



Puerto Rico



The University of
The West Indies



Organization of
American States

USAID HURRICANE LENNY RECONSTRUCTION

CDCCM

PROFESSIONAL
DEVELOPMENT TRAINING
IN
COASTAL INFRASTRUCTURE

CDCM TRAINING 2001

OBJECTIVES

- Address gaps in Coastal Infrastructure Design, Construction and maintenance in the Caribbean
- Strengthen the ability of Countries to withstand coastal hazards and respond effectively
- Increase the attention given to maintenance of coastal infrastructure
- Increase the understanding of coastal processes

COURSES

The following programme of courses (and their delivery locations) have been developed to achieve the objectives:

1. Coastal Zone Management (Antigua & St. Lucia)
2. Coastal Defense Systems (St. Lucia & Dominica)
3. Monitoring and Maintenance of Coastal Infrastructure (Grenada)
4. Design of Marine Structures (Trinidad & Tobago)



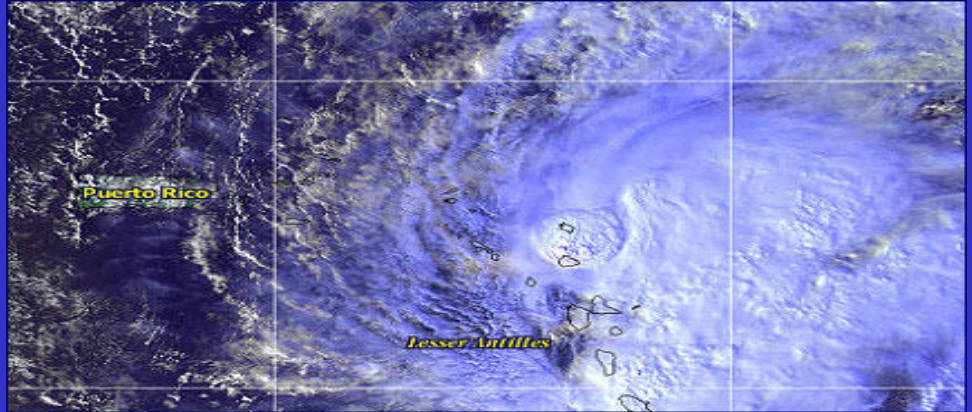
In November 1999, Hurricane Lenny formed just south of Jamaica and traveled on a northeast track through the Leeward Islands, turning into a Category 4 Hurricane and generating winds speeds in excess of 240 kph (150 mph), and causing around US\$270M in damage to coastal infrastructure, communities and businesses. Much of the damage occurred in the small island economies of the four Eastern Caribbean countries, Antigua & Barbuda, Dominica, St. Lucia and Grenada.

Engineers, Planners, Surveyors, Hoteliers and Educators from the Caribbean Region are invited to participate in a Professional Development Training Programme in Coastal Infrastructure to be delivered between June and September 2001. The programme will be delivered by a joint team of the Departments of Civil Engineering from The University of The West Indies and Old Dominion University of Virginia, USA, and the Coastal Hydraulics Laboratory, US Armed Corps of Engineers.

CDCM ORGANISATION

ADVISORY BOARD

Mr. Jan Vermeiren (OAS)
Mr. Mansfield Blackwood (USAID)
Mr. Compton Deane (Consultant)
Mr. Raymond Charles (UWI)
Mr. Winston Rajpaulsingh (UWI)
Dr. Gan. Shrivastava (UWI)
Dr. Derek Gay (UWI)
Mr. Vincent Cooper (UWI)
Dr. David Smith (Consultant)
Mr. Norman Allyn (Consultant)



CONTACTS

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UWI
3. Mr. R. Charles
Project Director,
Dept. Civil Engineering
UWI

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PARTICIPATING INSTITUTIONS: Organisation of American States, University of the West Indies, Old Dominion University, Virginia, and Coastal Hydraulics Laboratory, US Armed Corps of Engineers.

ATTENDANCE: Candidate participants from Antigua & Barbuda, Dominica Grenada and St. Lucia, who are public servants and are nominated by their respective Governments, will have the costs of their attendance fully sponsored by the OAS. Governments may nominate up to five participants per course.

Private Sector and NGO candidates will have to meet the costs of their attendance including a registration fee of US\$1,000.

REGISTRATION: Registration forms may be obtained on this web site or from the project contacts in the Engineering Institute, UWI. A maximum number of 30 persons per course will be allowed.

COASTAL ZONE MANAGEMENT

TARGET: PLANNERS, SURVEYORS, ENGINEERS, ARCHITECTS, HOTELIERS, COASTAL STAKEHOLDERS



DAY	SESSION	TOPIC	PRESENTER
1	Morning	<ul style="list-style-type: none"> • Elements of Coastal Management 	UWI
	Afternoon	<ul style="list-style-type: none"> • Coastal Hazards and Vulnerability • Climate Change 	UWI
2	Morning	<ul style="list-style-type: none"> • Coastal Processes 	UWI & ODU/CHL
	Afternoon	<ul style="list-style-type: none"> • Beach Management 	ODU/CHL
3	Morning	<ul style="list-style-type: none"> • Marine Biological Issues • Watershed Management & Coastal Quality 	UWI
	Afternoon	<ul style="list-style-type: none"> • EIA • Data Collection and Analysis 	ODU/CHL
4	Morning	<ul style="list-style-type: none"> • Land Use Planning 	UWI
	Afternoon	<ul style="list-style-type: none"> • Legislative Environment & Policy 	UWI
5	Morning	<ul style="list-style-type: none"> • Clinic 	Panel
	Afternoon	<ul style="list-style-type: none"> • Closure & Presentation of Certificates 	Coordinator: Mr. V. Cooper

COASTAL DEFENSE SYSTEMS I

TARGET: CIVIL ENGINEERS, PLANNERS



DAY	SESSION	TOPIC	PRESENTER
1	Whole Day	<ul style="list-style-type: none">Coastal Hazards and Vulnerability	UWI
2	Whole Day	<ul style="list-style-type: none">Coastal Processes	UWI & ODU/CHL
3	Morning	<ul style="list-style-type: none">Coastal Mapping & Data Collection	ODU/CHL
	Afternoon	<ul style="list-style-type: none">Sources and Uses of Coastal Hazard Information	UWI
4	Whole Day	<ul style="list-style-type: none">Introduction to Coastal Defense Systems	UWI
5	Morning	<ul style="list-style-type: none">Clinic	Panel
	Afternoon	<ul style="list-style-type: none">Closure & Presentation of Certificates	Coordinator: Dr. G. Shrivastava

COASTAL DEFENSE SYSTEMS II

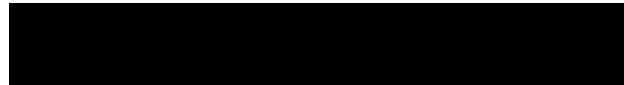
TARGET: CIVIL ENGINEERS



DAY	SESSION	TOPIC	PRESENTER
1	Whole Day	<ul style="list-style-type: none">Codes of Practice & Design Criteria	ODU/CHL
2	Whole Day	<ul style="list-style-type: none">Design of Coastal Roads and Defense Works	UWI & ODU/CHL
3	Whole Day	<ul style="list-style-type: none">Design of Coastal Defense Works	UWI ODU/CHL
4	Whole Day	<ul style="list-style-type: none">Drawings Specifications & Contract Documents	UWI ODU/CHL
5	Morning	<ul style="list-style-type: none">Field Visit	UWI
	Afternoon	<ul style="list-style-type: none">2-hr ClinicClosure & Presentation of Certificates	Panel Coordinator: Dr. G. Shrivastava

MONITORING AND MAINTENANCE OF COASTAL INFRASTRUCTURE

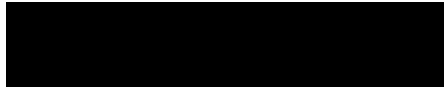
TARGET: CIVIL ENGINEERS, PLANNERS, SURVEYORS, COASTAL STAKEHOLDERS



DAY	SESSION	TOPIC	PRESENTER
1	Morning	<ul style="list-style-type: none">• Materials in a Marine Environment	ODU/CHL
	Afternoon	<ul style="list-style-type: none">• Monitoring of Coastal Erosion• Vulnerability	ODU/CHL
2	Whole Day	<ul style="list-style-type: none">• Maintenance Management Systems• Replacement Analysis	ODU/CHL
3.	Morning	<ul style="list-style-type: none">• Introduction to Data Acquisition and Remote Sensing	UWI
	Afternoon	<ul style="list-style-type: none">• Clinic	Panel
4.	Morning Afternoon	<ul style="list-style-type: none">• Clinic/Workshop• Closure & Presentation of Certificates	Panel Coordinator: Mr. R. Charles

DESIGN OF MARINE STRUCTURES

TARGET: CIVIL ENGINEERS



DAY	SESSION	TOPIC	PRESENTER
1	Whole Day	<ul style="list-style-type: none">• Hazard Assessment and Risk Analysis	Dr. C. Stere
2	Morning	<ul style="list-style-type: none">• Codes of Practice and Design Standards	ODU
	Afternoon	<ul style="list-style-type: none">• Design of Marine Structures	Dr. C. Stere
3	Whole Day	<ul style="list-style-type: none">• Design of Marine Structures	Dr. C. Stere
4	Whole Day	<ul style="list-style-type: none">• Case Studies; Failures and Successes	OAS; CDB; ODU
5	Morning	<ul style="list-style-type: none">• Case Studies; Failures and Successes	Dr. D. Smith
	Afternoon	<ul style="list-style-type: none">• Closure & Presentation of Certificates	Coordinator: Dr. D. Gay

CDCM TRAINING REGISTRATION FORM

Government Nominees

COUNTRY:

MINISTRY/AGENCY:

ADDRESS: Email:

COURSE TITLE:

COURSE LOCATION:

NOMINEE:

CURRENT POST:

QUALIFICATIONS:

AGE:

NOMINATING OFFICIAL:

SIGNATURE:

DATE:

PLACE
OFFICIAL STAMP
HERE

CDCM TRAINING REGISTRATION FORM

Private Sector Applicants

COUNTRY:

COMPANY/AGENCY:

ADDRESS: Email:

COURSE TITLE:

COURSE LOCATION:

NOMINEE:

CURRENT POST:

QUALIFICATIONS:

AGE:

METHOD OF PAYMENT: (BANK DRAFT PREFERRED)
(US\$1,000)

SIGNATURE:

DATE: