

## SALT PONDS

Most of the salt ponds (“ponds”) in the Virgin Islands were bays that, over time, have been closed in by reef or mangrove growth across the bay’s mouth. Sand, sediment, and rubble also accumulate on the developing berm area during storms and aid in separating the pond from the bay.

The water in the pond is seawater that remained inside the newly made berm. Once the pond is separated from the bay, salt water can still seep into the pond at high tides or it can wash over the berm during storms.

Fresh water from rain and storm water runoff also enters salt ponds. These fresh water inputs lower the pond’s salinity. These changes in salinity can be very large and can occur very rapidly.

During dry periods, the pond’s water evaporates quickly, increasing the salinity. Sometimes, salt ponds can dry up completely leaving crystallized salt behind.

Salt ponds are constantly exposed to the sun. This combined with frequent changes in water level caused by sudden storm water inputs or evaporation can lead to drastic changes in water temperature in salt ponds.

### LIFE IN A SALT POND

Very few organisms are able to withstand the drastic fluctuations in temperature and salinity that salt pond experience. These unstable conditions make salt ponds “unfriendly” environments to live in. Yet, many crabs, insect larvae, brine shrimp, and some halophilic (salt-loving) plants can be found living in salt ponds. Brine shrimp and algae give ponds a variety of different colors, including brownish-pink, orange, green, and red.

Many wading birds (herons, stilts sandpipers and sometimes, flamingoes) and waterfowl (ducks, teals, coots) feed on organisms in the pond. Other birds (kingbirds, martins, and swallow) feed on insects that fly over the ponds, and many nest or roost in the surrounding vegetation. Insect and fish-eating bats also frequent ponds in the evening.

A pond that has been recently opened to the sea by a storm may contain fish (sennet, barracuda, tarpon, mullet, snook, etc.) these are often fed upon by birds such as kingfishers, herons, and ospreys.

Animal and plant life associated with ponds are not well studied. The complex ecology of a pond is only partly understood. We do know that a pond is a very dynamic system with constant modifications in the natural community in response to continuous changes in salinity, temperature, turbidity, and levels of oxygen and hydrogen sulfide (from decaying organic matter) in the pond.

### ARE SALT PONDS IMPORTANT?

YES! Salt ponds serve a number of very useful purposes that benefit the marine environment and us.

1. Ponds are natural settling basins, filtering upland storm water runoff and the sediments and pollutants it carries. This protects marine habitats (seagrass beds and coral reefs from silt) and keeps the water in adjacent bays clean.
2. Ponds provide feeding places for wading birds, fish-eating bats and insects. The vegetation around the pond also provides nesting and roosting places for many birds and other wildlife.
3. Ponds are excellent areas for bird watching, environmental research, and education.
4. Ponds have many traditional uses, including: gathering salt for cooking; “soaking” for medicinal purposes; and, gathering brine shrimp as tropical fish food.

## THREATS TO SALT PONDS

Salt ponds in the Virgin Islands are an endangered habitat. Numerous activities have eliminated them or reduced their values as sediment traps or wildlife habitat. Threats include:

- development of upland areas without proper use of sediment control measures. This leads to rapid “filling in” and loss of a pond.
- opening of salt ponds for marina basins. When this is done all runoff into the pond goes directly to the sea.
- pollutants such as waste oil, septic discharge and household and commercial chemicals entering the pond in storm water runoff from upland sources. This results in the death of pond animals and plants and a disruption of the ecology of the pond.

If we overload our salt ponds with too much sediment or pollution, they will eventually stop working for us. Without functioning salt ponds, many of our marine resources such as reefs, sea grasses, fish, and birds will be in danger.

### PROTECT OUR SALT PONDS

- Never dispose of chemicals by pouring them down the toilet or sink or on the ground.
- You should keep your car tuned up and dispose of waste oil at designated sites.
- Persons should discourage the construction of manmade structures on or near (>100’) saltponds.
- Promote and use responsible development and construction practices, including erosion control, spot-clearing (clear only what you need to), immediate revegetation of your site, and doing major work only during the dry season to avoid possible erosion.
- **Report violations to DPNR’s Division of Environmental Enforcement. 340 773 5774 or 340 774 3320 ext. 5106**



# SALT PONDS: NATURE’S WATER POLLUTION PREVENTION SYSTEM

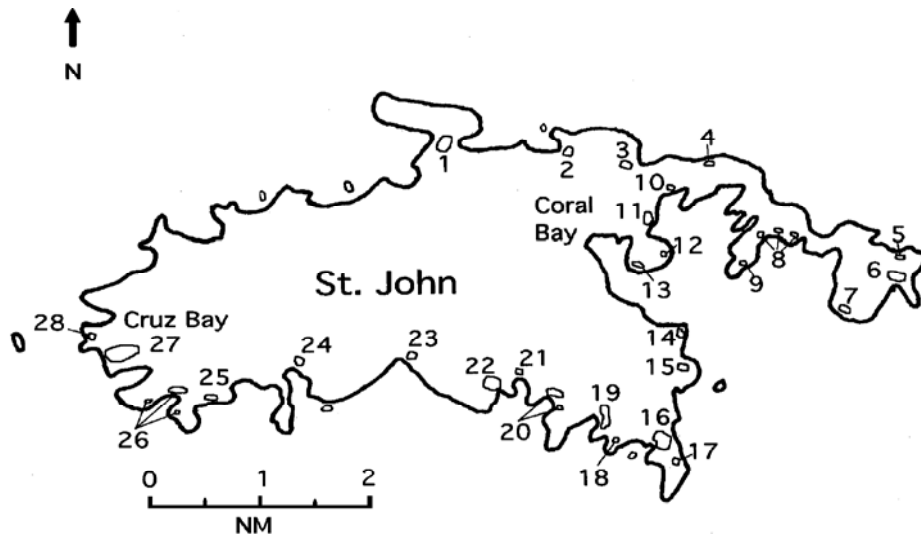


**Department of Planning and  
Natural Resources**

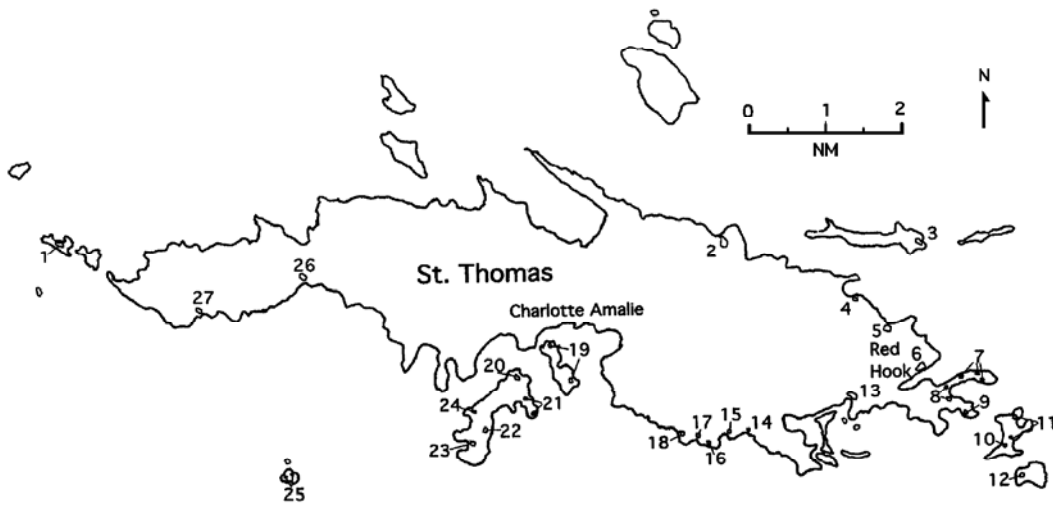
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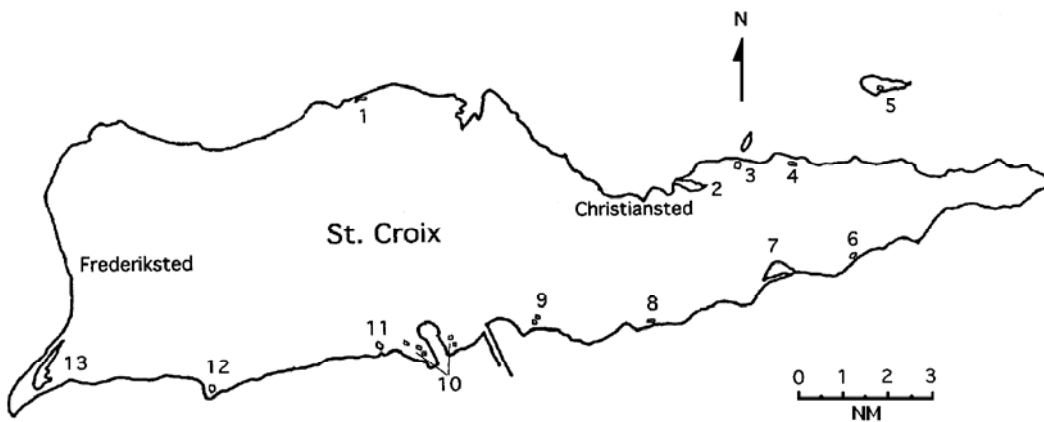
# SALTPONDS OF THE VIRGIN ISLANDS



1. Frank Bay	6. Privateer Bay	11. Popilleau Bay	16. Salt Pond	21. Little Lameshur	26. Chocolate Hole
2. Leinster Bay	7. Southside Pond	12. Fortsberg	17. Drunk Bay	22. Europa Bay	
3. Brown Bay	8. Elk Bay	13. Harbor Point	18. Kiddel Bay	23. Reef Bay	
4. Mt. Pleasant	9. Turner Bay	14. Lagoon Point	19. Gootpan Bay	24. Fish Bay	
5. Newfound Bay	10. Borck Creek	15. Friis Bay	20. Great Lameshur	25. Hart Bay	



1. Salt Cay	6. Red Hook Pond	11. Great St. James	16. Coculus Bay	21. Sprat Point	26. Preserverance
2. Mandahl Bay	7. Cabrita Point	12. Little St. James	17. Ltl Coculus Bay	22. Limestone Bay	27. Fortuna Bay
3. Thatch Cay	8. Great Bay	13. Benner Bay	18. Frenchman Bay	23. Flamingo Bay	
4. Footer Point	9. Water Point	14. Bovoni Bay	19. Hassel Island	24. Providence Bay	
5. Smith Bay Pond	10. Christmas Cove	15. Bolongo Bay	20. East Gregerie	25. Saba Island	



1. Rust Op twist	5. Buck Island	9. Billy French Ponds	13. West End Saltpond
2. Altona Lagoon	6. Robin Bay	10. Krause Lagoon	
3. Southgate Pond	7. Great Pond	11. Manning Bay	
4. Coakley Bay	8. Half Penny Bay	12. Long Point	

These maps do not show the location of every natural pond in the U.S.V.I. The ponds shown are the largest and most important, for wildlife and sediment reduction.