

Sarasota County Littoral Zone Requirements

TECHNICAL MANUALS: Editor's note: Printed herein are the technical manuals attached to Ordinance No. 97-051, adopted July 1, 1997. Amendments to the technical manuals are indicated by parenthetical history notes following amended provisions. The absence of a history note indicates that the provision remains unchanged from the original. The original section and subsection numbering has been preserved. Obvious misspellings and punctuation errors have been corrected without notation. For stylistic purposes, headings and catchlines have been made uniform and the same system of capitalization, citation to state statutes, and expression of numbers in text as appears elsewhere in the Code of Ordinances has been used. Additions made for clarity are indicated by brackets.

ENVIRONMENTAL TECHNICAL MANUAL – LITTORAL ZONE REQUIREMENTS

A. A littoral zone plan. In order to provide optimum water quality for surface waters of Sarasota County and to provide desirable aquatic habitat, the following is required:

- 1. Littoral Zone Requirements.** No less than 30 percent of the surface area reserved for each stormwater detention pond, or series of ponds if connected with equalizer pipes, measured at normal water level, shall consist of a littoral zone. In cases where a retention pond exceeds the minimum area needed to treat stormwater runoff, the area of littoral zone shall be based on the minimum pond size that would have been required for stormwater treatment. Littoral zones will not be required in dry retention facilities (e.g., sodded depressions designed to hold stormwater for a fixed period of time, then dry out as water is lost through percolation and evaporation) or underground vaults. Littoral zones are required, but need not be planted in lakes less than one acre created solely for aesthetic or attenuation purposes (e.g. do not receive untreated stormwater discharges).
- 2. Littoral Zone Plan and Location.** A plan shall be submitted showing the proposed location(s) of the littoral zone(s) and a typical cross-section. Littoral zones should be located away from residential lots whenever possible and shall be concentrated near the outfall of each pond when practical. Perimeter or fringe littoral shelves are discouraged.
- 3. Platting.** Tracts of land identified on proposed plats that contain stormwater ponds shall have a note placed on the plat identifying that planted littoral shelves may be located with these tracts.
- 4. Maintenance.** Required littoral zone vegetation shall be maintained in perpetuity by a designated responsible entity or the owner of the property.
- 5. Bond and Maintenance Easements.** A monitoring and maintenance bond in a form acceptable to the Board shall be submitted to the County prior to the excavation of the on-site lakes. The bond shall be in the amount to cover 100 percent of the estimated cost for two years of monitoring and maintenance of the littoral zones. The applicant shall also provide a temporary maintenance easement to the County in the event that the littoral zone bond must be used to properly maintain the littoral shelf. Littoral zone bonds are not required for non-residential commercial projects.
- 6. Species to be Planted.** Initial planting shall include at least three different herbaceous emergent native species for each littoral zone. No species shall constitute more than 50 percent of the number of plants to be planted.
- 7. Installation.** Plants should be installed in that portion of the littoral zone between normal water level and a depth of two feet unless otherwise approved by the Natural Resources Department.
- 8. Source of Plants.** If plants are to be obtained from a nursery, the plan must indicate the source. If plants are to be obtained from the wild, the applicant must provide proof that the appropriate permit has been obtained from the Florida Department of Environmental Protection.
- 9. Proposed Spacing.** Centers of vegetation shall be no farther apart than three feet for herbaceous individual plants or clumps or five feet for floating-leaved species.
- 10. Planting Schedule.** Littoral zones should be planted during the months of June through October. Littoral zones in lakes excavated during these months shall be planted within 30 days following excavation, provided that normal water

level is or is likely to be attained within that time period. Littoral zones in lakes excavated in November through May shall be planted by June 15 unless otherwise decided by the Natural Resources Department based on existing environmental conditions. The County shall be notified within seven days of planting.

11. **Guarantee of Coverage.** Supplemental planting will be required on an annual basis if coverage is less than 85 percent and the littoral shelf fails to show progress toward success, unless otherwise determined by the Natural Resources Department based on existing conditions. Desirable native herbaceous emergent plants that recruit within a littoral zone will be counted towards the coverage requirement.

12. **Proposed Monitoring.** The success of the littoral zone plantings shall be assessed twice a year during the growing season (April through November). An annual monitoring report shall be submitted to the County summarizing the results of the two monitoring events. The annual monitoring report may be submitted via mail or e-mail attachment [PDF, Word]. Each monitoring report shall include all of the applicable elements reflected in the monitoring report guidelines located in Appendix I of the Environmental Technical Manual. Monitoring reports that do not include all of the required information shall be deemed incomplete and require a re-submittal. The monitoring report shall be prepared by an environmental scientist, ecologist, biologist or person with similar training.

13. **Success Criteria.** The littoral zone shall be deemed successful and monitoring may cease when the herbaceous emergent native vegetation equals or exceeds 85 percent coverage and nuisance/invasive species coverage constitute less than 15 percent.

14. **Nuisance/Invasive Species.** Nuisance/invasive species (e.g., cattails, primrose willow, torpedo grass) shall be removed from the littoral shelves whenever they constitute more than 15 percent of the vegetative cover in the littoral zone. If the nuisance/invasive species impede the establishment of native plants, they shall be physically removed from the littoral shelves and properly disposed. Native woody species that invade a littoral zone and trend toward becoming a monoculture shall physically be removed from the system.

15. **Exotic Fish.** Stocking of exotic fishes such as Tilapia (*Oreochromis sarotherodon*, Tilapia), grass carp (*Ctenopharyngodon idella*), suckermouth catfish (*Hypostomus* sp.) and others, shall be prohibited in ponds with littoral zones. If such species are introduced by other means (cross contamination by maintenance boats, birds, etc.) and are impacting the success of the littoral zone, they shall be removed from the stormwater system where practical.

16. **Water Withdrawals for Irrigation.** If water withdrawals for irrigation purposes are proposed from stormwater ponds that contain littoral zones, the County may require an irrigation plan to establish minimum water levels and control withdrawals to ensure the success of the littoral zone.