# **Contact Information**

Institute for Sustainable Energy and the Environment (ISEE) MSC 213

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Lower Rio Grande Valley-Texas Pollutant Discharge Elimination Systems Storm

Water Task Force MSC 213 700 University Blvd. Kingsville, TX 78363 361-593-4330 kujg2004@tamuk.edu



UNIVERSITY

KINGS

Texas A&M University-Kingsville is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 33033-4097: Telephone number 404-679-4501) to award bachelor's, master's and doctoral degrees.



Lower Rio Grande Valley 18<sup>th</sup> Annual Water Quality Management & Planning Conference



May 16 - 20, 2016 Isla Grand Resort

South Padre Island, Texas www.islagrand.com





### FRANK H. DOTTERWEICH COLLEGE OF ENGINEERING ENVIRONMENTAL ENGINEERING 700 UNIVERSITY BLVD., MSC 213 KINGSVILLE, TX 78363-8202 PH 361/593-2187 • FAX 361/593-2069

May 16, 2016

Greetings,

On behalf of the Institute for Sustainable Energy and the Environment (ISEE), housed in the Frank H. Dotterweich College of Engineering at Texas A&M University-Kingsville, along with the Lower Rio Grande Valley Texas Pollutant Discharge Elimination System (TPDES) Storm Water Task Force and our partners, welcome to our 17<sup>th</sup> Annual *Lower Rio Grande Valley Water Quality Management & Planning Conference* 

ISEE is a sustainability-based environmental research institute at Texas A&M University-Kingsville. ISEE focuses on research topics germane to South Texas and the U.S.-Mexico border region. It is our goal to develop team-based and research inspired programs to train and educate our future engineers. Working with our partners, we have brought together representatives from academia, private industries, environmental groups, research communities and state and federal agencies to be a part of a team exchanging ideas concerning environmental issues impacting coastal and semi-arid regions and the Rio Grande Valley, and transferring that information to the decision makers and stakeholders who influence the economic, social and physical infrastructure along the border region.

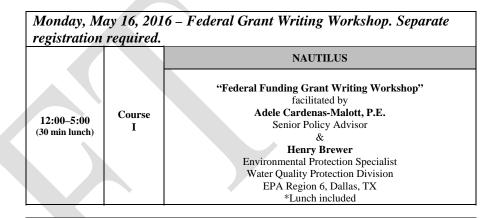
ISEE has hosted several key topical conferences with the Lower Rio Grande Valley TPDES Storm Water Task Force. It is my hope that this conference serves as a platform for discussing sustainability issues that are both important and relevant to the Rio Grande Valley. This year the conference topics include the new TPDES MS4 Phase II permit, the Arroyo Colorado Watershed Protection Plan Update, low impact development, the stormwater runoff flow reduction strategies, **RESTORE**, academia research topics, and many other interesting themes. **Our conference also consists of many estuary topics**, a result of the **recently formed Laguna Madre Estuary Program**. We hope you consider participating in this event and hope you have an enjoyable and stimulating time at the conference.

Sincerely,

Kim Jones, P.E., Ph.D. Director, ISEE Texas A&M University-Kingsville MSC 188, 700 University Boulevard Kingsville, Texas 78363 Phone: (361) 593-2187 Fax: (361)593-2069 email: kfkdi00@tamuk.edu



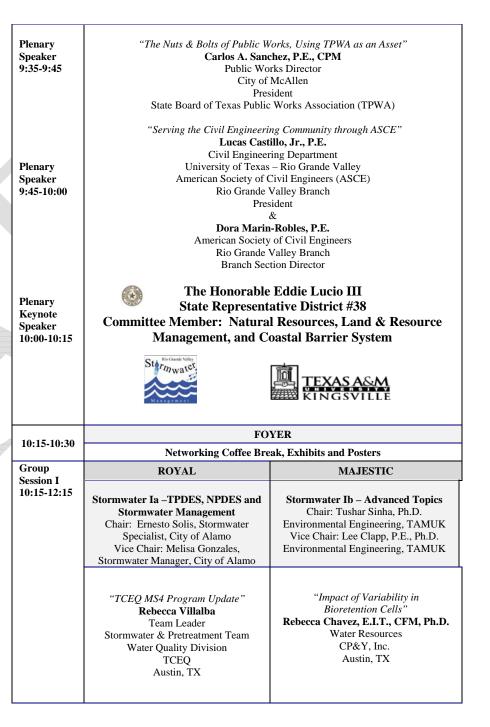
# **Conference Schedule**



Tuesday, May 17, 2016 – TFMA Course and Exam & Low Impact Development Design Course. Separate registration required. Must join TFMA to sit in during Exam.

		SUNDIAL	
9:00–4:00 (30 min lunch)		Floodplain Management Review Course*	
	Course	Thomas W. Mountz, PE, D.WRE, CFM	
	I	Project Manager - Water Resources	
		Texas Floodplain Management Association (TFMA)	
		6 CECs/6 PDUs	
		*Lunch included	
5:30-8:00	Exam	CFM Exam	
5.50-0.00		Register at <u>www.tfma.org</u>	
7:30am– 6:00pm (30 min lunch)	Course III	CONCH	
		Soil Erosion Pollution Awareness (SEPA) Program Funded by IBWC, Texas Clean Rivers and the EPA and TCEQ Clean Water Act NPS 319 Program	
		Low Impact Development (LID) Planning & Design Course* Beverly Storey, P.LA.	
		Texas A&M Transportation Institute	
		College Station, TX	
		&	
		Kim D. Jones, P.E., Ph.D.	
		Institute for Sustainable Energy & the Environment (ISEE) - Director	
		Texas A&M University-Kingsville	
		4 CECs (TFMA CFM)/8 PDUs	
		*Lunch included	
		FOYER	
6:30 pm-8:00		TOTER	

- 00	Registration	PALM GRAND BALLROOM RECEPTION AREA (2nd Floor)		
6–7:00 pm Registra	Registration		Early Registration, 2 <sup>nd</sup> floor	r
	Meeting		BOARDROOM	
:00 pm	wittening		ool Track – Volunteer Meetin	
	Dinner	WINDJAMN	IER'S BEACHFRONT CAI	FÉ (2 <sup>nd</sup> Floor)
:00 pm		EPA - TAN	IUK - TASK FORCE DINN	ER EVENT
Conferenc	<u> </u>		~ ^	
			- Conference Theme	
<i>velcome</i> , Froup	-	ers and Keyno ROYAL	MAJES	TIC
ession 0		KUTAL	MAJES	
:00-10:15			Plenary, Welcome, and Keynote	
	Vice-	Chair: Jose Hinojosa, S	Ph.D., P.E., Director, ISEE, TAM anta Cruz Irrigation District #15,	Chairperson
		Lower Rio Grande Va	alley TPDES Storm Water Task F	orce
		"Colobrating 18	years of Water Research in th	10
lenary Velcome		Lower	r Rio Grande Valley"	ic
:00-8:15			nes, P.E., Ph.D., Director	
			able Energy and the Environr rweich College of Engineering	
			M University-Kingsville	2
lenary Theme	"The l	The LRGV Stormwater TPDES Task Force – History and Beyond" José Hinojosa, REM		
peaker				
:15-8:30	Chairperson Lower Rio Grande Valley (LRGV) Texas Pollutant Discharge Elimination System			
		(TPDES)	Stormwater Task Force	Similation System
		]	Founded 1998	
lenary			anagement Association Initia	tives"
Juest			Mountz, PE, D.WRE, CFM anager - Water Resources	
:30-8:45		Texas Floodplain Management Association (TFMA)		
		State Board	d of Directors – Treasurer	
lenary Theme	"Lor	wer Rio Grande Vall	ey Low Impact Development I	Program"
peaker			chez-Gonzales, MS, CFM	
:45-9:05			Engineering Associate I M University-Kingsville	
lenary		"Region 6 Wa	ater Priorities at EF	PA"
Keynote		0	cia, Deputy Directo	
peaker			ty Protection Divis	
:05-9:35				



	<ul> <li>"2016 NPDES Stormwater Proposed MS4 General Permit Remand Rule" Nelly Smith Municipal Stormwater Coord.</li> <li>EPA Region 6, Permits and Technical Assistance Section NPDES Permits &amp; TMDLs Branch</li> <li>"MS4 Evaluations in Oklahoma" Carrie Evenson, P.E., Ph.D. Oklahoma Department of Environmental Quality Oklahoma City, OK</li> <li>"CBP3 - Community Based Public Private PartnershipPrince George County successes and lessons learned, paying for GI" Adele Cardenas-Malott, P.E. Senior Policy Advisor EPA Region 6, Dallas, TX</li> </ul>	"Potential of Biochar as a Filter Media for Stormwater Applications" Jihoon Kang, Ph.D. School of Earth, Environmental and Marine Sciences University of Texas - Rio Grande Valley Edinburg, TX "Waste Water Management" Rajan Khatri Industrial Management MS Student Texas A&M University-Kingsville "Numerical modeling of Hidalgo County Drainage Canal water quality transport" Jungseok Ho, Ph.D. Civil Engineering Department Univ. of Texas – Rio Grande Valley Edinburg, TX	
	SABAL	PARADISE	
12:15-1:15 Lunch	MC: Joo Genera Santa Cruz Irrig		
12:30-12:45 Keynote Speaker	"Linkages between the Successes of and Water Quality M Ray Alle Executiv Coastal Bend Bays	3:00-3:15	
Group	ROYAL	Christi, TX MAJESTIC	Group Session II
Session II 1:15-3:00	Stormwater II – Est Chair: David Mendez, Bickerst Vice Chair: Emily Rogers, Attorney,	3:15-5:00	
	LOWER LAGUNA MAD PANEL DI PRESE		
	"Introd Sarah Bern Program Texas Commission on		
	Galveston Bay <i>"Laguna Madre</i> <b>Kim D. Jones, P.</b> Institute for Sustainable E Frank H. Dotterweich		

Texas A&M University-Kingsville

"What the Estuary Program Means for You" **Douglas Jacobson** Gulf of Mexico Program Regional Program Manager National Estuary Program Regional Program Manager EPA Region 6 Dallas, TX

"Estuary Programs in Texas: Vehicles of Action for Society and Environment" Carla G. Guthrie, Ph.D. Director Surface Water Division Texas Water Development Board

> "Leveraging Resources with National Estuary Programs" Brian Koch Regional Watershed Coordinator Texas State Soil and Water Conservation Board Wharton, TX

> > Honorable David A. Garza County Commissioner District #3 Cameron County San Benito, TX

Facilitated by: David Mendez Bickerstaff, Heath, Delgado, Acosta LLP Austin, TX

FOYER

Networking Coffee Break, Exhibits and Posters

MAJESTIC

ı III :00

ROYAL Stormwater III – Arroyo Colorado Watershed Protection Plan Update Panel Discussion Chair: Emily Rogers, Attorney, Bickerstaff Heath Delgado Acosta LLP Vice Chair: David Mendez, Bickerstaff, Heath, Delgado, Acosta LLP

# ARROYO COLORADO WATERSHED **PROTECTION PLAN UPDATE** PANEL DISCUSSION

PRESENTERS:

"EPA's Role in Watershed Protection Plan Development Under the Nonpoint Source Program" Mike Bira EPA NPS Program

EPA Region 6, Dallas, TX &

Henry Brewer

Environmental Protection Specialist Water Quality Protection Division EPA Region 6, Dallas, TX

"Watershed Planning in Texas" Ashley Wendt NPS Project Manager Texas State Soil and Water Conservation Board Temple, TX

"Arroyo Colorado Water Quality and Watershed Protection Plan Update" Tim Cawthon Natural Resources Specialist Texas Commission on Environmental Quality NPS Program, Austin, TX

"Arroyo Colorado Water Quality and Watershed Protection Plan Update" Jaime Flores, P.G., Arroyo Colorado Watershed Coordinator Arroyo Colorado Watershed Partnership, Weslaco, TX

> Facilitated by: Emily Rogers, Attorney Bickerstaff Heath Delgado Acosta LLP Austin, TX

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#### PALM GRAND BALLROOM

Social

5:30-6:00

Dinner

6:00-8:00

Networking/Fellowship

"Engineering Education, Technology Development and New Initiatives in the Valley"

> MC: Kim D. Jones, P.E., Ph.D. Director, Institute for Sustainable Energy and the Environment Frank H. Dotterweich College of Engineering Texas A&M University-Kingsville

"Water Quality Education and Research at Texas A&M University-Kingsville" Dr. Lee Clapp, P.E.

Chairperson Environmental Engineering Frank H.. Dotterweich College of Engineering Kingsville, TX

*"RGV Initiative"* Maria Oralia De Los Reyes, PhD Frank H.. Dotterweich College of Engineering Kingsville, TX

"We Are One: Building a Sustainable and Resilient Community in the Lower Rio Grande Valley" Dr. Andrew Ernest, P.E. Chairperson Civil Engineering Department The University of Texas-Rio Grande Valley Edinburg, TX "Local Educational Engagement and Experiential Learning in Stormwater Management" Dr. Frank J. Dirrigl, Jr. Associate Professor of Environmental Science The University of Texas-Rio Grande Valley Edinburg, TX

"South Texas College's STEM Initiatives and Leadership in the Rio Grande Valley" Dr. Ali Esmaeili Dean of Math, Science, and Bachelor's Degree Programs South Texas College

McAllen, TX

# Thursday, May 19, 2016 - TPDES, LID, Research and Funding

ROYAL

Group Session IV 8:00-10:00

#### Stormwater IV – National Initiative Panel Discussion Chair: Emily Rogers, Attorney, Bickerstaff Heath Delgado Acosta LLP Vice Chair: David Mendez, Bickerstaff, Heath, Delgado, Acosta LLP

MAJESTIC

# VALLEY-WIDE INTEGRATED MONITORING AND FORECASTING FOR FLOOD RESPONSE AND ECONOMIC DEVELOPMENT

#### **PRESENTERS:**

"Introduction - What is Valley-Wide Integrated Monitoring and Forecasting for Flood Response and Economic Development" Andrew Ernest., P.E., Ph.D.,

Chairperson Civil Engineering

University of Texas-Rio Grande Valley

"Cyberinfrastructure for Regional Water Monitoring and Modeling" Andrew Ernest., P.E., Ph.D., Chairperson

Civil Engineering University of Texas-Rio Grande Valley "National Flood Interoperability Experiment"

"National Water Model" Tim Whiteaker, Ph.D. Research Scientist Center for Research in Water Resources The University of Texas at Austin

"The Rivers & Estuaries Observation Network" Christopher Fuller, Ph.D. Research, Applied Technology and Education Services Potsdam, NY

"Conjunctive Surface Water-Groundwater Management, and Potential Flood Control with GMS Modeling" Chu-Lin Cheng, Ph.D. Civil Engineering Department Univ. of Texas – Rio Grande Valley Edinburg, TX

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		nha, Ph.D. Il Engineering		"Galveston Bay Estuary Program" Sarah Bernhardt, Ph.D. Program Manager Texas Commission on Environmental Quality Galveston Bay Estuary Program	"A Legislative Preview" Claudia Russell Attorney Bickerstaff Heath Delgado Acosta LLP, Austin, TX	
	Jungseok Ho		Lunch	SABAL	PARADISE	
	Civil Engineeri University of Texas Rio G	ing Department rande Valley, Edinburg TX	12:00-1:15		be E. Vega	
				Mayor, City	of Port Isabel	
	"Disaster Mitigation and Warning System" William Donner, Ph.D. Sociology Department Univ. of Texas – Rio Grande Valley Edinburg, TX		12:15-12:45 Keynote Speaker	<b>Ron Curry</b> Regional Administrator EPA Region 6, Dallas, TX		
	Facilita	ited by:	Group Session VI	ROYAL	MAJESTIC	
	<b>Emily Rogers,</b> Bickerstaff Heath Delg Austin,	Delgado Acosta LLP	1:15-3:15	Stormwater VIa – MS4 Topics Chair: Jose Figueroa, Stormwater Division, City of Brownsville	Stormwater VIb – Stormwater Topics Chair: David Salinas, CFM, Public Utilities Director, City of San Juan	
	FOYER			Vice Chair: Robert Valenzuela, City of San Benito	Vice Chair: Israel Gaona, CFM Engineer, Planning Department City of Weslaco	
10:00-10:15	Networking Coffee Break, Exhibits and Posters					
Group Session V	ROYAL	MAJESTIC				
10:15-12:00	Stormwater Va – Estuary Topics Chair: Paula Rodriguez, City Planning and Community Development Director, City of La Feria Vice Chair: Raul Garcia, Stormwater, City of Los Fresnos	Stormwater Vb – Regulatory Topics Chair: Rudy Garza, CPM, Public Works Director, City of Alton Vice Chair: Raul Gomez, Administrative Assistant to the Honorable David Garza, Cameron County Commissioner		"On-line Data Management" <b>Ty Garmon</b> CBI Systems LJA Engineering, Inc. & George Culver Director of GIS LJA Engineering, Inc.	"The EPA Approach to Water Quality Protection Through Watershed Management" Mike Bira EPA NPS Program EPA Region 6, Dallas, TX "City of Laredo's Illicit Discharge	
	"Trash Free Waters" Douglas Jacobson Gulf of Mexico Program Regional Program Manager National Estuary Program Regional Program Manager EPA Region 6	"A City's Liability for Flooding" Emily Rogers Attorney Bickerstaff Heath Delgado Acosta LLP Austin, TX		"The use of web-based NPDES-MS4 Permit Manager to address the Environmental and Economic Challenges in Puerto Rico" Javier Vélez-Arocho EcoStahlia Environmental Consultants	Detection and Elimination Program for TPDES Compliance" Ivan Santoyo Environmental Services Department City of Laredo "Using Green Infrastructure in new housing developments in the LRGV	
	Dallas, TX <i>"Over 30 Years of Freshwater Inflow</i> <i>Research in the</i> <i>Lower Laguna Madre Estuary"</i> <b>Caimee Schoenbaechler</b> Environmental Flows Specialist Bays & Estuaries Program Texas Water Development Board	"Multi Sector General Permit" Rebecca Villalba Team Leader Stormwater & Pretreatment Team Water Quality Division Texas Commission on Environmental Quality Austin, TX		San Juan, Puerto Rico <i>"Funding for MS4s"</i> John Porter, CFM Director, Environmental Services Department City of Laredo	to create active public spaces." Hugo Colón Acevedo Senior Design Manager, buildingcommunityWORKSHOP & Nick Mitchell-Bennett Executive Director, Community Development Corporation of Brownsville, TX	

		<i>"Topic"</i> Beverly Storey, P.LA. Texas A&M Transportation Institute College Station, TX			
3:15-3:30	FOYER Networking Coffee Break, Exhibits and Posters				
		JTILUS			
3:15-3:30	POSTER WINNER	ANNOUNCEMENTS			
Group Session VII	ROYAL	MAJESTIC			
3:30-5:00	<b>Stormwater VII – Funding Panel Discussion</b> Chair: David Mendez, Bickerstaff, Heath, Delgado, Acosta LLP Vice Chair: Emily Rogers, Attorney, Bickerstaff Heath Delgado Acosta LLP				
	FUNDING OPPORTUNITIES USEPA PROGRAMS & TEXAS WATER DEVELOPMENT BOARD STORMWATER FUNDING PROGRAMS				
	PANEL DISCUSSION PRESENTERS:				
	Henr Environmental 1 EPA, Dal	in the Lower Rio Grande Valley " y Brewer Protection Specialist Region 6 las, TX			
	Mar Clean Water SRF Texas Water D	vings Incentives" k Evans Program Coordinator evelopment Board stin, TX			
	Projec Texas Water D	& odnar, CFM t Manager vevelopment Board stin, TX			
	Ashle NPS Pro Texas State Soil and V	ource Grant Program" ey Wendt ject Manager Vater Conservation Board uple, TX &			
	NPS Pro Texas Commission of	Cawthon ject Manager n Environmental Quality stin, TX			



Saturday, May 21, 2016 - Task Force Meeting, 11 am