



Human impact in Norden

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Thesis

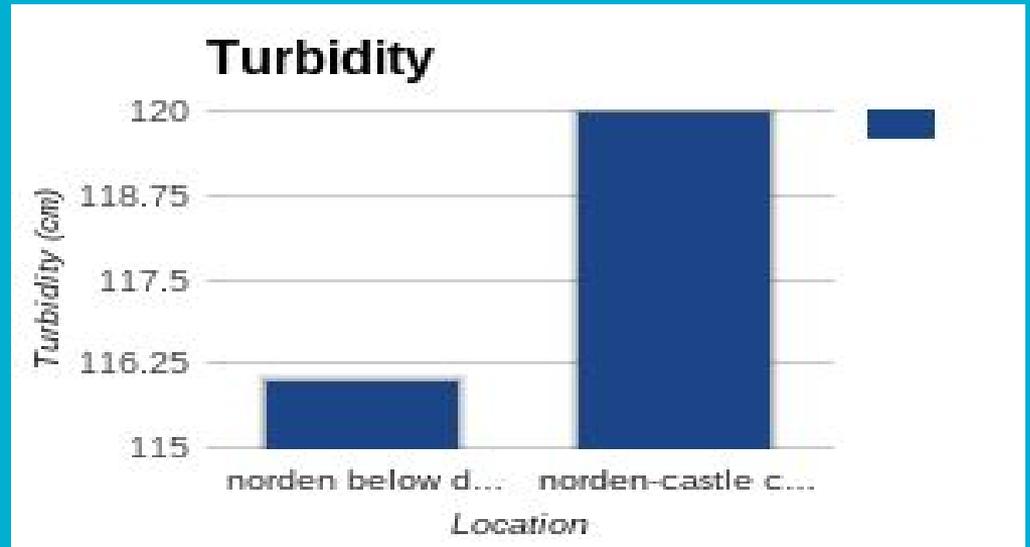
The water quality above the dam will be better than below the dam, because there will be less human impact above the dam.

What we were looking at

- Turbidity (clarity)
- Erosion
- Runoff
- Algae growth
- Invertebrates
- Sediment content
- CFS (cubic feet per second)
- Temperature

Turbidity

- Turbidity is how clear the water is
- Downstream- 60.32 cm
- Upstream- 120+ cm
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Erosion

- The erosion in our area of the stream was very severe.
- Only occurred during flood stages or spring time.
- Over time on the outside bank the stream eroded so that there was a 5' incline.

Runoff

- Runoff from ski resorts
- Runoff from trains passing by the wetland
- This is the biggest pollution impact on the river

Algae growth

- There were two main types of algae
- Green-short algae covering the bottom
- Natural oil that forms in stagnant water but is not the product of pollution

Invertabrates & Vertabrates

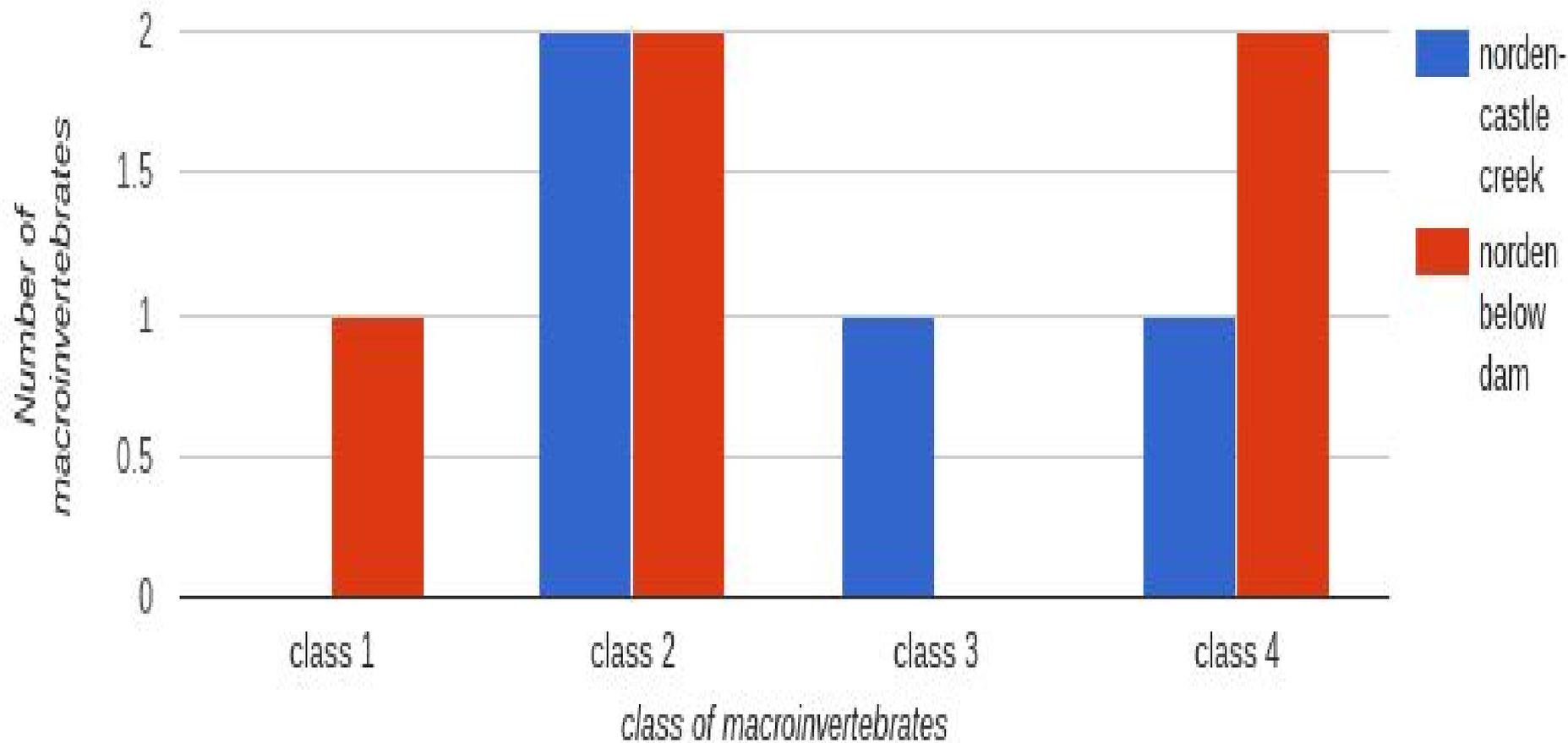
Invertabrates

- 1 snail
- 1 worm
- 5 water boatman
- 5 water striders
- 1 crawfish
- 1 dragonfly

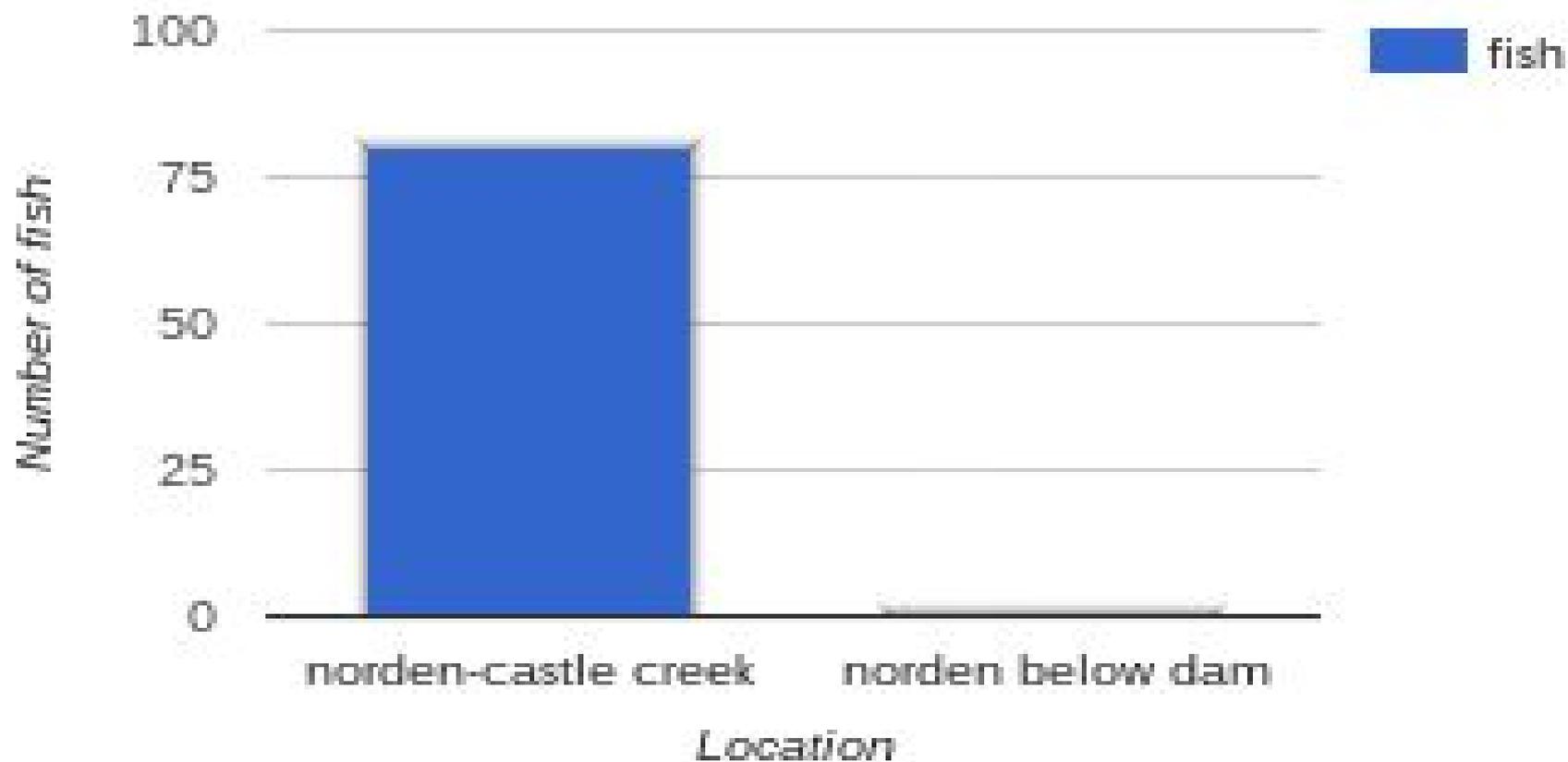
Vertabrates

- 3 Toads
- 80+ trout

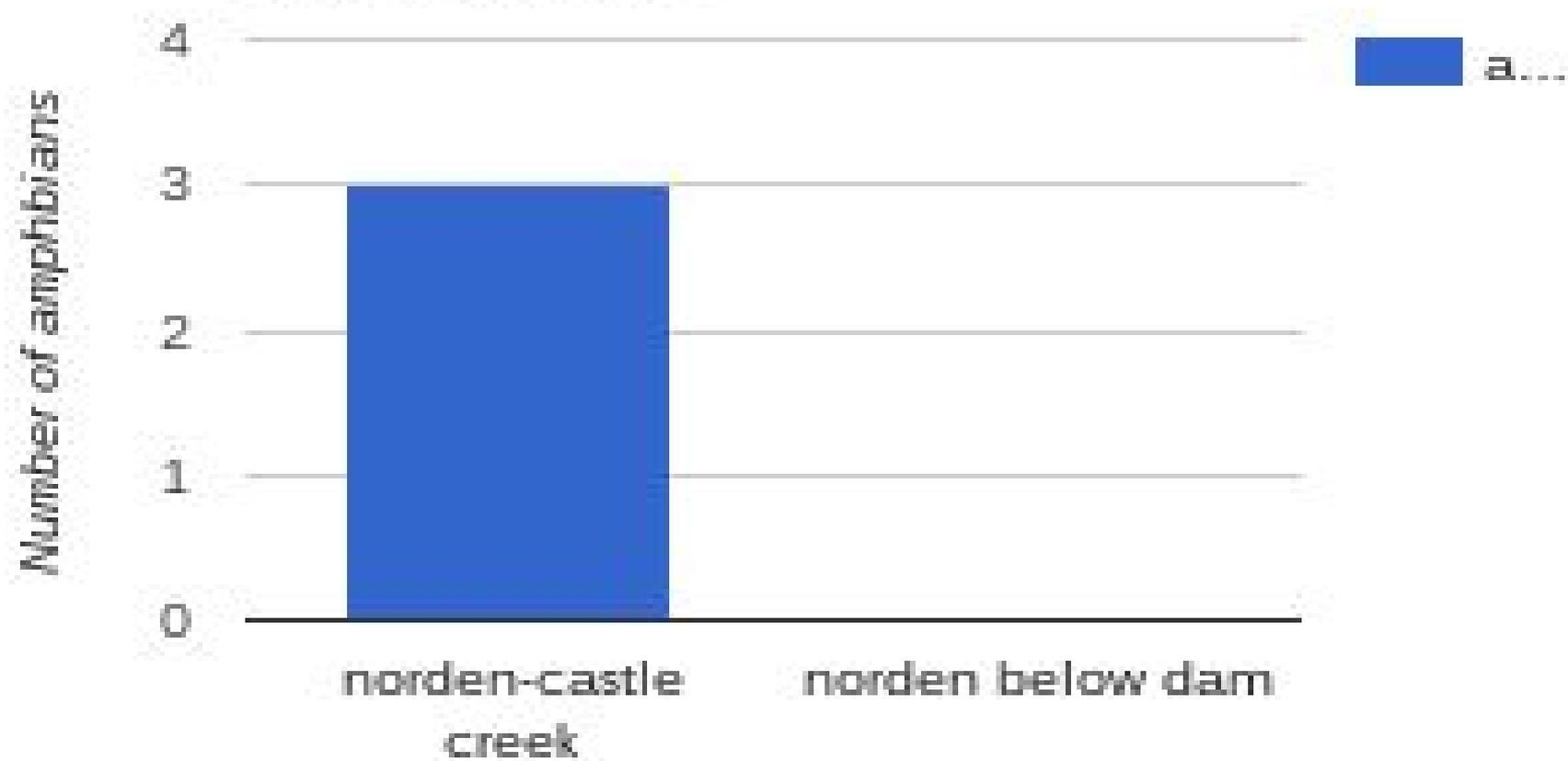
Types of macroinvertebrates at norden-castle creek and norden below dam



fish



amphibians

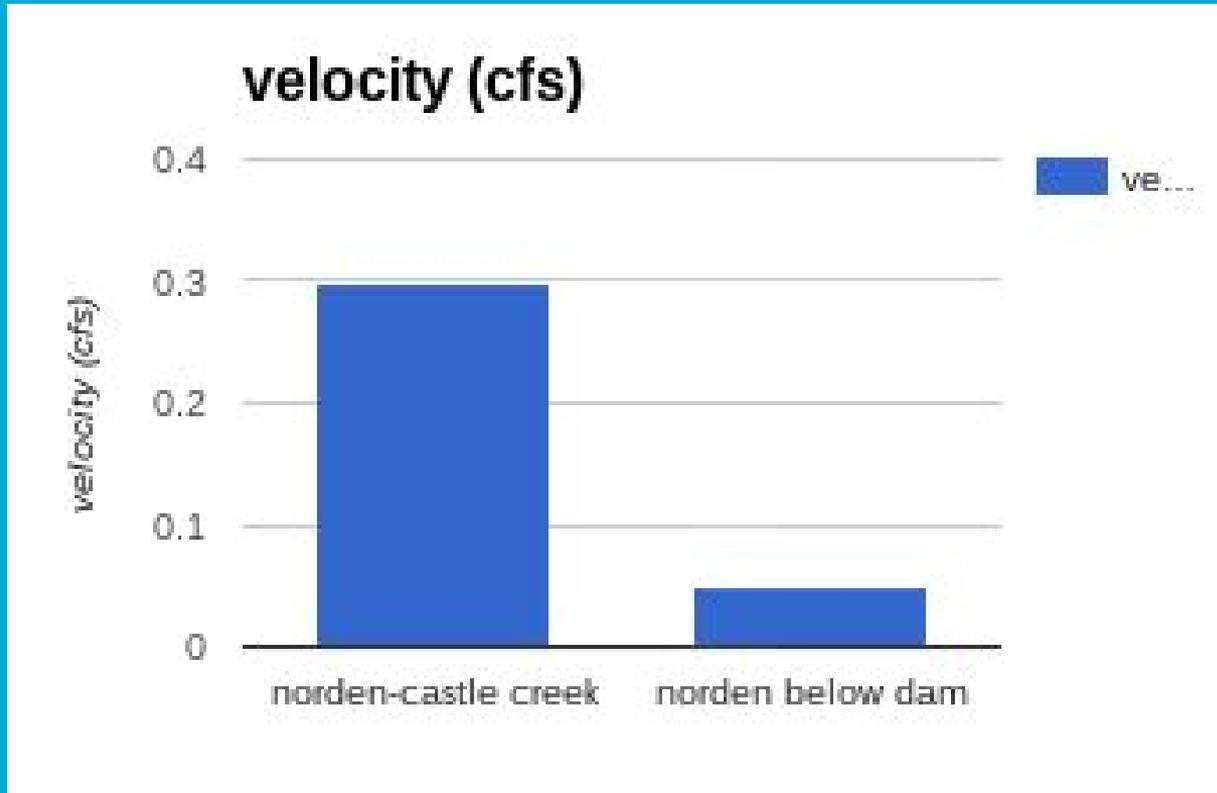


Sediment content

- Level of decomposed material on the stream bed
- Requires flood levels to "cleanse" stream bed
- Fish will not lay eggs if there is too much sediment
- 0.75" sediment level in undisturbed parts of the bed

CFS (Cubic Feet per Second)

- 0.3 CFS



Temperatures

- Air temperature: 11 degrees Celsius
- Water temperature: 10.8 degrees Celsius

Conclusion

- Human impact in Norden is not too severe
- The dams along the South Yuba do in fact make it unhealthy
- There were not many invertebrates found because of the lack of water as a result of the drought
- As well as low D.O levels