## **Lake Frances Retaining Wall Guidelines**

Lake Frances Committee members have compiled some information to guide homeowners before installing retaining walls or bulkheads. We hope that you will find the information useful. The intent of this document is to offer guidelines for those interested in protecting their property from lake erosion. This is not an all-inclusive document with regard to engineering, design, construction, or the like.

## **EDUCATION**

- 1. <u>Shorescaping Shorelines</u> are the best solution. A well-designed shorescape uses native plants to provide a functional solution to problems such as shoreline erosion, poor water quality, invasive weeds, and wildlife management.
- 2. *Constant water movement causes erosion*. The lapping of the water on your property slowly eats away at the waterline. Over time, there is a gap between the lakebed and your yard. Generally, when we get one of our torrential downpours big chunks of unprotected yard may break away and fall into the lakebed.
- 3. Alternatives to retaining walls, such as restoration of natural shorelines or riprap, should be explored first. Retaining walls should be constructed only as a last resort.
- 4. **Retaining walls significantly alter shoreline lakeshore characteristics.** They create a very unnatural environment shoreline, which causes alteration of wave actions, beach dynamics and shoreline erosion patterns. Retaining walls reflect and accelerate wave energy, causing increased erosion on adjacent shorelines.
- 5. Lack of proper foundation and backfill for existing walls is a major culprit of erosion. If a wall is built incorrectly the ground will eventually sink behind the wall. Dirt may be added to offset the sinking but over time the additional dirt is just providing more fill for the lake.

## **GUIDELINES**

• Per <u>Lake France Owners bylaws</u>, Article XVI, Sec. (e), Piers, boat landings, projections, or retaining walls into Lake Frances will not be constructed without prior approval of the Board of Directors. The written request will be accompanied by a detailed drawing of the proposed structure and a sketch showing its proposed location. Once approved by the Board of Directors, the stockholder will construct the structure according to the detailed drawing. Any changes to existing structures must be approved by the Board of Directors, using the procedures above.

## RESOURCES

- Shorescaping and Vegetated Shorelines:
  <a href="http://www.clemson.edu/extension/hgic/water/resources\_stormwater/shoreline\_plants\_in\_south\_carolina\_waterfronts.html">http://www.clemson.edu/extension/hgic/water/resources\_stormwater/shoreline\_plants\_in\_south\_carolina\_waterfronts.html</a>.
- Preventing and Repairing Shoreline Erosion: <a href="http://www.clemson.edu/extension/water/stormwater-ponds/problem-solving/shoreline-erosion/index.html">http://www.clemson.edu/extension/water/stormwater-ponds/problem-solving/shoreline-erosion/index.html</a>.
- Managing Shorelines:
   <a href="http://www.dnr.sc.gov/marine/NERR/present/stormwater/PowellManagingShorelines.pdf">http://www.dnr.sc.gov/marine/NERR/present/stormwater/PowellManagingShorelines.pdf</a>