

Environmental Division

Water Resources Engineering

Environmental Engineering

Industrial Hygiene

Engineering Management

Environmental Sustainability

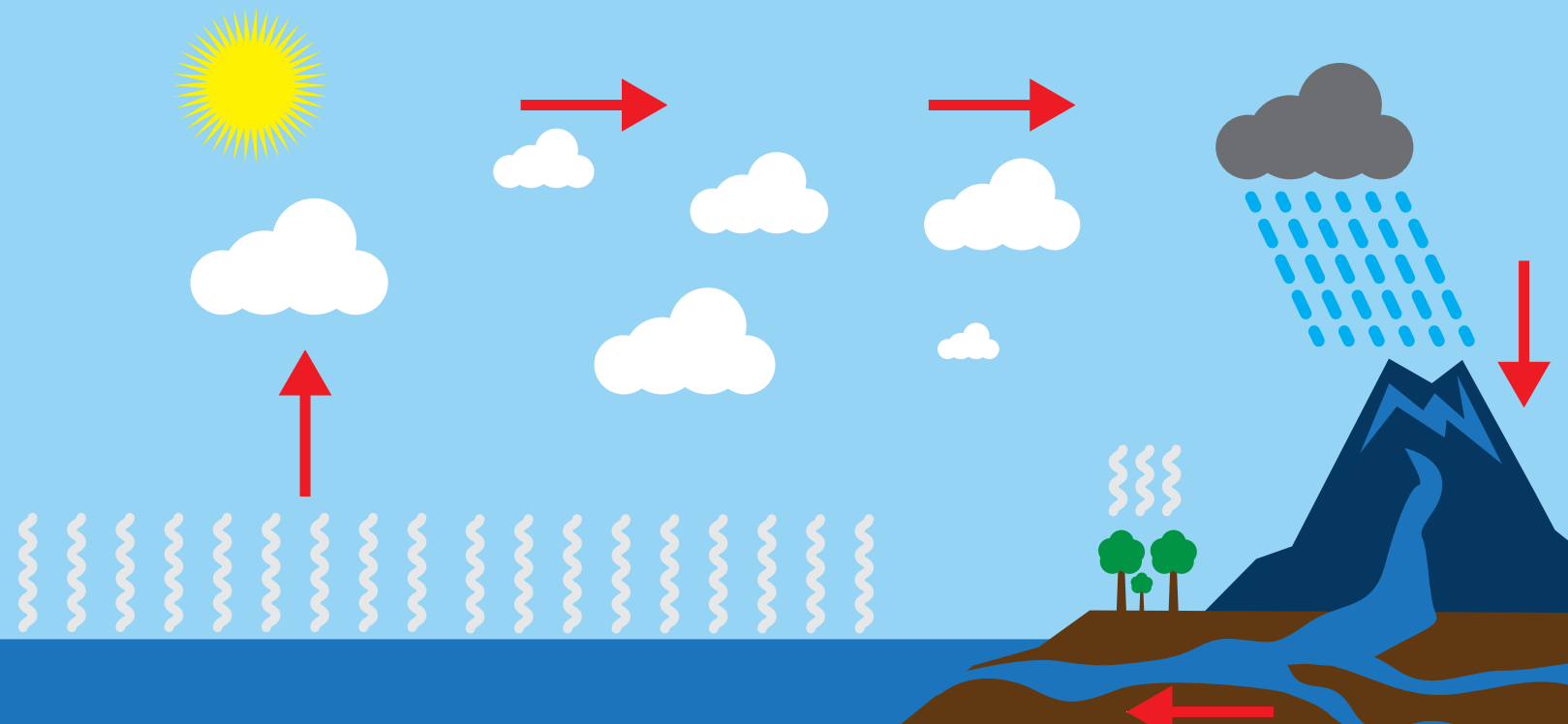
Engineering Sustainability


Compliance & Permitting

Field Services



Water Resources Engineering




 Water Resources Engineering is the quantitative study of the hydrologic cycle (the distribution and circulation of water linking the earth's atmosphere, land and oceans) and involves the design and analysis of engineering structures, systems, and operations/processes a) to manage water resources in order to ensure a continuous supply of clean water for all required purposes, and b) for collecting and transporting stormwater and wastewater. It also focuses on uses, protection, conservation and restoration of water resources and addresses methods for controlling water to avoid water-related damage and catastrophes.

What we offer:

- Water resources systems design, analysis, management and optimization
- Surface and groundwater hydrology and floodplain analysis
- Hydraulics and hydraulic structures
- Wetlands and erosion control studies

Hydraulic Engineering is the application of fluid mechanics to a natural or manmade water transportation system.

Environmental Engineering

 Environmental Engineering is the integration of mathematics, sciences and engineering principles to improve the natural environment, to provide clean water, air, and land for human habitation and for other organisms, to clean up pollution sites, and to control wastes using the properties of matter and energy for a sustainable environment.


What we offer:

- Ambient air quality monitoring (as per EPA/NAAQS for TSP, TSP-Lead, PM_{10} / $PM_{2.5}$, NO_2 , SO_2 , CO , O_3 , etc.) and control
- Indoor and workplace air quality monitoring (as per OSHA, NIOSH, ACGIH, ASHRAE, etc.) and control
- Environmental, community and occupational noise monitoring, exposure assessment and control
- Potable water and wastewater treatment and pollution control
- Surface water, stormwater and groundwater sampling, analysis and contamination remediation
- Surface and subsurface soil investigation
- Environmental audits and site assessments
- Environmental Impact Statements



Industrial Hygiene




 Industrial Hygiene is defined as the science dedicated to the anticipation, recognition, evaluation, communication and control of environmental stressors in, or arising from, the work place that may result in injury, illness, impairment, or affect the well-being of workers and members of the community. These stressors are divided into the categories physical, chemical, biological, ergonomic and psychosocial. Industrial hygiene is the science of protecting and enhancing the health and safety of people at work and in their communities. The profession of industrial hygiene uses strict and rigorous scientific methodology and often requires professional experience in determining the potential for hazard and evaluating exposures or risk in workplace and environmental studies.

What we offer:

- Personal exposure assessment
- Implementation of engineering, administrative and hygiene controls
- Microbial investigation
- Site Specific Health and Safety Plans (HASPs)
- Environmental, hygiene and safety oversight and compliance certification
- Industrial hygiene program management
- Hazard recognition, evaluation and control
- Engineering Preparedness and response
- Industrial hygiene performance metrics
- Hazardous waste operations and emergency response (HAZWOPER)
- Incident response

Engineering Management

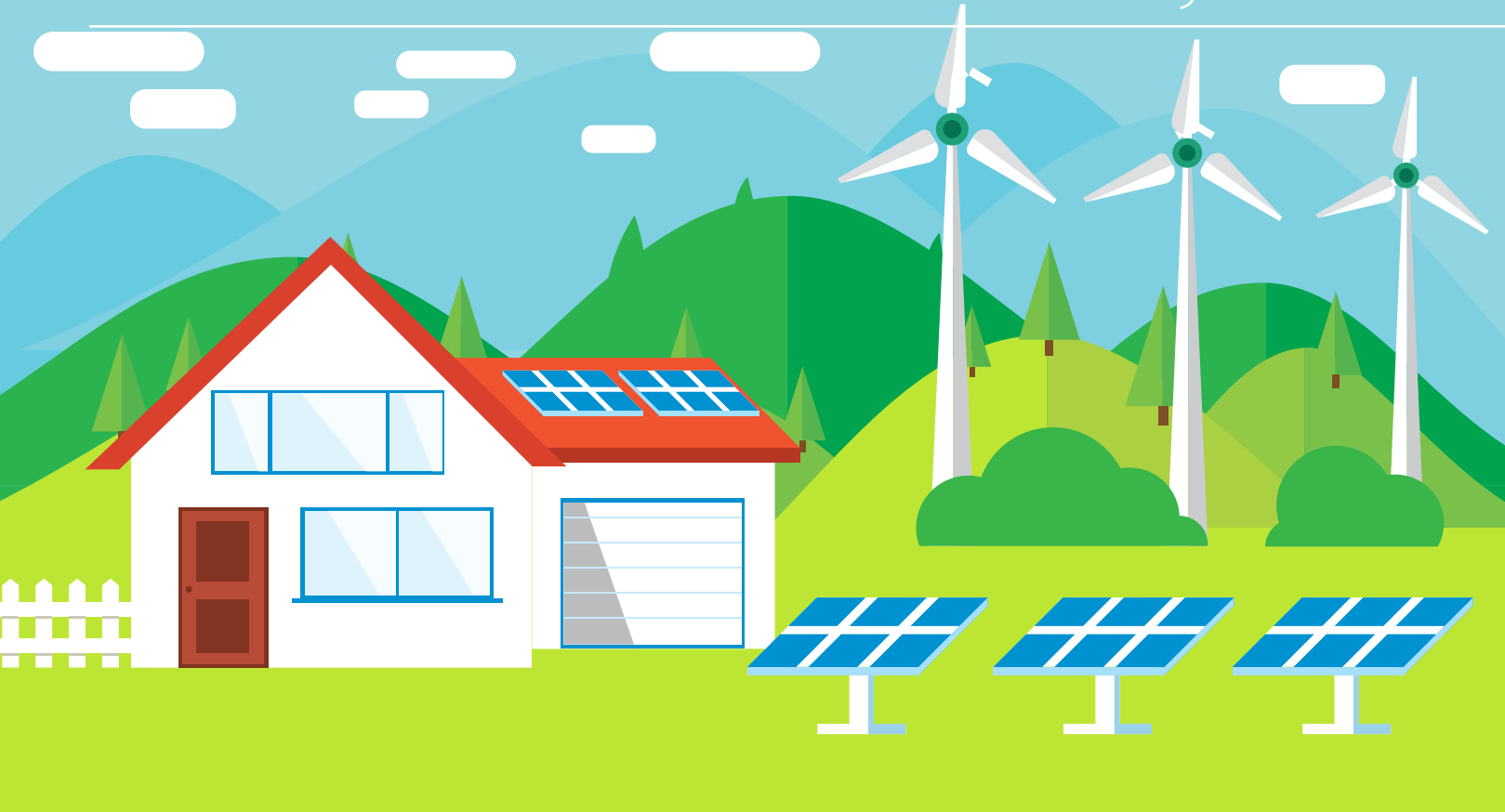
 Engineering Management is the process of reaching organizational goals by working with and through people and other organizational resources, and has the following characteristics: a) it is a process or series of continuing and related activities, b) it involves and concentrates on reaching organizational goals, c) it reaches these goals by working with and through people and other organizational resources. The basic management functions that make up the management process are planning, organizing, influencing and controlling.

What we offer:

- Environmental permitting, reviews, inspections and decision making as per NPDES/SPDES, SEQR/CEQR and SWPPP
- Quality assurance and quality control
- AST/UST permitting, design and abatement
- Hazardous operations emergency response
- Hazardous, universal, municipal, medical/infectious waste management
- Toxic and hazardous materials management
- Grant writing



Environmental Sustainability



Environmental **S**ustainability is a state in which the demands placed on the environment can be met without reducing its capacity to allow all people to live well, now and in the future. It can be achieved at rates of renewable resource harvest, pollution creation and non-renewable resource depletion that can be continued indefinitely.

- For renewable resources - the rate of harvest should not exceed the rate of regeneration (sustainable yield);
- For pollution - the rates of waste generation from projects should not exceed the assimilative capacity of the environment (sustainable waste disposal); and
- For nonrenewable resources - the depletion of the nonrenewable resources should require comparable development of renewable substitutes for that resource.

What we offer:

Sustainability assessment of the feasibility of alternatives considering factors such as

- Risk/Reliability
- Resiliency
- Life Cycle Analysis
- Value Engineering
- Energy Conservation
- Constructibility
- Schedule Certification

The initiative areas of **S**ustainability are:

- Energy – green procurement implementation
- Waste – and pollution prevention
- Water – resource management

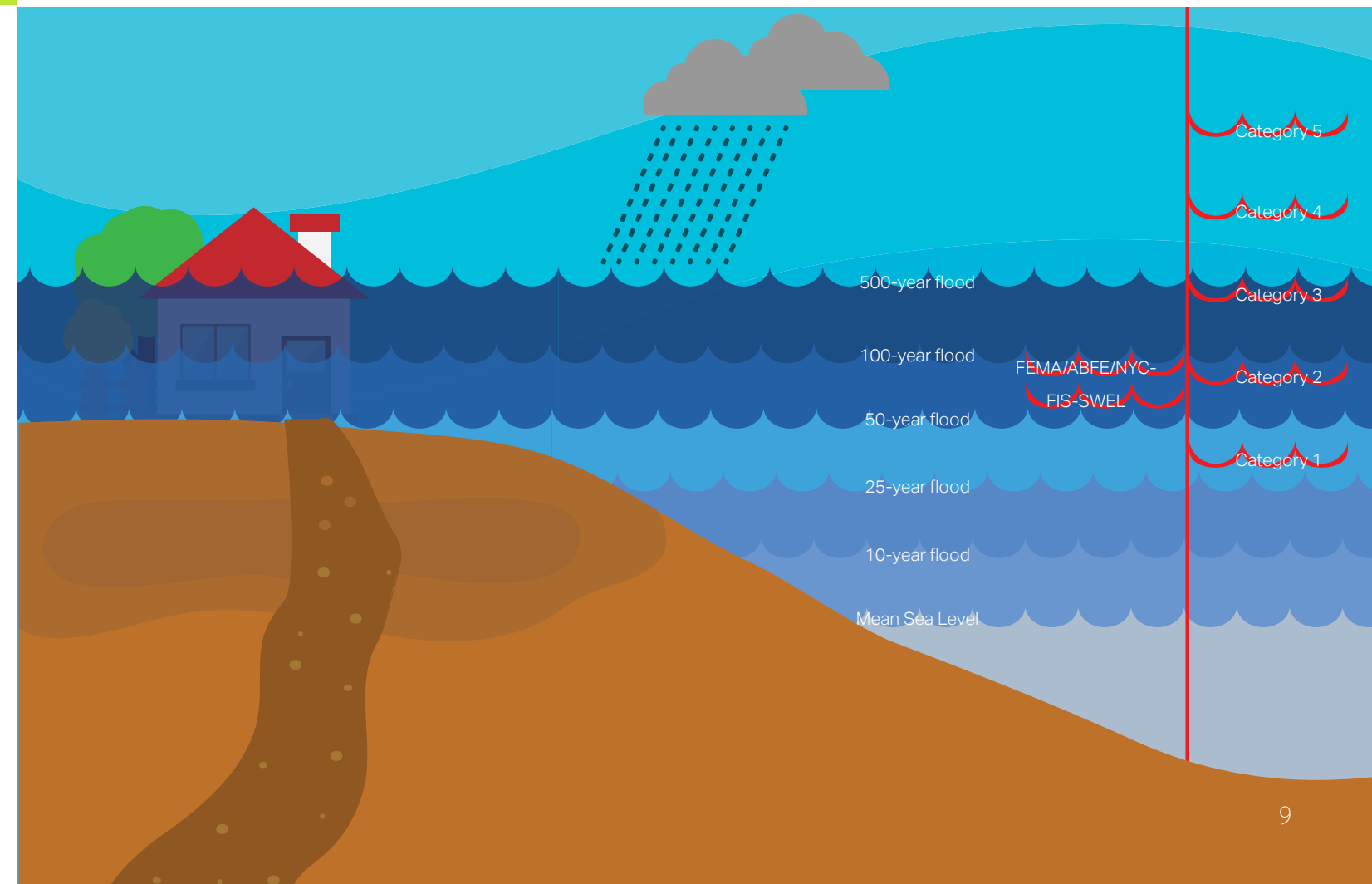
Engineering Resiliency

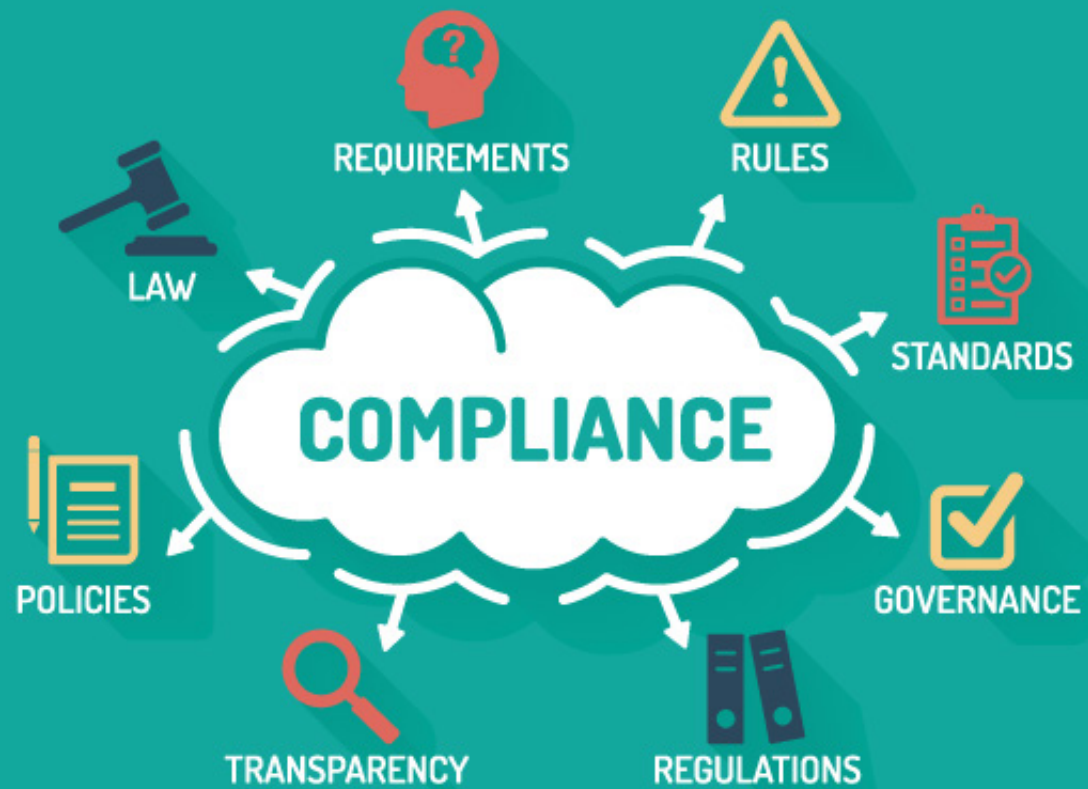


Resiliency is the capacity to adapt to stress and change, tolerate changes, and reduce the magnitude and/or duration of disruptive events while maintaining their original state. No matter how well designed and constructed a structure or a system product is, failure of one sort or another is inevitable eventually. Resiliency is a measure of a system's ability to bounce back from a failure to continue to offer some level of performance (possibly not the original level of performance).

What we offer:

- Coastal and inland (riverine) flood impact analysis and mitigation
- Extreme events risk analysis and assessment
- Planning of flood control structures





What we offer:

- Inspections
- Investigations
- Assessment
- Sampling
- Monitoring
- Oversight

What we offer:

Compliance with all site -, and project - specific applicable federal, state and city/local codes, rules and regulations, as well as contract specifications.

- Worker Protection Plan / Health and Safety Plan
- Spill Response Plan
- Emergency Demobilization Plan
- Environmental Protection and Project Cleanup Plan
- Waste Management Plan
- RCRA Emergency Contingency Plan
- RCRA Hazardous Waste Area Closure Plan
- Hazardous and Universal Hazardous Waste Management Plan
- Noise and Dust Mitigation Plan
- Regulatory Compliance Management Plan
- Risk Assessment Plan
- Hazardous Materials Assessment

- RCRA hazardous Waste Management, Contingency and Closure Plans
- NYSDEC
 - Protection of Waters Permits
 - Coastal Erosion Management Permits
 - Freshwater Wetlands Permits
 - Tidal Wetlands Permits
 - State Pollution Discharge Elimination Systems (SPDES)
 - Stormwater
 - Water Withdrawal Permits
 - Long Island Well Permits
 - Air Facility Permits
 - Solid Waste Management Permits
 - Hazardous Waste Management Permits
 - Radiation Control
- NYCDEP
 - Construction Noise Mitigation Plan (CNMP)
 - Alternative CNMP
 - Construction Dust Plan

