

### PROCEEDINGS OF CONFERENCE 37

February 20–24, 2006 Long Beach, California, USA

IECA is a non profit organization that provides opportunities for the exchange of worldwide information and ideas concerning effective and economical methods of erosion control.

IECA...your essential Best Management Practice

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 www.proceedings.com

ISBN: 978-1-60423-683-5

Some format issues inherent in the e-media version may also appear in this print version.



#### **DISCLAIMER**

The opinions expressed in the papers of this proceedings and the responsibility for the contents of the articles are those of the authors. They are not necessarily the opinions of the International Erosion Control Association.

© 2006

International Erosion Control Association 3001 South Lincoln Avenue, Suite A Steamboat Springs, CO 80487

> Telephone: 970 879 3010 Fax: 970 879 8563 Email: ecinfo@ieca.org Web Site: http://www.ieca.org

# **IECA...your essential Best Management Practice**

## **TABLE OF CONTENTS**

		Page
COVERS AND SPINE		
TITLE PAGE		i
DISCLAIMER		ii
TABLE OF CONTENTS		iii
TECHNICAL PAPERS		
SLOPE TECHNOLOGY		
2006 MOST DISTINGUISHED PAPER*		
*SOIL STRENGTH REINFORCEMENT BY PLANTS Wendi Goldsmith		3
APPLICATION OF A NEW NAILING METHOD FOR STABILIZING FORESTED SLOPES Hiroyuki Nakamura, Tadashi Aoki, and Naoto Iwasa		19
STREAM RESTORATION		
STREAM DESIGN IN URBAN AREAS Donald W. Baker and Pablo Gonzalez-Quesáda		35
RESULTS OF HYDRAULIC PERFORMANCE TESTING OF SCOURSTOP TRANSITION MAT™ Michael D. Robeson, Tom Carpenter, and Chris E. Clopper		43

	Page
VEGETATIVE ESTABLISHMENT	
COMPOST AND VEGETATION APPLICATIONS TO STABILIZE A CITY BURN DUMP Kaila Dettman and John McCullah	. 57
PRODUCTION AND DEPLOYMENT OF PHOTOSYNTHETIC NITROGEN-FIXING BIOFERTILIZERS Timothy Flynn	. 69
ANALYSIS OF COMPOST TREATMENTS TO ESTABLISH SHRUBS AND IMPROVE WATER QUALITY Brent G. Hallock, Anne Power, Steve Rein, Mike Curto, and Misty Scharff	. 79
STORM WATER MANAGEMENT	
EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAMS "LOOKING OVER THE BUFFET"  John Chapman	. 93
ORGANIC BMPS USED FOR STORMWATER MANAGEMENT L. Britt Faucette and Rod Tyler	. 101
CONSTRUCTION SITE STORMWATER TURBIDITY REMOVAL USING CHITOSAN ACETATE AND SAND FILTRATION AT THE LAKESIDE CONSTRUCTION PROJECT IN REDMOND, WASHINGTON: A CASE STUDY	
John MacPherson	. 109
WETLANDS TECHNOLOGY	
A CASE STUDY OF COMMUNITY-BASED SEASONALLY FLOODED ECOSYSTEM MANAGEMENT IN BANGLADESH: PROSHIKA EXPERIENCE Md. Abdur Rahman	. 121
EROSION AND SEDIMENT CONTROL	
ERODING FOOD SECURITY: LINKING SOIL EROSION, SOIL FERTILITY AND CROP YIELD IN KENYA Jeff B. de Graffenried, Jr	. 133

P	age
A TALE OF AN URBAN STREAM  John McCullah and Kaila Dettman	313
SUCCESSFUL BIOSTABILIZATION ON THE LAST BEST RIVER Michael C. Sprague	323
VEGETATIVE ESTABLISHMENT	
APPLICATION OF ORGANIC HYDROMULCHING SYSTEM IN HONG KONG—ITS GREENING EFFECT AND NUTRIENT PROPERTY THROUGHOUT THE PAST 6 YEARS Zong-wen Liao, Mao Xiao-yun, Guo He-rong, Wailun (Alan) Tan, and Tat-Pui (Daniel) Ho	341
STORM WATER MANAGEMENT	
CHEMICALLY ENHANCED FILTRATION ON LARGE-SCALE DEVELOPMENT PROJECTS Shannon L. Brown and Angela L. De Paoli	353
INTEGRATING INFRASTRUCTURE AND WATER QUALITY PROTECTION IN THE MIDWEST Douglas J. Norsby, Mike Shipman, and Michael Thomas	379
WETLANDS TECHNOLOGY	
PERMITTING, DESIGNING, AND CONSTRUCTING A SALTMARSH ALONG THE SAVANNAH RIVER Jason M. Goldstein	407
PRIMA DESHECHA LANDFILL LANDSLIDE REMEDIATION RIPARIAN HABITAT MITIGATION PROGRAM Melissa Howe and Richard Lewis	433
EROSION AND SEDIMENT CONTROL	
EFFECTIVE POLYMERS REDUCING SEDIMENT IN NE ILLINOIS CONSTRUCTION SITE RUNOFF Stephen McChesney and Mark Willobee	461
STREAMBANK PROTECTION AT THE PESCADO RIVER, SALTA, ARGENTINA Gustavo O. Salerno, Gabriel E. Amores, and José D. Brea	481

				Page
REFERENCES				
AUTHOR INDEX				493
TECHNICAL REVIEW COMMITTEE				495
2005–2006 IECA BOARD OF DIRECTORS AMBASSADORS, ADMINISTRATIVE STAFF COMMITTEE CHAIRS AND ROSTERS		i		503