

ATM | **TEXAS A&M**
UNIVERSITY
GALVESTON CAMPUS
FEARLESS ON EVERY FRONT

Dr. Antonietta Guigg,
Regents Professor
Acting Chief Academic Officer
Senior Associate Vice President for Research and Graduate Studies



**WE ARE
AGGIES
BY THE SEA**

Academic Programs



Marine and Coastal Environmental Science



Maritime Business Administration



Ocean Engineering



Maritime Transportation



Foundational Sciences



Liberal Studies



Marine Biology



Marine Engineering Technology

DEGREE PROGRAMS



CURRENT DEGREE PROGRAMS

Marine Engineering Technology (B.S.) *

Marine Transportation (B.S.) *

Maritime Administration (B.S.) *

Maritime Administration and
Logistics (MMAL) *

Marine Biology (B.S., M.S., Ph.D.) *

Marine Fisheries (B.S.)

Marine Resource Management (MRM) *

Marine Sciences (B.S.) *

NEW: Marine and Coastal
Management and Science (PhD)

Maritime Studies (B.A.)

Ocean and Coastal Resources (B.A., B.S.)

Ocean Engineering (B.S.)

University Studies (B.A., B.S.)

- Maritime Law

- Ocean and One Health (Pre-Health)
*(Partnered with UTMB to offer with
M.S. in Clinical Laboratory Science)*

- Maritime Public Policy & Communication

- Tourism and Coastal Community
Development

* License Option Available (MART Required)

New degree programs to start Fall 2022

Computer Science: 4 year program

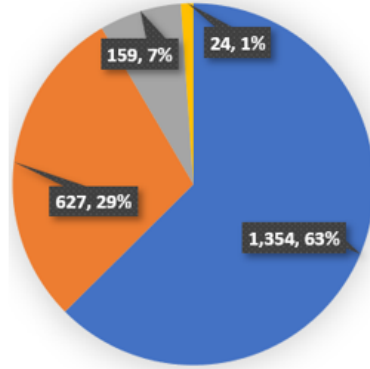
Environmental Engineering : 4 year program

Partnership with Lonestar - Dr. Verma!

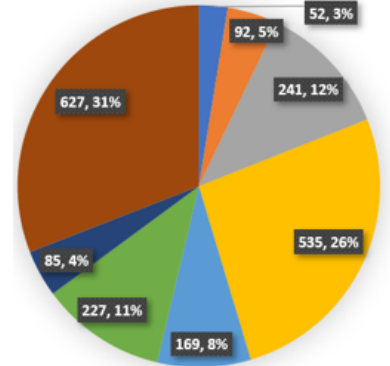
Partnership with Lamar State College Orange - Capt Roth



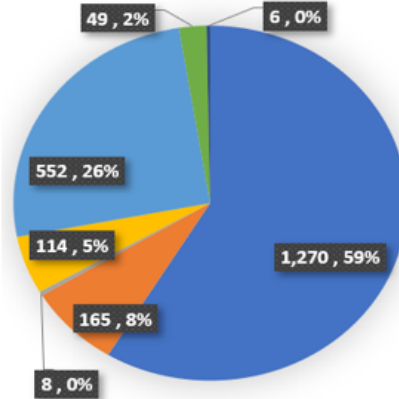
Enrollment data



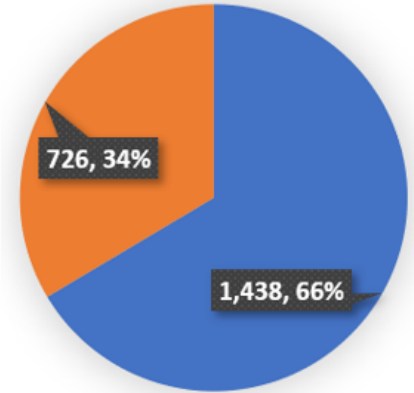
■ Undergraduate ■ ENGE + OCEN
■ Graduate ■ TAMU Graduate



■ FSCI ■ LIST ■ MARA ■ MARB
■ MARE ■ MART ■ MCES ■ OCEN



■ White ■ Black
■ American Indian ■ Asian
■ Hispanic or Latino ■ International
■ Unknown or Not Reported



■ Male ■ Female



Faculty Promotions

Liberal Studies

- Katherine Echols, Instructional Professor
- Amie Hufton, Instructional Professor

Jack K. Williams Library

- Amy Caton, Instructional Associate Professor

Maritime Business Administration

- Paula de Witte, Professor of the Practice

Maritime Transportation

- Augusta Roth, Professor of the Practice



New Administrative Appointments

Foundational Sciences

- Philip Brown, Assistant Division Chair

Liberal Studies

- Kathryn Falvo, Honors Chair

Marine Engineering Technology

- Paul Poiter, Assistant Department Head

Maritime Transportation

- Amy Luna, Assistant Department Head
- Ryan Vechan, Assistant Department Head



New Full Time Faculty

Liberal Studies

- Timothy Ballingall, Instructional Assistant Professor, English
- Rebecca Ottman, Instructional Assistant Professor, English

Marine & Coastal Environmental Science

- Christopher Smith, Visiting Assistant Professor, Geology & Oceanography

Maritime Transportation

- Wade Howell, Assistant Professor of the Practice
- Christopher Sparks, Assistant Professor of the Practice

New Full Time Faculty – Cluster Hire

Marine Engineering Technology

- Behnaz Papari, Assistant Professor, Electrical Power Distribution Systems
- Nima Fathi, Assistant Professor, Clean Energy Systems
- George King, Instructional Assistant Professor, Oil & Gas; Alternative Marine Fuel
- Andrew Moore, Assistant Professor of the Practice, Licensed Marine Engineer

Maritime Business Administration

- Mawuli Afenyo, Assistant Professor, Economics
- Robert Baker, Assistant Professor of the Practice, Ocean Transportation, Port Operations and Inland Waterways
- Livingstone Caesar, Assistant Professor, Business Analytics
- Amer Jazairy, Assistant Professor, Logistics

A black and white photograph of a modern building interior, likely a university hallway or atrium. The space features high ceilings with recessed lighting, large glass windows on the right side, and a staircase with a metal railing in the center. The overall atmosphere is clean and architectural.

Faculty Awards Recognition

Dr. Peter Santschi; 2021 Distinguished Professor

Dr. Jhenny Galan; 2021 The Association of Former Students Distinguished College Level Teaching Award

Dr. Patrick Louchouart; 2020 Regents Professor

Dr. Ashley Ross; 2021-22 Montague-Center for Teaching Excellence Scholar

Laura White, 2021 Vice President Meritorious Service Award for Outstanding Classroom Teaching

Dr. Antonietta Quigg, Regents Professor; 2021 William Paul Ricker Faculty Award



Academic Affairs Staff Promotions

- Denise Grant, Business Coordinator II, Maritime Business Administration
- Jessica Lee, Business Administrator I, Marine Biology
- Travis Richards, Postdoctoral Research Associate, Marine Biology
- Laura Stearns, Research Specialist I, Marine & Coastal Environmental Science
- Lisa Stewart, Director, Center for Academic Learning Support
- Katie St. Clair, Manager, Sea Life Facility



Academic Affairs Staff Accolades

- Rachel Ball, achieved her Master of Education (M.Ed.) in Higher Education Administration from Texas Tech University in August 2021.
- Rachel Ball, Academic Advisor III, named February 2021 honoree by the Office for Student Success who recognizes an exceptional academic advisor for their work with undergraduate students and the advising profession.
- Katie St. Clair, featured with the work she does supporting research at the Sea Life Facility in Chancellor Sharp's *"Around Texas"* episode featuring that aired on PBS Feb 11, 2021

New Academic Affairs Staff

- Stephanie Escobar, Academic Advisor I, Center for Academic Learning Support
- Lexis Fentanes, IT Generalist I, Information Technology
- Beau Greer, Computer Maintenance Technician II
- Tara Lulla, Administrative Associate, Student Enrollment Services
- Liz Musgrove, Program Aide, Research & Graduate Studies Office
- Glenda Nelson, Administrative Coordinator II, Foundational Sciences
- Tracy Proctor, Business Coordinator I, Maritime Business Administration
- Buzz Refugio, Assistant Director, Student Enrollment Services
- Celeste Rodriguez, Admissions Counselor I, Student Enrollment Services
- Tommy Thomasson, Technical Laboratory Coordinator, Maritime Transportation
- John Vandewater, Administrative Coordinator II, Student Enrollment Services
- Robert Varela, Admissions Counselor I, Student Enrollment Services
- Mary Ellen Vedas, Library Associate II, Jack K. Williams Library



SEA LIFE FACILITY

-in partnership with the George and Cynthia Mitchell Foundation, 21 undergraduate students contributed to research projects by providing husbandry care

-the Marine Biology Department invested \$75,000 to design and build new seawater systems to expand and enhance our abilities to study jellyfish, oysters, and plankton.





TEXAS A&M UNIVERSITY
GALVESTON CAMPUS

AGGIELAND

DOESN'T STOP AT
THE WATER'S **EDGE**


TEXAS A&M UNIVERSITY AT GALVESTON

2020-2025 STRATEGIC PLAN

We are the future of innovation, education, service and communities
of, for and by the sea

GUIDING PRIORITIES

Institutional priorities to guide the university in planning for the years to come:



Enhance transformational education & undergraduate student success

Elevate graduate and professional education

Strengthen and harness our research enterprise

Grow and support our world-class faculty

Engage Texas and beyond to enhance our impact

Be a best place to live, work, and learn

Incorporate Inclusion, Diversity, Equity, Accountability (IDEA)

Address the demands of infrastructure

THE BLUE ECONOMY

The Blue Economy relies upon a sustainable ocean and coastal environment that emerges when commercial activity is in balance with the capacity of ecosystems to support and sustain these while remaining healthy and resilient. As a special-purpose institution in marine and maritime studies, it is incumbent upon Texas A&M University at Galveston to lead efforts in the Blue Economy. We are training the next generation of students and engaging in scholarship that works towards protecting coastal communities, conserving marine life and ocean ecosystems, driving economic growth that includes smart shipping and safe ports, and creating an inclusive ecosystem with improved livelihoods.

Central Tenets of the Blue Economy Framework *(ref. NOAA 2019)*



Coastal Resilience



Ocean Exploration



Marine Transportation
& Power at Sea



Seafood Production



Coastal Communities



Marine Systems
& Technologies

KEY STRATEGIES & TACTICS

Visit tamug.edu/AcademicAffairs/StrategicPlan.html for the full Texas A&M University at Galveston and Texas A&M University Strategic Plans.

Integrate the New Ship, the NSMV Lonestar State

Key Leads: Dr. Donna Lang, langd@tamug.edu · Capt. Augusta Roth, rotha@tamug.edu

- Review license option curriculum for new capabilities
- Build new undergraduate and graduate curriculum opportunities which utilize the ship and all it has to offer (non-License Option)
- Broaden integration of the ship to the Blue Economy
- Analyze and plan appropriate cost structure

Elevate our Prominence as Academic Leaders in the Blue Economy

Key Leads: Dr. Antonietta Quigg, quigga@tamug.edu · Dr. Daniel Roelke, droelke@tamug.edu

- Advance scholarship in key research areas
- Recruit & retain world class faculty & thought leaders
- Invest in next generation of graduate students
- Hire a professional proposal writer
- Invest in broader impacts with targeted outreach efforts

Grow and Strengthen Engineering at Galveston

Key Leads: Dr. Jay Porter, jporter@tamug.edu · Dr. Alok Verma, averma@tamug.edu

- Build upper level and graduate programs
- Make Galveston a 1st choice destination
- Develop sustainable model for student and space reporting to the State
- Remove any barriers between Galveston and engineering student programs & services
- Prepare Program of Requirements for new building



KEY STRATEGIES & TACTICS

Visit tamug.edu/AcademicAffairs/StrategicPlan.html for the full Texas A&M University at Galveston and Texas A&M University Strategic Plans.

Develop Structures to Sustain IDEA Work

Key Leads: Dr. Carol Bunch Davis, bunchc@tamug.edu · Danny Roe, roed@tamug.edu

- Invest & formalize human and financial resources
- Create a central hub for activities and initiatives
- Develop high impact learning opportunities
- Promote alignment with Aggie Core Values

Extend and Enhance External Partnerships

Key Leads: Grant Shallenberger, shalleng@tamug.edu · Dr. Joan Mileski, mileskij@tamug.edu

- Local organizations & industry
- K-12 (GISD, etc.) & Higher Education (GC, COM, UTMB, San Jac, Lamar, LoneStar, etc)
- Local & state government entities to plan & build Pelican Island bridge

Implement a Strategic Enrollment Management Process

Key Leads: Amber Booth, bootha@tamug.edu · Dr. Antonietta Quigg, quigga@tamug.edu

- Build an enrollment profile or model
- Include transfer student programs & initiatives
- Targeted recruiting for Black & Hispanic students
- Enhance student success initiatives (retention)
- Adopt Journey, co-curricular map



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Excellence

Integrity

Leadership

Loyalty

"Loyalty and respect for tradition is about a sense of belonging to something greater than yourself."
—Former Executive Vice President and Provost Dr. David Prior



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Research at a Glance



INSTITUTE FOR A DISASTER RESILIENT TEXAS



1

Hazard Analytics

Measuring, Mapping, &
Managing Flood Risk

Funded By:
Texas General Land Office

2

Risk Communication & Perception

Buyers BeWhere

Funded By:
FEMA & TDEM

3

Policy & Decision Support

Texas' Enhanced State
Hazard Mitigation Plan

Funded By:
TDEM

4

Education

Partnerships for
International Research
& Education

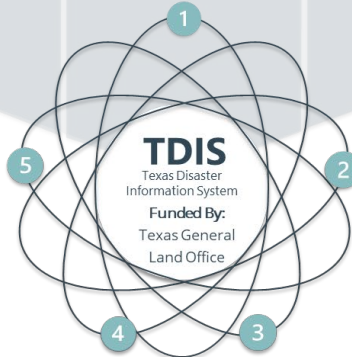
Funded By:
National Science Foundation

5

Coastal Risk Reduction

Ike Dike

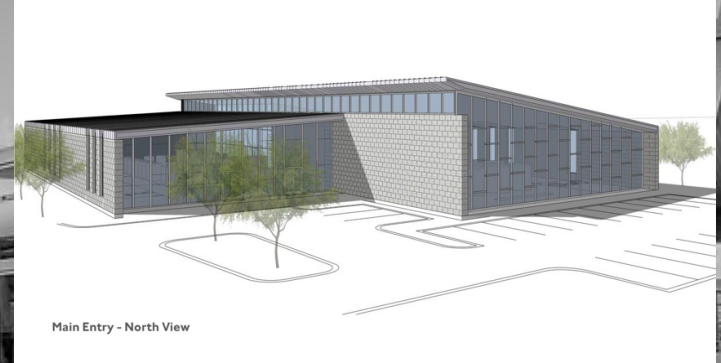
Led By:
Center for Texas Beaches &
Shores



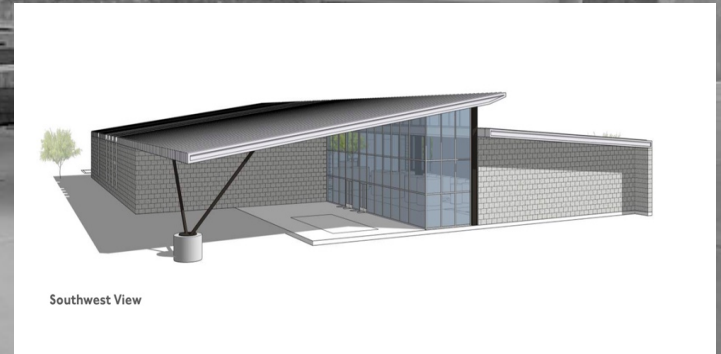
Research at a Glance

Gulf Center for Sea Turtle Research Sea Turtle Rehabilitation Hospital and Education Outreach Center

- \$3 million confirmed and an addition \$5 million pending in RESTORE funding to build out the turtle hospital
- Raising additional revenues to build it out and create a sustainable facility



Main Entry - North View



Southwest View

Ike Dike Status and New Developments

Galveston Campus Board of Visitors

14 October 2021

Bill Merrell

BOV talk presents a challenge

- Some Visitors have worked on the Ike Dike concept for 13 years
- Some probably hearing it described for the first time
- Will try to give an overview of the Ike Dike's transition from ridiculed concept to in all probability the largest project in USACE history
- Then focus in on a few critical next steps

Coastal Spine Early Development

- Ike Dike first proposed less than a month after Ike in Late 2008
- Idea was to stop all the water at the shore and keep it out of Galveston Bay
- Simple design – 17ft barrier at coast with gates across inlets
- Provides protection from 100yr storm

IKE Dike Concept November 2008



Not Received well

- No newspaper would touch
- Local politics ridiculed it – especially in Harris County

- Organized strong opposition formed
- Rice and Houston Endowment
- Favored In-bay solutions
- Extremely well funded and well rehearsed

But as Vic Pierson is fond of saying – the Science is on our side

- 2009 Netherlands trip – led to powerful Dutch partnership
- Joint Ike Dike feasibility studies and much more – NSF PIRE
- Bay Area Houston Economic Partnership(BAHEP) – International Maritime Advisory Committee(IMAC)
- Bay Area Coastal Protection Alliance(BACPA)
- Refocused Texas Center for Beaches and Shores to receive Ike Dike funding – supported in part by BOV
- Institute for a Disaster Resilient Texas formed and off to fast start
- Kept Ike Dike concept going with presentations and editorials

IKE Dike Concept November 2008



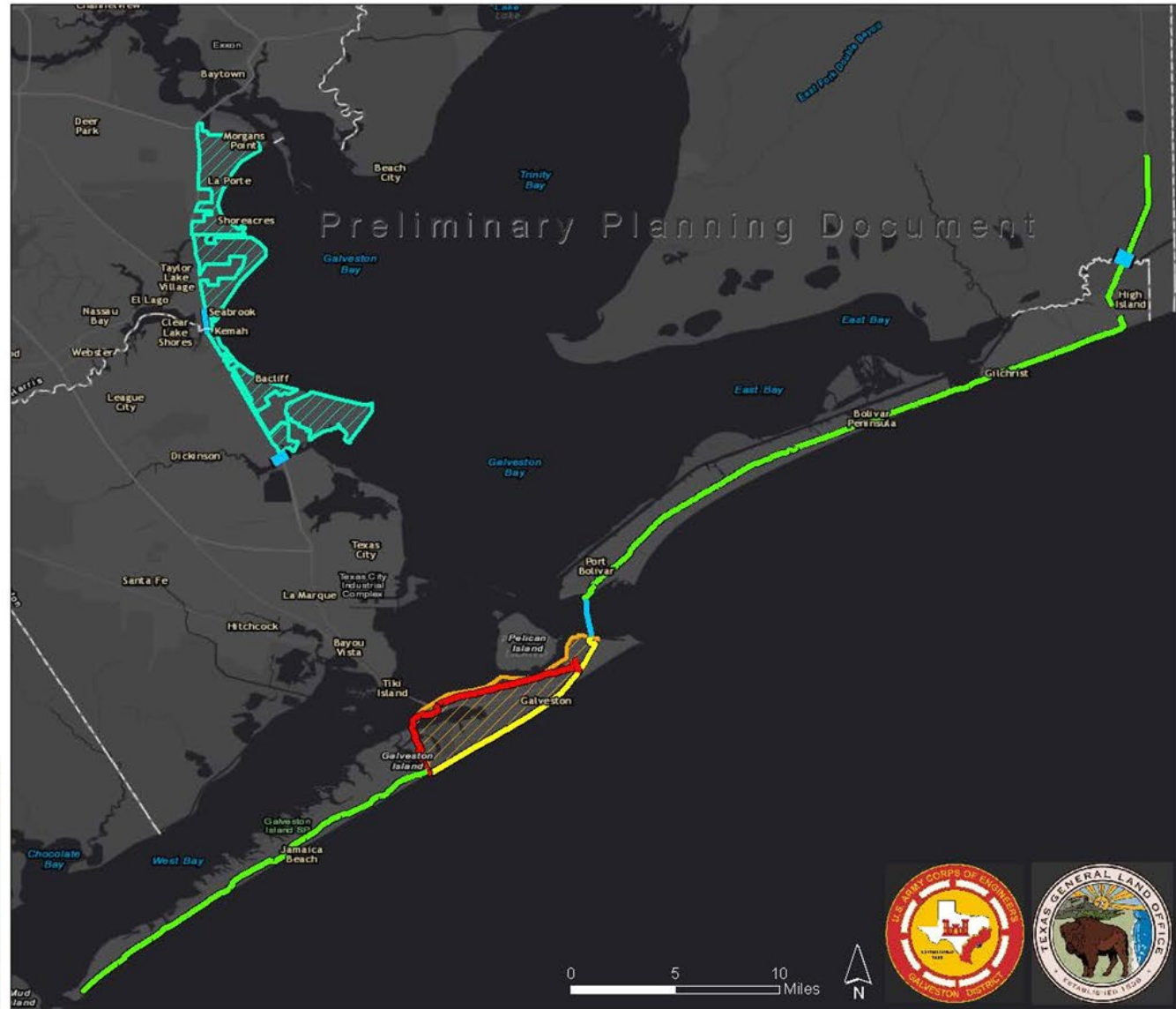
2021 USACE Alternative A – Coastal Barrier/Non-Structural System

Coastal Texas Protection and Restoration Feasibility Study

Alternative A

-  Navigation and Environmental Gates
-  Levee/Floodwall
-  Galveston Ring Levee*
-  Galveston Seawall Improvements
-  Galveston Island*
-  Nonstructural Improvements

* One or both of these features may be selected.



Remarkably, Ike Dike has evolved from highly ridiculed concept to the expected approval of largest Corps project ever built in the US

Time to take advantage of self-evident phase

- Technically – Serious Flaws in USACE Report

 - Inadequate effective height of coastal barrier

 - Failure to close San Luis Pass

 - Rainfall rates compromise secondary measures - Ring Levy and Bay

 - Costs questionable

 - Pilots concerned about 2 gate system

Leads to inadequate protection causing death and destruction and would fail to reduce federal flood insurance rates

Time to take advantage -2

USACE issued 2 draft reports

Over 100-page critique sent to USACE and on Ike Dike website

Pretty much ignored by Corps in final report

Final report issued and sent up for Chief's report to Congress

Chief will send saying its in the national interest

Will allow for federal authorization and appropriations

But still need changes in design

Need Organization that can deal with Corps

Time to take advantage - 3

- Texas-formed Gulf Coast Protection District, a powerful organization capable of influencing the USACE. The District is now responsible for raising 35% state construction match and solely responsible for ALL Operational and Maintenance costs over the life of the Ike Dike
- The governor has made his 6 appointments to the Districts Board and the 5 member counties, Orange, Jefferson, Chambers, Harris and Galveston, have made appointments.
- Had an organizational meetings, awaiting initial funding of \$200M from Texas Legislature, most monies will come from District's taxing authority

Members Gulf Coast Protection District

- Three of the Governor's appointments, Bob Mitchell, Bay Area Houston Economic Partnership (BAHEP), Sally Bakko, City of Galveston, and Michel Bechtel, City of Morgan's Point, regularly meet monthly at BAHEP's International Maritime Advisory Committee meeting, chaired by Texas A&M, and are well versed in the status of the USACE study and the Ike Dike concept.
- Bechtel elected president, Mitchell vice president, Bakko Asst Secretary.
- Nicole Sunstrum, long-term senior staff for Senator Larry Taylor, is the executive director.

Bottom Line

- The District has the State leadership role and a significant challenge – designing and building the barrier with the USACE, then operating, maintaining and updating it for many years – probably over a century
- Needs a lot of independently verified information to deal successfully with USACE and to develop its management policies and structure
- Texas A&M and Dutch partners providing temporary help by providing some of the needed information using independent experts and funding sources

Bottom Bottom Line

- Been working on the Ike Dike for 13 years and this is the first time that I believed that it is going to be built
- Personally at 78, an appropriate and fortuitous time to pass on to next round of Texas A&M researchers

For More Information

- <https://www.tamug.edu/ikedike/>
- <https://idrt.tamug.edu>
- <https://www.tamug.edu/ctbs/>