ASABE Journals Special Collection
Water Quality Monitoring: Technologies and Data Stewardship for Low Cost, High-Frequency, and In Situ Data Collection

Submission Guidelines

You are invited to submit a manuscript to Water Quality Monitoring: Technologies and Data Stewardship for Low Cost, High-Frequency, and In Situ Data Collection - a Special Collection of peer-reviewed papers to be published in ASABE journals.

The landscape of water quality sensing and monitoring is continuously evolving, creating new opportunities and challenges. Harmel et al. (2018) states the following needs for water quality monitoring... "Looking to the future, further improvements are needed related to lower cost systems, practical improvements, and enhanced in situ sampling…" Based on this need, this Special Collection aims to provide the state-of-the science and guidance related to lower cost, more practical, higher-frequency, and/or in situ technologies. In the Digital Age, where data serves as the backbone for decisions and planning, guidance related to data stewardship and technologies is needed to assist multiple stakeholders. This Collection will aid stakeholders and practitioners in collecting flow (discharge) and water quality data (e.g., pathogen, sediment, nutrients) at the small watershed scale in urban and rural settings. This proposed Special Collection will form the basis for an eventual standard(s) to complement the existing ASABE Engineering Practice 621 on model calibration and evaluation, offering robustness to data collection efforts, enhancing the value of monitoring results, and instilling greater confidence in policy recommendations. With this guidance, stakeholders can make more informed choices, ensuring more accurate and meaningful water quality and flow assessments. The collection will cover topics, including,

- Guidelines for crowd sourcing water quality monitoring data collection with water quality sensors.
- Establishing QA/QC and QAPP protocols for in-situ/high-frequency flow and water quality monitoring.
- Development of methods and applications of high-frequency flow and water quality data in process-based and AI-ML models.
- Data stewardship for high-frequency flow and water quality monitoring.
- Socio-economic barriers and perception in water quality data collection efforts utilizing sensors.
- High-frequency runoff and water quality monitoring in cold climates.
- The design and application of high frequency flow and water quality monitoring (active/passive, low cost and proprietary sensors, networks, applications in urban and rural settings, regulatory vs non-regulatory purposes).
- The collection and uncertainty analysis of high-frequency water quality in situ and low cost technologies.
- Review of analytical methods for in situ monitoring of monitoring emerging contaminants.
- High-frequency or sensor-based monitoring to assess "end-of-pipe" water quality in different scales and conditions.

The following information will help you with your submission.

1) **Submit your manuscript any time before 15 September 2025.** If you have problems meeting that deadline, please contact the Editor, Kati Migliaccio (klwhite@ufl.edu). Submission will follow ASABE procedures (www.asabe.org/JournalAuthors).

2) **Indicate in the submission letter that the manuscript should be considered for the Special Collection "Water Quality Monitoring: Technologies and Data Stewardship for Low Cost, High-Frequency, and In Situ Data Collection".** In addition, please send a confirmation e-mail to the Editor (klwhite@ufl.edu) indicating that you have submitted a manuscript for the Collection.

3) Manuscripts may be submitted to either *Journal of the ASABE, Journal of Natural Resources and Agricultural Ecosystems,* or *Applied Engineering in Agriculture* (www.asabe.org/JournalDescriptions); Collection may include papers in above journals so please review the requirements and submit them to the appropriate journal.

4) To facilitate the review process, **please prepare your manuscript using the latest "Journal Manuscript Template"** (www.asabe.org/ManuscriptTemplates). Your careful attention to formatting requirements will be greatly appreciated.

5) Each paper will go through a full peer-review process following ASABE procedures.

6) Papers included in the Special Collection will receive several additional benefits:
- The first three pages will be free in JASABE and AEA. Full-page charges will apply to the remaining pages. JNRAE charges are based on article type and length (www.asabe.org/apc).
- Public access will be free for the remainder of the year of publication plus two additional years (i.e., through 2026 or 2027) for JASABE and AEA. JNRAE is fully open access. For JASABE and AEA, open access may be purchased at the discounted rate of $1200 per article.
- Papers will be highlighted in an introductory article and will include an identifying logo.
- In 2018, the 2-year impact factor was **3.82** for Collection articles in *Trans. ASABE* compared to 1.97 for all NRES articles in *Trans. ASABE* and 1.12 for all articles in *Trans. ASABE*.

7) The Collection is a massive undertaking and will require contributions of many reviewers. We expect that all authors will contribute to the review of other manuscripts when requested.

8) Papers that are not accepted by the final deadline will not be included in the Collection, although authors could choose to continue with the review process as a regular journal manuscript.

9) We expect the first decision around 1 November 2025 and final acceptance by 1 February 2026. Papers will be published in early 2026.

If you have any questions, please contact Kati Migliaccio at klwhite@ufl.edu or Debabrata Sahoo at dsahoo@clemson.edu.

Best regards,

Kati Migliaccio, Editor, Natural Resources & Environmental Systems (NRES), ASABE Journals
Debabrata Sahoo, Special Collection Coordinator/Guest Associate Editor, NRES, ASABE Journals
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