



Training Program

on

DISASTER RESILIENT WATER INFRASTRUCTURE

For Engineers
of

GWIL, GWSSB, WASMO, Municipal
Corporations & Municipalities of GoG

Date- 18-19 July 2024

Venue: GIDM, B/h PDEU, Raysan, Gandhinagar,
Gujarat



Tentative Schedule

Day – 1: 18 th July 2024			
Time	Session	Session Details/ Objectives	Resource
8.30-9.30	Breakfast		
9.30-10.00	Registration	<ul style="list-style-type: none"> Online registration of participants Training kit distribution Facility briefing Safety briefing 	GIDM
10.00-10.30	Pre-Test & Introduction of Participants	<ul style="list-style-type: none"> 15 Question online Test on DRR Establishment of Ground rules Introduction of participants 	GIDM
10.30-10.45	About GIDM	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> History & Establishment of GIDM Governance mechanism Core areas of GIDM Programs and Achievements 	GIDM
10.45-11.45	Basics of Disaster Risk Management	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> 'Disaster Risk' through Hazards, Exposure, Vulnerability and Capacity components Disasters are NOT natural and need for intervention and planning Disaster Management Cycle Conceptual framework of Disaster Risk Reduction 	GIDM
11.45-12.00	Tea break		
12.00 -13.00	Understanding on Disaster Resilient Water Infrastructure	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> Resilient Infrastructure-Concepts & trends Overview of water infrastructure and their vulnerabilities Impact of climate change on water infrastructure Cascading effect on population due to risk associated with service interruptions 	GIDM
13.00-14.00	Lunch break		
14.00-15.30	Enhancing Resilience in Water	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> Effects of hazards on treatment plants 	KCPL, Ahmedabad

	Treatment Facilities	<ul style="list-style-type: none"> Layouting and design considerations of various units of treatment plants [Seismic, floods, cyclone, Tsunami, extreme weather etc.] Use of advanced materials and construction methods in treatments plants Operation & maintenance strategies for resilience 	
15.30-15.45	Tea break		
15.45-16.45	Strengthening Water Quality Resilience	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> Water quality parameters (Physical, Chemical, biological) Water quality standards and regulations Water quality monitoring & testing methods Common water borne diseases 	Nirma University
16.45-17.45	Fire Safety Hands on Exercise	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> Types of Fire Procedure to use fire extinguisher Fire risk assessment Hands on use of fire extinguisher 	GSFA
Day -2: 19th July 2024			
9.00-10.00	Breakfast		
10.00-11.30	Integrating Resilience into Water Conveyance Systems	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> Overview of water conveyance systems Design of water conveyance systems (Pipe material, size, layout pump, valve etc) Pipeline inspection & maintenance Emerging technologies in water conveyance 	VPEP, Ahmedabad
11.30-11.45	Tea break		
11.45-13.00	Building Resilience in Water storage infrastructure	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> Effects of hazards on water storage infrastructure (overhead tank, sump, wells, tanks, etc.) Layout and design consideration of water storage infrastructure [Seismic, floods, cyclone, Tsunami, extreme weather etc.] 	CEPT

		<ul style="list-style-type: none"> • Operation & maintenance strategies for resilience • Emerging technologies in water storage 	
13.00-14.00	LUNCH break		
14.00 -15.15	Resilient Wastewater Infrastructure	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> • Effects of hazards on sewerage systems • Layout and design consideration of for sewerage systems (Materials, joints, shapes, loads, etc.) • Operation & maintenance strategies for resilience • Emerging technologies in water storage 	IIT-Gandhinagar
15.15-15.30	Tea break		
15.30-16.30	Resilient Pumping Systems for the Future	<p>At the end of the session participants would be able to understand:</p> <ul style="list-style-type: none"> • Types of Pumps & their choice • Multiple pump system • System head curve • Selection of pumping units • Operation & maintenance of pumps 	GIDM
16.30-17.00	Valedictory Session	<ul style="list-style-type: none"> • Post-test • Feedback • Certificate distribution • Group photo 	GIDM
