

NOVEMBER 2018 | ISSUE 2

STORMWATER

Lower Rio Grande Valley Stormwater Task Force Newsletter

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Welcome back to the second edition of the Stormwater Newsletter. Starting this Month we will be showcasing our Task Force members so you can learn a little more about them. We have a couple of events coming up so keep on reading for more information.

If you're interested in submitting pictures or including an announcement, please feel free to email us at lrgvswtf@utrgv.edu.



JOSE HINOJOSA, TASK FORCE MEMBER

Santa Cruz Irrigation District #15

Jose' "Joe" A. Hinojosa was hired as General Manager for the Santa Cruz Irrigation District No. 15 in July of 2013 to replace retired General Manager John Miller. Joe worked for the City of Brownsville for much of his public career as Environmental and Stormwater Manager having oversight of water resources within the City and its ETJ. Joe is a graduate of Texas A&M University College Station/Galveston and is a native of Brownsville, Texas.





Why did you select Marine Biology as your field of major?

I selected Marine Biology as a degree due to my avid interest in science and biology throughout my early school years. Science dealing with the worlds oceans and its vast expanse of resources always fascinated me. When I was growing up there used to be a popular Marine Biologist named Jacque Cousteau who had his own show featuring sorts of marine animals and environments. I found the whole idea of exploring that underwater world extremely intriguing and quite different to any other career I had envisioned..

Tells us about your most challenging stormwater project that you have been involved?

The most challenging storm water project was getting the Monte Bella LID project in Brownsville off the ground as it was complicated by not only the relative novelty of the concept, but also the requisite cooperative partnerships we had to try to establish to bring it to fruition. In the end, it was worth all the work as it was a key component to an inaugural phase of our present and expansive storm water program.

What new skills have you developed in the last year?

In this field working with so many partners at all levels, each year brings its own set of discoveries. Seeing and understanding the confluence of interests on all issues related to water whether it be flooding, water conservation, agricultural, academics, regulatory, economics and sustainability is a constant pursuit. Learning how to try to address the myriad of concerns regarding water issues with a holistic perspective to best address the vast regional challenges is a valuable skill in itself. I am still trying to get there. Finding common ground with fellow stakeholders often starts with small steps, so we all have to be somewhat patient; but nevertheless, relentless.

LOW IMPACT DEVELOPMENT SYSTEMS

BY DR. AHMED MAHMOUD



Field visit to the site of the city of Mercedes Project (Mr. Javier Guerrero and Jose Figueroa (city of Mercedes)) UTRGV civil engineering students are working with Dr.Mahmoud on the design of Low Impact Development systems in two different cities Palmhurst and Mercedes. The students will develop green infrastructure demonstration facilities according to each city drainage policy,

providing each city with civil drawings that will be implemented and constructed by the city on the selected sites. Both projects are funded by the Texas Commission on Environmental Quality (TCEQ) as a part of the master plan in the Lower Rio Grande Valley.



Field visit to the site of the city of Palmhurst project(From Left to right: Oscar Hernandez (student), Dr.Andrew Ernest, David Vasquez (student), Lupe Garcia (city of Palmhurst), Mr. Javier Guerrere and Dr. Abmed Mahmeud)

Mr. Javier Guerrero and Dr. Ahmed Mahmoud)

"DEVELOPMENT OF THE LOWER LAGUNA MADRE AND BROWNSVILLE SHIP CHANNEL WATERSHED PROTECTION PLAN (WPP) PHASE III"

\$165,000 total project cost. Duration FY19-22

Project Background: This project will provide an assessment of existing and potential water quality threats from on-going NPS water pollution within the Laguna Madre and the Brownsville Ship Channel Watersheds, and will develop a WPP to improve and protect water quality within the target region. The WPP will meet EPA's nine-elements for WBPs.

This project will facilitate Phase I and II of the development of a Watershed Protection Plan for the Lower Laguna Madre and Brownsville Ship Channel watersheds. The WPP will be consistent with the United States Environmental Protection Agency's (EPA) 9 Key Elements for Watershed-Based Plans. This WPP will be based on stakeholder decisions for managing their watershed resources while achieving watershed goals.

The Brownsville Ship Channel and Port Isabel Fishing Harbor are included on the 2014 Texas Integrated Report of Surface Water Quality for elevated bacteria levels. In addition, the Brownsville Ship Channel and the Lower Laguna Madre, assessment unit 2491_03, have concerns for low dissolved oxygen. There is currently no bacteria impairment for the Lower Laguna Madre Assessment Unit 2491_03, but there is a lack of routine bacteria data.

The Lower Laguna Madre and Brownsville Ship Channel Partnership Steering Committee was formed in 2016 and the stakeholders decided to develop a WPP to address the bacteria impairments and other concerns within the watersheds. An initial watershed characterization effort began in 2014 and is scheduled to be completed in 2017. This project will continue the watershed characterization effort, fill additional data gaps, and calculate existing pollutant loads and load reductions needed to meet water quality standards and goals. Using this information, stakeholders will select management measures to address pollutant loadings. The next phase of the project will develop the WPP.

The PI's for this project are Dr. Andrew Ernest, Professor; Abdoul Oubeidillah, Assistant Professor; Javier Guerrero, Director of Water Studies; and the Augusto Sanchez (UTRGV's/Cameron County's Director of Estuary, Environmental, and Special Projects). Mr. Gonzales will serve as the watershed coordinator who will conduct local stakeholder meetings, educational programs, provide media updates, and find funding opportunities in developing the WPP.

The PI's for this project are Dr. Andrew Ernest, Professor; Abdoul Oubeidillah, Assistant Professor; Javier Guerrero, Director of Water Studies; and the Augusto Sanchez (UTRGV's/Cameron County's Director of Estuary, Environmental, and Special Projects).

STUDENT OF THE MONTH



DAVID VASQUEZ

66

I am classified as a senior and throughout my college years I have done an engineering internship at a structural firm and currently working with Dr. Ahmed Mahmoud in Low Impact Development research.

WHAT MADE YOU DECIDE ON YOUR MAJOR?

I chose Civil Engineering because I knew my work could make a difference and be lasting.

WHAT ARE YOUR PLANS AFTER GRADUATION?

My plan after I graduate with my bachelors degree is to get a job in environmental/water resources to get some experience in the field then study at UTRGV for my master's degree. My hopes are to do research in improving water quality in third world countries.

WHAT ADVICE WOULD YOU GIVE TO FUTURE CIVIL ENGINEERING STUDENTS? Study hard and always go to your

professors for help when needed.

PAST EVENTS





CITY OF DONNA'S HALLOWEEN BASH

Outreach Event for City of Donna's Halloween Bash held at the Donna Square Park on October 31st. Over two hundred (200) children were in attendance and were given stormwater awareness materials.



PAST EVENTS



CITY OF PALMHURST NIGHT OUT

The Department of Civil Engineering took part of the 7th Annual National Night Out hosted by the Palmhurst Police Department and the City of Palmhurst. Our Department had a table where they answered questions and gave away goodies to children and visitors.



TCEQ AWARD KICK OFF

Project Background: The North and Central Hidalgo County Watershed (NCHW) located within the Lower Rio Grande Valley is the area North of the Arroyo Colorado watershed and westernmost region of the Upper Lower Laguna Madre watershed. This watershed mostly flows into the Lower Laguna Madre Bay assessment unit (AU) 2491_01 which has a concern for low dissolved oxygen levels. The Lower Laguna Madre AU directly north of the area that the Arroyo Colorado flows into is impaired for low DO and bacteria.

The NLMW is comprised of subwatersheds associated with the Raymondville Drain, the Hidalgo Floodway and the IBWC pilot channel (IBWC Floodway). These major waterways contribute freshwater and stormwater to the Laguna Madre. This project aims to begin the assessment of these subwatersheds. It is anticipated that these three (3) distinct sub watersheds will possibly be required to be assessed, quantified and identified as separate major watersheds in the Lower Rio Grande Valley.

Currently, very limited data has been collected to assess the project watershed(s) impairments and concerns or determine the contributing sources. There is especially a lack of water quality data collection within this target region. A characterization of the watershed is nonexistent and stakeholders have not come together to discuss how to address the concerns and impairments, partially because they are unaware of it. An effort to raise awareness within the watershed and reduce the amount of contributors is a must and stakeholders need to be educated on what some of the potential causes to the impairments are to assist in determining goals and objectives for reducing pollutants in their watershed.

Part of raising awareness is by providing watershed characterization information that includes, but is not limited to, geographic boundaries and available water quality data. Identification of existing data must first take place to provide stakeholders with such information so that future planning and implementation activities can take place.

Stakeholders also need to be engaged to determine what locally existing data is available, and define the goals, objectives, and indicators of a watershed implementation program. Leadership of a stakeholder group is currently limited within the watershed. To engage stakeholders, individuals need to be contacted and discussions need to be held as sources and causes of bacteria are identified. Through this process, as well as a series of public meetings to solicit public input, a consensus course of action for reducing pollutant loads can be determined on how to move forward with planning and implementation.

Of importance, this project may consider evaluating the northern boundary of the Arroyo Colorado Watershed. Project leaders will work with the Arroyo Colorado Watershed Partnership, its stakeholders and the TCEQ to identify issues and concerns that may arise from this proposed project that may impact the Arroyo Colorado Watershed Protection Plan.

The PI's for this project are Dr. Andrew Ernest, Professor; Abdoul Oubeidillah Assistant Professor; Javier Guerrero, Director of Water Studies; and the Augusto Sanchez (UTRGV's/Cameron County's Director of Estuary, Environmental, and Special Projects). The water studies team will be looking to hire a watershed coordinator for this project. The watershed coordinator who will conduct local stakeholder meetings, educational programs, provide media updates, and find funding opportunities in developing the WPP.



Save the Date!

What: 2018 Nonpoint Source Program Post-Award Workshop for your TCEQ Nonpoint Source contract executing September 2018

Where: TCEQ Main Office, Austin

<u>When</u>: Wednesday October 3, 2018; 9:00am - 3:00pm (times tentative)

<u>Purpose</u>: To meet the contractual requirement of a Post-Award Meeting while sharing information, lessons, and ideas about successful TCEQ Nonpoint Source projects

<u>Topics Covered</u>: Contracting with the TCEQ; Quality Assurance Requirements; Breakout Project Meetings; Roundtable Discussions

<u>Who Should Attend</u>: Key project personnel including project managers, quality assurance officers, modelers, field staff, etc. Please forward this email to any applicable staff.

Additional details are forthcoming.

Please add Megan Henson <u>megan.henson@tceq.texas.gov</u> to your address book so future emails concerning this event are not sent to your junk email folder.

PAST EVENTS

CREST LUNCHEON





CENTER FOR COASTAL WATER RESOURCES, INTERDEPENDENT INFRASTRUCTURE, SUSTAINABILITY AND RESILIENCY RESEARCH (C-WRIISRR)

The NSF - CREST Center Proposal Development Workshop and Luncheon, hosted by the Stormwater Task Force, was held on November 1, 2018 at the Echo Hotel in Edinburg, Texas. Over forty (40) stakeholders were in attendance including UT Regent Ernie Aliseada, Hidalgo County Commissioner Elect Ellie Torres, Cameron County Commissioner David Garza, and VP for Research, Dr. Parwinder Grewal. The CREST proposal is due December 6, 2018 with a possibility of being funded \$10 million dollars over the course of 10 years.

NSF-CREST CENTER PROPOSAL DEVELOPMENT WORKSHOP & LUNCHEON

NOVEMBER 1, 2018 • 11:30 AM • Echo Hotel - Chevron Room • 1903 S. Closner Blvd. Edinburg, TX

Welcome

Parwinder Grewal, PhD. Executive Vice President for Research, UTRGV

Overview of

CREST Center for Coastal Water Resources, Interdependent Infrastructure, Sustainability and Resiliency Research (C– WRIISRR, pronounced "SeaRiser") Andrew Ernest, PhD., P.E., BCEE, D. WRE Professor for Civil Engineering, UTRGV

Working and Brainstorming Session

AndrewErnest, PhD., P.E., BCEE, D. WRE Professor for Civil Engineering, UTRGV

Project Team

Principals

AndrewErnest, PhD., P.E., BCEE, D.WRE Professor for Civil Engineering, UTRGV

Javier Guerrero, M.S., E.I.T. Director of Water Studies for Civil Engineering, UTRGV

College of Engineering & Computer Science

Constantine Tarawneh, Ph.D. Associate Dean for Research and Special Projects, UTRGV

Extreme Events

William Donner, PhD. Associate Professor for Sociology & Anthropology, UTRGV

Jungseok Ho, PhD., P.E, Associate Professor and Co-Chair for Civil Engineering, UTRGV

Water Supply

Chu-Ling Cheng, PhD. Assistant Professor for School of Earth Environmental and Marine Science, UTRGV

> Abdoul Oubeidillah, PhD. Assistant Professor for Civil Engineering, UTRGV

Environmental Quality

Candace Robledo, PhD. Assistant Professor for School of Medicine, UTRGV Ahmed Mahmoud, PhD. Lecturer I for Civil Engineering, UTRGV

Education & Outreach Angela Chapman, PhD. Assistant Professor for Teaching and Learning, UTRGV













The Stormwater Taskforce met on October 30, 2018 to discuss the annual report due to Texas Commission of Environmental Quality in December. Groups were formed to assist with the Outreach component of the new Stormwater Management Plan and Annual Report. Future meetings are to be scheduled to further discuss.



LOWER RIO GRANDE VALLEY - TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER TASK FORCE

The University of Texas Rio Grande Valley | Civil Engineering Department | 1201 West University Drive Edinburg, Texas 78539 | (956) 929 - 7189 | www.rgvstormwater.org

LRGV TPDES TASK FORCE

LRGV TPDES STORMWATER TASK FORCE ANNUAL REPORT WORKGROUP City hall, City of Alton, TX. October 30, 2018, 10 am

Governing Board

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Sose Hinojosa, REM Santa Cruz Irrigation Dist. #15 Chair

Jose Figueroa City of Mercedes Vice-Chair

Zenaida Guerrero City of Weslaco Secretary

MEMBERS

Jaime Sandoval City of La Feria

David Salinas City of San Juan

Roy Jimenez City of Donna

Paolina Vega, P.E. Cameron County

Albert Barreda CC Drainage District #1

EX -OFICIO

Dr. Andrew Ernest, P.E. UTRGV

Dr. Ahmed Mahmoud UTRGV

Augusto S. Gonzalez MS UTRGV

AGENDA

1. Welcome and Introductions

- 2. Review Permits a. TXR150000 b. TXR050000 c. TXR040000 d. Advisory Committee (SWMP BMP)
- 3. Review TXR040000
- 4. Review Template and Certification Page
- 5. Review SWMP Chapter 15
- 6. Other
 a. Retreat 2019
 b. WQ Conference 2019
 c. USACE Symposium 2019
 d. NSF CREST Workshop Luncheon
- 7. Due dates
- 8. Other
- 9. Adjourn

MEMBERS

Bernard Rodriguez City of San Benito

> Juan De La Garza City of Mission

Robert Valenzuela City of Edinburg

> Veronica Flores City of Primera

Leo Olivares City of Palmview

Raul Garcia City of Los Fresnos

> Jeff Underwood City of Alton

> > Ernesto Solis City of Alamo

lsidro Venecia City of La Joya

Lupe Garcia City of Palmhurst

Eduardo Gonzales Willacy County

Saul Garcia Hidalgo County Pct. #1

> Lonnie Bearden Town of Combes

> > David Alaniz City of La Villa

TASK FORCE LIASION

Javier Guerrero, E.I.T., MS



LOWER RIO GRANDE VALLEY - TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER TASK FORCE

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Dr. Andrew Ernest, P.E. UTRGV

Dr. Ahmed Mahmoud UTRGV

Augusto S. Gonzalez MS UTRGV

13. Adjourn

LRGV TPDES STORMWATER TASK FORCE OUTREACH WORKGROUP

City hall, City of Alton, TX. October 30, 2018, 10 am

AGENDA

1. Welcome and Introductions
2. Task Force SWMP a. Review MCM 1 b. Outreach BMPs
3. General Update a. Upcoming events i. Conference 2019 ii. Retreat 2019 iii. USACE Symposium iv. NSF CREST Luncheon b. Grants
4. Classroms Visits a. Speakers b. Schedule c. Stenciling
5. Channel 12 and 17
6. Recruiting Video/PSAs
7. Websites
8. Flyers/Brochures a. Topic for 1st mail out b. Design - Utility bill c. Design for Lobby/public facility/ each MCM d. TV, Brochure holder
9. PSAs a. 30 sec clips b. documentary c. update
10. Adopt and Inlet
11. Model
12. Other

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Isidro Venecia City of La Joya

Lupe Garcia City of Palmhurst

Eduardo Gonzales Willacy County

Saul Garcia Hidalgo County Pct. #1

> Lonnie Bearden Town of Combes

> > David Alaniz City of La Villa

TASK FORCE LIASION

Javier Guerrero, E.I.T.,MS UTRGV

ANNOUNCEMENTS





We would like to wish Mr. Javier Guerrero a very Happy Birthday this upcoming November 23rd!!

USACE SYMPOSIUM

WHEN: JAN 31 - FEB 01, 2019 WHERE: THE PEARL, SOUTH PADRE ISLAND

ANNUAL CHRISTMAS PARTY

WHEN: DECEMBER 7, 2018 WHERE: UTRGV BALLROOM

*PLEASE RSVP TO ROXANNA.TELLO01@UTRGV.EDU

*MORE IN INFORMATION BELOW

REMINDERS

STORMWATER CONFERENCE

WHEN: MAY 21-24, 2019 WHERE: THE PEARL, SOUTH PADRE ISLAND • WE ARE ACCEPTING SPEAKER ABSTRACTS

FOR MORE INFORMATION VISIT WWW.RGVSTORMWATER.ORG

ASCE STUDENT SYMPOSIUM

WHEN: APRIL 10-14, 2019 WHERE: SOUTH PADRE ISLAND CONVENTION CENTER



WE WOULD LIKE TO WELCOME THE LATEST ADDITION TO THE STORMWATER TASK FORCE : TOWN OF COMBES.

Fun Facts

-The site was originally the headquarters for the Combes Ranch, named for Charles B. Combes, a settler from Kentucky, who moved to the region during the early 1900s.

-The town developed after 1904, when the St. Louis, Brownsville and Mexico Railway built a line through the region.



Aida Gutierrez SWTF Rep. for Town of Combes

Q

US Army Corps Engineers

1.31.19 - 2.1.19 The Pearl, 310 Padre Blvd.

South Padre Island, TX For more information, contact <u>lrgvswtf@utrgv.edu</u> HOSTED BY: STORMWATER TASKFORCE









STORMWATER CONFERENCE

21st Annual Lower Rio Grande Valley Water Management & Planning Conference



MAY 21-24, 2019 THE PEARL / SOUTH PADRE ISLAND, TX 78597

For more information email: lrgvswtf@utrgv.edu



JOIN US FOR OUR 8TH ANNUAL STORMWATER TASKFORCE

Christmas Party

DECEMBER 7TH 6:00 PM UTRGV BALLROOM, 1201 W UNIVERSITY DR. EDINBURG, TX HOSTED BY: STORMWATER TASKFORCE RSVP TO JOIN AT <u>ROXANA.TELLO01@UTRGV.EDU</u>



Stormwater Wanagement 21ST ANNUAL UT RIO GRANDE VALLEY STORMWATER CONFERENCE

CALL FOR SPEAKERS

May 21st - 24th, 2019 The Pearl, South Padre Island, Texas

Abstracts are to be submitted at <u>http://rgvstormwater.org/speakers/</u> Deadline: January 31st, 2019

> For more information: Deanna Levrier Email: <u>deanna.levrier@utrgv.edu</u> Phone: (956) 665-3572

ACCEPTABLE TOPICS

- Watershed Management
- Coastal Communities Infrastructure and Development
- Flood Management
- Water: Health, Safety, and Medicine Topics
- Innovation Topics
- Research Topics
- TMDL/Watershed Protection
- Advancing in Resiliency in Water Infrastructure
- Sustainability
- Green Infrastructure & Low Impact Development
- Challenges and Successes in Arid Environments
- Coding and Planning
- Stormwater Management Programs: Industrial, Construction, Municipal

Habby Thanksgiving!

WISHING YOU A ALL THE BEST OF THIS SEASON! MAY YOU ENJOY IT WITH YOUR FAMILY AND FRIENDS!









































