

# Contents

Marine Debris Toast.....	1
Synthesis of Proceedings Book .....	2
Purpose of the workshop.....	4
Acknowledgments .....	5
Introduction .....	7

## Alaska Marine Debris Programs

The NOAA Marine Debris Program: Implementing a Program to Address the Nation’s Needs <i>Sarah E. Morison</i> .....	13
Talking Trash in Kachemak Bay: The Kachemak Bay CoastWalk Program <i>Marilyn Sigman and Bree Murphy</i> .....	17
Derelict Fishing Gear in Alaska: Accumulation Rates and Fishing Net Analysis <i>Bob King</i> .....	25
Debris via the Sea: St. Paul Island, Pribilof Islands, Alaska <i>Aquilina D. Lestenkof and Phillip A. Zavadil</i> .....	31
Marine Debris Remediation from Prince William Sound to Gore Point: Gulf of Alaska Keeper <i>Chris Pallister</i> .....	37
Kodiak Archipelago Marine Debris Survey <i>Andy Schroeder</i> .....	39
Sunny Resurrection Bay: What’s Happening on Our Beaches? <i>Tim Johnson</i> .....	45
Cleanup of Marine Debris on Unalaska Island <i>Nir Barnea</i> .....	47
Norton Sound Economic Development Corporation Clean Water Program <i>Wes Jones</i> .....	49

**Marine Debris Technical Knowledge and Research**

Unmanned Aerial Systems and Buoy Technologies for  
Locating and Tracking Marine Debris in the High Seas  
*Tim Veenstra* .....51

Nature and Sources of Chemicals in Marine Plastic Debris  
*Benjamin Applegate, Chris Pallister, and John M. Kennish* ..... 53

Seabirds Indicate Plastic Pollution in the Marine Environment:  
Quantifying Spatial Patterns and Trends in Alaska  
*David Hyrenbach, Hannahrose Nevins, Michelle Hester, Carol Keiper,  
Sophie Webb, and James Harvey* ..... 57

Somebody Untangle Me! Taking a Closer Look at  
Marine Mammal Entanglement in Marine Debris  
*Aleria Jensen, Michael Williams, Lauri Jemison, and Kim Raum-Suryan* ..... 63

A Tangled Web: The Mystery, Math, and Mechanics of Net Recycling  
*Lois Young* .....71

**Summaries of Marine Debris Workshop  
Breakout Discussions** .....75

Question 1: Where and How Accessible Are Regional  
Shore-Cast Marine Debris Accumulations?  
*Nir Barnea and Tim Veenstra*..... 77

Question 2: Is Standardized Marine Debris Data Collection Possible?  
*Sarah Morison and Lauri Jemison*..... 85

Question 3: What Can Be Done with Collected Marine Debris?  
*Bob King and Lois Young* ..... 89

Question 4: How Can We Prevent and Reduce Marine  
Debris Sources through Education and Outreach?  
*Bree Murphy and Jerry Dzugan*..... 97

Contents

Question 5: How Can Emergent Programs for Marine Debris Removal and Prevention Be Developed?  
*Chris Pallister, Philip Zavadil, and Erika Ammann*..... 105

Question 6: How Does Marine Debris Affect Wildlife and the Environment?  
*David Hyrenbach and John Kennish* ..... 109

Question 7: What Criteria Should Be Applied to Prioritizing Marine Debris Cleanups in Alaska?  
*Reid Brewer and Aleria Jensen*..... 121

Participants.....127