

# Are there too Many Dissolved Solids in our Stream?

**BY : ALEX, NIKKI, AND LANIE**



# What is Conductivity?

- Conductivity measures the amount of dissolved solids in the stream.
- We are measuring for conductivity to find how healthy our stream is.
- The Stream has a conductivity from 1500-9000 mg/l which is considered very poor in terms of water quality.
- "The wars of the 21<sup>st</sup> century will be fought over water" – Ismail Serageldin

# Background

## Causes

- **salt, nitrates and, phosphates**

## Which Can be Found in....

- Dead Plants and Animals
- Dead Leaves and Animal Waste
- Leaking Septic Tanks
- Fertilizer
- Dirt
- Cleaning supplies

## Consequences

- Fresh water organisms struggle to live because of high salt amount
- Imbalanced Life Cycle



# PREDICTIONS

We had mixed predictions. Two of us thought that every section would be poor.

Section 1,2,,3- least poor

Section 4 and 5- 2<sup>nd</sup> to least poor

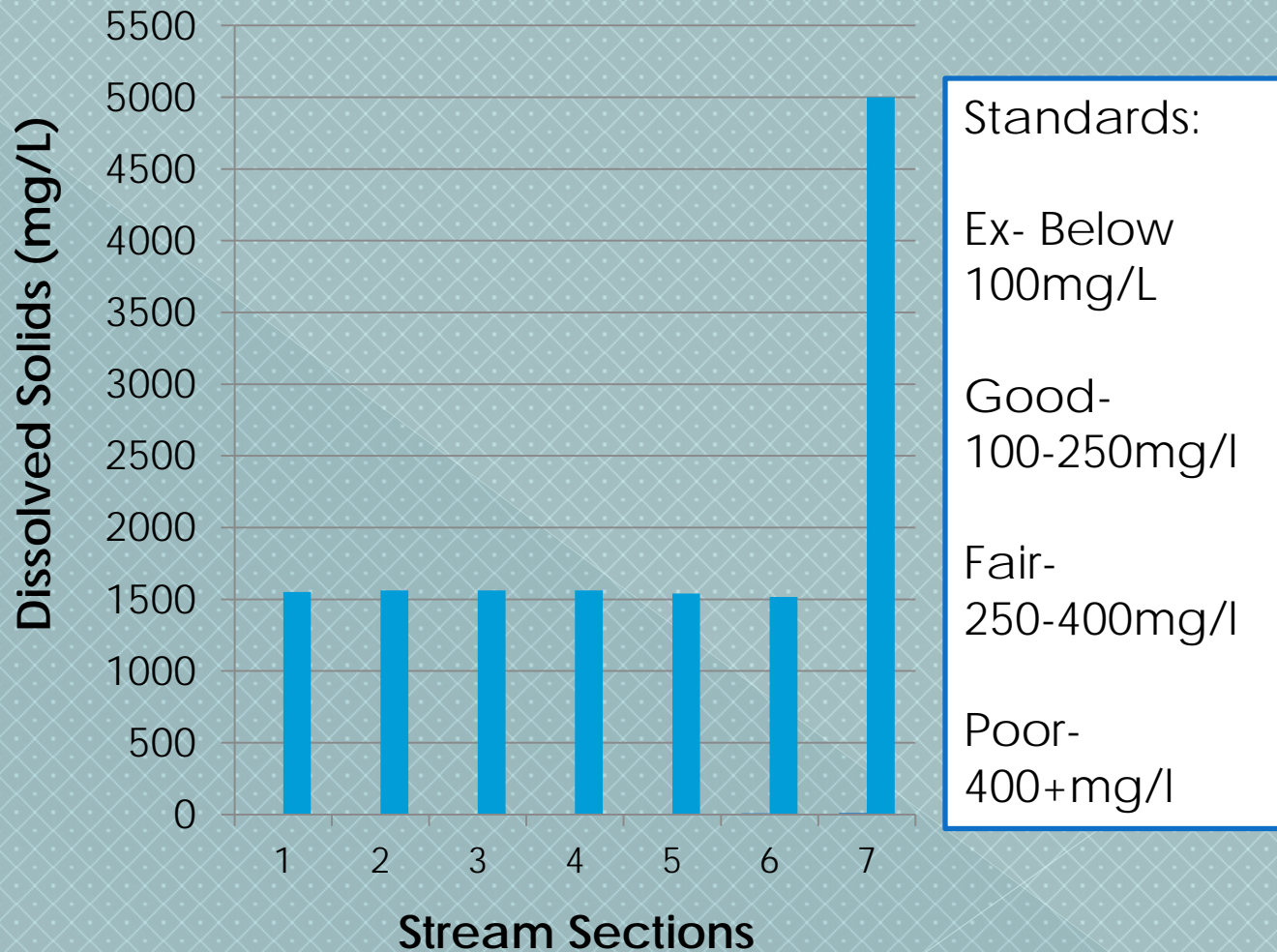
Sections 8 and 9- most dissolved solids/worst

Someone else in our group thought....

that would get fair and poor results

# Evidence : Quantitative

Section	Dissolved Solids (mg/L)
1	1552
2	1561
3	1562
4	1562
5	1540
8	1516
9	5000





# Evidence : Qualitative

Some things we noticed @ the stream that contributed to Conductivity were...

Condos + Houses



School



Dirt



Dead leaves



Algae



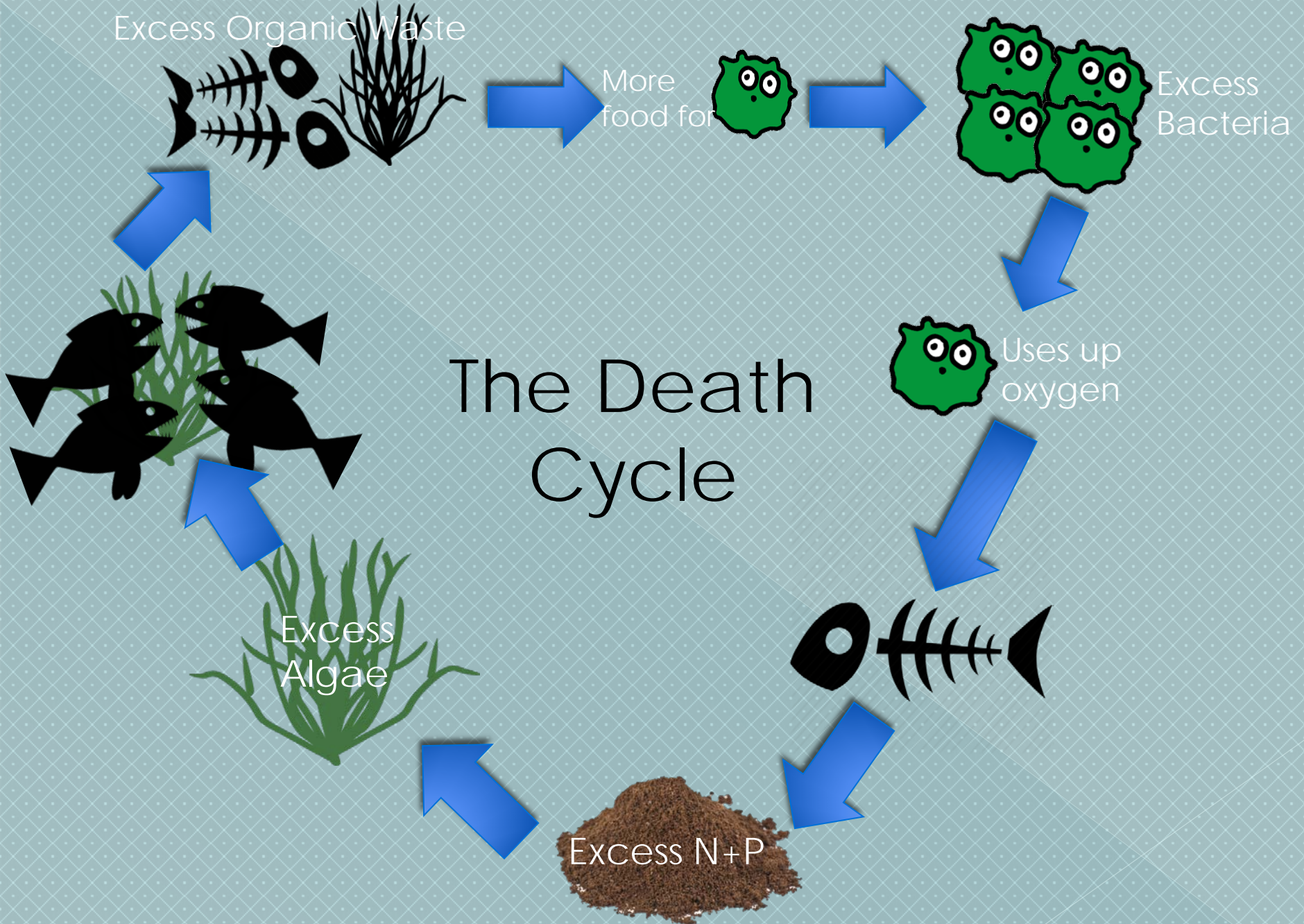






Now you may be asking..why are nitrogen, and phosphorus consequential for our stream?





# Conclusion

- ◉ Therefore, our streams high conductivity is problematic for many aquatic organisms.
- ◉ If we do not treat our water with care, clean water could be the main source of wars in the not-so-far future.

## **In order to prevent high conductivity we must...**

- ◉ Be more mindful of the amount of salt we lay on the pavement.
- ◉ During summer and spring put less fertilizer on lawns near the stream.



**Overall, in order to improve the conductivity of our stream we need to be aware of the well-being of our stream and its organisms!**

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