

Hello All.

I wanted to state how I understand how the new proposed criteria will function and through out some thoughts. comments are welcome. I am referring to sections of the Draft Implementation of the Turbidity Criterion document.

For any project, there will be (at least) three locations where turbidity measurements will be made, each with it's own function.

The Baseline location (Section 2.2)

The baseline station is located above Coral and or Hard-bottom if it exists in the vicinity of the construction site. Data will gathered PRIOR to construction and from this data, an estimate of the natural variability in this environment will be made using the equations in section 2.3. It is important to note that this is the only time turbidity measurements will be made at this location !

Section 2.4 describes how measurements will be made during construction activities. Turbidity measurements are made at two locations during construction. One measurement will be made at the compliance location at the edge of the turbidity mixing zone. Another measurement will be made at a location referred to as the background location. The background location is chosen to be "In an area clearly outside of the influence of any construction activities and not at the same locations as the pre-project background station(s)" Section 2.4 states that the location of the compliance and background station can shift due to environmental conditions and location of the mixing zone.

Section 2.4 also details how the turbidity natural variability upper 90 or 95 percent confidence interval value , collected at the baseline station prior to construction ,is added to the value of the data from the background station data to form the limit that the data in the compliance location cannot exceed.

Regarding what we were discussing regarding the estimation of a time integrated turbidity "loading " to the coral or hard-bottom, there will not be any data collection at the coral/hard-bottom location (baseline station(s)) during construction, so that estimation can't be made.

Some of my thoughts and ideas :

Why not go back to the pre-construction baseline location(s) during operations? I can see that they may too far from the compliance location to provide a relevant background value during operations ??? But , if you got a boat and a meter, why not go over to the baseline sites at some interval?

I am thinking that perhaps there should tiers of monitoring requirements based on the magnitude of the project.

If something is considered to have the possibility of a large impact, sedimentation and long term turbidity measurements (self recording sond) could be deployed at a coral/hard-bottom location ??? And/or a diver survey pre and post construction?

The way that the turbidity mixing zone is defined is very important . Rule 62-4-244 governs this. I've not had the chance to study this.

The issue we discussed of the gathering of a sufficient number of samples at the baseline location to calculate the confidence interval should be addressed.

The issue of gathering data at the baseline location during representative meteorological and physical oceanographic conditions (wind, waves, currents etc.) should be addressed more fully.

I was looking at turbidity instruments on the web and noticed that this instrument has just become available.

<http://www.sequoiasci.com/product/lisst-aobs/>

It simultaneously measures turbidity(NTU) and suspended sediment concentrations (mg/l).

If this instruments works well, it could be very useful.

Ok that's my 2 cents worth for the moment.

Best. Jack.

Hello All

I wanted to make you aware of the products from this Miami company. I've never used them myself so this isn't an endorsement! They measure sedimentation plus other Parameters and have the capability of forming a real time array. Check it out!

<https://lindorm.com/>