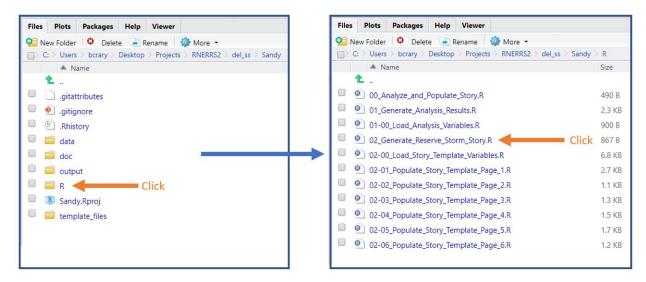
3 Print Generation Workflow Guide

The **Print Generation Workflow** populates the storm story report template, creates a raw print storm story report, and outlines the steps to develop a final print storm story report. The Workflow requires that the user provide text inputs and figure paths within an Excel spreadsheet, which is read into R and ultimately placed into the empty print template. R automates the template population step and produces a 'raw' storm story. The user can refine this raw storm story in PowerPoint to create a final storm story. The following steps must be followed to complete this workflow.

- Populate the storm story content within /template-files/text/Storm_Story_Template_Text_Entry.xlsx, which is found in the Workspace. There are tabs corresponding to each of the pages (Page 1 through Page 6) in the storm story template. The spreadsheet provides notes (i.e., blue-shaded cells) for each field that must be populated, indicated by the white cells. An example of a completed text entry spreadsheet is provided in the Workspace: see "EXAMPLE_Storm_Story_Template_Text_Entry.xlsx."
- 2. Add the images outlined and named in the Storm_Story_Template_Text_Entry.xlsx to the /template/images subfolder. You can add the images in this folder either before you work on the text entry input, in parallel, or after. The image placeholders can be found in the template_files/empty_template/Storm_Story_Template.pptx file. Places where images are needed in the template are noted in the Storm_Story_Template_Text_Entry.xlsx file along with dimension specifications. Note that there are three default/base images required for the template. These are "PageOneBanner.png," "RoundedRectangle.png," and "PageOneMid.png". Do not delete these files.
- 3. If the .Rproj is not already open, launch the .Rproj file ("R Project") in the parent directory of the Workspace. R Studio will launch and the files pane in the bottom right will show the Workspace. For example, you would double-click "Sandy.Rproj" to launch the R session and you would see the R files for this project listed by clicking on the "R" folder (see screenshot below).
- Open R/02_Generate_Reserve_Storm_Story.R within R Studio by clicking on the file (see screenshot below).



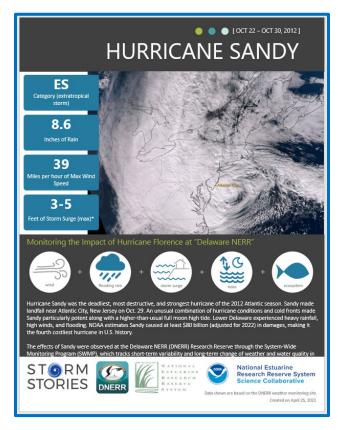
Screenshots of opening 02_Generate_Reserve_Storm_Story.R in the R project

5. **Execute the storm story generation script by clicking the 'Source' button in R Studio.** This script will read the inputs from Step 1 and populate the empty print template found in **/template-files/empty_template.**



How to execute the storm story generation script

6. Verify that a raw populated template PowerPoint file (storm_report_raw) has been created in the /template_files/ directory. The raw template storm story should be nearly complete but will require a final review to ensure images are rendered and the text fits within constraints.



Screenshot of an example raw storm story

7. Make a copy of the "storm_report_raw" PowerPoint file, rename it as "storm_report_final" and make desired additions and enhancements. Updates include adding the Weather and Water Quality data tables, refining narratives, adjusting spacing between text or graphics, placing callout boxes overtop of figures, emphasizing text by changing to bold or italics, adding hyperlinks, etc.

- 8. Go to template_files/resources/ for custom and pre-designed content elements to create the final report.
 - **ss_print_template_resources.pptx** file provides additional content elements that can be customized for each Page (1-6).
 - ss_Weather_and_WaterQuality_Data_Table_template.xlsx file can be used to help process and format data for the Weather and Water Quality data generated in the output/met/data_table and output/wq/data_table csv files. Tables from this file can be copied directly into the pre-formatted tables provided in the "ss_print_template_resources.pptx" file (see Page 3 and Page 5). Alternatively, table data can be copied directly from the output/met/data_table and output/wq/data_table files into the pre-formatted tables. However, some manual formatting will be needed as PowerPoint will maintain the 'parent' excel format.
 - ss-image_guide_size_check.pptx file provides a copy of the placeholder images for each
 Page (1-6). This file can be used to check image sizes and/or modify images by resizing and
 cropping.
 - graphics folder provides icons, additional NERRS maps, and NOAA/NERR logos. The icons subfolder includes a copy of all icons used in the storm story template as well as additional icons (see files that start with "0") that can be used as additional layered elements (e.g., wind icon for wind section/data plot).
- 9. Save the storm story as a PDF.