# SEAMAP Data Systems Developer and Database Administrator

*Gulf States Marine Fisheries Commission*
*Ocean Springs, Mississippi | Full-time, onsite*

Proposed salary: $65,000–$85,000 annually, depending on qualifications, plus the GSMFC's benefits package.

## About the position

The Gulf States Marine Fisheries Commission (GSMFC) seeks a developer and database professional to maintain and improve the data systems supporting the Southeast Area Monitoring and Assessment Program (SEAMAP). SEAMAP brings together state, federal, and university partners to collect, manage, and distribute fisheries-independent information.

This position combines database administration, data engineering, application development, and collaboration with fisheries scientists and agency partners. It is not primarily a data-entry or reporting position. The successful candidate will take ownership of existing systems, resolve problems, and develop improvements that preserve the meaning and traceability of scientific data.

The position works under the administrative supervision of the SEAMAP Coordinator, with technical collaboration from other GSMFC programs and guidance from participating data owners and the SEAMAP Subcommittee.

## Database management and data integration

- Maintain relational databases supporting Groundfish, Bottom Longline, Reef Fish, Plankton, and associated SEAMAP products.
- Develop data-loading and transformation tools for partner submissions, including Access databases, spreadsheets, CSV files, and historical formats.
- Design and document schemas, identifiers, relationships, reference tables, and submission specifications. Investigate performance and integrity issues.
- Preserve original submissions and document transformations. Verify record counts, relationships, and outputs after imports and changes.

## Scientific data quality and partner coordination

- Maintain validation tools for new and historical records, including structural, temporal, spatial, biological, and cross-table checks.
- Distinguish confirmed errors from unusual but valid observations, missing information, and issues requiring source-owner review.
- Coordinate with state and federal partners to clarify definitions, resolve findings, and track reviewed exceptions and corrected submissions.
- Apply approved corrections through controlled processes with backups and verification and communicate data limitations clearly.

## Applications and operational responsibilities

### Applications and public data access

- Maintain the SEAMAP website, interactive mapping and query tools, downloadable datasets, and supporting application services.
- Develop and support staff applications for intake, validation, database operations, reporting, and export.
- Maintain compatibility with partner workflows, including Access and spreadsheet products. Verify fixes in distributed applications and published datasets, not only in source code.

### Reliability and technical support

- Maintain version-controlled code, automated tests, deployment instructions, data dictionaries, and user documentation. Test changes before production release.
- Maintain documented backup, recovery, configuration, and release procedures in coordination with GSMFC technical staff.
- Monitor automated intake and notification workflows and investigate failures. Keep accurate records of project status, dependencies, limitations, and unresolved decisions.
- Support data requests, technical reporting, and related GSMFC projects as assigned and prioritized by the supervisor.

### Required qualifications

- Bachelor's degree in computer science, information technology, data science, or a related field, or equivalent education and relevant professional experience.
- Demonstrated ability to develop database-backed applications and data-processing workflows; strong SQL and relational-database skills.
- Practical Python experience and ability to maintain existing PHP and JavaScript applications.
- Ability to troubleshoot unfamiliar systems, validate imported data, investigate discrepancies, and preserve source information.
- Working knowledge of Git, testing, configuration management, and controlled deployment; clear communication and ability to work independently while seeking needed clarification.

### Preferred qualifications

MySQL; Access/ODBC and legacy-data interoperability; HTML, CSS, JavaScript, React, and PHP web applications; Python-based Windows applications; GIS and spatial data; multi-organization data standards and review; Oracle or Oracle APEX for legacy or cross-program support.

Candidates need not know every component of the existing stack. Careful data handling, maintainable development, sound judgment, and willingness to learn are important. Experience with fisheries or environmental datasets would be helpful but not necessary.

## Work arrangements and application

The position is based at the GSMFC office in Ocean Springs, Mississippi. Some travel and occasional evening or weekend work may be required. Anticipated start: January 2027, subject to agreement.

### How to apply

Submit a résumé describing relevant experience, education, and technical skills, and a brief statement of interest explaining how your experience would support this role. Relevant code samples or descriptions of previous projects may be included. Do not submit proprietary code, credentials, or confidential data.

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