

The program is implemented based on the established environmental laws, specifically RA 9275, otherwise known as the "Philippine Clean Water Act" that provides a comprehensive strategy to address the degradation of our waterbodies.

It aims to improve water quality of priority rivers and other critical water bodies, including lakes and bays, through continuous massive cleanup, monitoring of industries and rehabilitation of esteros/rivers through partnership agreements such as the Adopt-an-Estero Program. Water classification is a very important component of water quality management since the application of effluent standards is dependent on this classification. Also, the operationalization of Water Quality Management Areas (WQMAs) is prioritized.

Status of Water Quality

Priority Recreational Waters (Bathing Beaches)

Out of 39 Priority Recreational waterbodies in CY 2020, only 36 waterbodies were monitored due to strict implementation of community quarantine. Of the 36 waterbodies monitored, only 21 or 58% are within the Water Quality Guidelines in terms of Fecal Coliform Counts.

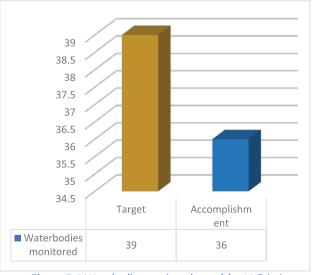


Figure 5.1 Waterbodies monitored out of the 39 Priority Recreational Waterbodies

Table 10. The 21 beaches within the Water Quality Guidelines

Sto. Domingo Beach	Region 1	
Sinait Beach		
Angib Beach	Region 2	
Nangaranbuan Beach		
Iba Bay	Region 3	
Honda Bay	- MIMAROPA	
Muelle Bay		
Diwata-Imacoto Beach	Region 5	
Boracay Coastal Waters	Region 6	
Duyong Tingib Beach		
Panglao Coastal Waters	Region 7	
Himoaw Bay	Region 8	
Kalangaman		
Great Sta. Cruz	Region 9	
Roan Beach	Region 10	
Leling Beach Resort	Region 11	
Lion Beach Resort	Region 12	
Sarangani Bay Beaches		
London Beach Resort		
Hinatuan Beach	Region 13	
Baroro		

Priority Rivers

The objective of monitoring Priority Rivers is to improve water quality and comply with DENR Administrative Order No. 2016-08 or the Water Quality Guidelines and General Effluent Standards of 2016.

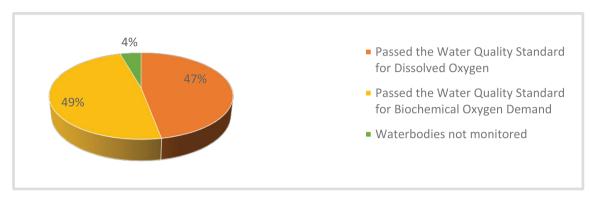


Figure 5.2 Priority Rivers monitored

Figure 5.2 shows that out of 43 rivers monitored in CY 2020, 32 waterbodies passed the water quality standard for Dissolved Oxygen (DO) while 33 waterbodies passed the water quality standard for Biochemical Oxygen Demand (BOD). Meanwhile, three waterbodies were not monitored due to strict implementation of community quarantine where the waterbodies are located.

Monitoring of Other Waterbodies

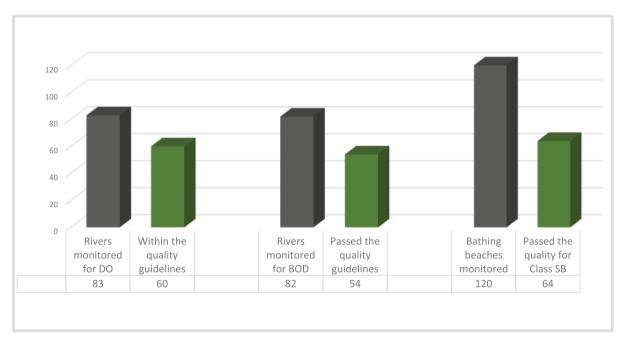


Figure 5.3 Monitoring of other waterbodies

Figure 5.3 shows that in CY 2020, out of 83 rivers monitored for DO, 60 or 72% are within the water quality guidelines. For those that are monitored for BOD (82 rivers), 54 or 66% passed the water quality guidelines. On monitoring of other recreational waters, there are 120 bathing beaches monitored in CY 2020, 64 of which or 53% passed the water quality criteria for Class SB or fishery water suitable for commercial propagation of shellfish and intended as spawning areas for milkfish and similar species.

Classification of Waterbodies

This activity is influenced mainly by the current status of the waterbody and its dominant utilization. Thus, there are several steps that must be done to assess the beneficial use of the waterbody. These involve the conduct of field survey / monitoring of the waterbody, and laboratory and data analysis. The public has also huge influence in the classification of waterbodies and therefore a public survey and / or public hearing is part of the process that was also done by the EMB Regional Offices.

For CY 2020, EMB has identified additional forty-nine (49) water bodies for classification and two (2) waterbodies for reclassification in terms of best usage and water quality to be maintained.

Water Quality Management Area

The designation of Water Quality Management Areas (WQMA) is governed by the "Philippine Clean Water Act of 2004" or RA 9275 under Section 5 which states that, "The DENR in coordination with the National Water Resources Board (NWRB), shall designate certain areas as water quality management areas using appropriate physiographic units such as watershed, river basins or water resources regions. In CY 2020, the Bureau drafted and proposed two (2) waterbodies for designation. These are the Panglao Island Coastal Waters (Region 7) and Bolo River (Region 1). Due to the physical distancing measures and restrictions in travel, the activities such as coordination meetings and travel were not conducted, and the budget was realigned to NBC 580. The validations were done through desk review.

Assessment of the Adopt-an-Estero Waterbody Program

The program provides positive, measurable change to both the communities and the environment by bringing together the Estero Community, Donor-Partner, Local Government Unit/s, other government agencies and the DENR to clean the esteros of wastes, debris and silt until all have been cleaned up. It also intends to mobilize estero communities in cleaning the estero, to enlist their active participation in the actual clean up, implementation and preparing plans to sustain a clean estero in the future years. Due to the threat of the COVID-19 pandemic, travel restriction policies and localized lockdowns, water quality monitoring sampling and cleanup activities had been very minimal. However, coordination with the adopters was undertaken.

Name of Adopted Waterbody: LINGUNAN CREEK

Location: Valenzuela City

Private Sector Partner: March Resources Manufacturing Corp.



Name of Adopted Waterbody: ZAMBOANGA CHANNEL CREEK Location: Zamboanga City Private Sector Partner: Jollibee Camins Branch, 905th Philippine Army



Figure 5.4 Lingunan Creek (top) and Zamboanga Channel Creek (bottom), among the adopted waterbodies

Compliance Monitoring of Firms

Shown in the table below is the compliance monitoring of firms in terms of water quality with corresponding Notice of Violations (NOVs) issued.

Table 11. Percentage of Compliance of Firms for CY 2019 and CY 2020

DETAILS	CY 2019	CY 2020
Discharge Permit Issued	5,929	6,477
Firms Monitored	9,060	10,222
Notices of Violation Issued	4,930	3,928
Percentage of Compliance	46%	62%

Ways Forward

- **‡**Compliance Monitoring of Firms/Industries
- #Ambient Water Quality Monitoring (Priority Rivers, Recreational Waters and Other Waterbodies)
- #Massive cleanup of waterbodies through the Adopt-an-Estero/ Waterbody Program
- #Classification of additional forty-six (46) waterbodies according to their best usage

Proposed Policies in CY 2021

- #Guidelines for the Designation of Non-Attainment Areas (NAAs) and Attainment Areas (AAs)
- **♣** Guidelines for the Real-Time Continuous Effluent Monitoring Systems (RTCEMS)
- ♣ Development of Industry Specific Effluent Standards for the Industries (PSIC Code 56 of the DAO 2016-08)
- ♣ Development of Industry Specific Effluent Standard for Offshore Oil and Gas Industry
- **♣** Development of Wastewater Charge System

(Source: EMB 2020 Annual Report)