

THE GREAT BAY LIVING SHORELINE PROJECT



Spur Road Further Recommendations

Below are ideas, suggestions, and comments provided by the GBLS program coordinators and attendees of the final GBLS workshop held on April 8, 2022. This feedback was generated largely in response to the Design Team's final presentation as well as review of their suggested living shoreline design memo and plans.

Spur Road Positives

- Great renderings - very informative to see the different options for the landscape. Info on permitting was helpful to see as well.
- Incorporated assessment of and planning for SLR. Beautiful drawings and photos clearly illustrate your project.
- I liked how you incorporated the landowner throughout the process and providing him with options and renderings.
- Presentation of erosion and SLR was really great.
- Impressive negotiating the hurdle of property owner interests that could derail the project and prevent it from happening.
- really effective presentation.
- Liked the planting plan and no mow zone.
- Well-developed No-Action alternative. Focus on river ice erosion. Nice landscaping treatment of upper elevations.
- loved the renderings!
- Liked No Action alternative. Focus on river ice erosion treatment of upper elevations.
- Liked the visual renderings - a good tool for communicating with the landowner to help them visualize (sometimes) it's hard for people to visualize! Also, well executed. Also liked the way you worked with landowner to make sure the plantings and design for lawn area fit their needs; plus, the "lawn" area design looks great! Very aesthetically pleasing.
- Very comprehensive analysis of site conditions. The water level graph with the bank elevations overlaid on top is very helpful for understanding the site and potential planting zones. The no action alternative that incorporates the erosion pin data is informative.
- Nice explanation of the design and the different design choices considered and excellent set of drawings that clearly lay out the conceptual design.

Spur Road Suggestions

- Archaeological investigations if needed.



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- May include 1) current sprinkler system 2) Positional erosion may be linked to marsh/sediment removal following oil spill. Note property to south denied access to oil-clean-up areas. Section 106 investigation
- How might your project intersect with properties north and south.
- Add in NH Native plants to edges of property to support local ecology - get rid of all the lawn if client is on board.
- Look into aerials to see where the shoreline did originally exist. Or to compare to the proposed shoreline limit.
- Can little bluestem withstand salinity? How about planting *Spartina pectinata* at that upper edge?
- Consider an alternative berm treatment between the house and the marsh to reduce potential impacts to marsh.
- Would love to see your project implemented along adjacent parcels as well.
- More "organic" edge between lawn and unmowed shoreline edge.
- Landowner functional goals? What could you grow for use or consumption on unmowed lawn portion?
- Oysters will grow much better along the base of the stone toe if they can be covered in macro-algae (such as rockweed). Seaweed could be transplanted along the stone toe.
- The cost of the project could be reduced somewhat by moving the stone toe landward, which could reduce the amount of fill needed. This would affect other design decisions, however, for example to maintain the shallow sloping marsh surface one would need to lower the upland edge or add additional coir logs to terrace the slope.
- To implement this project, the landowner will need to get approval from the adjacent property owners. Neighbors as well as permitting agencies may ask if the project would increase scouring of shoreline immediately up or down stream.

Spur Road Presentation Questions

Q: What was the determination of the existing bulkhead? Was that incorporated into the design?

A: If this conceptual design were implemented, the bulkhead would be left intact, but some fill would be placed on top of it as part of the living shoreline.

Q: Will homeowner stop use of lawn chemicals or do they not apply?

A: The use of fertilizers or pesticides wasn't discussed as part of this project. It is always advisable to limit the use of chemicals along the water's edge.



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Q: Curious to know how open the landowner was to the salt marsh migrating inland into their nice lawn with SLR?

A: The design team explained that healthy unmowed saltmarsh grasses could provide more stability to the shoreline than a mowed lawn and this seemed to make sense to the landowner. Visual access to the water was also important to the landowner so saltmarsh grasses (which tend to be shorter) seemed acceptable, and were preferred over any sort of shrub in this case.

Q: Wondering about a no-action alternative to let the wall degrade and not mow the salt marsh vegetation.

A: The landowner was concerned the wall could collapse in a way that would endanger people. Once established, a living shoreline or an un-mowed swath of lawn could be more stable in the long run.

Q: I am curious about how stormwater or natural groundwater flows down the slope of the property may also contribute to the erosion. Does the grass slow the flow enough?

A: Stormwater runoff can over saturate and loosen soils, exacerbate shoreline erosion, and create gullies in newly planted living shorelines. In this case, the area draining to this shoreline was found to be relatively small (in part because the road and highway divert flows) so runoff volumes were not huge. There is a swale and drainage system constructed along one side of the yard which manages some of the stormwater. Although not part of this conceptual plan, the team discussed creating a place for this drainage system to discharge that would not cause erosion within the living shoreline.

