

How You Can Help Our Lagoon

The Banana River Lagoon spans the entire western shoreline of Patrick Space Force Base. It is home to thousands of species of fish, plants, and other animals and is an integral part of life here on the Space Coast. The most unmistakable species of the Banana River is the West Indian manatee whose staple food source is seagrass that grows throughout the lagoon under normal conditions.

In 2011, the Banana and Indian River Lagoon experienced a catastrophic harmful algal bloom (HAB) that resulted in a loss of over 60 % of the seagrass.¹ The manatees have since experienced an unprecedented die off because of starvation from the loss of seagrass.

The cause of HABs have been linked to decades of pollution caused by untreated stormwater runoff, wastewater discharges, and septic systems that leach into the groundwater. The residents and local governments that share the Lagoon have rallied to fund restoration projects and educate the public. In recent years, the Banana River water quality has improved, but it still has a long way to go.



Stormwater Runoff

Stormwater runoff is rainfall that does not percolate into the ground where it falls. It is generated when rain flows over land and impervious surfaces, such as roofs, parking lots, driveways, streets, and sidewalks. As the water flows across impervious surfaces, it can pick up a variety of pollutants such as excess fertilizer, pet waste, yard waste, pesticides, herbicides, oil, gas, paint, solvents, and litter.

How Can You Help?

There are a variety of things that residents can do to help reduce the amount of nutrients and pollutants that enter the lagoon. Here are a few things you can do to help.

Irrigation

Excess irrigation, much like stormwater, can carry a variety of pollutants to the Lagoon. Here are some ways to limit excess irrigation:

- Install a rain sensor or turn off your sprinklers when there is rain in the forecast.
- Install a rain barrel. Rain barrels are a great way to capture rainfall and use it for your lawn.
- Avoid overwatering. Follow the St. Johns River Water Management District watering restrictions.² They can be found here: <https://www.sjrwmd.com/wateringrestrictions/>
- Test your sprinkler system. Once a month test your sprinkler system and replace any broken, defective, or missing sprinklers.

Pet Waste

It is important for the health of the lagoon that all dog owners pick up after their pets. Here are a few things that all dog owners should do regularly:

- Carry pet waste bags on every walk. Don't forget to use them!
- Pick up pet waste in your yard. Aside from being loaded with nutrients that can enter the lagoon, it can pose a serious health risk to you, your family, and your community.

Vehicle Maintenance

The way you maintain and clean your vehicle matters. It can greatly impact the environment and the lagoon. Here are a few ways to reduce vehicle pollution:

- Wash your vehicle at a commercial or designated car wash area. Commercial car washes drain to a specific water treatment system that removes pollutants from the water.
- If you wash your car at home, make the right choices. Use soaps or detergents that are labeled phosphate-free. Some cleaning products contain phosphate which can feed HABs. Washing your car in the yard also prevents pollutants from entering the stormwater system and ultimately the lagoon.
- Properly dispose of automotive fluids. Improperly disposed automotive fluids can drain into stormwater systems and harm fish and wildlife.
- Keep adequate spill cleanup supplies. In the event of a fluid spill, having the proper cleanup kit close by can make a huge difference. Make sure you know how to use them!

Litter

Litter or trash causes a massive amount of pollution to the world's environment and waterways. Here are a few simple actions you can do to keep your community and the lagoon clean of litter:

- Throw your trash in the garbage. Most public places have some type of trash receptacles.
- Throw away cigarette butts. Cigarette butts account for the most common form of plastic pollution in the world. They contain hundreds of toxic chemicals that can remain in the environment for many years beyond the life of the cigarette butt itself.³
- Properly dispose of hazardous waste. Never bury, dump, or burn chemical products. Locate a nearby [household hazardous waste collection center](#).

See Something, Say Something

If you think a pollutant has been dumped or is being discharged (illicit discharge) into a stormdrain or a waterbody, call Patrick SFB 24/7 Spill Hotline at (321) 298-7022. The signs of illicit discharge include suds, foul or chemical odor, discoloration of water, oily rainbow sheen, and trash/debris.

Get Involved, Learn More

There are several volunteer opportunities that have a direct and positive impact on the Banana River Lagoon. Below is a list of the local volunteering and workshop opportunities:

- Space Force Earth Day Event (April 25, 2024 – contact Steven Baker, (321) 494-9387, steven.baker.44@spaceforce.mil to get involved!)
- Lagoon Loyal – [List of upcoming workshops and volunteer opportunities](#)
- Marine Resources Council – [Volunteering opportunities application](#)
- Brevard Zoo Living Shoreline – [Volunteer signup](#)
- Keep Brevard Beautiful – [Volunteer signup](#)

Sources:

1 Morris LJ, Hall LM, Jacoby CA, Chamberlain RH, Hanisak MD, Miller JD and Virmstein RW, (2022) Seagrass in a Changing Estuary, the Indian River Lagoon, Florida, United States. *Front. Mar. Sci.* 8:789818. doi: 10.3389/fmars.2021.78981

2 “Watering restrictions,” www.sjrwmd.com, St. Johns River Water Management District, <https://www.sjrwmd.com/wateringrestrictions/>

3 “Tiny but deadly: Cigarette butts are the most commonly polluted plastic”, earthday.org, EarthDay.ORG, <https://www.earthday.org/tiny-but-deadly-cigarette-butts-are-the-most-commonly-polluted-plastic/>