## Topic 06 - Topic Analysis

Julia Parish

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## **Topic Analysis**

This text sentiment analysis was completed as an assignment for the course, Environmental Data Science 231: Text and Sentiment Analysis for Environmental Problems. The data was sourced from . . .

Original assignment instructions can be found here

## Load Libraries

```
#install packages as necessary, then load libraries
if (!require(librarian)){
  install.packages("librarian")
  library(librarian)
librarian::shelf(here,
                 igraph,
                 kableExtra,
                 ldatuning,
                 LDAvis,
                 lubridate,
                 pdftools,
                 quanteda,
                 quanteda.texplots,
                 quanteda.textstats,
                 readr,
                 reshape2,
                 sentiment,
                 tidyr,
                 tidytext,
                 tidyverse,
                 topicmodels,
                 tsne)
```

## Run three Topic Analysis models and select the overall best value for k (the number of topics).

Include justification for the selection: theory, FindTopicsNumber() optimization metrics, interpretability, LDAvis