

Plan of Action:

Guadalupe River- Downstream

Team 6- RiverAid

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1. Introduction

According to Cebu City Environment and Natural Resources Office (CCENRO), Guadalupe River is the most polluted river in Cebu City. It is classified as a Type C river by the Department of Environment and Natural Resources (DENR) in the year 2000, which means that it is not fit for drinking and bathing with minimal to zero signs of life. Solid waste, domestic wastewater, and sewage are visible in the downstream area of the river.

2. Research Method and Main and Sub Questions

The main problem regarding the downstream area of the Guadalupe River is the accumulation of waste due to the increasing amount of illegal waste disposal in all parts of the river. The riverbank is used as a dumpsite by the informal settlers living along the riverside. In addition, septic waste is being disposed to the river through pipelines that originated from the households of surrounding barangays. Citizens have been issued with warning notices to stop the unhealthy practice, but continue to do so, thus implying a weak implementation of existing laws and policies that protect the river.

2.1. Data Gathering

With the limited time and the current situation that we are facing due to the pandemic, we will be working on this research through desk research. In this way, we will be retrieving data provided by the local government units (LGUs), which are obtained through experiments, case studies, and historical documents. Drone shots showing the current situation of the downstream part of the Guadalupe River were provided by the coordinators to help us with our observations. In addition, we will be consulting with the experts and LGUs through a scheduled speed date. Lastly, we can retrieve data by researching online and using data and results acquired from previous Climate Café Research Studies.

2.2. Main and Sub Questions

“What is the main cause of the pollution of the Guadalupe River, and how can this be reduced and remedied?”

Based on the data provided by DENR and Cebu City Local Government, the main cause of the pollution is the septic waste thrown by the settlers surrounding the river. The level of Fecal Coliform is 19712.39% higher than the critical level.

To tackle on this problem, we have specific sub-questions:

- What are the regular actions done by the government and the community to at least lessen the wastes found in the river?
- What are the possible ways to resolve the septic wastes of the community?
- How much percentage of the community does not have a septic tank?
- What are some alternative solutions aside from installing a septic waste system?
- Would a communal septic tank be feasible in the study?
 - Will there be a proper location to install the communal septic tank?
 - Is there a sufficient space?

- What design of communal septic tank would be cost-effective and efficient to the area?

Based on the River Scan 2019, MCWD stated that they would shoulder the expenses for building a communal septic tank system that will temporarily receive domestic wastewater at Barangay Sambag 1 but they could not proceed without a specific location provided by the Cebu City Government.

- Are there actions undertaken by the government to provide a possible location?
- Can we suggest a location fit for the project?
- Is this statement of MCWD still holds true up to now? If not, what initiatives can we possibly do to fund the project?

First Week (April. 19-23, 2021)

Goal: The first week we want to get to know each member of the team and decide a team name and team logo, and we want access to data that can help us formulate an answer to our questions; data amount of pollution in Guadalupe River, the cause of pollution, possible solutions, data from polluted rivers worldwide, stakeholders of the Guadalupe River, and previous and current projects about the Guadalupe River and their research results.

Action Step <i>What needs to be done?</i>	Person In-charge <i>Who should take this action to complete this step?</i>	Deadline <i>When should this step be completed?</i>	Resources <i>What do we need to complete this step?</i>	Status of the Step
Decide a name and logo for the team	Jhedshane Clyde S. Villas	April. 19, 2021	Adobe Photoshop CS6	The name and logo for the team has been decided, and can be seen on the headings of the cover page.
Make a 2-pager Plan of Action for the 2-week project	Everyone	April. 20, 2021	Microsoft Word and Microsoft Teams	The Plan of Action for the River Scan Challenge has been made and finalized by the team.
Make a Factsheet about the Guadalupe River	Everyone	April. 23, 2021	Microsoft Word and Microsoft Teams	The step is in progress.
Make an infographic for the Guadalupe River	Jhedshane Clyde S. Villas	April. 23, 2021	Microsoft Teams and Adobe Photoshop CS6	The step is in progress.
Make a pitch about the group progress and following steps for week 2	To be discussed by the team	April. 23, 2021	Microsoft Word, Microsoft PowerPoint, and Microsoft Teams	The step is in progress.

Second Week (April. 26-30, 2021)

Goal: The main goal for the second week is to come up with a solution that helps with the biggest problems regarding the Guadalupe River. This specifically means that plastic pollution will be counteracted and water quality will be improved. This solution will be comprehensively elaborated in a report of approximately 10 pages consisting of several analyses.

Action Step <i>What needs to be done?</i>	Person In-charge <i>Who should take this action to complete this step?</i>	Deadline <i>When should this step be completed?</i>	Resources <i>What do we need to complete this step?</i>	Status of the Step
Planning of the implementation of the solution (elaboration of the stages)	Everyone	April. 26, 2021	Microsoft Word, Microsoft Excel, Microsoft Teams	Start in week 2
Design of the solution	Everyone	April. 28, 2021	Adobe Illustrator, Adobe Photoshop, QGIS	Start in week 2
Locational analysis, where in/ around the river should the solution be applied?	Everyone	April. 28, 2021	Adobe Illustrator, QGIS	Start in week 2
Stakeholder analysis, what stakeholders are involved?	Everyone	April. 28, 2021	Microsoft Word, Microsoft Teams	Start in week 2
Financial paragraph, Cost benefit analysis along with an explanation	Everyone	April. 28, 2021	Microsoft Word, Microsoft Excel, Microsoft Teams	Start in week 2
Preparation for the Project Pitching	Everyone	April. 29, 2021	Microsoft Word, Microsoft Teams	Start in week 2