



Biscayne Bay Data Visualization

Team Members: Joshua Fernandez, Jorge Leon, Daniel Chevez, Julian Gasteli, Daniel Navarro, David Llerena, Eduardo Cortes, Rachel Roig, Anthony Castillo

Product Owner: Biayna Bogosian

Instructor: Masoud Sadjadi

Introduction

- This project was developed to improve a webpage and visualization of data that was collected in Biscayne Bay following a fish kill in August 2020

'Decades Of Warning Signs' Preceded Biscayne Bay Fish Kill

WLRN 91.3 FM | By [Jenny Staletovich](#)
Published August 25, 2020 at 7:25 AM EDT



Biscayne Bay fish kill is a warning sign, researcher says

By [Chrystian Tejedor](#)

Labor Day Weekend Biscayne Bay fish kill highlights urgent need for action

Fish kill hits Biscayne Bay as high heat, still waters worsen pollution impacts

Weather, wind contributed to fish kill in Biscayne Bay

A year after massive fish kill in Biscayne Bay, see what's being done



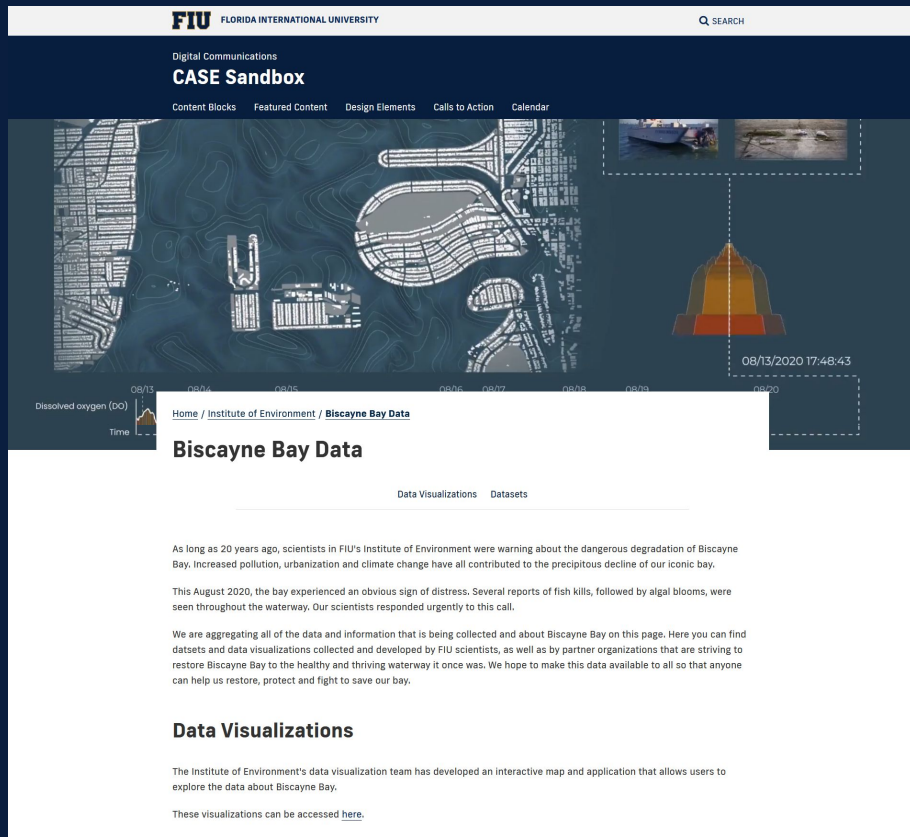
Improvements to redesigned site

- New mapbox style and interactive ways to work with layers
- Fully redesigned webpage that draws focus to the mapbox map
- Mapbox layers that include GeoJSON parameter scaling
- Readability of the data has been significantly improved with scaling and color coding of scales
- Toggle buttons that allow viewing single or multiple parameters at once
- Information on the different parameters displays for users as they select buttons
- Social media section is now dynamic and includes recent updates from FIU's Institute of the Environment

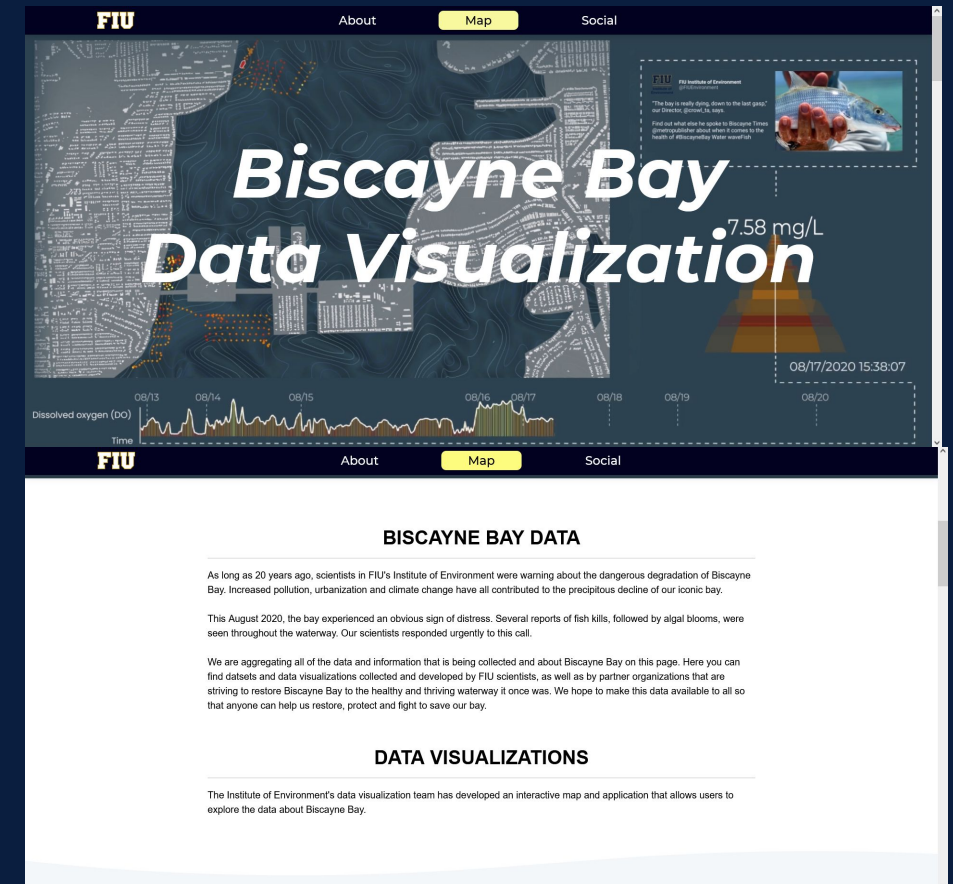


Webpage Changes

Before

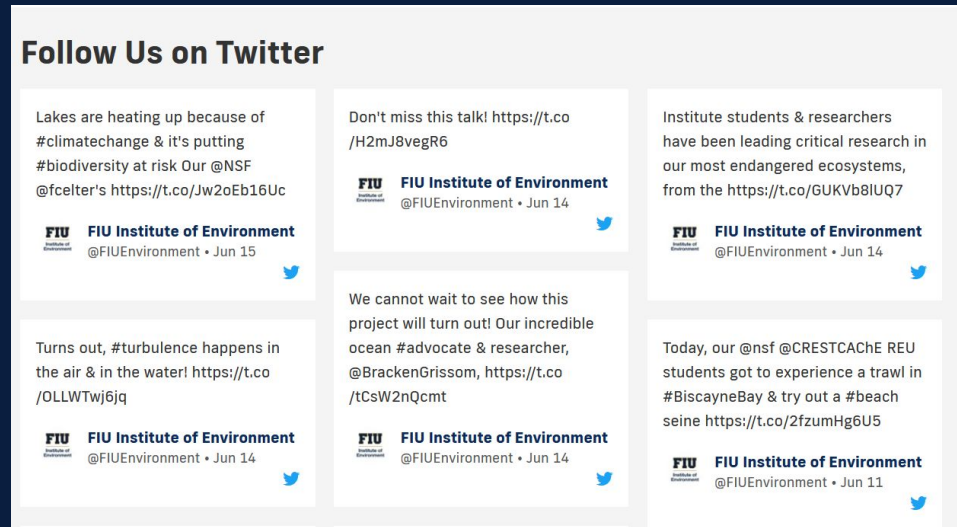


After

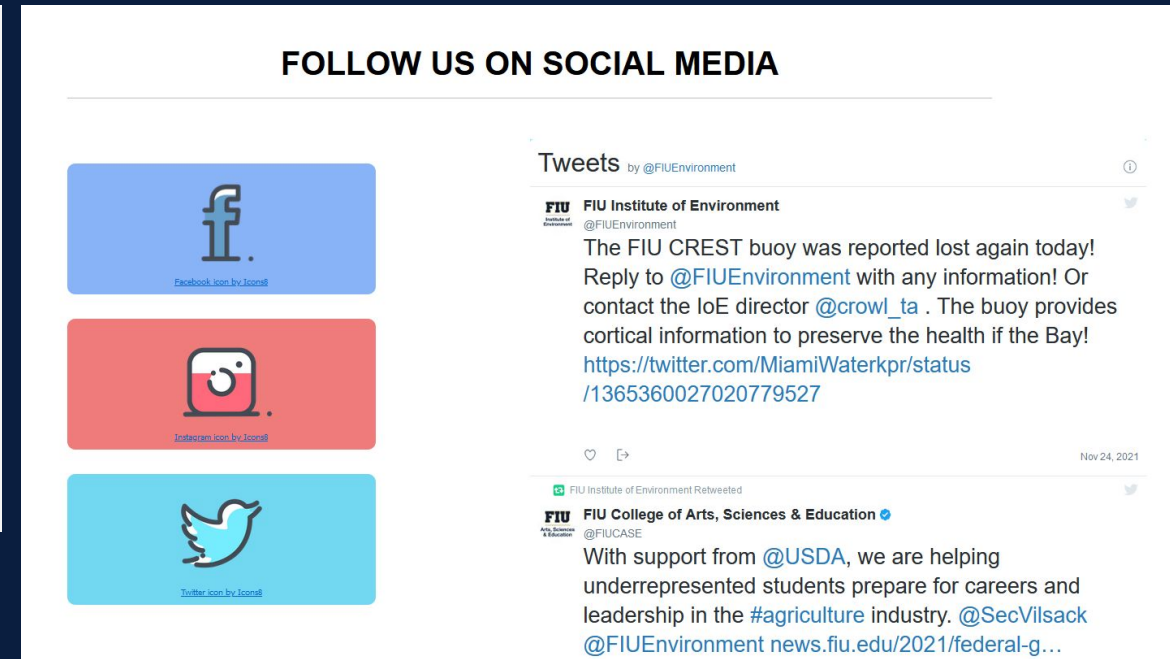


Social Media Changes

Before (Static Tweets)

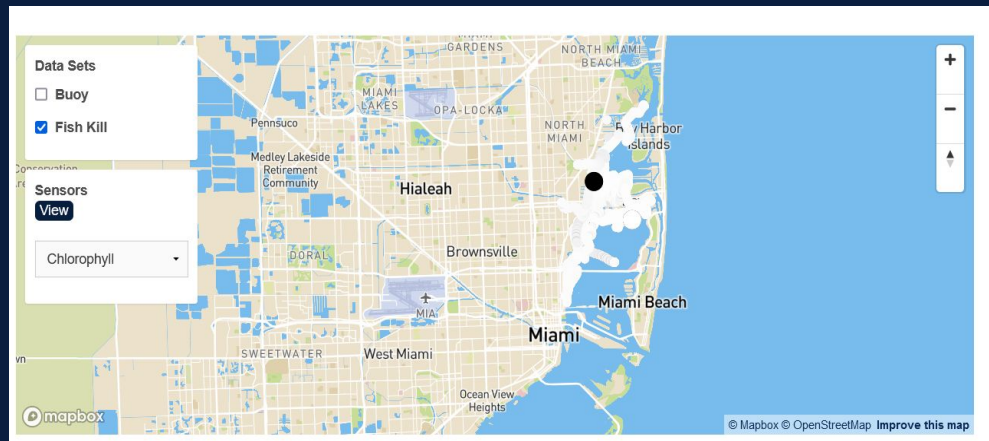
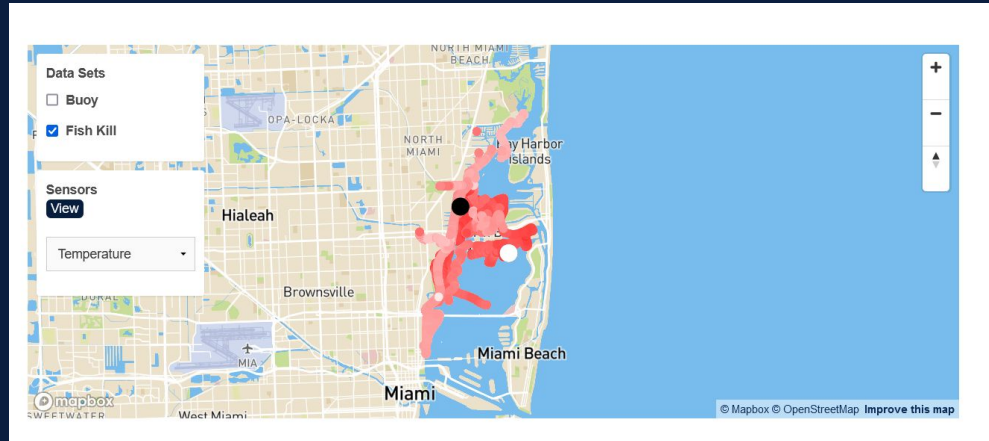


After (Dynamic updates)

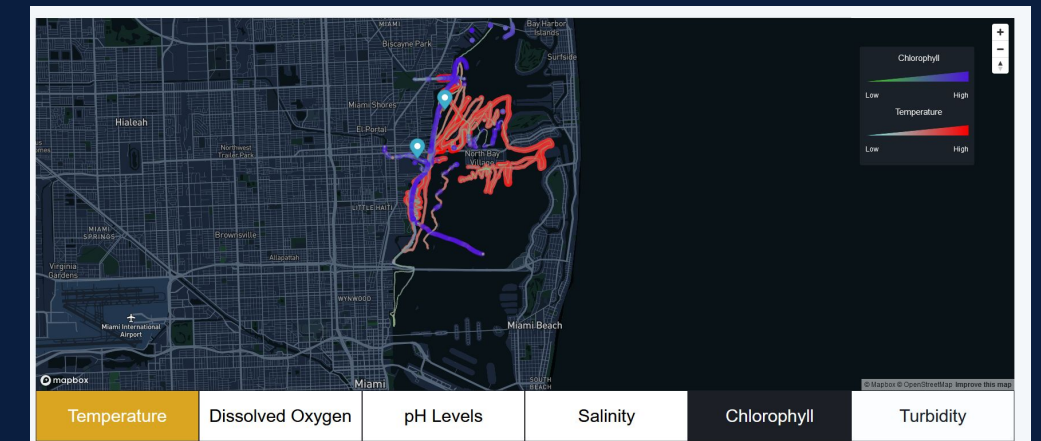


Mapbox development

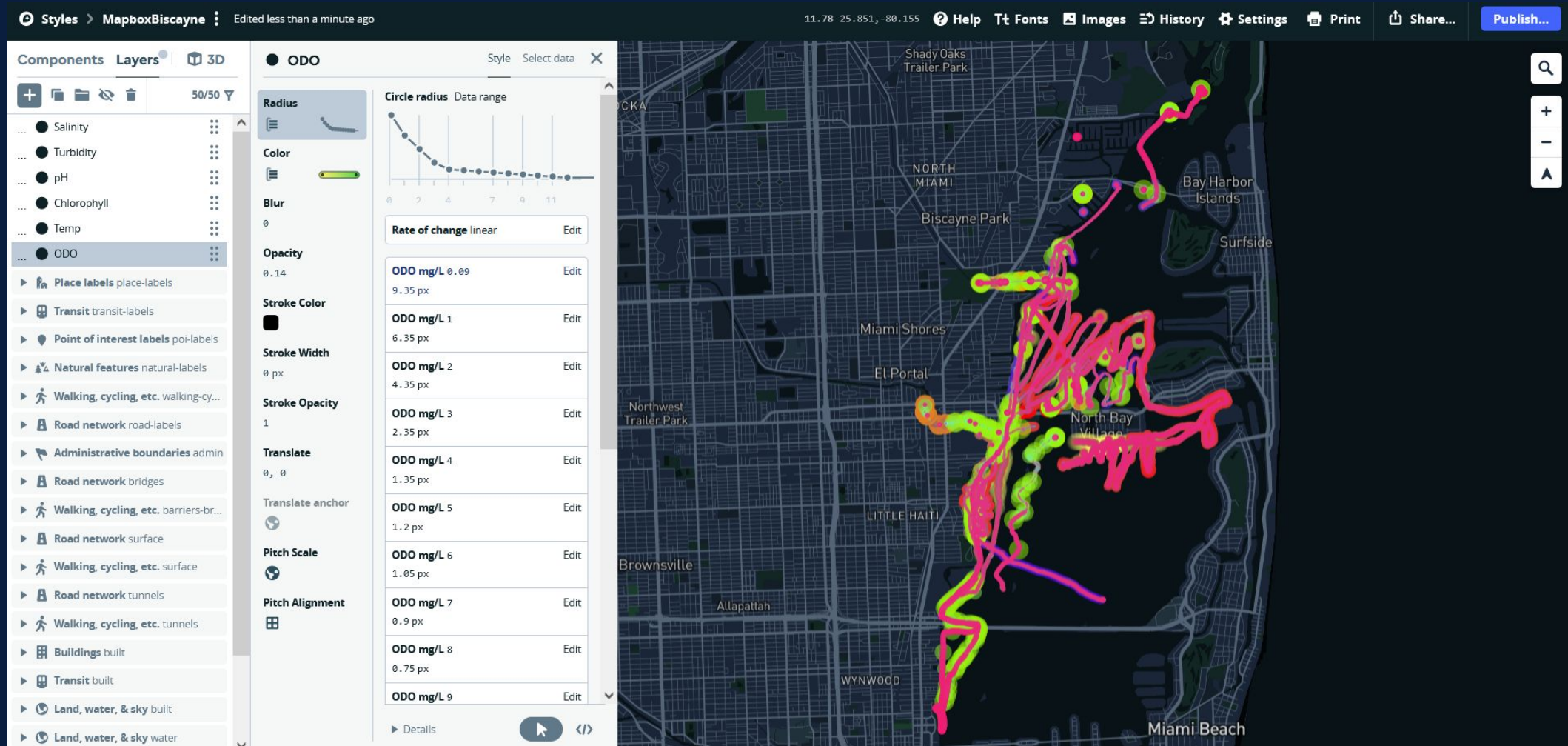
Before



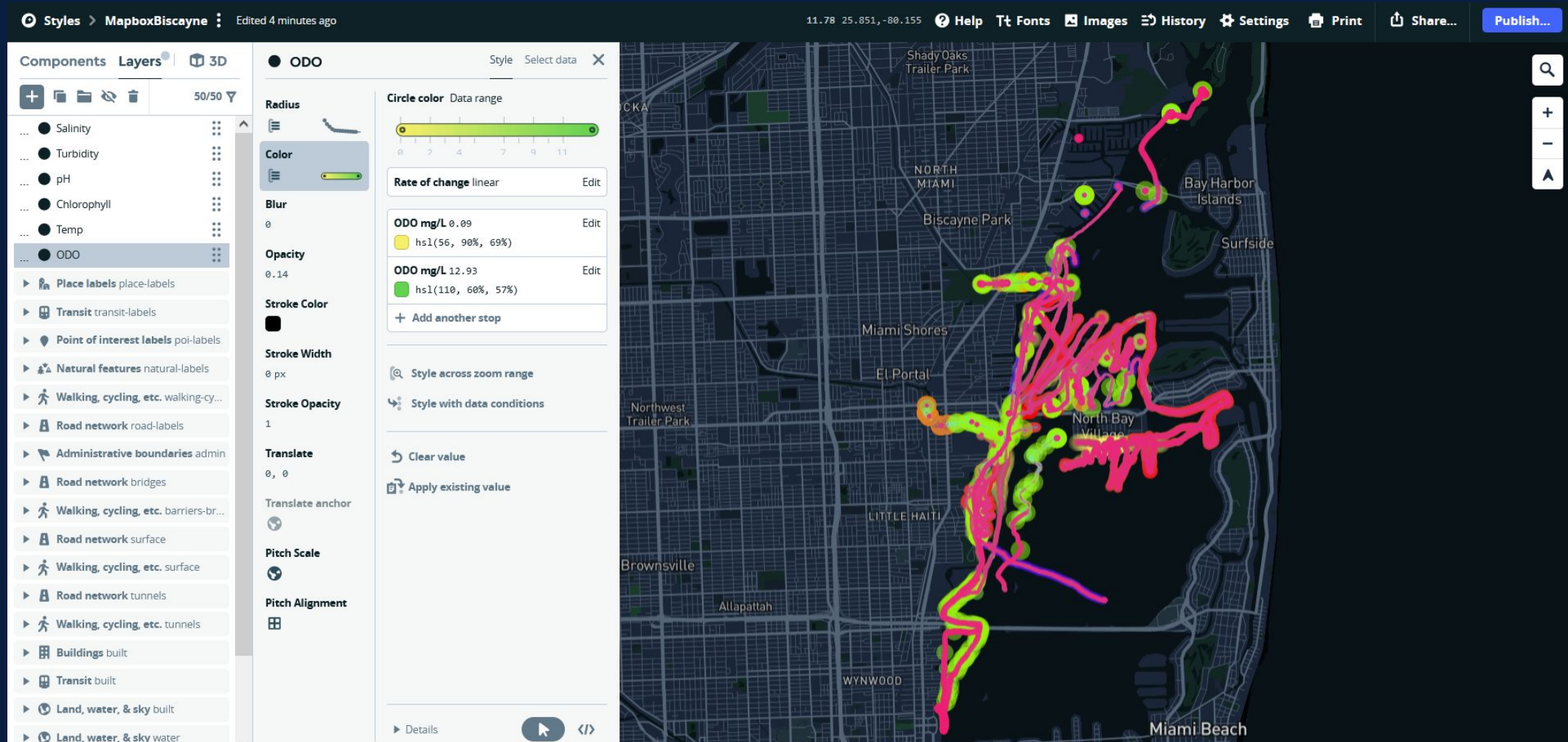
After



Mapbox Parameter Scaling



Mapbox Parameter Scaling (cont.)





General Development Info

- 43% HTML (200 Lines)
 - Containers for different sections of the site
 - Div classes to enable CSS styling and JavaScript calls
 - Social Media API calls
- 34% CSS (550 Lines)
 - 68 different selectors to style and animate parts of the webpage
- 23% JavaScript (300 Lines)
 - Mapbox API calls
 - Toggle buttons for mapbox layers
 - Gradient legend synching
 - Parameter information

