

1. Record Nr.	UNINA9910366626603321
Titolo	Resilience of Large Water Management Infrastructure : Solutions from Modern Atmospheric Science // edited by Faisal Hossain
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-26432-7
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XV, 124 p. 42 illus., 37 illus. in color.)
Disciplina	363.7394 363.73946
Soggetti	Water - Pollution Hydrology Atmospheric science Civil engineering Climatic changes Sustainable development Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution Hydrology/Water Resources Atmospheric Sciences Civil Engineering Climate Change/Climate Change Impacts Sustainable Development
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Resilience Of Large Water Management Infrastructure -- Chapter 2. Survey Of Water Managers For 21st Century Challenges -- Chapter 3. Current Approaches For Resilience Assessment -- Chapter 4. Application Of Numerical Atmospheric Models -- Chapter 5. Infrastructure-Relevant Storms Of The Last Century -- Chapter 6. Sensitivity Of Probable Maximum Precipitation (PMP) -- Chapter 7. A Recommended Paradigm Shift In The Approach To Risks To Large Water Infrastructure In The Coming Decades -- Chapter 8. Safety Design of

Sommario/riassunto

Infrastructure that manages our water resources (such as, dams and reservoirs, irrigation systems, channels, navigation waterways, water and wastewater treatment facilities, storm drainage systems, urban water distribution and sanitation systems), are critical to all sectors of an economy. Realizing the importance of water infrastructures, efforts have already begun on understanding the sustainability and resilience of such systems under changing conditions expected in the future. The goal of this collected work is to raise awareness among civil engineers of the various implications of landscape change and non-climate drivers on the resilience of water management infrastructure. It identifies the knowledge gaps and then provides effective and complementary approaches to assimilate knowledge discovery on local (mesoscale)-to-regional landscape drivers to improve practices on design, operations and preservation of large water infrastructure systems.

---