**GIT AND GITHUB:**

What – Version control for project management

Who – Watershed Management Git and GitHub are the platforms of choice to these ends

When – 24/7/365

Where – Anywhere (with an internet connection)

Why – Version control, transparency, reproducibility

**MORE SPECIFICALLY:**

* Git is an open-source version control platform for tracking changes during software development -- <https://git-scm.com/>
* GitHub Desktop is the a -- <https://desktop.github.com/>
* GitHub is the web-based host service associated with GH Desktop using Git as its basis -- <https://github.com/>
* There are implementations of Git within IDEs (RStudio, Visual Studio, etc.)
* Online version of GitHub is free for open source projects and fee-based for privately hosted projects

**HOW TO:**

* Create an account with GitHub
* Download and install GitHub Desktop
* Link your GitHub account to your Desktop application
* Create a repository
  + Through GH Desktop
  + Through the website
* Clone a repository
* Commit/Push/Pull
* Branch
* ???

**GITHUB FOR STATUS AND TRENDS**

Colin Donald

**PROJECT PROPOSAL:**

Objective: Repurpose WQ plot from base graphics to ggplot

Client: Jim Bloom and the Coquille DO TMDL

Ground rules:

1. Project resources (volunteers):
   1. Project manager
   2. Wo-R-ker Bees (git it?)
2. Each bee will be assigned a random roster number to determine the task assignment order.
3. First task: PM organizes project into discrete tasks.
4. Each bee will have a turn at working on the task according to the assigned order.
5. Bees work on that task for 30 minutes then hand off to the next rostered bee.
6. Bees have two days to begin a task, otherwise hand off to the next rostered bee.
7. The roster rolls over a task until it is complete.
8. When a task is complete, the next person on the roster begins the next task.
9. After each person is done with their task assignment, the solution is posted to GitHub using Colin’s step-by-step for Status and Trends.
10. The subsequent worker bee has to use whatever portion of code developed by the previous worker bee(s). You can’t just scrap the solution and start over, unless the solution patently does not work. This will be managed by the PM.
11. Comment, comment, comment. Make sure to leave instructions or ideas for the next person.
12. Obviously you’re not required to do this—you have deadlines or are simply recalcitrant—but your level or participation will determine the size of your participatory trophy!