

Workshop for Hawks Cay Resort 2023 FLMS Conference

Tuesday – August 29, 2023 – Full Day Workshop: 8:15 am – 4:15 pm

Create Your Own Interactive Web App with R (Shiny) and Recycle Report Formats (with R markdown)

Dan Schmutz, M.S., Chief Environmental Scientist, Greenman-Pedersen, Inc.

Description:

Did you know that if you have a little bit of training in the statistical software environment R that you can create and deploy your own interactive web application? The free Shiny package makes it easy to build interactive web apps straight from R without knowing any web coding languages. You can host standalone apps on a webpage, embed them in R Markdown documents, or build dashboards. Join this full day workshop to learn how, and you will go home with your own web app.

The workshop will also cover the power of parameterized reports in R markdown. Parameterized reports allow users to automate the creation of reports that follow the same format but include data from different sites or events. Examples of uses of parameterized reports could include showing results for a specific geographic location in each report, running reports that cover specific time periods, or running a single analysis multiple times using different assumptions.

This class is ideal for users with some previous exposure to R, but beginners are welcome too. Teaching methods will touch on both concepts and techniques, with an emphasis on implementation in R. We will send instructions for installing the free programs R and RStudio and required packages prior to the workshop, along with suggested practice exercises for beginners to get up to speed. Please bring your laptop, if possible, as the workshop will emphasize a hands-on approach to learning.

Instructor:

Dan Schmutz, M.S., is the Chief Environmental Scientist and a Vice President for Greenman-Pedersen, Inc. (GPI), a 1,900-person multidisciplinary consulting firm. He has over 25 years of professional experience developing and applying ecological and hydrological assessments, GIS, and data science techniques for addressing questions of

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interest to water resource managers. He earned a Master of Science degree in Zoology from the University of South Florida in 1997 and has been enjoying playing with data ever since.

