

Sarasota County's Watershed Story

Dona and Roberts bays

Natural resources like Dona and Roberts bays are vital to our community's quality of life. Learn how they are at risk and how we can protect them by working together.



For motorists driving along U.S. 41 in Nokomis just north of Venice, Dona and Roberts bays are but a glimpse of water and mangroves that one passes in the blink of an eye. But for people who live in the neighborhoods near Dona Bay and its southern neighbor, Roberts Bay, the waterways are a treasured source of beauty and recreation.

As estuaries, where fresh and salt water mix and meet, the bays provide vital habitat for fish, shellfish and wildlife.

The connection of Nokomis, Laurel and Venice residents to these small bays in southern Sarasota County is obvious. Less apparent is the connection of thousands of residents living in neighborhoods from the south end of Manatee County, through the heart of Sarasota County and southward to Dona and Roberts bays. Yet the yards, neighborhoods, roads, pastures, golf courses and farms in nearly 90 square miles of the county make up the watersheds that drain to these bays.

It wasn't always this way. Before about 1916, the watershed for Dona Bay was approximately 16 square miles. But then decades of drainage projects to control mosquitoes, create farmland and pastures, and to reduce flooding, dramatically changed the flow of runoff to both bays. The most significant of these projects are Cow Pen Slough, which empties into Dona Bay, and the Blackburn Canal, which empties into Roberts Bay. (See the map comparing the historic and modern day watersheds on page 2.)

The result is a watershed for Dona Bay that is more than five times its original size. Meantime, scientists estimate



Photo by Stan Sagella

On a windy day, the incoming tide flows into Dona and Roberts bays through the Venice inlet.

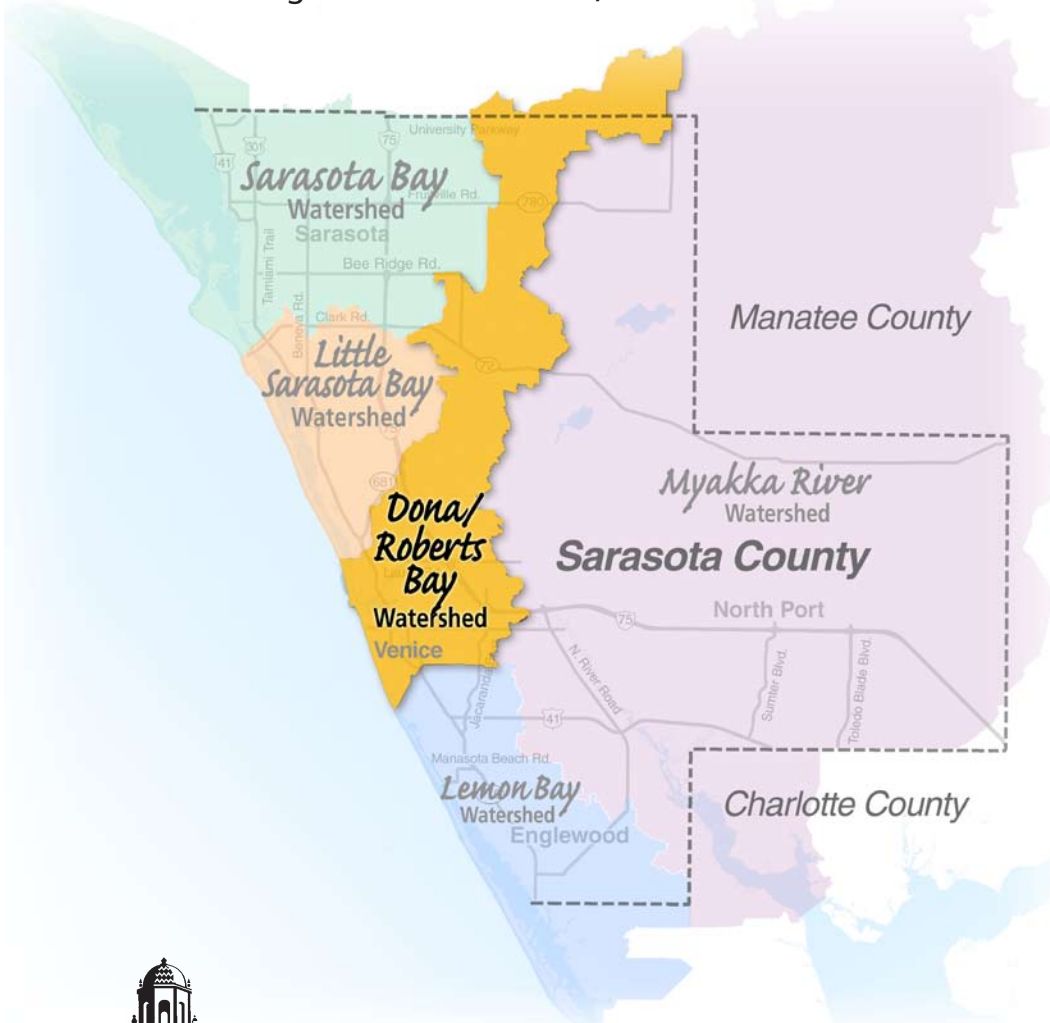
that 7 percent of the Myakka River's flow is diverted to Roberts Bay by the Blackburn Canal constructed in 1959.

Runoff from rainfall has been diverted by these canals into tidal creeks and bays, altering the mix of fresh and salt water, which changes the habitat that shellfish and young fish require. The drainage system also carries soil and anything else that can float or be carried by flowing waters from the watershed to the bays, changing bottom habitats in creeks and bays.

In recent years, scientists have been documenting conditions in the bays, including water quality, oyster habitat and the volume of freshwater reaching the bays. Studies are ongoing, but technical work indicates problems with the mix of fresh and salt water (salinity), which is particularly important for early life stages of fish and shellfish.

To improve conditions in the bays, scientists believe we must make changes to the watershed that attempt to copy nature's original plan to the extent practical. Through the Dona and Roberts Bays Watershed Management Program, Sarasota County Government has acquired key parcels of land upstream that can be used to store and balance the amount of excess freshwater reaching tidal creeks and the bays. The program's goals are to improve the quality of habitat for birds and marine life, increase fresh water wetlands and add to the community's water supply.

We invite you to learn more about the condition of our bays, which is the first step in protecting them. Then, through sharing responsibility for the future of our water resources, together we can make a difference by combining government action and individual changes in the way we care for the land.



Get connected

Find information on Dona and Roberts bays and other Sarasota County water bodies at www.sarasota.waterratlas.org

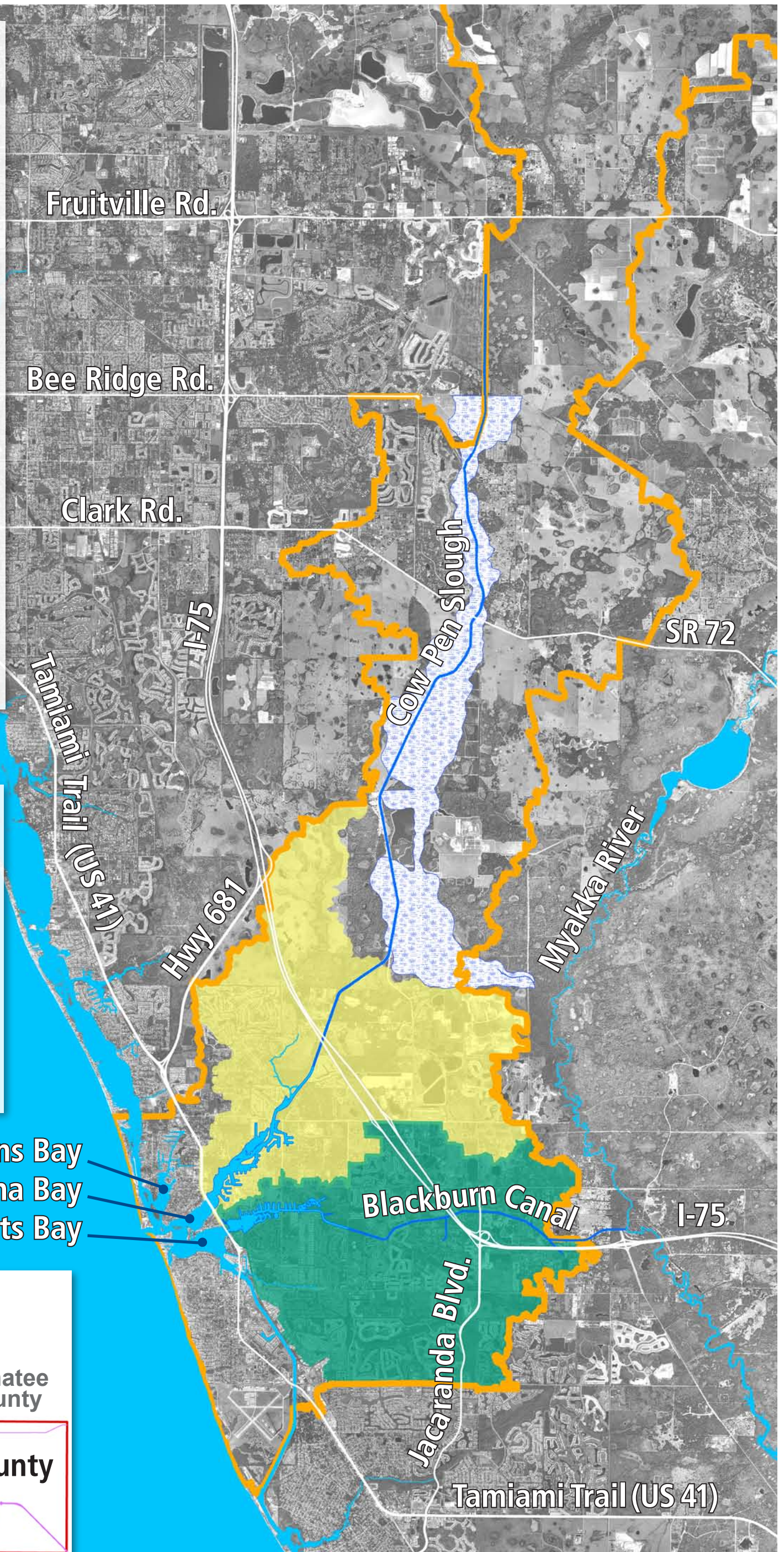
Request notices of workshops and meetings about the Dona and Roberts Bays Watershed Management Program
Email: watershed@scgov.net
Telephone: 861-5000 and ask for watershed

Small bays, large watershed






The yellow and green areas of this map depict the portions of Sarasota County that historically drained to Dona and Roberts bays, respectively. The blue-and-white hatched area depicts the marsh, now known as Cow Pen Slough, which once meandered toward the Myakka River. The marsh that once filtered and slowed runoff was drained and diverted to Dona Bay in the mid-1900s when the Cow Pen Slough canal was created.

After the canal was created, the historical Dona Bay drainage area depicted in yellow was expanded to include all of the acreage inside the thick orange line. In the rainy season, the canal carries large amounts of fresh water rapidly to the bay. This disrupts the balance of fresh and salt water in tidal creeks and bays.

Meantime, the historical Roberts Bay drainage area, depicted in green, was augmented by freshwater flows from the Blackburn Canal. Scientists estimate that at least 7 percent of freshwater flows in the Myakka River are diverted to Roberts Bay via the Blackburn Canal.



Dona and Roberts bays watersheds

-  Sarasota County boundary
-  Historic Dona Bay watershed
-  Historic Roberts Bay watershed
-  Historic marsh
-  Modern Dona and Roberts bays watershed



Lyons Bay
Dona Bay
Roberts Bay

