REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
ENVIROMENTAL MANAGEMNET BUREUA

DATE: March 15, 2020
Longitude: 14.779431
Latitude: 121.027178

BIO-OXYGEN DEMMAND (BOD) HAZZARDS ASSESMENT

MUNICIPALITY	STATUS	BOD CONDITION
MARILAO	Very Poor	High
MEYCAUYAN	Very Poor	Very High
OBANDO	Poor	Low

All pyshio-chemical and hazard assessments are based on the available maps interpolation, geospatial analysis and the coordinates of the user's selected location.

- Areas with **low BOD condition** are likely to experience aqua life disturbance like fish killing and health concern issue.
- Areas with **moderate or high BOD condition** are likely to experience food security issue as well as health concerns
- Areas with **very high BOD condition** are likely to experience Areas with very high
- BOD is affected by the same factors that affect dissolved oxygen (see above). Aeration of stream water by rapids and waterfalls, for example will accelerate the decomposition of organic and inorganic material. Therefore, BOD levels at a sampling site with slower, deeper waters might be higher for a given volume of organic and inorganic material than the levels for a similar site in highly aerated waters.
- Chlorine can also affect BOD measurement by inhibiting or killing the microorganisms that decompose the organic and inorganic matter in a sample. If you are sampling in chlorinated waters, such as those below the effluent from a sewage treatment plant, it is necessary to neutralize the chlorine with sodium thiosulfate

RECOMMENDATION

- The implementation of appropriate mitigation measures as deemed necessary by project manager, DENR-EMB and LGU officials is recommended for areas that are affected by the BOD fluctuation of oxygen to reconsider different measure like proper garbage disposal, city environmental office must monitor each individual household with regards to its garbage management.
- It takes some experimentation to determine the appropriate dilution factor for a particular sampling site. The final result is the difference in dissolved oxygen between the first measurement and the second

EXPLAINATION

- Biochemical oxygen demand, or BOD, measures the amount of oxygen consumed by microorganisms in decomposing organic matter in stream water. BOD also measures the chemical oxidation of inorganic matter (i.e., the extraction of oxygen from water via chemical reaction). A test is used to measure the amount of oxygen consumed by these organisms during a specified period of time (usually 5 days at 20 C).
- This is especially true for rivers and streams with a lot of organic pollution. Since it is not known when the zero point was reached, it is not possible to tell what the BOD level is. In this case it is necessary to dilute the original sample by a factor that results in a final dissolved oxygen level of at least 2 mg/L.