

Position Description

GIS Specialist

This position is located within the Commonwealth of the Northern Mariana Islands (CNMI) Coastal Resources Management Office (CRM). CRM provides technical expertise and assistance for the planning, management, and monitoring of coastal resources in the CNMI and ensuring their sustainable use and development. CRM is made up of multiple branches that comprehensively address resource management issues in the coastal zone. These include Permitting, Enforcement, Outreach & Education, Non-Point Source Pollution (NPS), The Coral Reef Program, Natural Resource Planning, and Geographic Information Systems (GIS). CRM also takes an active role in interagency resource management and planning initiatives, including marine and coral monitoring, watershed management and conservation plans, and the CNMI Climate Change Working Group.

In support of these programs and its agency mission, CRM is recruiting for professionally qualified GIS personnel to assist with the implementation of computer and GPS technologies, databases, software applications and tools to produce an integrated geographic information system.

The GIS personnel must demonstrate adequate knowledge with data and process modeling. Under direct supervision of the Director, he/she will utilize GIS for the purpose of spatial data management and visualization, as well as organizing and enhancing existing systems. The GIS personnel will work within the CNMI GIS User Group to help direct GIS activities (data sharing, standardized coordinate and datum scheme, and update responsibilities). The position will assist other staff in the effort to install, implement, and manage the on-going updates of CRM data and information systems. The GIS personnel will respond to requests of users, and troubleshooting problems relating to software and hardware errors, as well as support and train other users as needed. The GIS personnel will provide IT support to CRM, including specifications of computers, printers, plotters and network connectivity.

The GIS Specialist must have the following capabilities:

- I. Data Collection, Management, and Dissemination**
 - A. Generate GIS spatial data using GPS for base layer development
 - B. Familiarity with GPS survey methods, recent GPS technology including Trimble and Garmin GPS units, and associated software packages
 - C. Integrate new datasets developed by CRM sections or other partner agencies, and update archived datasets.
 - D. Develop and maintain detailed metadata for new and existing datasets.
 - E. Coordinate off-island environmental research efforts that require GPS and GIS components
 - F. Work with partner agencies and CNMI GIS users to develop a web-based portal for GIS data and mapping services

- G. Coordinate with other CNMI agencies and Federal partners for distribution of new CNMI GIS datasets

II. Project Planning and Grant Writing for GIS Program

- A. Design projects and provide technical descriptions including budgets for grant applications and grant reporting
- B. Familiarity with ESRI licensing to maintain existing licenses and support ongoing maintenance and updates
- C. Capable of working under tight deadlines

III. Training and Education

- A. Promote GIS educational awareness and participate in GIS outreach activities within CRM and partnering agencies
- B. Take a lead role in the CNMI GIS User Group and facilitate inter-agency data coordination efforts.
- C. Provide occasional GIS outreach and education to the Northern Marianas College.
- D. Familiarity with ESRI Training programs to enhance GIS skills of CRM and partnering agency staff.
- E. Ability to plan training events including planning of logistics and budgets.

IV. Spatial Planning

- A. Provide GIS expertise and technical guidance for planning processes related to CRM projects and management plans.
- B. Coordinate and participate with government agencies, community leaders, special interest groups, committees, and contractors during the project planning process
- C. Conduct data and information assessments pertaining to CRM projects prior to the project planning process in order to identify information gaps
- D. Take a lead role in helping CRM implement Marine Spatial Planning efforts in the CNMI
- E. Study of issues, trends, and need forecasting for the CRM GIS program. Development of goals, objectives, scheduling, and plan strategies for program implementation.
- F. Provide maps and graphics illustrating activities related to CRM permitting, enforcement, and marine monitoring, as well as changes in these activities over time.
- G. Work with appropriate CRM sections to update CRM Areas of Particular Concern and marine conservation target areas using best available data.

V. Regulatory Activities and Resource Management

- A. Analyze and determine compatibilities of permitting and enforcement areas to policies and guidelines
- B. Develop and assist training programs for CRM staff and partnering agencies to promote spatial awareness in resource management

VI. Other responsibilities

- A. Assist with production of thematic maps
- B. Provide occasional IT and network connectivity support for the CRM office
- C. Coordinate imagery acquisition updates for the CNMI
- D. Coordinate topographic and bathymetric Lidar acquisition for the CNMI
- E. Work closely with NOAA PSC in building GIS Capacity in CNMI and across the Pacific

Minimum Qualifications:

- BS in Geography, Planning, Natural Resource Management or related field,
- Must be proficient with ArcGIS 9.x and 10
- Must have 3 to 5 years of applied experience with ArcGIS Technology.
- Familiarity with Garmin and Trimble products
- Proven experience generating outputs as described in Description of Responsibilities (above) through publications, reports, or academic papers.
- MS/MA in Planning, Natural Resource Management, Geography or related field will substitute for up to 3 years of experience.
- Must be physically fit for field work, willing to travel to other islands within the CNMI, and tolerant of tropical conditions.
- Must possess a valid driver's license

Desirable Qualifications:

- Familiarity with ArcGIS Server and ArcSDE technology
- Experience with shoreline/coastal morphology surveying

Position Status and Salary:

1year contract, ~ \$ 30,000 - \$35,000 per annum plus fringe benefits;

To apply:

Send full CV, copies of any pertinent published work, names and contact information (mailing address, email address, phone numbers) of three references to:

Rita C. Chong, Director
Coastal Resources Management Office
P.O. Box 10007
Saipan, MP 96950

Email inquiries and applications may be sent to:

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