

September 3, 2015

*To:*

Bettina Grün  
Editor in Chief  
The R Journal

*From:*

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Enclosed please find my manuscript, entitled ‘SWMP: An R Package for Retrieving, Organizing, and Analyzing Environmental Data for Estuaries’, to be considered as a research article in the R Journal.

A continuing challenge in the environmental sciences is the effective use of continuous monitoring data. The increasing quantity of data from automated sensor networks suggests that more appropriate methods to synthesize and interpret this information are needed. This article describes the SWMP (‘swamper’) software package for R that was developed in part to address research needs of the US National Estuarine Research Reserve System (NERRS). The System-Wide Monitoring Program (SWMP) was implemented by NERRS in 1995 to collect continuous water quality data at over 140 fixed stations at each of the estuaries in the reserve system. The SWMP package addresses many common issues working with large datasets from automated sensor networks, such as data pre-processing, combining data from different sources, and exploratory analyses to identify parameters of interest. As such, the package has value for the NERRS network as well as more generic applications to environmental time series data. Several functions provided in the package are novel contributions to CRAN.

I greatly appreciate the opportunity to publish my work in the R Journal. Please feel free to contact me directly should additional information be needed.

Respectfully,

Dr. Marcus W. Beck