

# Table of Contents

PREFACE . . . . .	vii
Living Shoreline Summit Steering Committee. . . . .	xi
INTRODUCTION . . . . .	1
Keynote: The National Academies Report on Mitigating Shore Erosion Along Sheltered Coasts . . . . .	3
<i>Susan Roberts</i>	
LIVING SHORELINE DESIGN . . . . .	7
Integrating Habitat and Shoreline Dynamics into Living Shoreline Applications . . . . .	9
<i>Kevin M. Smith</i>	
Overview of Living Shoreline Design Options . . . . .	13
<i>Karen A. Duhring</i>	
Recommending Appropriate Shoreline Stabilization Methods for Different Estuarine Shoreline Types in North Carolina. . . . .	19
<i>Bonnie Bendell</i>	
Design Criteria for Tidal Wetlands . . . . .	25
<i>Walter I. Priest, III</i>	
EVALUATION OF LIVING SHORELINE TECHNIQUES . . . . .	33
Current Understanding of the Effectiveness of Nonstructural and Marsh Sill Approaches . . . . .	35
<i>Bhaskaran Subramanian, Eugene Slear, Kevin M. Smith, and Karen A. Duhring</i>	
A Comparison of Structural and Nonstructural Methods For Erosion Control and Providing Habitat in Virginia Salt Marshes . . . . .	41
<i>Karen A. Duhring</i>	
Living Shorelines Projects in Maryland in the Past 20 Years . . . . .	49
<i>Bhaskaran Subramanian, Johann Martinez, Audra E. Luscher, and David Wilson</i>	
Evaluating Ecological Impacts of Living Shorelines and Shoreline Habitat Elements: An Example from the Upper Western Chesapeake Bay . . . . .	55
<i>Jana L. D. Davis, Richard L. Takacs, and Robert Schnabel</i>	
Landscape-Level Impacts of Shoreline Development on Chesapeake Bay Benthos and Their Predators . . . . .	63
<i>Rochelle D. Seitz and Amanda S. Lawless</i>	
SHORELINE POLICY: REGULATORY OVERVIEW . . . . .	71
Regulatory Process for Living Shoreline Implementation in Maryland . . . . .	73
<i>Audra E. Luscher, Jana L. D. Davis, Doldon Moore, and Amy Moredock</i>	

Regulatory Program Overview for Virginia’s Submerged Lands and  
Tidal Wetlands and Options for Promoting Living Shorelines. . . . .81  
*Tony Watkinson and Shep Moon*

TOOLS AND DECISION-MAKING: FACILITATING AND  
ENCOURAGING LIVING SHORELINE IMPLEMENTATION . . . . .87

NOAA’s Shoreline Management Technical Assistance Toolbox . . . . .89  
*Allison C. Castellan and Kris L. Wall*

Maryland Shorelines Online: A Web Portal and Geospatial Tool  
for Shoreline Planning and Management in Maryland . . . . .93  
*Audra E. Luscher*

Living Shorelines: A Strategic Approach to Making it Work on the Ground in Virginia . . . . .99  
*William A. Stiles, Jr.*

Willingness to Pay for Risk Reduction and Amenities:  
Applications of the Hedonic Price Method in the Coastal Zone . . . . .105  
*Craig Landry and Paul Hindsley*

Incentives to Promote Living Shoreline Techniques in the Chesapeake Bay . . . . .111  
*Jana L. D. Davis and Audra E. Luscher*

Living Shoreline Case Studies . . . . .117  
*Drew Koslow, Katie Register, Bobbie Burton, Walter I. Priest III, and Audra E. Luscher*

CONCLUSIONS AND NEXT STEPS . . . . .123

Living Shorelines in the Chesapeake Bay: Needs and Recommendations for Future Activities . . .125  
Living Shoreline Summit Steering Committee

INDEX . . . . .131