BEACH COMMITTEE REPORT ON THE SHORELINE REMEDIATION PLAN

As presented at the July General Meeting, HSIA contracted Flood Brothers to create a design that would preserve the shoreline of the community beach, while enhancing the recreational uses enjoyed by all the residents. The Board directed Flood Brothers to address the following priorities in the design: preserving the swim area, maintaining erosion controls, beach preservation, water clarity, and environmental compatibility.

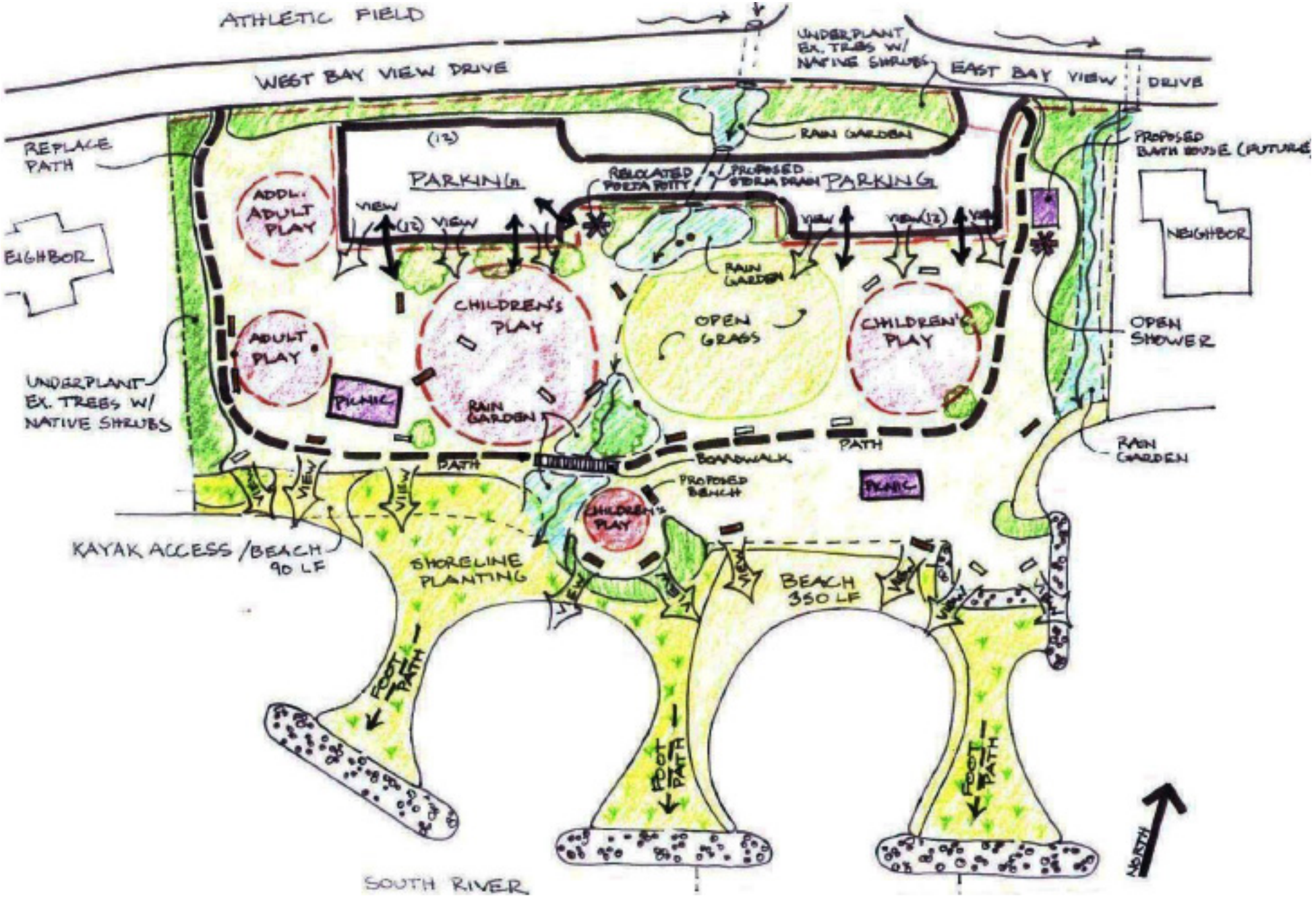
At the November General Meeting, the design team presented a living shoreline design, and compatible landscape features for the park areas. A lively discussion ensued, and many important concerns and questions were raised. The community vote on the design was 46 in favor and 46 opposed. We have a list of all the questions asked at the General Meeting and are compiling detailed responses. These will be posted on the web site as soon as they are available and published in the next issue of *the Sea Breeze*.

In response to both the concerns over, and the support of the design, the board has agreed to take a six-month study period regarding the living shoreline model. The study will look at the currents and sediment specific to our beach, and, if possible project the impact of the proposed changes. With a project of this long lasting impact on such a valuable community asset, it is our obligation to ensure the proposed improvements are the correct method and design. It is also our duty to address the concerns raised, using data specific to our particular location and design.

In order to keep the Shoreline Remediation Project on schedule, the first phase of the project will move forward, as planned, for this current fiscal year. We currently have, in this year's budget, funds to restore the portion of shoreline on the east end of the beach, or the far left when facing the water. This is the most critical area of deterioration, and must be addressed without further delay. The Beach Committee recommendation is for that section to be rebuilt similar to the current conditions and materials, with some alterations that will improve the effectiveness of that design.

In addition, the Beach Committee will move forward with the other projects budgeted for this year, as reflected in the landscaping plan presented at the November General Meeting. This work includes improving the parking lot, replacing the surrounding pilings and cable with a low, split-rail fence, and installing rain gardens and other storm water management features to reduce flooding in the park area.

The design presented at the General Meeting is included on the next page of this issue along with some basic information about the Living Shoreline model. For additional information and helpful links, please go to the HSIA web site at www.hillsmereshores.net.


ATHLETIC FIELD
WEST BAY VIEW DRIVE
UNDERPLANT EX. TREES W/ NATIVE SHRUBS
EAST BAY VIEW DRIVE
REPLACE PATH
(13)
RAIN GARDEN
PROPOSED BATH HOUSE (FUTURE)
PARKING
RELOCATED PORTA POTTY
PROPOSED STORM DRAIN
PARKING
ADDL. ADULT PLAY
VIEW
(12) VIEW
VIEW
VIEW (12)
NEIGHBOR
NEIGHBOR
RAIN GARDEN
CHILDREN'S PLAY
OPEN GRASS
CHILDREN'S PLAY
OPEN SHOWER
ADULT PLAY
PICNIC
UNDERPLANT EX. TREES W/ NATIVE SHRUBS
RAIN GARDEN
PATH
BOARDWALK
PATH
RAIN GARDEN
PROPOSED BENCH
PICNIC
CHILDREN'S PLAY
KAYAK ACCESS / BEACH 90 LF
SHORELINE PLANTING
BEACH 350 LF
FOOT PATH
FOOT PATH
FOOT PATH
NORTH
SOUTH RIVER

What are "Living Shorelines?"

Living shorelines are an increasingly popular approach to erosion control that use strategically placed plants, stone and sand to deflect wave action, conserve soil and simultaneously provide critical shoreline habitat. Living shorelines often stand up to wave energy better than solid bulkheads or revetments, which add to the problem by amplifying waves on neighboring shores. Ironically, these hardened structures often increase the rate of coastal erosion, remove the ability of the shoreline to carry out natural processes, and provide little habitat for estuarine species.

On the other hand, Living Shoreline management techniques can prevent shoreline erosion while maintaining the benefits to wildlife and water quality that a natural shoreline provides. Jeff Opel, district manager of the Anne Arundel County Soil Conservation District in Maryland, saw dramatic evidence of this during Hurricane Isabel in 2003:

> *"We flew most of the county shoreline by helicopter shortly before the hurricane hit, and we flew it again about 90 days later. There was really significant damage along walls and bulkheads, and along riprap," Opel said. "But when we looked at where we'd done nonstructural work, and at wetlands along the main front of the Bay, we saw very little damage to the shoreline itself. We were very surprised. It told us we were on to something."*

Other benefits from living shorelines include:

- Less bank erosion and property loss, especially during storms
- Lower erosion control construction costs
- Natural and visually pleasing views
- A beach for boat launching, sunbathing and swimming
- Restored marine habitat and spawning area for fish and shellfish
- Improved water quality

Support for Living Shoreline management has grown over the past several years and many environmental agencies and groups now offer both technical and financial support for their construction. There is a wealth of information about Living Shorelines on the Internet. The following links are good places to start:

NOAA's "Living Shorelines Portal"
http://habitat.noaa.gov/restorationtechniques/public/shoreline_tab1.cfm has info

on implementation techniques, current NOAA shoreline projects, federal and state contacts, and links to other resources and publications.

Maryland Shorelines Online is maintained by Maryland's DNR and the Maryland Coastal Program, and provides FAQs about Living Shorelines and information about available technical and financial assistance for communities and homeowners interested in these restoration techniques.
http://shorelines.dnr.state.md.us/living.asp

Fact sheet about Living Shorelines produced by the Virginia Dept of the Environment (pdf doc may take a while to load):
http://www.deq.virginia.gov/coastal/documents/lsfactsheet.pdf

An article from *The Bay Journal* (published by the Alliance for the Chesapeake Bay and the Chesapeake Bay Trust) on Living Shorelines:
http://www.bayjournal.com/article.cfm?article=2651&print=yes

This website provides restoration information and online tours of Living Shorelines implemented at the Patuxent River's Jefferson Patterson Park. ("Tours" may take a while to download.)
http://www.jefpat.org/Living%20Shorelines/lsmainpage.htm