



Potential Management Measures for the Oyster Waters TMDL Implementation Plan

Boater Waste

1. Make Galveston Bay a No Discharge Zone. This will be a combined effort with the Policy and Outreach Workgroup.
2. Increase the number of pumpouts in the Clear Lake and Galveston Bay areas. The group would like to coordinate with the Policy and Outreach workgroup to get ordinances passed in the surrounding cities that require marinas that meet certain criteria to have a pumpout. For instance, marinas that have at least 25 wet slips that can accommodate boats 26 feet and over must have a pumpout. As part of this measure, the workgroup would also help to pursue funding for entities interested in having a pumpout.
3. Continue with education and outreach of boater waste issues.
4. Increase enforcement. The workgroup would like TPWD to work with the Coast Guard Auxiliary to train marine officers about preventing sewage discharge and incorporating y-valve inspections into the USCG Aux voluntary vessel checks. Initially, marine officers may educate boaters to prevent sewage discharge but then should escalate to stronger enforcement.

OSSF

1. Create a regional plan to identify, prioritize, and address failing systems. Mapping and matching bacterial concentrations with where the septic tanks are located will help determine if OSSFs are a significant contributor to the bacteria in the bay. A more recent data analysis will be used to identify areas where samples indicate the bay is being affected by failing septic systems and then prioritized to determine which areas to focus additional resources
2. Pursue funding for actively locating failing systems. Currently, the Galveston County Health District only responds to complaints. With funding the county can hire staff to identify and address failing systems.
3. Pursue funding for low income repairs. The court system does very little enforcement to low income homeowners. Need to find funding to help low income homeowners repair failing systems. The guidelines for "low income" need to be very clear so the appropriate people are receiving the help.
4. Require that a licensed maintenance provider or a registered maintenance technician must do the maintenance on all types of systems, not homeowners.
5. Standardize and promote point of sale inspections.
6. Increase education and outreach to both the public and public officials. There are many issues that are important for education and outreach that will be prioritized and addressed. Currently a

workshop is being planned for the Fall/Winter 2010 to help homeowners identify the signs when they have a problem with their septic system and to offer general education about their systems.

Policy and Outreach

1. Work with local communities to share storm water management ideas that concern bacteria issues.
2. Require all marinas to have a pump out. Coordinate with Boater Waste Workgroup.
3. Make Galveston Bay a No Discharge Zone. Coordinate with Boater Waste Workgroup.
4. Work with local authorities to increase enforcement of sewage pumpout and publicize the actions.
5. Create a positive message to increase awareness of the bacteria issue in the bay.
 - o Message needs to be positive
 - o The bay is at risk. Half of our waters cannot be harvested due to high bacteria concentrations. More pressure is expected in the future with 4 million people expected to move into the area. There is a need to reduce the stress to the bay and now is your chance to help.
 - o Combine oyster waters use with all seafood consumption and recreation
 - o Incorporate other TMDLs in the area

WWTF

1. Confirm that existing facilities are meeting the discharge permit limit.
2. TMDL recommends setting the limit at the water quality standard.
3. Increase the monitoring frequency, especially for the smaller facilities.
4. Establish training and better guidance for permittees with new bacterial monitoring requirements, particularly in the areas of sampling techniques and disinfection equipment and preventative maintenance programs.
5. Prioritize the facilities that are coming up for renewal and provide pre-permitting support to help them prepare for the process.
6. Offer assistance to small facilities that have discharge violations to help them get back on track.
7. Offer funding for pre-testing early enough that the facilities can get into compliance before the new permit limits take effect.
8. Encourage dischargers to sample and test for bacteria before actual permit renewal to ensure the facility is in compliance and testing for the correct species.
9. Funding for more frequent unannounced sampling of bacteria in discharges to the TMDL area.
10. Require minimum of a C License for operators of facilities impacted by the TMDL. Offer funding for the extra training if it is necessary.
11. Offer classes covering bacteria issues closer to the entities and make sure the class is relevant.
12. Find and apply for a grant to have TCEQ give two classes a year to the operators to keep their knowledge and practices current in terms of bacterial compliance issues.
13. As part of the permit renewal or issuance, TCEQ would provide a detailed guidance document to help the facilities comply with the new bacterial sampling.
14. After a specified number of bacteria violations, the facility will be required to seek assistance to reach compliance. It would be up to the facility to decide the type of assistance to pursue.

Options might be to ask for help from TCEQ, neighboring cities, a qualified engineer, or from the recommended peer group (a list of qualified professionals chosen by the workgroup.)

15. Require training for bacterial sampling and operations and maintenance if the facility is in a TMDL.
16. Require redundancy in the chlorine feed system and auto switch over capabilities. Include this training in basic operator training class curriculum. Offer training classes in the TMDL area on a regular basis.
17. Recommend that an alternate group establish a better communication mechanism for more prompt response (or feedback) to complaints or irregular samples.
18. More unannounced focused inspections to address potential bacterial issues.
19. More unannounced inspections in general.

Regionalization - Encourage WWTF regionalization.

Collection Systems: Recommend the facilities participate in the Sanitary Sewer Overflow Initiative (SSOI) at the time they renew their permit. Pursue funding for evaluations to get entities into the SSOI.