

Background Note: The Venetian Golf and River Club splits two watersheds on the community — the Dona Bay Watershed and the Myakka Bay Watershed.

Dona Bay Watershed has grown significantly in the past 100 years. Historically, the drainage area of the Dona Bay estuary was only 15 square miles. However, decades of projects designed to reduce mosquitoes, increase irrigation to farmland and drain the land for development has enlarged the watershed so that today Dona Bay receives freshwater runoff from nearly 100 square miles (<https://sarasota.wateratlas.usf.edu/watershed/?wshedid=1>) of Sarasota and Manatee counties through the human-made channel of Cow Pen Slough.

This has contributed to nutrient pollution and altered the salt-freshwater balance of the estuary, important for oysters and seagrass to thrive. The Cow Pen Slough canal system was installed in the 1960s to route water from the wetlands to our north to Dona Bay, and this introduced excessive amounts of freshwater to Dona Bay. Increased freshwater altered the salinity and increased nutrients that have degraded water quality.

The Dona Bay Watershed Management Plan, cooperatively created by Sarasota County's Public Works Department and the Southwest Florida Water Management District (SWFWMD), is designed to reverse this trend by not only restoring the watershed and reducing the freshwater flow to Dona Bay, but also redirecting up to 15 million gallons a day to the public water supply.

Dona Bay and the Myakka River Watersheds split the Venetian community in half. See phase 3 below.

Dona Bay and Myakka River Watersheds



Restoring Dona Bay: A Deep Dive into Status Phase 3

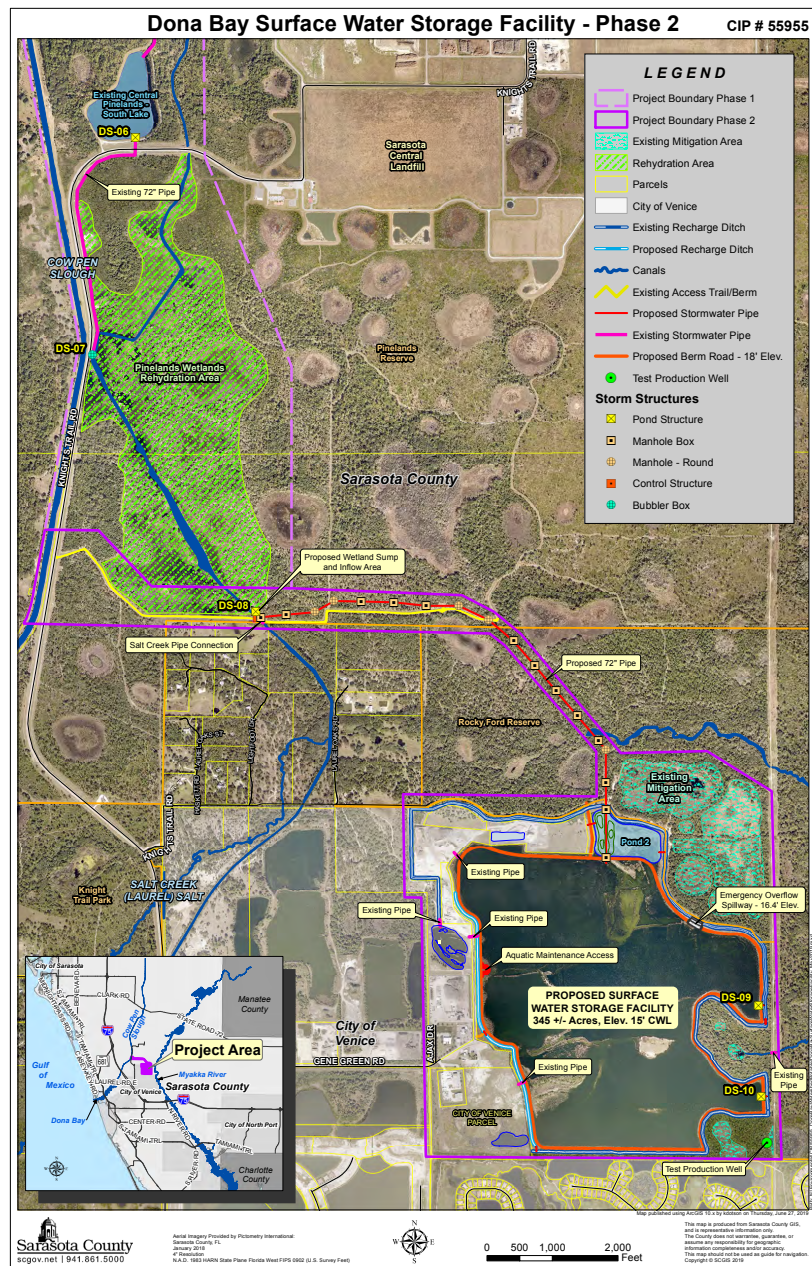
It is the focus of an ongoing Sarasota County Dona Bay Watershed Restoration Project aimed at bringing it back to a healthier state. Years of human activity have disrupted the natural balance of fresh and saltwater, impacting water quality and the overall health of the our water supply. The DBW Restoration Project is working to reverse these effects.

The project has several key goals:

- **Restore a more natural mix of fresh and saltwater in Dona Bay.**
- **Re-establish a more natural flow of freshwater throughout the watershed**
- **Protect properties from flooding**
- **Improve water quality**
- **Find beneficial uses for excess surface water, including replenishing underground water supplies (an aquifer recharge) to combat saltwater intrusion and provide potential alternative drinking water sources**

The restoration program is being implemented in phases. **Phase 1** involved enhancing 150 acres of wetlands by redirecting the flow of Cow Pen Canal through a new control structure and creating a 365-acre water storage area just north of our perimeter road. This area is known as the Venice Minerals Surface Water Storage Facility.


Phase 2 built a 72-inch pipeline to the water storage facility. This pipeline allows water to be diverted from Cow Pen Slough and used to restore historical flows to the Myakka River during extreme weather.

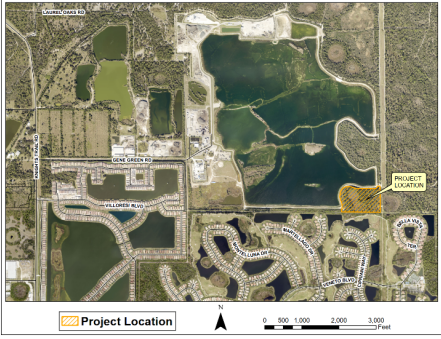


Currently, the project is in **Phase 3**, which focuses on replenishing the aquifer. This involves drilling aquifer recharge wells and building the necessary infrastructure to direct excess water from Cow Pen Slough into the aquifer, rather than letting it flow into the bay. This will reduce the amount of freshwater entering Dona Bay, leading to improved salinity and water quality in the estuary. It's also estimated this will significantly reduce nitrogen input into the bay by 75,000 to 150,000 pounds annually.

A crucial part of Phase 3 is the exploratory well drilling project which is to begin this summer. This project has several important objectives:

Dona Bay Restoration Phase III Aquifer Recharge
CIP # 88084


 Last updated: February 2025

<p>PROJECT SCHEDULE</p> <p>Design Start Summer 2022</p> <p>Design Finish Fall 2024</p> <p>Construction Start Summer 2025</p> <p>Construction Finish Fall 2026</p> <hr/> <p>PROJECT DETAILS</p> <p>Design Consultant Jacobs Engineering Group</p> <p>Design Contract Cost \$2,038,100.00</p> <p>Contractor TBD</p> <p>Construction Contract Cost \$1,800,000.00</p> <hr/> <p>COUNTY PROJECT MANAGER(S)</p> <p>Design Carmino Spina cspina@scgov.net</p> <p>Construction TBD</p>	<p>Project Description</p> <p>The design of Dona Bay Phase III Aquifer Recharge is a multi-phased project which entails a pre-design study followed by the design and permitting of an aquifer recharge system.</p> <p>Project Progress/Status</p> <p>100% Plans & Specifications have been submitted for Bidding.</p> <div style="text-align: center; margin-top: 20px;">  </div>
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- **Collect data to design the final aquifer recharge wells**

- **Verify the quality of the groundwater at depth**

- **Confirm how easily water can move through the aquifer (permeability)**

- **Use the well for long-term monitoring of the aquifer.**

This project is essential for the long-term health of Dona Bay, ensuring a more balanced ecosystem for generations to come. It will have direct impact on our water supply. Furthermore, the acre water storage facility just to our north may ultimately become a reservoir for the county in the future.

See <https://storymaps.arcgis.com/stories/07e6017b5a2a491485204aa2dab7641f> for the project phases. Scroll down for the Dona Bay Watershed Restoration.

