BORIIS database project

Rhode Island Natural History Survey (the Survey), a Rhode Island, USA-based, 501c3 nonprofit, seeks highly qualified parties interested in being considered for a contract to develop, in concert with stakeholders, a working prototype of a database for the management of biodiversity data (observations of species and natural communities in space and time) primarily for internal audiences.

The project is referred to as BORIIS (Biota of Rhode Island Information System). A schema for BORIIS has been developed using Microsoft Access and undergone conceptual testing by staff and an external user group. Funding has been secured to develop and test a working prototype preparatory for future full implementation.

- This prototype phase includes building and documenting, at least to the demonstration level, the backend, frontend, and user interface (UI), with metadata, with the possibility of pushing off detailed development of refined features to a later phase as necessary
- The user experience (UX) design brief is for users to feel they have the power to explore an information-rich but systematically organized environment. Basic functions are intuitive, and users coming in with general database experience carry out basic tasks with minimal training.
- The contract will be administered by Roger Williams University using USEPA funds.
- The project is expected to start early in calendar 2024 with final deliverables late in 2024.
- As envisioned, future BORIIS deployment is in an access-secured, desktop (not mobile) web environment, but prototype development will take place in a single-site, desktop environment.
- Prior consultations suggest a MySQL platform; however, backend/frontend platform decisions are not final. The choice of structure will likely be guided by the expertise of the selected contractor with other factors including initial vs operating cost, user training requirements, likelihood of future updates, and ready availability of qualified software engineers.

Important characteristics in selecting a contractor may include but are not limited to:
- demonstrated ability to design data repository systems that are (1) intuitive to users and administrators, (2) expandable in content breadth and number and diversity of users, (3) easy to maintain, (4) stable, and (5) secure
- experience with similar applications, including experience with natural history specimens
- can refer to past clients willing to vouch for contractor's easy, responsive communication
- eligible for US employment and ability to be accountable for use of US federal funds
- availability/timeline and price
- women, minority, veteran, and disadvantaged businesses are encouraged to apply

Contractors responding to this RFQ by 12/31/2023 will be screened, and selected contractors interviewed by Survey staff via phone or Zoom. One or more may be asked to work with the Survey and Roger Williams U. to develop a scope of work and budget and submit a formal proposal.

The Survey would like to hear from database developers interested in working on this project. Please respond via email to dgregg@rinhs.org with a short description of your or your company's background and capabilities as they are relevant to the above described project. Review of responses will begin January 2, 2024 and continue until a contract is finalized.

Founded in 1994, the Survey is a member-supported, 501c3 non-profit that encourages public participation in environmental science and a scientific approach to solving environmental management challenges. For more information on the Survey see rinhs.org.