

# River Contamination: Clean up of the Paraná River

Universidad Tecnológica Nacional  
Facultad Regional Paraná

Electronics Engineering Department, Inglés I

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# The Issue

We are unkind to the natural world and we keep throwing plastics and all our garbage directly into the river.

We are sacrificing our natural environment and ourselves in the long term for physical convenience and ease of living in the short term.



# The goal

To search for a practical and efficient solution to address the contamination of the Paraná river produced.



# The goal

To approach the problem so as to clean, protect, and provide a safer water supply to the people and wildlife in many cities and towns.



# Geographic Context and Location

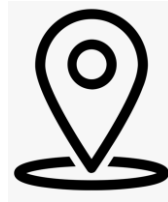
The Paraná River has four thousand and eighty kilometers (4880km).



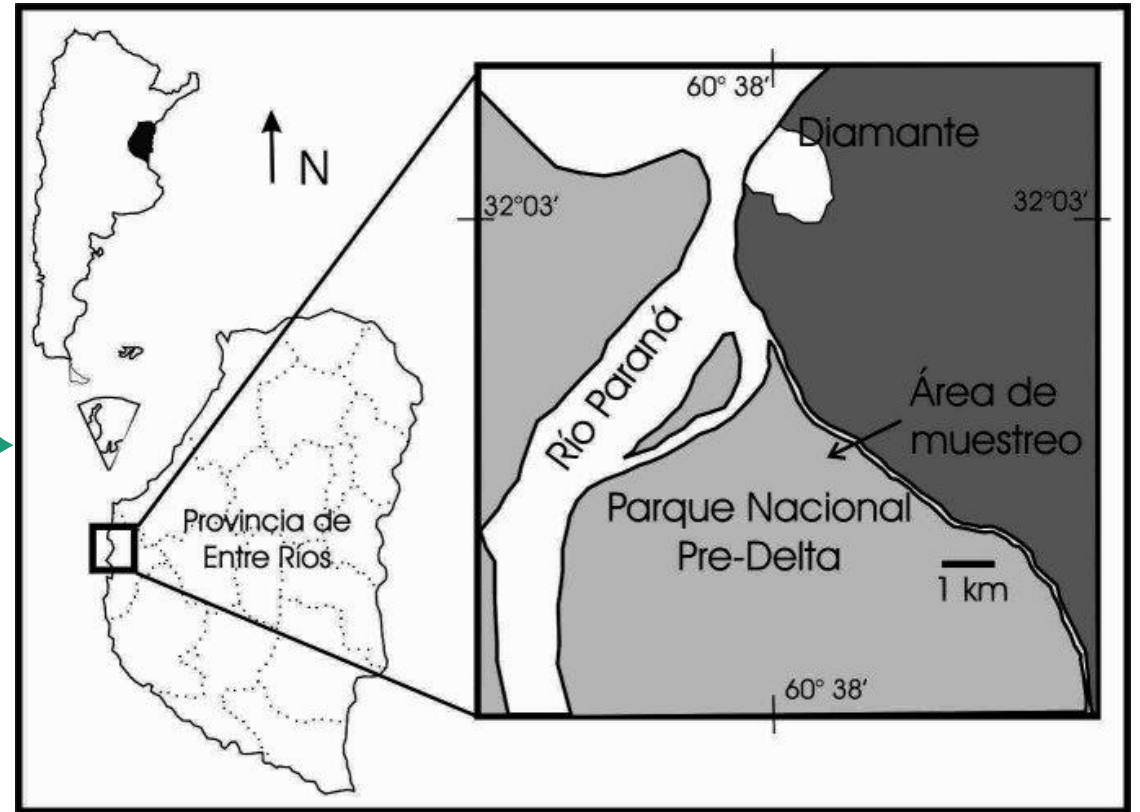
# Geographic Context and Location

It has three well-defined parts:

- The High Paraná
- The Middle Paraná
- The Low Paraná

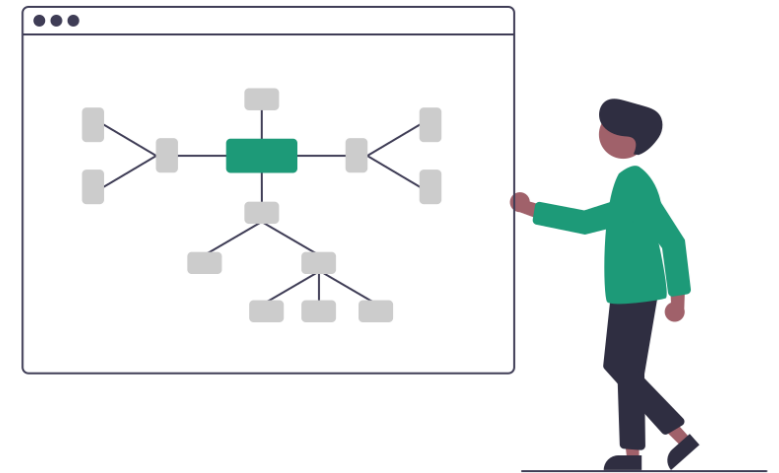


# Geographic Context and Location



# Map of the presentation

- Description of the problem
- Statement of the problem
- Definition of causes and factors of the problem
- Description of consequences of the problem.
- Description of different solutions to the problem
- Detail of strengths and weaknesses of the proposal





# Problems



Plastics



Chemicals



# Current Situation



# Current Situation



# Current Situation



# Current Situation



# Causes and Factors



Places near  
the river



Garbage





# Causes and Factors



Microplastics



Factories



# Consequences



Neurotoxic  
effects



Food poisoning





# Consequences



Death of fish

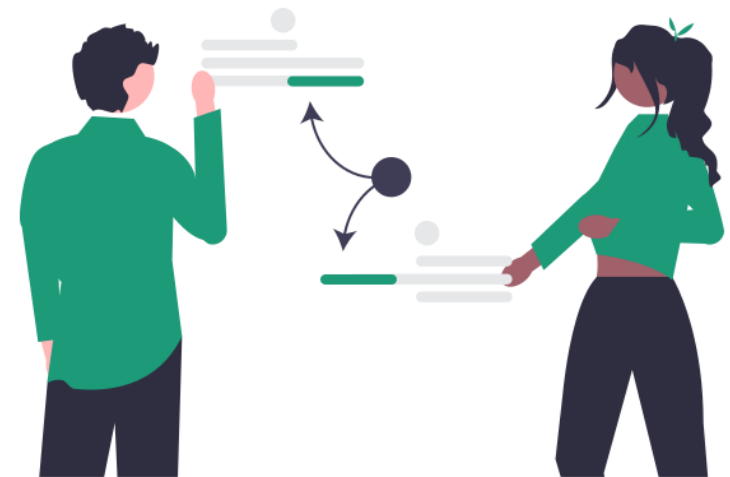


# Consequences



# Problem Approach

The objective of this Project is the clean up of the river in a part of it or its entirety. To do this, it is possible to implement certain actions that should improve living conditions, health and the environment.



# Awareness raising actions



Household chemicals disposal



Recycling of waste



# Political Actions



Incentives Programs



# Legal policies

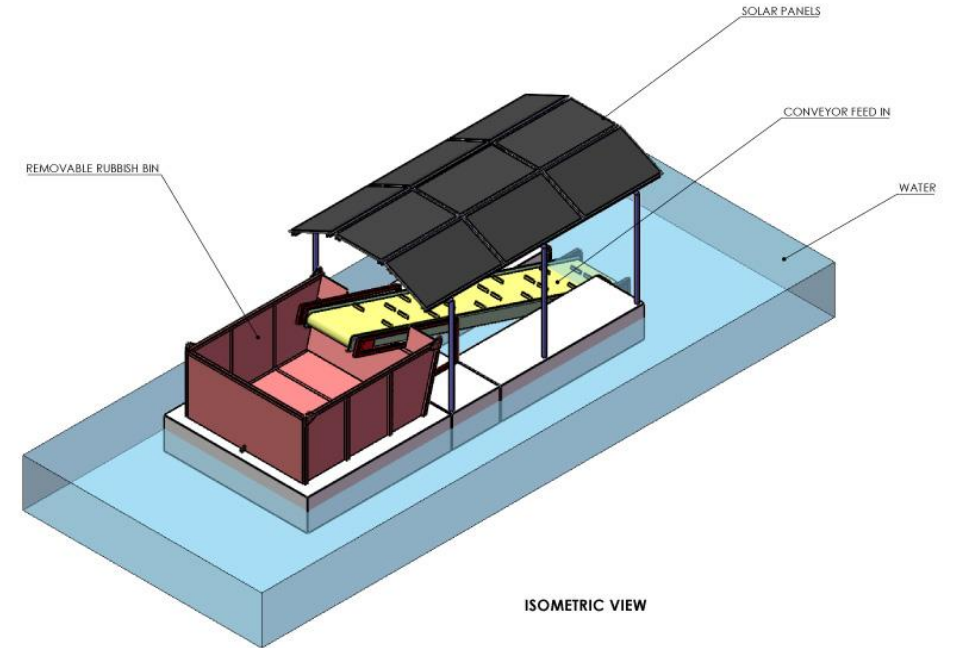


Monetary penalty



# Engineering developments

Solar powered automatic river cleaner



# Engineering developments

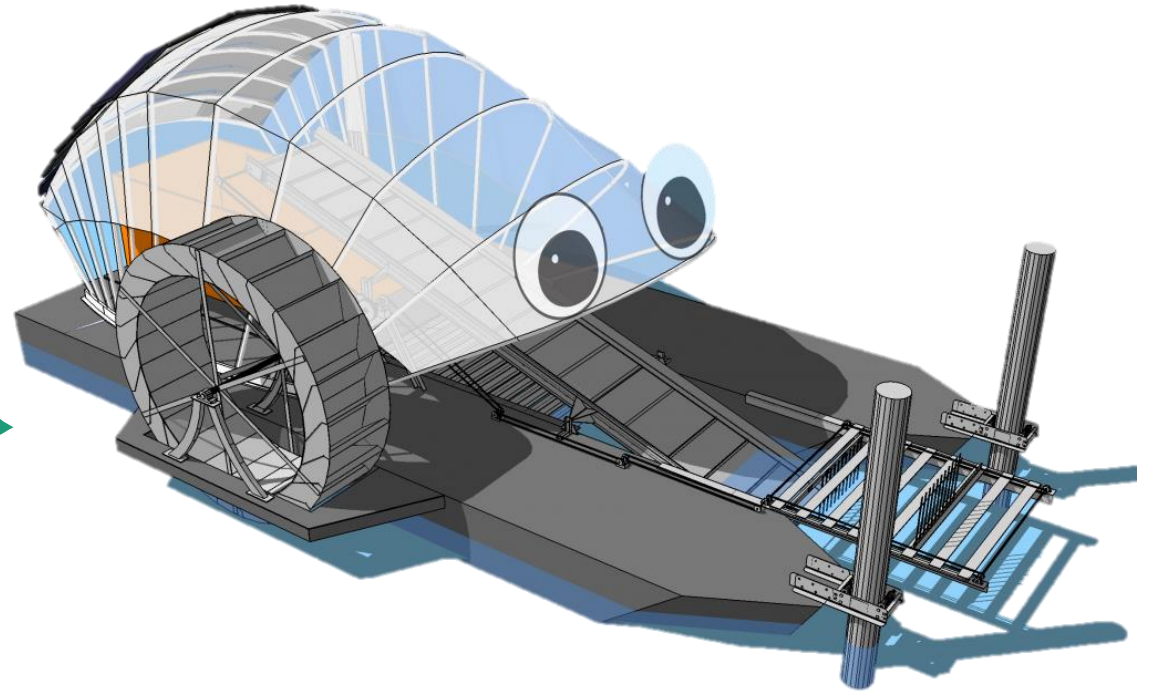
Solar powered automatic river cleaner





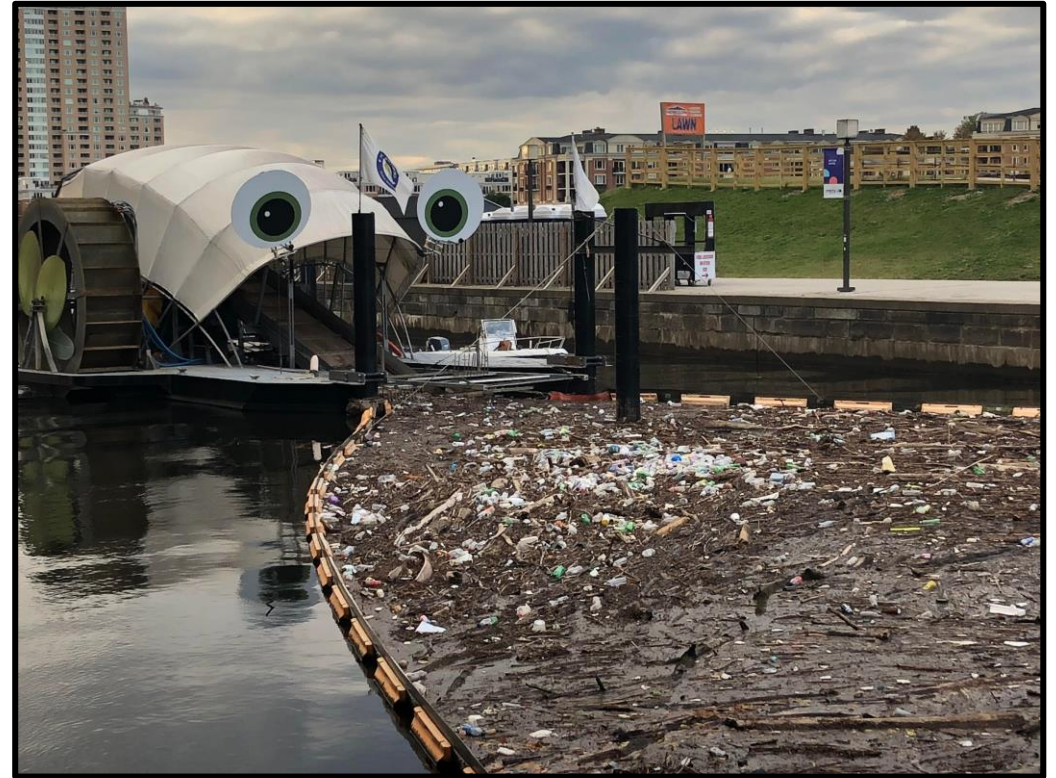
# Engineering developments

Mr. Trash Wheel



# Engineering developments

Mr. Trash Wheel



# Strengths

## Changes

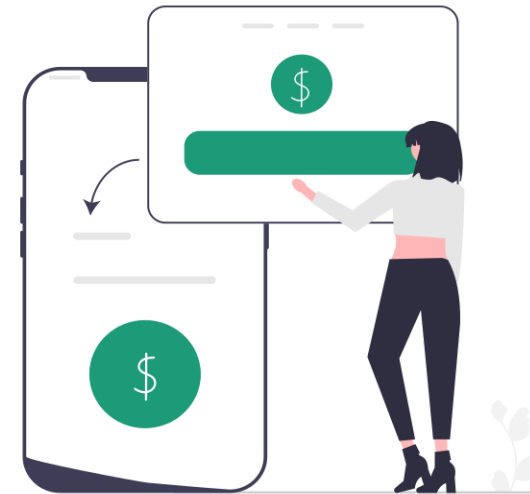
Small individual actions  
are not difficult.



# Weaknesses

## Cost

Unfortunately not everything is inexpensive.



# Weaknesses

## Present State

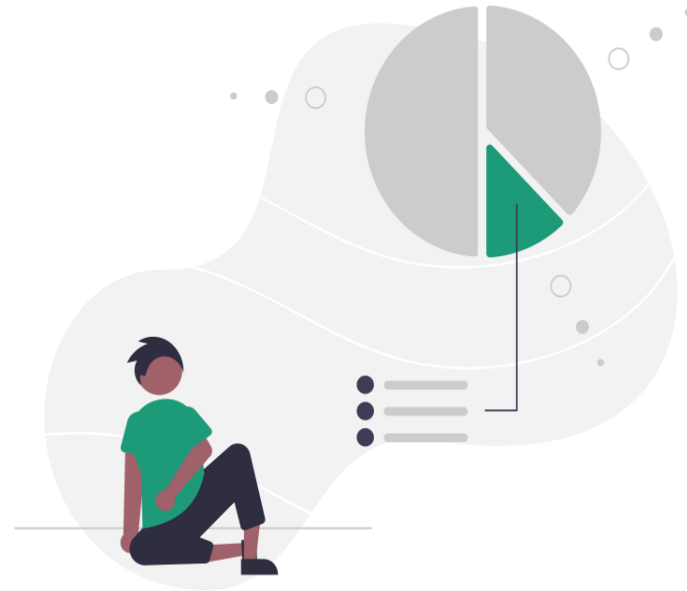
Proposing a way of thinking  
is important.



# Weaknesses

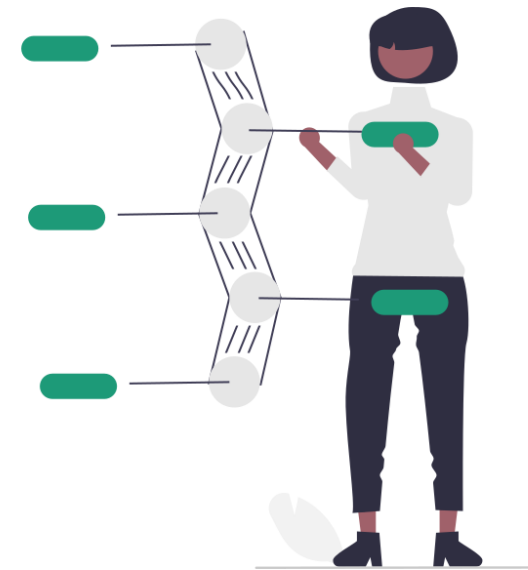
## Awareness

Learning is the most difficult beginning.



# Conclusion

The project seeks a solution that can help reduce the pollution of the river, because since the river is alive, a lot of species live there too. We use the river for our needs. So we should understand the importance of this.





**Thank you for your attention!**





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