



# Living Shoreline

## Cost Estimating Tips

### 1. GET RECENT QUOTES ON MATERIALS!!!

Material costs (sand, riprap, coir log, etc.) have been varying widely and wildly over the past couple of years based on supply chain issues, transportation costs, etc. What you thought was the price a month or two ago may not still be the price unless you have guaranteed quotes.

### 2. OVERESTIMATE SAND QUANTITIES

As you place and grade sand and after a couple of tide cycles, the sand will be more compact than it was dumped straight out of the truck. It may also settle a little depending on the existing conditions. You will also invariably drop a little transporting it from a driveway to a backyard shoreline. We estimate 10 to 20 percent additional to account for these items.

### 3. MAKE SURE YOUR QUANTITIES AND PRICING MATCH

Meaning if your material quote from the supplies is per ton, you need to convert to a cubic yard price, or convert the cubic yards to tons. Sand generally ranges between 1.3 and 1.7 tons per cubic yard depending on whether it rained the day before it is loaded and weighed. Riprap is generally about 1.4 tons per cubic yard.

### 4. DON'T FORGET TIE INS

When estimating length of riprap or oyster castle sill or coir log, don't forget to include the length of any portions that are required to tie the sill or coir log into the bank.

### 5. PLANT QUANTITIES

For marsh grass planting (*Spartina patens*, *Sporobolus alterniflorus*, etc), the required planting density quickly changes quantity. A 24" spacing planting is equivalent to 1 plant for every four square feet of required planting coverage area, a 18" spacing planting is equivalent to 4 plants every 9 square feet, and 12" spacing is one plant per square foot.