## **Brooks of Bonita Springs**

## Community Development Districts I and II



July 26, 2024

## To All Brooks Homeowners,

In the CDD's 2024 Capital Improvement Plan (CIP), one project was for lake bank restoration which is a significant part of the CDD's overall storm water retention and control program. The purpose of this letter is to provide an explanation of why the lake banks are important and to update you on the status of our restoration project.

The CDDs lake bank restoration program has been funded at \$100,000 annually. However, Hurricane Irma (2017) and Hurricane Ian (2022) caused extensive shoreline damage. In 2023, the CDDs approved a 2024 \$864,000 capital improvement project to repair the residential side damage for twenty-six (26) Brooks' lakes. Note that the CDDs are responsible for the residential lake banks while the golf courses are responsible for the lake banks adjacent to their facilities.

The repair process consists of four steps:

- A black vinyl tube (aka, geo tube) is placed along the damaged lake bank.
- > A dredging machine suctions up sand from the lake and deposits it into the geo tube.
- ➤ Once the sand has drained and dried, the geo tube is split and the sand is spread along the lake bank to recreate the proper slope (if the lake water level is too high, the geo tube is not split until the water level recedes to the appropriate level).
- Littoral plants are placed along the water's edge to hold the sand in place and to minimize future erosion due to high winds.

This complete process can be viewed in this short <u>video</u>.

Many Brooks' owners have asked about the littoral plants in the lakes behind their property. These littoral plants are Spike Rush (left) and Canna Lily (right) as shown in the pictures below.





Since the initial construction of The Brooks, our lakes have been managed by the two CDDs. The Brooks CDDs have spent approximately \$1,900,000 for the original littoral plantings plus the on-going replacement required due to age, storm damage, or lake bank restoration projects. The original plantings were at the water's edge. During the dry season, as the water recedes, the plants' root structure follows the water and new shoots form. The Spike Rush and Canna Lily can survive in water up to a depth of about 2-3 feet. Since the lake banks are designed with a 4:1 slope, the plants can extend to about 12 feet into the water at the "low-water" state during the winter 's dry season months.

The littorals minimize residential lake bank erosion, absorb fertilizer run off and irrigation water chemicals, as well as road and residential chemical runoff caused during storms throughout the year. They are an integral part of The Brooks' overall storm water management system.

In addition to the purposes just mentioned, the littorals provide protection for the eggs laid by the bass, tilapia, and cichlids that develop into fry, fingerlings and mature fish. The fish and native frogs (not Cane Toads) provide food for migratory birds and other local wildlife to flourish. The fish provide a food source for wood storks, anhingas, herons, etc. Ospreys and eagles are seen regularly catching fish. You probably have watched as the wood storks, pelicans, and heron waiting along the lake shoreline while the anhingas drive the fish towards the shoreline for the others to eat.

Many of our owners, their guests, children, or grandchildren have the opportunity to fish for largemouth bass and cichlids within your Master Associations' designated fishing areas. Fishing is not permitted on the banks of the golf courses.

As stated in our memo regarding storm water management, you may remember the lake water is retained within the storm water retention system by fixed weirs to allow all non-absorbed containments to settle to the lake bottom. The fixed weirs only discharge water once water levels exceed levels permitted by the Southwest Florida Water Management District.

The CDD is required to submit annual water quality data to the EPA via Lee County to ensure compliance with the National Pollutant Discharge Elimination System Permit. We collect this data at the water outfall on the western side of The Brooks adjacent to Via Coconut Road. Our discharges have consistently met all EPA requirements.

We hope this provides a better understanding of why littorals are planted in The Brooks' lakes, and the need to maintain an active, on-going management/restoration process. We are happy to report that the restoration project started in 2023 is progressing toward completion. Many have questioned the "black tubes" laying along the lake banks behind your homes. Now you know the reason. Unfortunately, the unusually wet spring we had, which has now been followed by the traditional rainy season here in SWFL, has prohibited our contractor from splitting the geo tubes and installing the plant material. We will have to wait until the water level drops sufficiently to allow the remaining bags to be split, the sand spread and the littorals planted.

As a reminder, you may find additional information regarding the CDDs' activities at our website, <a href="mailto:brookscdds.net">brookscdds.net</a>. If you would like to provide input to all ten Supervisors representing both of your CDD's, you may email your input to <a href="mailto:feedback@brookscdds.net">feedback@brookscdds.net</a>.

**Thank you** for your continued interest in the Districts' projects and activities.

Your Brooks of Bonita Springs CDD I & II Supervisors