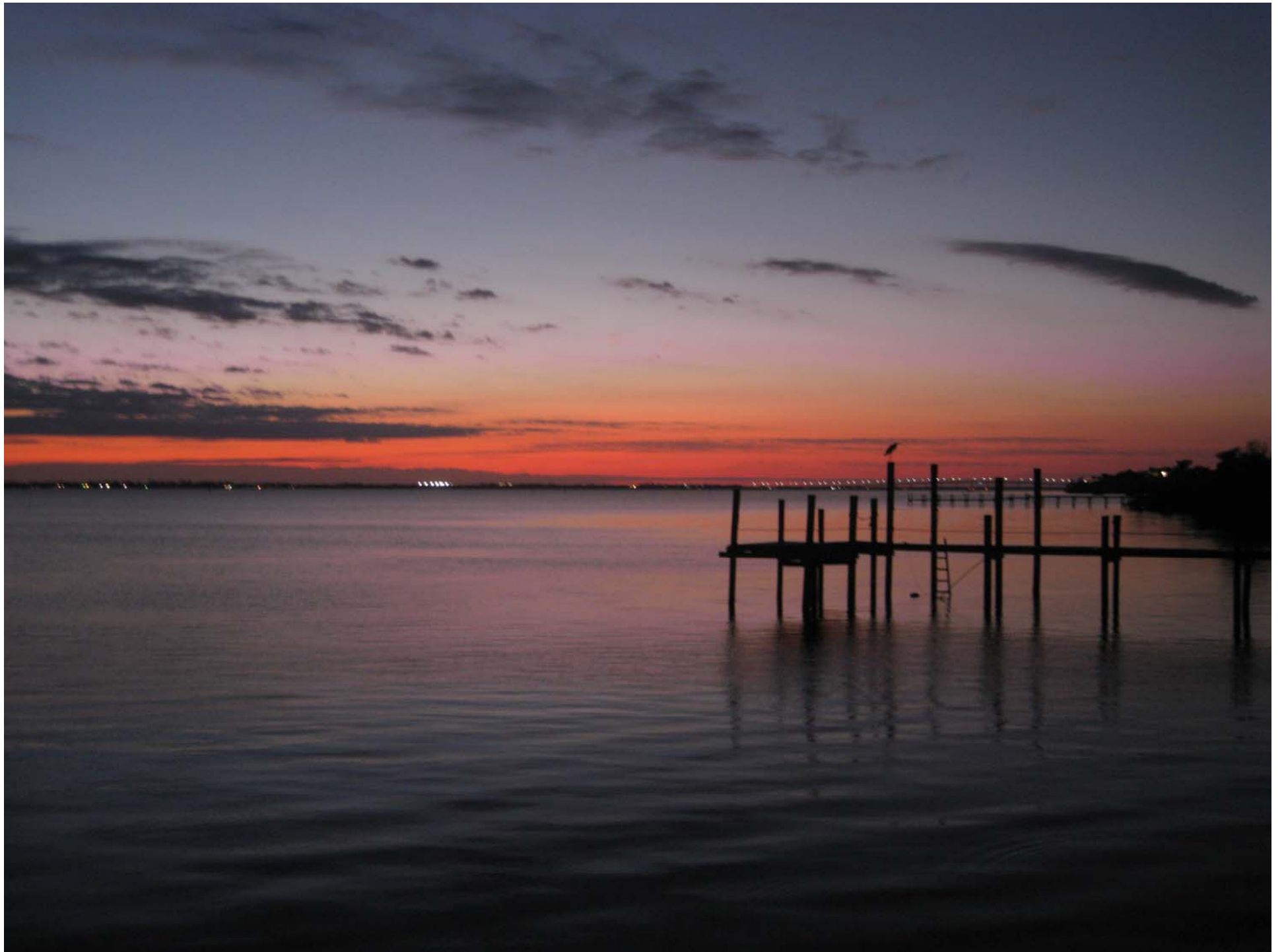




**IS THE RIVER
SAFE?**

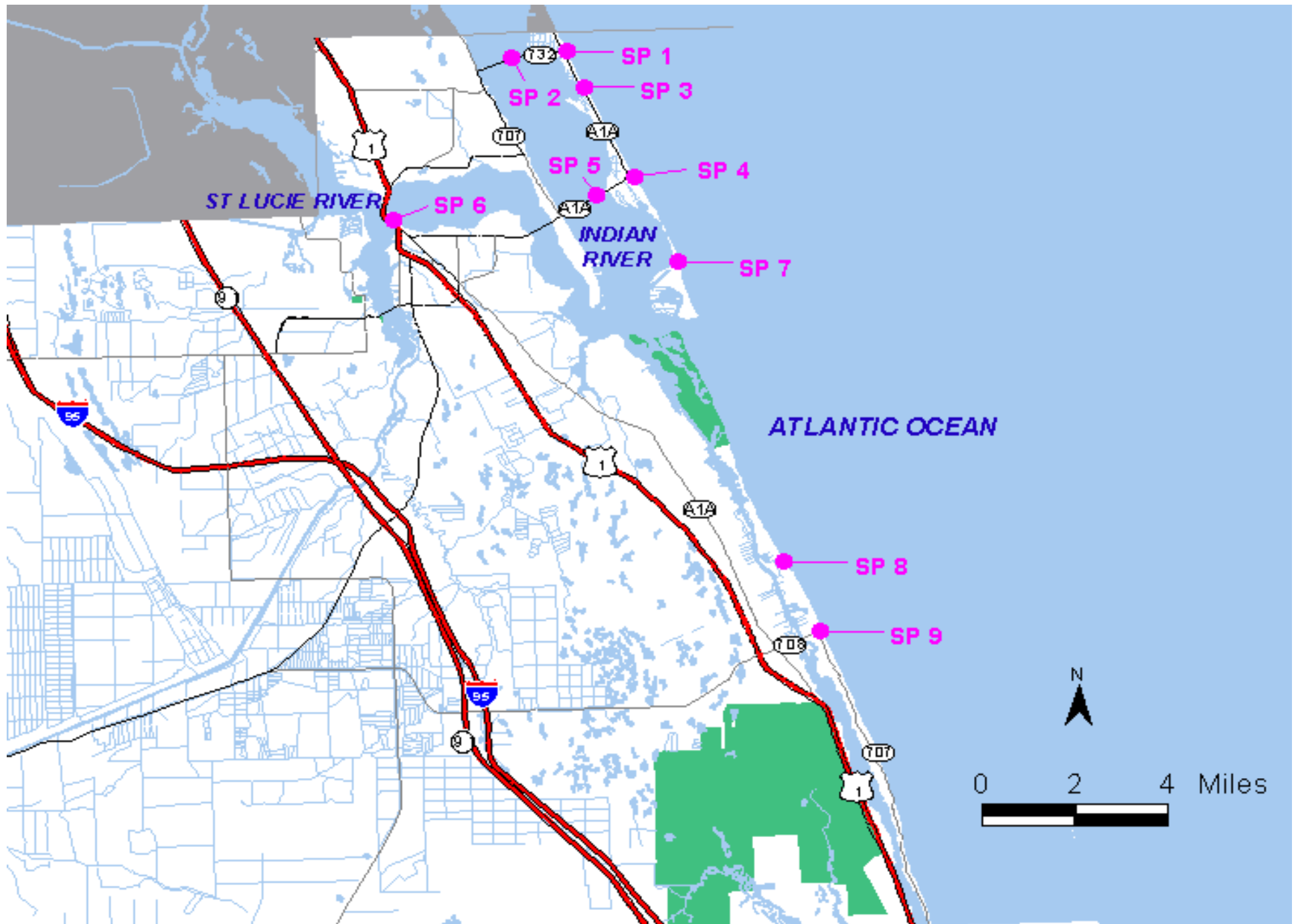


Bob Washam
Environmental Health Director
Martin County Health Department

- Bachelor of Environmental Technology, FIT
- Master of Environmental Epidemiology,
University of Miami School of Medicine
- Registered Environmental Health Professional

WHAT WE DO

- Bacteria sampling of swimming areas, every other week
- Issue health advisories
- Monitor for illnesses in the community



ADVISORY

HIGH BACTERIA LEVELS.
SWIMMING NOT RECOMMENDED
INCREASED RISK OF ILLNESS
AT THIS TIME.

FOR FURTHER INFORMATION, PLEASE CONTACT THE
LOCAL COUNTY HEALTH DEPARTMENT, OR VISIT THE
DEPARTMENT OF HEALTH'S BEACH WATER QUALITY
WEBSITE:

www.doh.state.fl.us

(SELECT "BEACH WATER QUALITY"
FROM THE SUBJECT LIST.)



What are enterococci?

- Indicators of bacteria, viruses and protozoa
- Typically found in intestinal tract of animals and humans
- Relatively easy to sample and test

COMMON HEALTH EFFECTS

- Upset stomach and diarrhea
- Eye or ear irritation
- Skin rashes

RIVER BACTERIA SOURCES

- Storm water runoff
- Animal waste
- Inadequate wastewater treatment

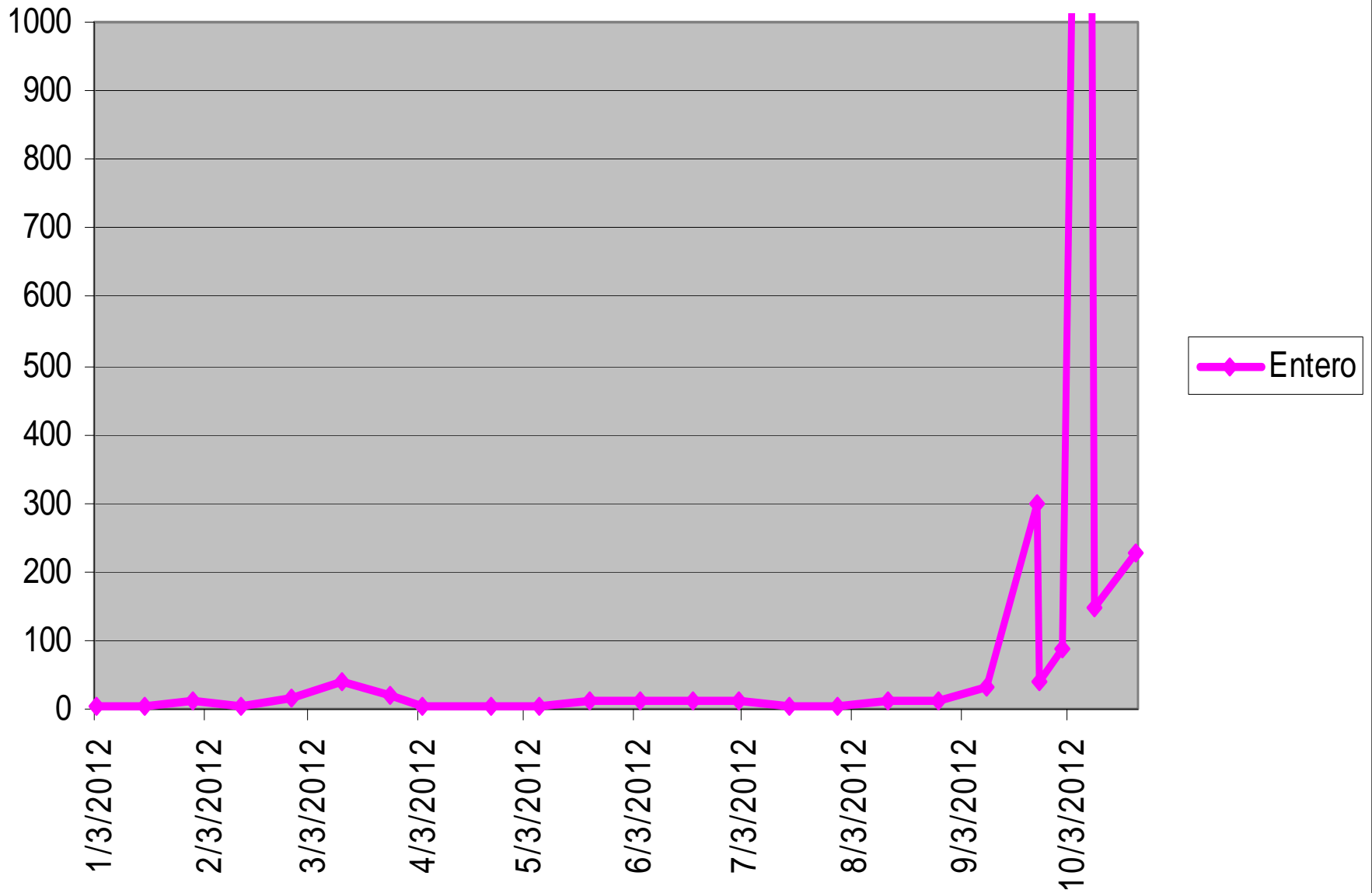
MORE RIVER BACTERIA SOURCES

- Sewage spills
- Boat discharges
- Agricultural operations

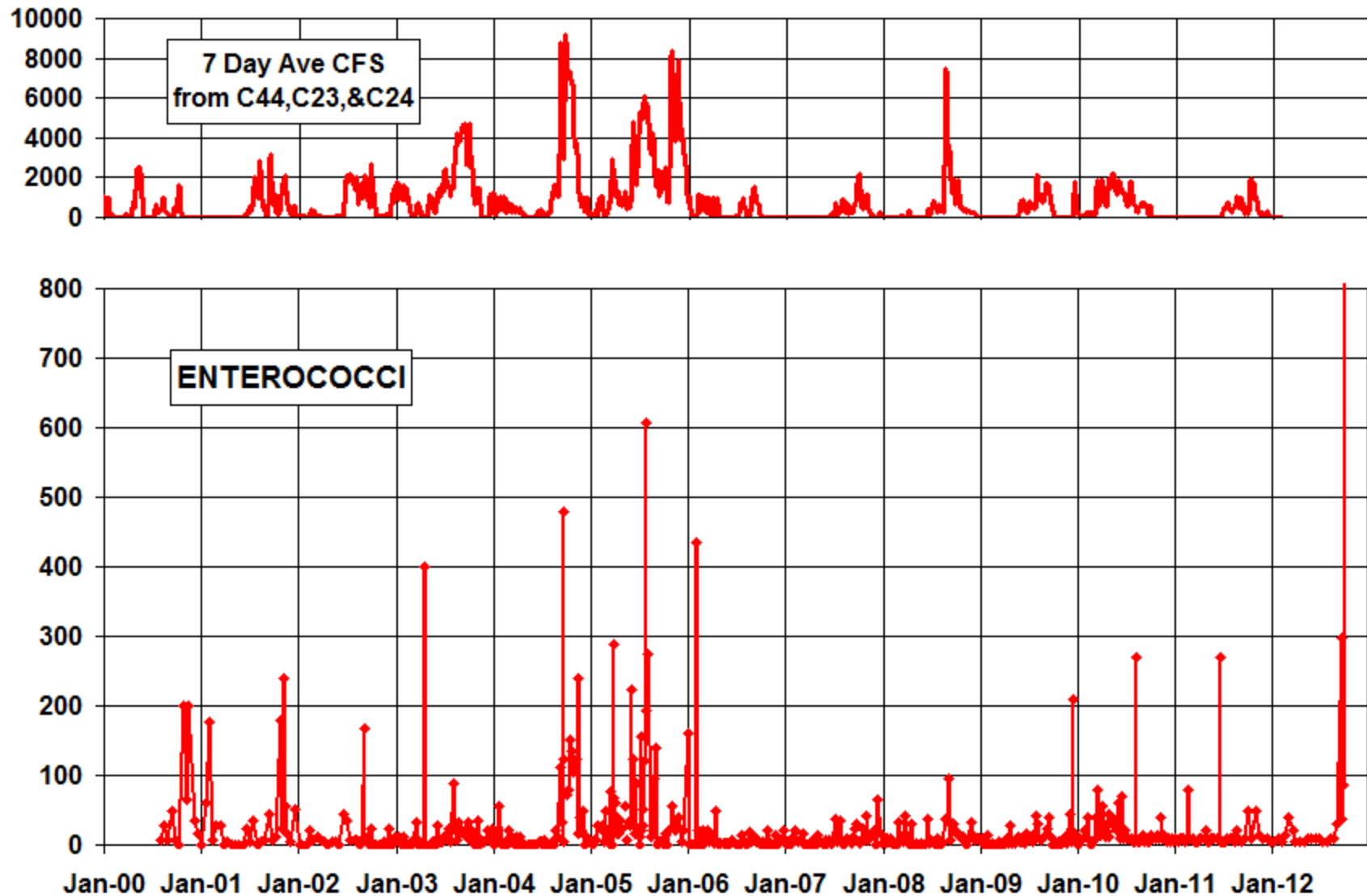
WHEN DO BACTERIA LEVELS INCREASE IN THE ST. LUCIE?

- Low salinity
- High turbidity
- High flows related to runoff and releases from rivers and canals

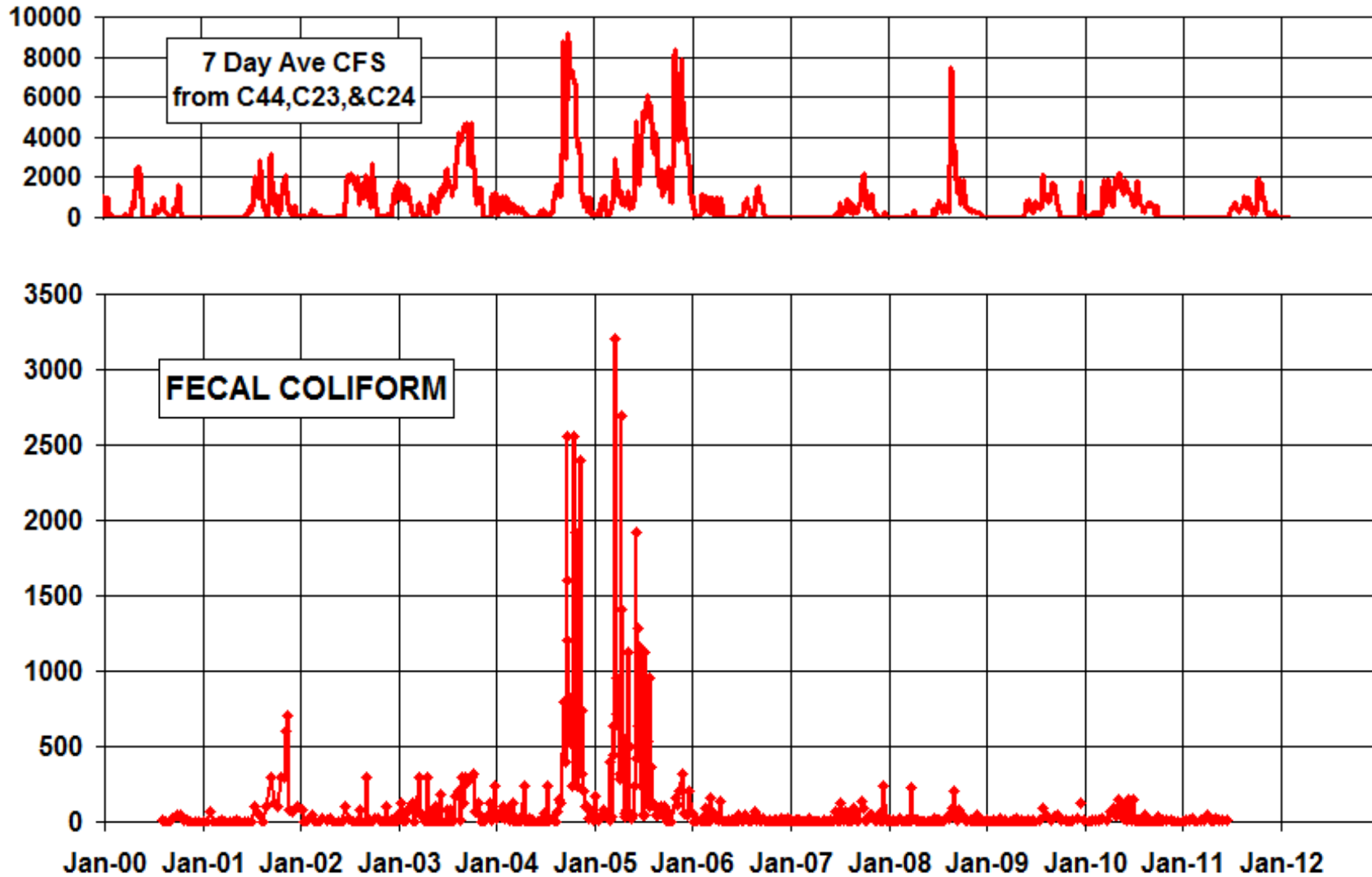
Roosevelt Bridge



Enterococci Levels at Roosevelt Bridge vs Discharges into the St. Lucie



Fecal Coliform Levels at Roosevelt Bridge vs Discharges into the St. Lucie





Haney Creek, Rio 2005

Blue Green Algae (Cyanobacteria)

- Blooms when nutrients and water temperature are high
- Can release toxins into water
- Do not swim in algae blooms, or allow pets to swim in the bloom

Summary

- Bacteria seem to increase when runoff from the land occurs and salinity decreases
- Blue-green algae blooms occur when nutrients increase
- Bacteria and Blue-green algae are generally highest when releases occur

What can you do?

- Minimize the use of fertilizers
- Keep your septic system maintained
- Keep elected officials informed

