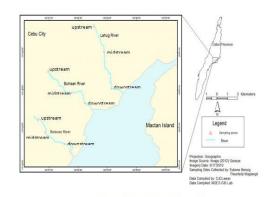


BULACAO RIVER

ABOUT THE RIVER

The Bulacao river has a width of 8 meters and stretches about 12.7Kms from Barangay Candulawan down to Barangay Bulacao, San Roque and Tangke of Talisay City. This river serves as the main boundary between Cebu City and Talisay City. The Upstream Portion of the Bulacao River Begins in the mountains of Barangay Candulawan of Talisay City. The upstresite is the original water source of the city as this was located in the watershed area. The midstream portion covers the barangays of Bulacao Talisay City and Bulacao Pardo of Cebu City. The downstream area covers the barangays of Inayawan Cebu City, San Roque and Tangke of Talisay before it empties into the road of SRP.



Source: Fecal and total coliform levels of Buhisan River, Cebu City, Philippines. 1

Figure 1. Map of the sampling sites.



BULACAO RIVER WATER QUALITY



The Bulacao River which was once classified as class C river is now classified as class D which is its only purpose is for navigation due to the tremendous amount of pollution found in the river. As shown in the data below, the major issues of the Bulacao River can be observed table.

As shown in the results below, all of the river's parts falls at the Class D criteria and only the Source of Bulacao River falls into the class A criteria. It can be observed that the parameters that still passes class C are the following: Ph Level, Total Suspended Solids (TSS), Chlorides, Nitrates, Posphates and the Color (TCU).

Parameters Measured									
Water Quality Monitoring Stations		рН	BOD (mg/L)	DO (mg/L)	TSS (mg/L)	Chloride s (mg/L)	Nitrates (mg/L)	Phospha tes (mg/L)	Color (TCU)
		Class D Criteria							
		6.0-9.0	15	2	110	400	15	5	150
1	50m before mouth bulacao river	7.73	32	2.24	14	57	0.55	0.58	12
2	Upper Torre Bridge	7.71	17	3.02	18	40	1.22	0.44	10
3	Bulacao Bridge	7.92	87	2.05	16	58	0.22	0.28	7
4	Candulawan Footbridge	7.67	8	4.41	14	17	1.31	0.14	5
		Class C Criteria							
		6.5-9.0	7	5	80	350	7	0.5	75
5	Source Bulacao River	7.8	3	7.15	7	18	1.07	0.07	5

PROBLEMS/ISSUES IN BULACAO RIVER





WATER QUALITY



ILLEGAL SETTLERS

Although it is shown in the table that the amount of solid waste still passes the DENR criteria. The amount of solid waste is still considerable especially there are three dumpsites near the river area. According to the report by DENR (2021), the highest category of solid waste is plastic which widely creates a negative impact into the different bodies of water.

The water quality is one of the main problems in Bulacao River specifically because of the DO, BOD and the amount of Fecal Coliform Present in the water as per the water quality analysis by the DENR. The main problem lies on the significant amount of Fecal Coliform bacteria due to improper disposal of wastewater to the river by the people.

One of the primary contributors of both Physical and Chemical waste. Due to lack of resources, most of the illegal settlers dump their wastewater directly into the river. According to the report made by the local government of Talisay, most of the communities which does not have septic tanks are residents who do not own the land.





POLLUTANTS OF THE RIVER

The users of the river are the nearby households and facilities around the river. In 2019 the city environment office identified that around 56 establishments and more than 100 houses have contaminated the Bulacao River in Cebu City. Aside from the houses, they found that dressing plants, slaughterhouses and stores situated near the river may have contributed to its pollution. Water deposited at the Bulacao River comes from houses in Barangays Bulacao and Inayawan.



Uncollected garbage, street refuse, agricultural pesticides, traffic emissions, industrial effluents eventually find their ways into the rivers and the groundwater aquifers. Water pollution compounded by poor sanitation and hygiene practices has led to an upsurge of waterborne and water-related diseases

LAWS AND POLICIES IMPLEMENTED

PD 1586

Philippine Environmental Impact Statement System Attain and maintain a rational and orderly balance between socio-economic growth and environmental protection.

RA 6969

Toxic Substances and Hazardous Waste Control Act of 1990 Regulate, restrict and prohibit the importation, manufacture, processing, sale, distribution, use and disposal of chemical substances and mixtures that present unreasonable risk and/or injury to health or the environment.



RA 9003

Solid Waste Management Act

SECTION 48: 1. Littering, throwing, dumping of waste matters in public places, such as roads, sidewalks, CANALS, ESTEROS, or parks, and establishments, or causing or permitting the same.

RA8749

Clean Air Act

The State shall pursue a policy of balancing development and environmental protection. To achieve this end, the frame work for sustainable development shall be pursued.present unreasonable risk and/or injury to health or the environment.

RA 9275

Philippine Clean water Act
Of 2004

The State shall pursue a policy of economic growth in a manner consistent with the protection, preservation and revival of the quality of our fresh, brackish and marine waters.

SECTION 5: Water Quality Management Area

SECTION 6: Non Attainment Areas

SECTION7:Septage and Sewerage Management

SECTION 8: Domestic Waste Management

SECTION 13: Waste Water Charge Systemdevelopment shall be pursued.present unreasonable risk and/or injury to health or the environment.

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