

# ANALYSIS OF EDNA WATER SAMPLES FROM INTERTIDAL REGIONS OF THE HOOD CANAL

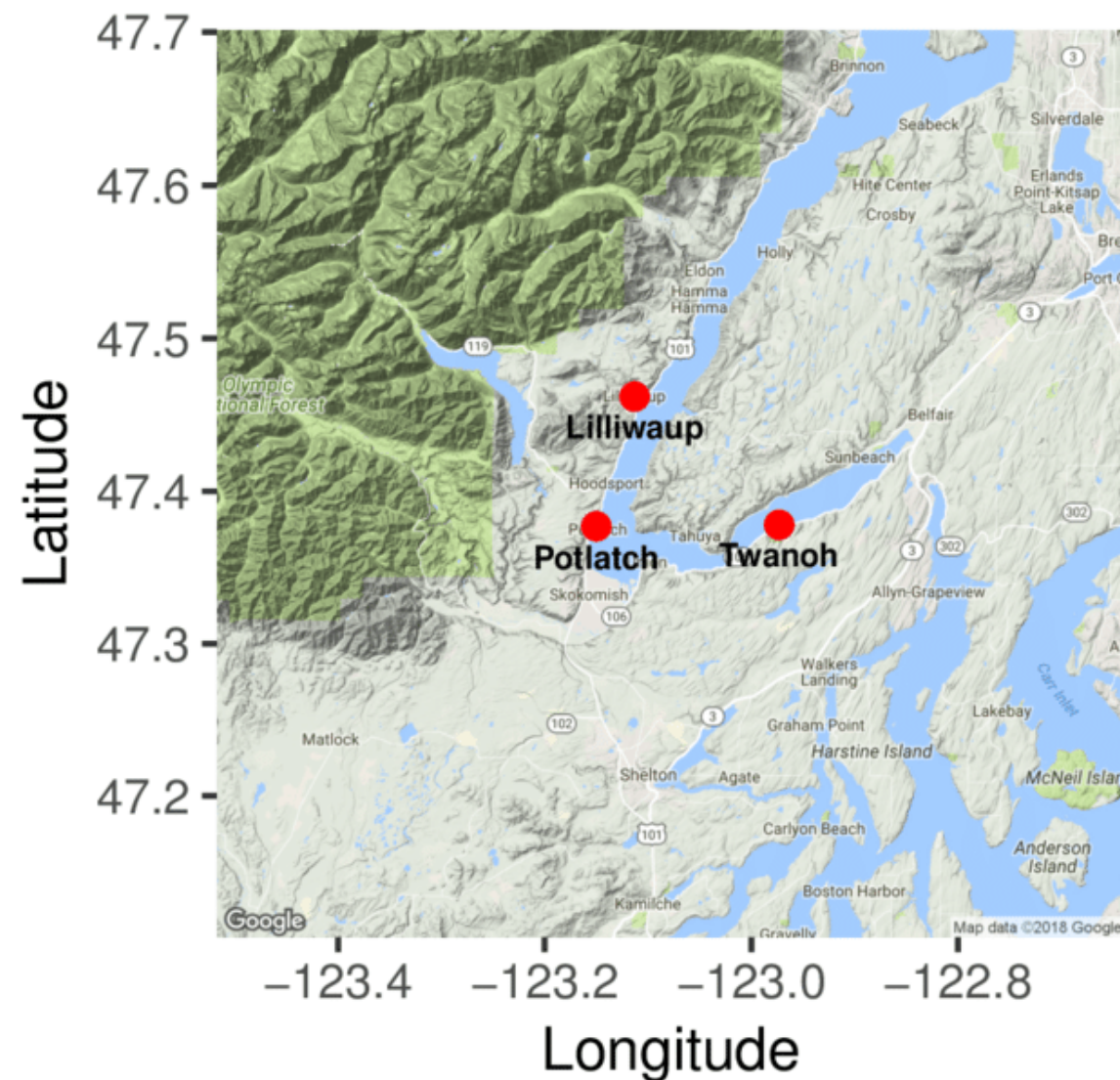
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FISH 546: BIOINFORMATICS

# OVERALL STUDY

1. Differentiate marine communities between areas
2. Investigate whether communities changes with tides



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**WHAT ARE THE MOST ABUNDANT TAXA FOUND  
USING ENVIRONMENTAL DNA COLLECTED  
FROM THREE STATE PARKS ALONG THE HOOD  
CANAL?**

**QUESTION**

UNIQUE TAG

CO1 TARGET SEQUENCE:330

UNIQUE TAG



F PRIMER

R PRIMER



REMOVE TAGS



DEMULTIPLEX



REMOVE PRIMERS



CONSOLIDATE



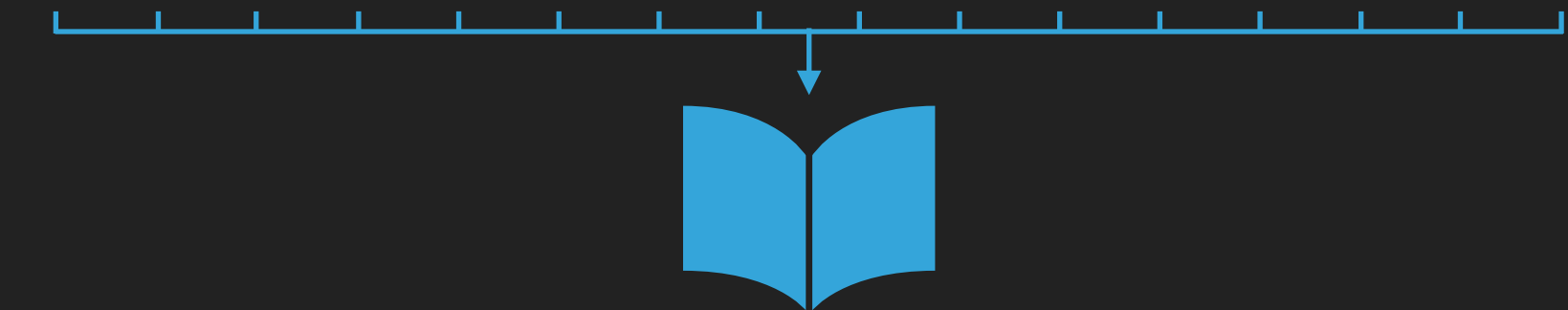
CLUSTER

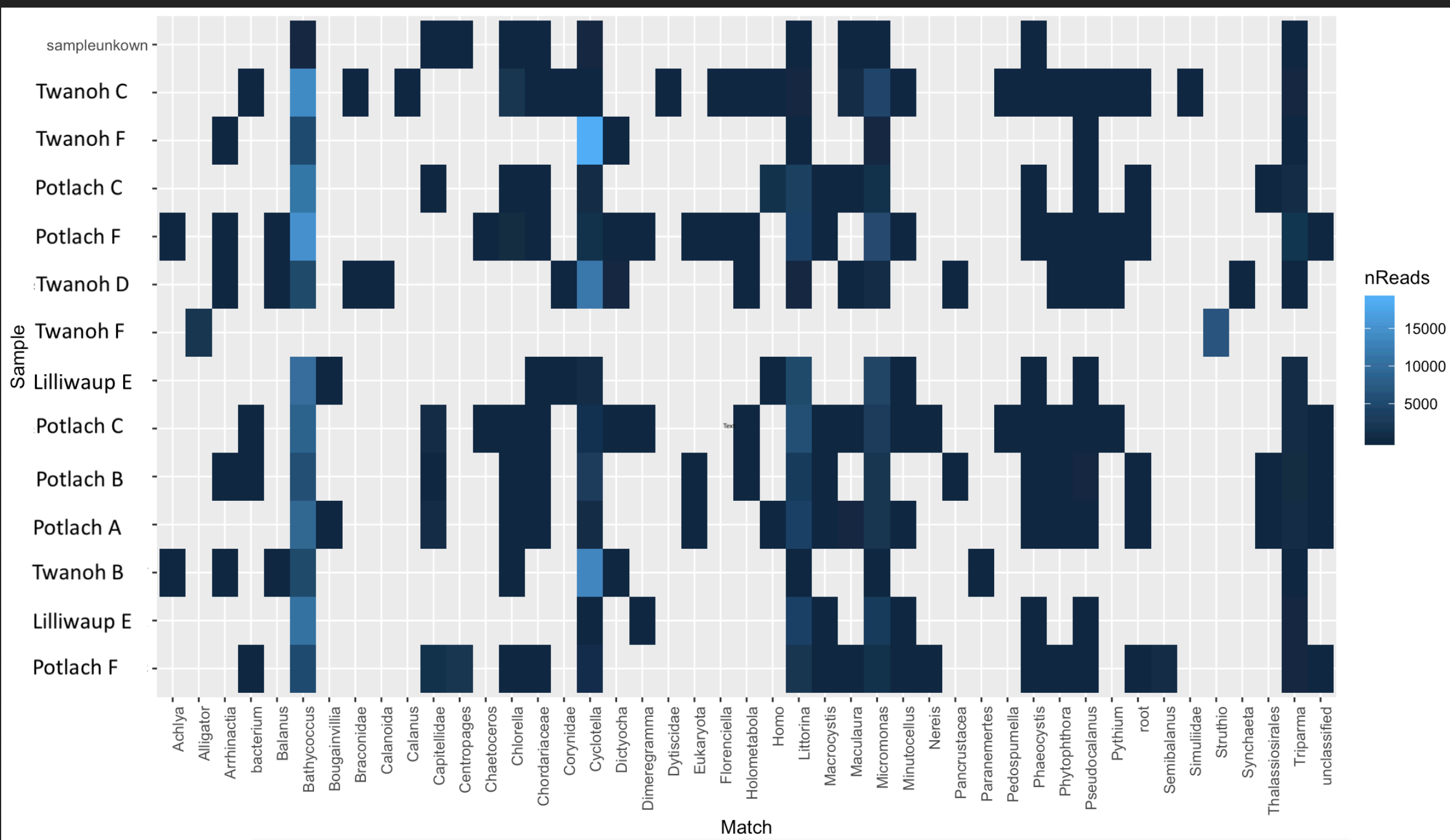


BLAST

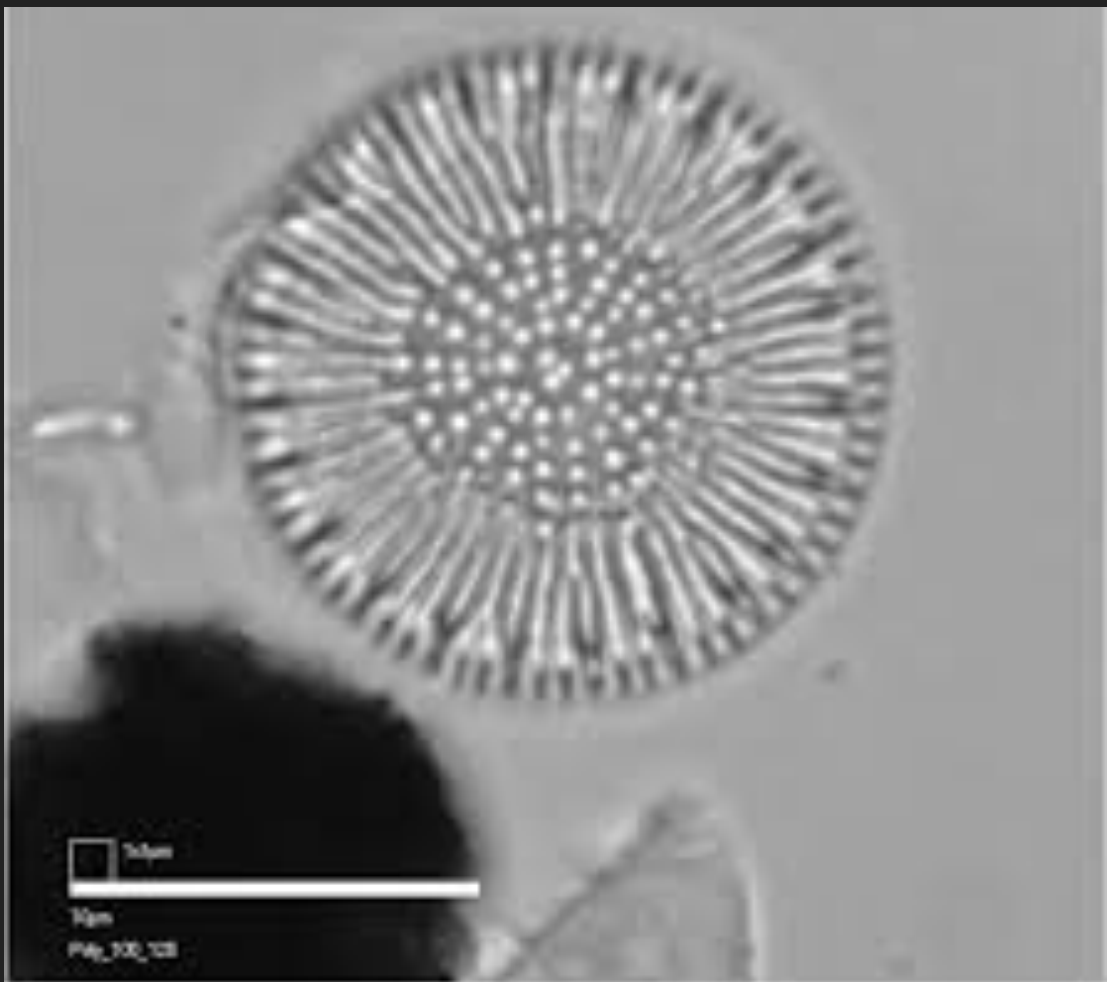


COMBINE DATA IN R









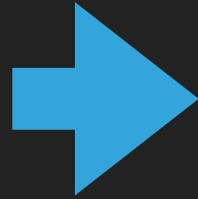


# NEXT STEPS

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## IMMEDIATE:

- ▶ Edit the pipeline to include reverse complemented data



## FUTURE:

- ▶ Repeat the entire process with the remaining 5 libraries of sequencing data
- ▶ Combine data sets and map distribution of species on a spatial scale

