# ESM 270 Ocean Health Index Lab

### Introduction

The Ocean Health Index [intro here]

Intro to WebApps concept and overview of lab exercise - study areas and regions

#### Instructions

You access an existing WebApp and modify it locally on your computer to complete the assignment. You will need to install R (and preferably RStudio) to complete the assignment.

#### Setup steps:

- 1. Create a folder called  $**ESM_270**$  in your home directory so that the R scripts will run smoothly. This folder will have the following filepath:
  - Windows: Users\[User]\Documents\ESM\_270\
  - Mac: Users/[User]/ESM\_270/
- 2. R: Download and install the current version of R from cran.r-project.org.
- 3. RStudio: Download and install the current version of RStudio from rstudio.com.
- 4. Choose a coastal country or territory that has a WebApp using the list available at ohiscience.org/subcountry. The WebApp you choose must have a green build | passing indicator associated with its study area.
  - click the three-letter code (xxx) in the 'Repo' column to explore the WebApp of that study area.
  - click the date in the 'Last Mod' column to explore the GitHub repository of that study area.
- 5. Click the 'Download ZIP' button on the main page of the repository (github.com/OHI-Science/xxx)



- NOTE: do not choose CHN, as it is under development.
- 6. Unzip the downloaded \*\* .zip \*\* folder and save in your ESM\_270 folder, without changing the name.
- 7. Open **RStudio** follow the instructions below. Note that anything following the # symbol in R is a comment and will not be executed.
- # 1. in your R Console, type the following, replacing 'xxx' with your 3-letter code: key = 'xxx'
- # 2. paste the following into your console:

```
\verb|setwd(sprintf('~/ESM_270/\%s-draft/subcountry2014', key)||
```

summary(cars)

You can also embed plots, for example:

## {r, echo=FALSE} plot(cars)

Note that the  $\mbox{echo} = \mbox{FALSE}$  parameter was added to the code chunk to prevent printing of the R code that generated the plot.