

Bahamas Updated Building Codes and Coastal Infrastructure Design Guidance

Name of legal entity	Country	Overall project value (US\$)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start/end)	Name of partners if any
Sustainable Seas Ltd	Bahamas	200,000	15%	1	Ministry of Public Works	the Inter-American Development Bank (IDB)	February 2022 December 2022	Mott MacDonald IBS

Detailed description of project

The archipelago of the Bahamas consists of 700 small low-lying islands, with 80% of land below sea level. The Bahamas is dominated by coastal and marine environments which is a key element in the identity and economy of the Bahamas. It is heavily dependant on the tourism industry as 45% of its annual GDP is obtained through the industry. The coastal and marine environments also provide many other benefits to human well-being such as coastal protection and carbon sequestration. However the Bahamas is highly vulnerable to natural disasters such as hurricanes which are generally coupled with severe coastal flooding and erosion. A national sea level rise of 1m would put 36% of tourism properties at risk. In order to address this issues the GOBH needs improved access to baseline data in addition to strategic level studies that set out policies and holistic management plans .

As part of Component 3 (Institutional strengthening for Coastal Risk Management) of the broader Climate-Resilient Coastal Management and Infrastructure Program (BH-L1043), the aim of this consultancy is to design and updating of policy and planning tools (i.e., SMPs, building codes, coastal and natural infrastructure design guidance) to improve and coordinate routine planning exercises for reducing coastal risk and vulnerability

It consists of 3 related sub-objectives: carry out a comprehensive assessment and comparative analysis of the contents of both the BBC 2003 and other global standards; incorporate appropriate coastal climate hazard exposure and risk, inclusive of design guidance for coastal infrastructure along with clarified inspection guidelines and incorporate appropriate adaptation standards or guidelines to improve climate resilience; adaption of standards to complement the Persons with Disabilities. The guidance provided in this project will be designed to assist public authorities and private clients when commissioning and approving coastal studies and works.

Type of services provided

Jonathan McCue on behalf of Sustainable Seas Ltd was appointed the role as coastal processes specialist/engineer, in which he offered expertise as part of a team to carry out the following activities:

- Construction of an interception report and work plan, the work plan included a methodology devised to satisfy the deliverables using allotted resources and timeline. The interception report included a stakeholder engagement strategy which identified a stakeholder map of priority stakeholders to be consulted.
- An assessment of current national framework for building construction, which involved the review and comparison analysis of the BBC 2003, Construction Manual for Small Building sand the IBC 2018, Florida Building Code 2017 with respect to the legal and policy framework. Along with a production of an assessment report of the findings.
- Assessment of current framework for coastal infrastructure and recommendations which included evaluation of existing methods in Bahamas along with recommendations of new methods.
- Development of an updated building code with coastal infrastructure design guidance which incorporated coastal infrastructure guidance for development and implementation along with recommendations.
- A final stakeholder consultation, including public authorities, engineers and other stakeholders.