Living Shoreline Questionnaire for Property Owners





A living shoreline is an alternative to shoreline hardening that not only reduces erosion but also has an array of natural benefits, such as providing habitat for fish and other wildlife, improving water quality, and buffering against storms. However, there is no single living shoreline design that will work for every property. Asking a property owner the following questions can help to inform the design of and decision to implement a living shoreline at their property.

How long have you owned the property?

Knowing how long the property owner has had the property can help to clarify how accurate their description of the shoreline is. For instance, new property owners are often eager to protect their investment but have not been there to actually gauge the rate of erosion and will often overestimate how bad the problem is. To estimate the erosion at a property, you can follow our *Using Google to Estimate Shoreline Erosion* tutorial (Extension Publication 3357).

Is this your primary residence?

If the property owner does not live at the property full time, they may not have accurate information about things such as boat traffic. If they are there primarily in the summer or on weekends, then they will be seeing only the high-traffic periods and may overestimate the boat-driven waves and erosion at their property.

What kind of sediment is along your shoreline?

When planning a living shoreline, the plants used are a vital component. Some plants do better in sandy sediment while others thrive in more organic soils. Knowing what sediment type makes up the shoreline can help you select the plant species to use in the living shoreline design. See <u>Extension Publication 3356</u> *Coastal Wetland Restoration Plant Fact Sheets* for more information on plant selection.

Have you noticed any erosion along your shoreline? If so, what do you think was the cause? Was it: 1) the result of gradual erosion over time, 2) the result of surrounding changes such as construction of a nearby bulkhead or boat ramp, or 3) a one-time event, like a hurricane?

Erosion can be caused by natural forces or human activity. Knowing the likely cause of erosion will help you determine the most appropriate living shoreline design.

Have you noticed a change in the shoreline plant type or a loss of plants?

A shoreline that previously was dominated by trees or shrubs and is now dominated by grasses could indicate high wave energy, changes in water level and salinity, an erosion event, or several other factors. See the *Coastal Wetland Restoration Plant Fact Sheets* (Publication 3356) for more information on plant selection.

Does your shoreline gradually slope into the water or is it a steep drop-off?

A drop-off (like from a bulkhead) would require grading the shoreline for planting. A steep drop-off could make installation of a living shoreline cost-prohibitive for some property owners.

Do you currently have a bulkhead along your shoreline? If so, what condition is it in?

If the property has a bulkhead, its condition affects living shoreline design and cost. For instance, behind some highly degraded bulkheads, naturally colonizing marsh plants can thrive because the bulkhead acts as a breakwater. Alternatively, if a relatively intact bulkhead is present, either it will need to be removed or an alternative bulkhead design will need to be implemented.

Do neighboring properties have bulkheads on one or both sides of your property? If a bulkhead is present on only one side of the property, which side is it on?

If there is a bulkhead present along the shoreline of a neighboring property, it may affect the implementation of a living shoreline. If a bulkhead is present only on one side, take note of which side of the property it is on (north, south, east, west). If bulkheads are present on both sides of the property, ask how far apart they are.

How much boat traffic do you have and when is it at its highest?

In many cases, waves along private properties are driven primarily by boat traffic. Areas with high boat traffic could experience as much wave erosion as places with wind driven waves. If the property owner indicates high amounts of boat traffic, you may need to further investigate the waves experienced at the property.

What bothers you most about your shoreline?

Identifying what the property owner feels is the biggest problem with the shoreline will help you create a satisfactory shoreline plan.

What do you want out of your shoreline?

A living shoreline can be designed to address differing needs. For instance, if the property owner wants to have flowers, you can add flowering marsh plants into the design. Furthermore, if the property owner wants more fish along their shoreline, a living shoreline is especially appropriate as it provides shelter for juvenile fish, crabs, shrimp, and other animals that attract larger fish.

Do you want to have a dock, boathouse, or other type of structure along your shoreline?

While structures such as these can shade out marsh grasses, with the right design, they can be compatible with living shoreline implementation. Knowing this in advance can help you design the appropriate living shoreline for the property and the property owner.

Have you heard of living shorelines?

Living shorelines are a cost-effective, viable, and desirable alternative to shoreline hardening. However, many property owners are not aware of these projects. Presenting living shorelines as an option will help property owners to choose the shoreline protection that is right for them and their property.



For more resources and information about living shorelines, visit the Mississippi-Alabama Sea Grant Consortium online or contact the Coastal Conservation and Restoration Program by emailing eric.sparks@msstate.edu.

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