Living Shoreline
Professional Workshop
Lynnhaven River Success Story
Presented January 13, 2015
By:
Jim Cahoon, VA PWD
So you want to build a shoreline, huh?
It is probably going to be a little sloppy
It might even get a little ugly
If done correctly, however, you might get this
Or even this...
as evidenced by a success story in the Lynnhaven River
Stephan Residence
3040 Little Haven Road
Pre-existing conditions
Conceptual Design

PROPOSED COIR LOG (95 FT)

PROPOSED SAND FILL AND PLANTING AREA (1,580 SF)

EXISTING MARSH (TO REMAIN)
Challenges

• Access
• Shading
• Permitting
Challenges Overcome!

• Access – moved to water based construction
• Shading – worked with homeowner to selectively prune existing trees
• Permitting – worked intimately with City of Virginia Beach staff to get through the system
Construction

- Coir logs installed
- Correct sand installed and graded
- Planting
- Goose protection fencing installed
September 2013
15 months post-construction
September 2014
27 months post-construction
September 2015
39 months post-construction
Why successful?

- Location, location, location
- Right attitude
- Right maintenance
- Right project partners
- Knowledgeable team

Photo credit: The’N. Pham/The Virginian-Pilot
Keys to remember for constructing a successful living shoreline:

- Accessibility
- Geotechnical considerations
- Planting seasons
- Plan for maintenance
- Qualifications of contractor
Accessibility

How will you build it – water based or land based?

Where are your access points with relation to your material laydown area?

What size equipment will you need for reach and will that equipment fit where you want it to?
Geotechnical considerations

Will the shoreline sink?

How will it be stabilized – fabric or overload with sand?

How will the mudwave be controlled?
Planting seasons

Grasses

Shrubs/Trees

Contractual considerations
Maintenance

Erosion and sediment control considerations during construction

Who is responsible?

Who monitors the site?

Recognize and accept some failures
Contractor qualification

Have they built living shorelines before?

Do they have a wetland scientist on staff or on their team?

Do they clearly understand the goals of the project?

Consider qualified bids – low bid is not always the best option for living shoreline construction
Questions?

Contact information:

Jim Cahoon, VA PWD

648 Independence Parkway, Suite 100
Chesapeake, Virginia 23320
(757) 436-5900 office