



EMPLOYMENT OPPORTUNITY:

GIS MAPPING & SPATIAL ANALYST

Background:

In November 2021, the Government of Belize (GoB) and The Nature Conservancy (TNC) signed a “blue bond” debt conversion agreement enabling the country to reduce its debt burden and increase its investment in marine conservation. Key milestones including the development, approval, and implementation of a Marine Spatial Plan (MSP) have been outlined in the Conservation Commitments under the Conservation Funding Agreement (CFA). On the 19th of October 2022, Belize’s MSP process was officially launched by the Government of Belize, marking the achievement of Milestone 3 under the CFA. The “Belize Sustainable Ocean Plan” (BSOP) was unveiled at the launch event as the name for Belize’s MSP, which was selected by the public through an open voting process.

The Coastal Zone Management Authority and Institute (CZMAI), under the Ministry of Blue Economy and Civil Aviation, has been designated as the government’s lead agency for the Marine Spatial Plan (MSP) process with funding support from the Belize Fund for a Sustainable Future (BFSF).

As part of this exciting initiative, a suitably qualified **GIS Mapping & Spatial Analyst** is being recruited to assist CZMAI’s Coastal and Marine Data Centre with required spatial mapping and analyses support for the MSP process in Belize.

Summary of Position:

The GIS Mapping & Spatial Analyst will be responsible for working along with CZMAI’s Coastal and Marine Data Centre staff to conduct spatial mapping and analyses to support multi-sector and multi-stakeholder input throughout the decision-making process and utilize GIS and marine spatial planning tools to inform the MSP process and develop the Belize Sustainable Ocean Plan (BSOP). He/she will also support the MSP Process Lead, MSP Science Lead, and TNC’s MSP Specialist in coordinating outputs. The GIS Mapping & Spatial Analyst will be supervised by, and report to the MSP Process Lead. This is a contractual position, subject to renewal based on satisfactory performance and funding availability.

Key Duties and Responsibilities:

Mapping & Spatial Analyses

- Analyse historical and current spatial datasets to determine trends resulting from multi-sectoral use of Belize’s ocean space.
- Provide strategic and technical support during all the relevant stages of the MSP process requiring data mapping, analysis, validation and visualization to support decision making.
- Lead the creation of a data collection work plan to guide the spatial data acquisition process and management of datasets.
- Support the relevant government and non-governmental MSP stakeholders to ensure necessary spatial data is acquired and validated in a timely manner, non-spatial information is converted to spatial data layers and data curation is conducted as required.



- Identify and conduct mapping of data providers and existing datasets while noting data gaps, overlaps and data discrepancies.
- Utilize ArcGIS desktop, ArcGIS Pro, ArcGIS Online and other marine spatial planning tools for data visualization and the overall decision-making process.
- Create high-quality static and interactive maps, graphic reports and charts showing the spatial distribution of various kinds of multi-sectoral use data.
- Prepare reports based on geospatial analysis findings.
- Present relevant information in an understandable way in various meetings and presentations to multi-stakeholder groups.
- Conduct any duties or tasks in relation to GIS and spatial mapping and analysis for the MSP process and as assigned by the CZMAI.

Development and Maintenance of the BSOP Geodatabase and Online Data Viewer Tool

- Design, create and maintain all geospatial data under the Marine Spatial Planning Process within geospatial databases.
- Organize and input geospatial data into databases, and while maintaining geospatial data collected under the process while ensuring data standards are maintained and adhered to.
- Manage and catalogue high spatial and spectral resolution raster and vector data from a variety of satellite, and aerial platforms.
- Convert geo-referenced physical maps into digital form for spatial analysis.
- Upload, and maintain spatial data layers within the online data viewing tool for the MSP process.
- Ensure spatial data from multiple sources are cleaned and manipulated to ensure data integrity and accuracy.

Required Qualifications and Experience:

- Bachelor's degree in Geographic Information Systems, Natural Resource Management, or a related field.
- Demonstrated experience in spatial modelling, mapping and overlay analysis and 3-5 years of working knowledge and experience of geospatial devices, and software tools.
- Experience in managing a digital library of geographic maps, and data for various file types.
- Demonstrated experience in creating scenarios and evaluating trade-offs for decision making.
- Ability to discover patterns and trends through the analysis of spatial data and knowledge of modern cartographic standards and principles.
- Detail-oriented and excellent collaboration, communication and interpersonal skills and ability to work independently and as a part of a team.



- Proficient in the methods, practices, and techniques of advanced spatial modelling, including raster and vector analysis and cartography.
- Knowledge of natural resources management, sectors, users of Belize's ocean space, and/or other related fields.
- Strong, effective communication skills for multiple audiences including communicating with multi-stakeholder groups.
- Experience in the use of computers applications and software packages (MS Word, Excel, Photoshop, etc) as well as web-based management systems.
- At least three years' experience with ArcGIS desktop, ArcGIS Pro and ArcGIS Online.
- Experience in implementing & measuring plans/strategies.
- Excellent time management and organizational skills.
- Able to obtain and submit a valid permit to work in Belize, a recent Police Record and valid Driver's License prior to commencing employment, if offered the position.

Work Environment:

The GIS Mapping & Spatial Analyst will be based at the CZMAI office in Belize City. However, when necessary, he/she will be required to work/travel to domestically and/or internationally.

Salary:

Salary will be based on qualifications and experience.

Application Procedure:

Qualified and interested persons should submit a Letter of Application, Resume or Curriculum Vitae, Copies of Academic Records, and other relevant credentials, and Contact Details for Two (2) Referees. Incomplete applications or applications not meeting the requirements stated above **WILL NOT** be accepted.

Applications can be submitted via e-mail to the address below no later than FRIDAY 6th January 2023

Coastal Zone Management Authority and Institute
Princess Margaret Drive, P.O. Box 1884
Belize City, Belize
msspcoordinator@coastalzonebelize.org
RE: GIS Mapping & Spatial Analyst Post