

Sarasota County Watershed Story: Roberts Bay North

Our creeks and bays: love 'em or lose 'em!

Sarasota County's landscape is defined in large measure by the hundreds of waterways – bays, creeks, canals and ponds – that connect to make up our watersheds.

A watershed is the land area that drains into a stream, pond, reservoir, bay or other body of water. Rain that falls within the watershed is delivered through small swales and ditches to tributaries that flow to our bays. It is important to recognize that the things we all do on the land affect the quality of our watersheds, including Roberts Bay North – and our own quality of life.

Today Sarasota County is examining all our county's watersheds to determine the best plan for restoring their health, to the greatest extent possible. As we perform those examinations, we invite you to join us in developing effective solutions that will reverse harmful trends that threaten sea life habitat and water quality. Government can't own the solutions alone. We need your help.



Roberts Bay North: its challenges and opportunities

Are you aware that Sarasota County has two water bodies named Roberts Bay? AND to further confuse the issue, the two bays are not connected with each other in any way! For this discussion, we are describing the land and water bodies that drain into the Roberts Bay North Watershed, as illustrated on the map.

Recreational boaters enter this small, shallow bay for fishing, skiing and swimming through the Intracoastal Waterway or Siesta Key's extensive navigable canals and bayous. There they find undeveloped islands and mangrove forests to explore. As an estuary, where fresh and salt water mix and meet, the bay provides vital habitat – a living nursery – for fish, shellfish and wildlife. That nursery is, today, at risk.

Urban development throughout the watershed has brought major change over the past 50 years. Natural areas were

converted to residential, commercial, agricultural and public use lands. The watershed is almost completely built out now; very few natural areas remain. There is little natural mangrove habitat left, as seawalls have hardened the shoreline in many places.

When natural streams were channelized for agriculture, flood control and mosquito control, surface water storage area was reduced, causing rainfall to course to the bay more rapidly, without benefit of natural filtration. This activity resulted in greatly expanded watershed boundaries.

Today Roberts Bay North receives large quantities of water from its urbanized watershed. The combined influences of stormwater runoff, wastewater plant discharges and septic systems have degraded the quality of that water.

Sarasota County is reducing wastewater influences by consolidating the wastewater

system and working with neighborhoods to replace existing septic tanks with sanitary sewer service, a project expected to span 10 or more years.

The bay was also impacted when natural shoaling closed Midnight Pass at the southern end of Siesta Key. This resulted in reduced tidal flow into and out of the Roberts Bay North portion of Sarasota County's Little Sarasota Bay.

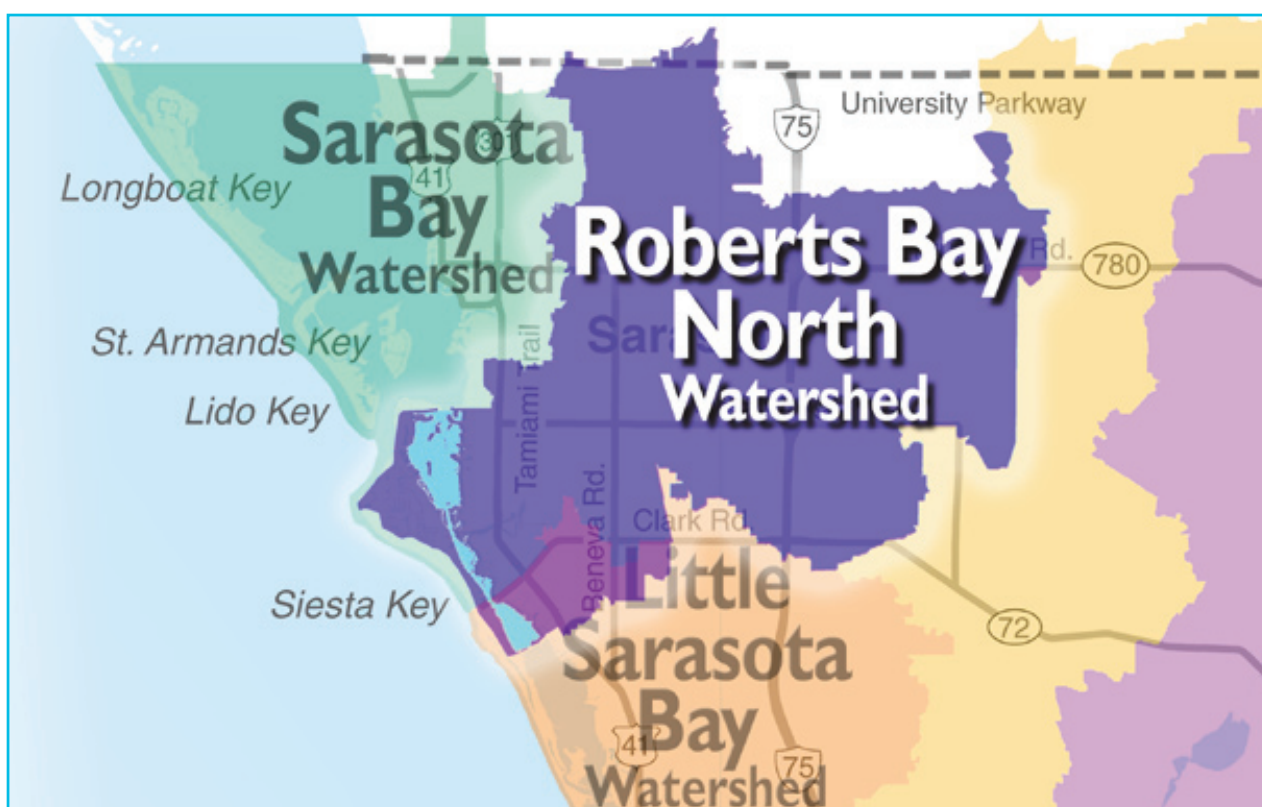
Area residents, builders and developers certainly didn't set out to threaten our sea life nor our water quality when they built the sea walls, roads, sidewalks and other hardened surfaces, along with condos and high rise commercial buildings that define our community today.

Nonetheless, more people and more development have placed greater stress on all our natural systems, resulting in diminished wetlands and increased quantities of pollutants introduced into our watersheds, including Roberts Bay North.

Today we have an opportunity – and a responsibility – to reverse those unhealthy trends.

The county's ongoing effort to develop comprehensive watershed management plans will protect and improve water quality leaving or within the Roberts Bay North watershed.

New development and redevelopment in Sarasota County benefit from recent stormwater and landscaping regulations. Low-impact design manages stormwater on individual lots by capturing rainfall on site. This approach closely mimics nature by helping to control downstream flooding, reducing water pollution and the imbalance of fresh and salt water in the estuaries. The county's landscape and fertilizer management ordinances prescribe appropriate plant materials, as well as fertilizer type and application schedule.



WANTED

Watershed champions for our creeks and bays!

The lure of these water bodies is at least in part responsible for attracting us to, or keeping us in, Sarasota County. Our waterways contribute significantly to our quality of life and, in no small measure, to increased property values here.

The more energy, enthusiasm and dedication we can rally to champion bay health, the greater the likelihood for positive outcomes. By nurturing our creeks and bays today, we greatly enhance the

possibilities for tomorrow's enjoyment. Won't you join the effort?

There are many opportunities here for individuals, schools, homeowner associations, communities, businesses, government, builder/developers and others. A truly successful long-term solution will include contributions by us all.

Our water heritage

Historically, nature provided a series of checks and balances that offered protections to our water bodies, to the wildlife in and around them and to the shorelines. Some 150 years ago, nature dictated the flow of water from the land to the bays. Pine and palmetto flatwoods were dotted with pockets of isolated wetlands that sometimes connected during rainy summer months. This diverse landscape

provided nurturing homes to wildlife. Soil and plants filtered and slowed the movement of rainwater, which then eased into meandering streams through the shallow groundwater table. Fresh water mixed with salt water from the bays, creating a healthy nursery for young fish.

Those natural patterns began to be interrupted and altered during the early 20th century, as the area's population grew and more development occurred. As a result, pollution increased, habitat was destroyed, and wildlife populations declined. The amount of fresh water flowing into the bays was increased, upsetting the balance of fresh and salt water required to sustain a healthy sea life population.

Timeline: Influences that have changed the Roberts Bay North watershed over the years

1000 – 1900s

Early development in Sarasota County included Calusa tribes, Spanish explorers and other European groups.



1910s

Miles of ditches were dug in upper Phillippi Creek basin for agriculture. This eliminated large areas of land that stored and filtered water and changed the natural flow of water. Celery was a big crop.



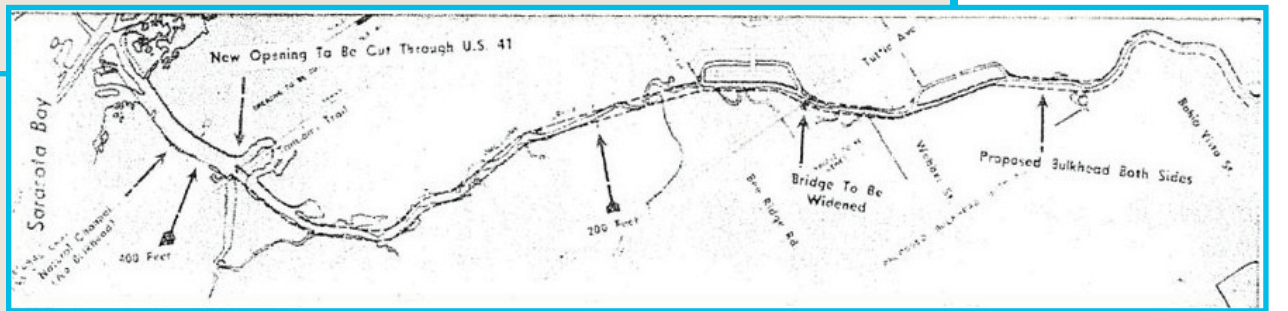
1950s

Urban growth accelerates at waterfront and continues inland. Flooding became a problem along Phillippi Creek.



1960s

Sarasota County authorizes first Phillippi Creek drainage study. Dredging begins at mouth of Phillippi Creek to alleviate flooding by allowing more water down the creek into Roberts Bay.



1970s

As the population in Sarasota County grew from 76,000 in 1960 to over 200,000 in 1980, development increased throughout the watershed.

1980 – 1990s

Sarasota County Stormwater Environmental Utility established to address continued flooding problems through planning and capital improvement projects. Septic tanks and private wastewater treatment plants identified as pollution sources. Celery Fields Regional Stormwater Facility construction begins.



2001

Phillippi Creek Septic System Replacement project begins.

2007

Roberts Bay North Watershed Management Plan study begins.

