Water Codebook

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```
volunteer.name
                                   n
## 1 J Phillips, Mary Feldman
                                  37
## 2
                 John Phillips
                                  17
## 3
                  Mary Feldman
                                172
## 4
                  Not Recorded 1264
## 5
                Pease, Strader
                                  31
## 6
                       Strader
                                  15
## 7
      Strader, Pease, Feldman
                                  35
## 8
              Strader, S. Poe
                                  11
## 9
                     Susan Poe
                                 789
##
          site.id
## 1
                 A 434
## 2
                 B 437
## 3
               Bay 794
## 4
                 C 264
## 5
                 D 441
## 6 Not Recorded
##
      record.id
                        site.id
                                            read.date
                                                                    time
##
    Min.
                1.0
                      Length: 2371
                                           Length: 2371
                                                               Length: 2371
##
    1st Qu.: 593.5
                      Class : character
                                           Class : character
                                                               Class : character
                      Mode :character
    Median :1186.0
##
                                           Mode
                                                :character
                                                               Mode :character
##
    Mean
            :1186.0
##
    3rd Qu.:1778.5
##
    Max.
            :2371.0
##
##
    volunteer.name
                         water.depth
                                              water.temp
                                                                air.temp
##
    Length: 2371
                        Min.
                                : 0.0100
                                            Min.
                                                   : 0.00
                                                             Min.
                                                                    : 0.00
                        1st Qu.: 0.4000
                                            1st Qu.:11.00
                                                             1st Qu.: 9.00
    Class : character
                        Median : 0.6500
                                            Median :19.00
                                                             Median :15.00
##
    Mode :character
```

```
##
                               : 0.7626
                                           Mean
                                                  :18.06
                                                           Mean
                                                                   :16.44
                        3rd Qu.: 0.9500
##
                                           3rd Qu.:25.00
                                                           3rd Qu.:21.70
                                                  :74.00
##
                               :12.0000
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                                                                   :74.00
                                                                   :2286
##
                        NA's
                               :71
                                           NA's
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                                                           NA's
##
   water.transparency
                              ph
                                            salinity
                                                               oxygen
    Min.
           :0.0000
                                                :0.0000
##
                               :0.300
                                                                 : 0.000
                        Min.
                                        Min.
                                                          Min.
    1st Qu.:0.3000
                        1st Qu.:6.500
                                        1st Qu.:0.0000
                                                          1st Qu.: 4.800
    Median :0.4000
                        Median :7.000
                                        Median :0.0000
                                                          Median: 6.500
##
##
    Mean
           :0.5249
                        Mean
                               :7.168
                                        Mean
                                                :0.7171
                                                          Mean
                                                                 : 6.646
##
    3rd Qu.:0.6500
                        3rd Qu.:7.500
                                        3rd Qu.:1.0000
                                                          3rd Qu.: 8.500
   Max.
           :9.0000
                        Max.
                               :9.900
                                        Max.
                                                :9.0000
                                                          Max.
                                                                  :15.100
##
    NA's
           :73
                        NA's
                               :95
                                        NA's
                                                :130
                                                          NA's
                                                                  :851
##
      record.id
                        site.id
                                           read.date
                                                                  time
##
    Min.
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                     Length: 2371
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    1st Qu.: 593.5
                      Class : character
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    Median :1186.0
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##
    Mean
          :1186.0
##
    3rd Qu.:1778.5
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    volunteer.name
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    Class : character
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                        Median : 0.6500
##
    Mode :character
                                          Median :19.00
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##
                        Mean
                               : 0.7626
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##
                        3rd Qu.: 0.9500
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##
                        NA's
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                                           NA's
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                                                           NA's
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    water.transparency
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                              ph
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##
    Min.
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                               :0.300
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    1st Qu.:0.3000
                        1st Qu.:6.500
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##
    Median :0.4000
                        Median :7.000
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##
    Mean
           :0.5249
                        Mean
                               :7.168
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                                                :0.7171
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##
    3rd Qu.:0.6500
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    NA's
           :73
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                                                :130
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                                                                  :851
##
##
      record.id
                                          read.date
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                                                                  time
##
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    1st Qu.: 593.5
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    Median :1186.0
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    Mean
##
          :1186.0
##
    3rd Qu.:1778.5
##
    Max.
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##
##
    volunteer.name
                         water.depth
                                             water.temp
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##
    Length: 2371
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##
    Mode :character
                        Median : 0.6500
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##
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                                                  :18.06
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##
                        NA's
                                           NA's
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                               :71
                                                           NA's
```

```
water.transparency
                                            salinity
                              ph
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##
    Min.
           :0.0000
                        Min.
                               :0.300
                                                :0.0000
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                                                          1st Qu.: 4.800
    1st Qu.:0.3000
                        1st Qu.:6.500
                                        1st Qu.:0.0000
                                        Median :0.0000
##
   Median :0.4000
                        Median :7.000
                                                          Median : 6.500
    Mean
           :0.5249
                        Mean
                               :7.168
                                        Mean
                                                :0.7171
                                                          Mean
                                                                : 6.646
##
    3rd Qu.:0.6500
                        3rd Qu.:7.500
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                                                                  :15.100
   NA's
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##
      record.id
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##
    Min.
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    1st Qu.: 593.5
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    Median :1186.0
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##
    Mean
          :1186.0
##
    3rd Qu.:1778.5
##
    Max.
           :2371.0
##
##
    volunteer.name
                         water.depth
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    Length: 2371
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    Mode :character
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    Mean
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##
    3rd Qu.:1778.5
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##
##
    volunteer.name
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##
    Length: 2371
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##
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    1st Qu.:0.3000
                        1st Qu.:6.500
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                                                           1st Qu.: 4.800
   Median :0.4000
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Mean
           :0.5249
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   3rd Qu.:0.6500
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##
    Mean
##
    3rd Qu.:1778.5
##
    Max.
           :2371.0
##
##
    volunteer.name
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##
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##
    water.transparency
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##
##
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##
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    1st Qu.: 593.5
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    Median :1186.0
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##
    Mean
          :1186.0
##
    3rd Qu.:1778.5
##
    Max.
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##
##
    volunteer.name
                         water.depth
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##
    Length: 2371
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##
    Class : character
                        1st Qu.: 0.4000
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                                                           1st Qu.: 9.00
    Mode :character
                        Median : 0.6500
                                          Median :19.00
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##
                        Mean
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                                                           Mean
                                                                  :16.44
##
                        3rd Qu.: 0.9500
                                           3rd Qu.:25.00
                                                           3rd Qu.:21.70
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##
                        NA's
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##
    water.transparency
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##
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    1st Qu.:0.3000
                        1st Qu.:6.500
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##
   Median :0.4000
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##
    Mean
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                               :7.168
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                                                          Mean : 6.646
##
    3rd Qu.:0.6500
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##
   NA's
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                                        NA's
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                                                          NA's
           :73
                                                                  :851
```

 $\#\#\mbox{Counted}$ values of 0 in numerical as legitimate data, did not replace with N/A