

Little Mosquito Creek & Assawoman Creek TMDL Public Meeting

October 15, 2015

Meeting Notes

Location: Chincoteague Bay Field Station (Classroom 200) located at 34001 Mill Dam Rd, Wallops Island, VA 23337

Start: 6:00 pm

End: 8:00 pm

Meeting Attendees:

Cole Charnock-ESSWCD, R. Owen Hooks-NASA Wallops, Scott Belfit-resident, Bruce Jones-visitor, Hillary Essig-ANPDC, TJ Meyer-NASA Wallops, David Liu-NASA Wallops, Anne Schlegel-DEQ/CO, Jennifer Howell-DEQ/TRO, Jian Shen-VIMS, Mac Sisson-VIMS

I. Agenda Item: Outline the TMDL Process

Discussion: Mac Sisson (VIMS) gave a presentation to the attendees of an overview of the TMDL process and the procedures used the source assessment and modeling component. The impaired segments are listed in the current Integrated Report for not meeting the Aquatic Life Use due to low dissolved oxygen levels. Several correlation graphs were shown of how different parameters relate to DO. Increased temperature and TP each have strong correlations with decreased DO. Also, an important relation is between salinity and because it shows the TP source is coming from outside of the system and not the tidal influence. It was discussed that TP limitation controls DO demand in the system.

II. Agenda Item: Questions & Answers/Comments

Q: How do we account for large change in the tourist population? That is difficult to interpret in the watersheds.

A: A large part of the tourist population is in the Trails End Campground in the Little Mosquito watershed. The septic system failure rate will be applied to the campground to estimate the load. This is based on the 5% failure rate as well as the VDH-Sanitary Shoreline Survey results.

Q: Are weather events accounted for in overflows?

A: Yes, the precipitation is used in that aspect. It will look over a 10-year period and looking for persistent effects.

Q: Cesspools, also known as pit privies, were grandfathered as septic systems, but they really are not because they become a direct discharge. How are these identified in the TMDL?

A: The ANPDC has identified areas in the watersheds where known pit privies are located.

Q: Will the Trails End campground have a different failure rate applied since it is considered a “hot spot”?

A: The VDH-DSS Sanitary Shoreline Survey identified >100 of the 2500 lots as being a direct contributor of pollution and that equates to approximately 4%, which is close to the 5% failure rate that will be applied across the watershed.

Comment: The geese population seems low for both watersheds. It would be good to show Snow Geese population estimates for December – March because there is a large increase in these watersheds. It was also discussed if geese population densities should be applied across the entire watershed versus the buffered area.

Q: Since there is a lack in the number of monitoring stations, the data doesn’t really show how the nutrient loads could be different from upstream to downstream.

A: Resources and accessibility are the limiting factors when determining monitoring station locations. The watershed model will be used to fill in the loading data gaps across the watershed.

Q: The mouth of Assawoman Creek has closed in over the years because of sedimentation from failed beach replenishment projects nearby. How will the closure be modeled?

A: Because of the closure, the tidal energy will not be directed into the system in order to have the freshwater be dominant.

Q: Could the low DO be caused by dark substrate in contribution with low/receding tide?

A: Marsh grass will have a significant effect on nutrient level contribution to the system.

Comment: Groundwater input will be high in nitrate.

Q: Will spatial monitoring ever be in place versus temporal monitoring in order to see the effects from the watershed? Other states have used probabilistic monitoring, especially in IP development, to look at the stream sub-segments in more detail.

A: Citizen monitoring is always encouraged in TMDL and IP watersheds. That would allow for more coverage in the watershed and more data points to help determine “hot spots” for where management efforts could be aimed.

Q: What is the rest of the process? What is the timeline?

A: VIMS will continue to fine-tune the data to be used in the model. The more accurate the assumptions used will result in better output. The project will conclude in March 2016 and there will be one more TAC meeting plus the final public meeting.