

UT RIO GRANDE VALLEY
STORMWATER
CONFERENCE

Lower Rio Grande Valley
20th Annual Water Quality
Management & Planning
Conference

High School Education Track

May 15 – 18, 2018
Schlitterbahn Resort – El Jefe's
South Padre Island, Texas



Monday, May 14, 2018	
6:00 pm	Up and Out
	Meeting for Volunteers
Tuesday, May 15, 2018	
Wednesday, May 16, 2018	
Thursday, May 17, 2018	
8:15 am	El Jefe's
	Volunteers – Roll Call
9:00 – 9:45 (Morning) 11:00 – 11:15 (Afternoon)	Parking Area
	<p style="text-align: center;">Tuesday Edinburg ISD (Morning) PSJA ISD (Afternoon)</p> <p style="text-align: center;">Wednesday Brownsville ISD (Morning) Mission CISD (Afternoon) San Benito ISD (Afternoon)</p> <p style="text-align: center;">Thursday Raymondville ISD (Morning) Lyford ISD (Morning) San Perlita ISD (Afternoon) Mission CISD (Afternoon)</p>
9:45 – 10:00 (Morning) 11:15 – 11:30 (Afternoon)	Parking Area
	<p style="text-align: center;">Introductions & Grouping of Students (No more than 8 students)</p>
El Jefe's	

10:00 AM
(Morning)

1:00
(Afternoon)

Geotechnical Engineering

Dr. Thuy Vu – UTRGV



Surveying

Mr. Jorge Vidal – UTRGV



Water Safety

Dr. Jong-min Kim – UTRGV



ASCE Student Symposium

Julio Narvaez – UTRGV



Texas Wildlife Association & East Foundation

Elisa Velador L.A.N.D.S Educator – RGV



Rain Harvesting Demonstration

UTRGV



City of Edinburg Water Distribution

Utilities Department, City of Edinburg, TX



Municipal Wastewater Treatment Process

City of Mission



Laguna Atascosa National Wildlife Refuge
Wetlands and Wildlife of Laguna Atascosa NWR



Clean River Program
UTRGV



Texas Stream Team
UTRGV



Parking Lot

Street Sweeping Equipment Demonstration
TYMCO & City of Los Fresnos



Vector Truck
TYMCO & City of Los Fresnos



11:30	Up and out
	Lunch
12:30 – 1:00	Shrimp Haus
	Meeting with Civil Engineering Department High School Students interested in UTRGV
1:00 (Morning) 3:30 (Afternoon)	Parking Area
	Departure



THE LOWER RIO GRANDE VALLEY TPDES STORMWATER TASK FORCE



The LRGV TPDES Stormwater Task Force. In 1998, founded by Andrew Ernest and Javier Guerrero, and facilitated by Texas A&M University–Kingsville (TAMUK), a coalition of thirteen (13) Lower Rio Grande Valley (LRGV) local governments joined to form the LRGV TPDES (Texas Pollutant Discharge Elimination System) Stormwater Task Force (TASK FORCE) in a joint effort to develop a proactive regional approach to comply with the TPDES Phase II Municipal Separate Stormwater Sewer System (MS4) rules. The Task Force developed a regional stormwater management plan (SWMP) adopted by the membership. The SWMP includes Best Management Practices (BMPs) that are required as part of the six (6) Minimum Control Measures (MCMs) of the State’s TPDES program. **Today the TASK FORCE is comprised of seventeen (17) local governments sharing one regional SWMP.**

Organization and Mission of the LRGV TPDES Stormwater Task Force. The TASK FORCE project idea was born from a 1998 local stormwater brainstorming round table held in La Feria, Texas. Several preliminary meetings continued at various cities until the coalition was formally organized. Local government officials and qualified professionals representing various communities in the LRGV region attended these meetings. The group agreed to develop a way to achieve a regional SWMP to comply with the TPDES regulations. The group formalized the organization by contractually empowering TAMUK to facilitate the group and by developing a system of by-laws that included election of board members and officers.

The TASK FORCE uses a unique, collaborative regional approach to involve various levels of government, including the Texas Commission on Environmental Quality (TCEQ) and the Environmental Protection Agency (EPA), in developing cost-effective solutions that will achieve compliance with the TPDES rules. The TASK FORCE project embodies the spirit of the mutually beneficial relationships between local governments and embellishes this relationship with academia and regulators. After nineteen (19) years, although the impact of this organization has translated into a regional collaboration movement not seen anywhere else in the State, the overall impact of this organization has yet to be fully realized.

The primary goal of the TASK FORCE project in 1998 was to develop and implement a regional SWMP to comply with Phase II regulations. In 2002, TASK FORCE participants began entering into local government interlocal agreements with TAMUK, which outlined the desire to address stormwater quality issues on a regional basis and named TAMUK as its facilitator. In executing these interlocal agreements, emphasis was placed on developing programs that study existing successful programs, addressing community goals, providing technical assistance and training, and promoting regional approaches.

In 2006, the TASK FORCE modified its mission to include stormwater quality management approaches to address broader water quality and watershed issues, particularly those associated with the Arroyo Colorado Watershed Partnership (ACWP), a local Total Maximum Daily Load (TMDL)-related organization. The TASK FORCE project has already enjoyed side benefits of increased communication and cooperation, and created a collaborative process for discussing water quality issues in the LRGV’s four-county region. In addition, this collaboration and others like it, has enabled the participating communities to successfully secure many grant funding opportunities since the TASK FORCE’s inception.

Academic researchers and faculty provided facilitation and management assistance for the TASK FORCE project, initiating this effort through a National Science Foundation (NSF) grant, other grants, and from annual membership fees collected from the member-local-governments. The funds provide resources for staff to facilitate the group’s efforts in formulating TASK FORCE project goals and developing TASK FORCE programs. Funds, in part, are also used to host workshops, expert panel discussions, conferences, seminars and training sessions.

In 2008, during a TASK FORCE meeting held in Mission, TX, the organization formed several committees: ordinance, grant, scholarship, outreach, training, housekeeping, construction, and others. The TASK FORCE worked closely with the committees in developing the SWMPs by responding to recommendations and suggestions posed by these committees. Recently, these committees have been replaced with work groups which now work with researchers in facilitating the organization and implementing the SWMPs. One key workgroup, responsible for luring millions of dollars worth of grant funding to the Valley, is the Low Impact Development (LID) workgroup. The LRGV LID Outreach, Education and Demonstration program is a highly regarded project in the region that resulted from collaboration efforts within this workgroup.

New Paradigm. The new stormwater paradigm presents many questions to local governments in the LRGV. What is a stormwater management program, what will it cost, who will fund the program, is it needed, and how much will it cost? The TASK FORCE realizes a regional program is a key part of a successful regional storm water program. But, regulators and academia do not have a firm grasp of the costs associated with developing and implementing such a program. Although the average citizen often takes for granted the services municipalities provide, the stormwater services are nonetheless expected. The region now requires that local governments provide a stormwater runoff pollution protection service. This new paradigm requires the development of infrastructure and funding strategies to support providing this service.

Storm Water Quality is Now a Municipal Responsibility. This is not the first time local governments have been confronted with environmental water quality regulations that affect the manner that cities allocate funds. TMDL regulations recently started developing new performance measures for local governments, and LRGV communities have become very familiar with the Arroyo Colorado TMDL studies. Based on these studies, the drafters of the Arroyo Colorado Watershed Protection Plan (ACWPP), which included members of the Task Force, concluded that urban stormwater runoff is contributing to the impairment of the Arroyo Colorado. Thus, the timing of the formation of the Task Force could not have been better. Local governments typically tend to procrastinate when it comes to addressing non- mandated environmental issues, usually because of lack of resources and lack of expertise and understanding rather than due to a non-proactive attitude. Still, finding funds to implement a regional SWMP program is a huge responsibility for any local government. Cost effectiveness and revenue potential were major considerations for our local governments when developing this Task Force.

In the LRGV, the communities share similar demographics and similar environmental concerns. Most residents live in low- or fixed-income households and cannot afford to pay fees to support the environmental-related requirements. Thus, there is a strong case for any type of collaboration that would keep costs down. In the LRGV, each community is contiguous to other communities, with some cities bordered by four (4) other cities. Thus, the LRGV appears as one urbanized metropolitan region. Although all these communities experience similar TPDES stormwater problems, none had in place a TPDES stormwater program or related ordinance. Since the creation of the TASK FORCE, stormwater tasks were generally viewed as “add-on” responsibilities for departments and staff that have other primary responsibilities. To varying degrees, with the exception of McAllen and Brownsville, the communities had existing staff (such as sanitary sewer, code enforcement, or road department personnel) handling stormwater operations, maintenance, regulation and enforcement. None of the communities could maintain a person, much less a department, to handle stormwater administration, planning, design, and engineering; water quality planning and monitoring; and capital improvements and expenditures. The regional approach taken by the TASK FORCE allows the LRGV communities to share these responsibilities, which results in a much more cost-effective program for addressing stormwater issues. Also realized in time, the TASK FORCE network provides a vitally important link to these small communities when new employees take on storm water related duties after key employee turnover. **The TASK FORCE project will recognize its twentieth (20th) year of existence in 2018, and the organization is determined to continue evolving and to continue strengthening its partnership in the future.**

Transition from TAMUK to The University of Texas Rio Grande Valley (UTRGV). In September 2016, the TASK FORCE decided to move its operation from TAMUK to UTRGV, a move that will be complete by July 2017. Moving the operation to a more local venue assures daily availability of resources and support to the TASK FORCE from the College of Engineering & Computer Science, the Civil Engineering Department and the UT System. With locations in Brownsville and Edinburg, UTRGV is poised to assist the TASK FORCE to achieve higher levels of success.

Contact Information

The University of Texas – Rio Grande Valley Civil Engineering Department

Edinburg Campus:

EACSB 1.202

1201 West University Drive
Edinburg TX 78539

(956) 665-3038

cive@utrgv.edu

Brownsville Campus:

LHSB 2.702

One West University Boulevard
Brownsville, TX 78520

(956) 882-6605

The University of Texas – Rio Grande Valley College of Engineering & Computer Science

Edinburg Campus:

ENGR 1.294

1201 West University Drive
Edinburg TX 78539

(956) 665-3510

coec@utrgv.edu

Brownsville Campus:

LHSB 2.702

One West University Boulevard
Brownsville, TX 78520

(956) 882-6605

Lower Rio Grande Valley-TPDES Storm Water Task Force

Edinburg Campus:

EACSB 1.202

1201 West University Drive
Edinburg TX 78539

(956) 665-3038

LRGVswtf@utrgv.edu



The University of Texas-Rio Grande Valley 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.