

Implementation Strategy

The implementation strategy describes the actions that the TCEQ and its stakeholders will undertake to achieve water quality standards. The strategy specifies actions to meet the load allocations assigned to all point sources and nonpoint sources identified in the TMDL report. Action strategies may be selected from a menu of possible measures based on an evaluation of feasibility, costs, support, timing, and other factors. Activities may be implemented in phases based on the TCEQ's assessment of progress.

Implementation Strategy 3.0: Onsite Sewage Facility (OSSF)

According to the Environmental Protection Agency (EPA), nationwide OSSF failure rates range from 10 to 20 percent. A study sponsored by the Texas On-Site Wastewater Treatment Research Council indicates that at least 12 to 20 percent are failing in this region.

The problem of failing OSSFs is widespread in the region and is present in urban, suburban, and rural areas. The actual number and distribution of OSSFs is unknown, and inventories of OSSFs are piecemeal. Enforcement is not uniform throughout the region. Furthermore, enforcement efforts often cease if owners of failing OSSFs do not have the resources to repair or replace failing OSSFs or to pay fines associated with violations of OSSF regulations.

Properly functioning and maintained OSSFs contribute little to no bacteria to waterways. Therefore, this I-Plan primarily focuses on OSSFs that are unpermitted, failing, or poorly maintained. Based on 1990 census data and subsequent permit data, the project area has at least 120,000 systems.

The following implementation activities are intended to address these systems.

Based on estimates presented in the TMDL reports, OSSFs contribute bacteria loading in the TMDL Project areas as follows:

- Clear Creek Watershed: Estimate of 91 failing OSSFs (Texas Commission on Environmental Quality, 2009)
- Buffalo Bayou and Whiteoak Bayou Watershed: Estimate of 23 failing OSSFs (Texas Commission on Environmental Quality, 2008)
- Houston Metro Watersheds: Estimate of 1093 failing OSSFs (Texas Commission on Environmental Quality, draft technical document)
- Lake Houston Watersheds: Estimate of 860 failing OSSFs (Texas Commission on Environmental Quality, draft technical document)

Implementation Activity 3.1:

Identify and Address Failing Systems

H-GAC will work with TCEQ, Authorized Agents of local governments, and other interested parties to create an inventory and map of OSSFs with particular focus on areas with known or

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suspected failing systems. The inventory is a crucial component in the development of priorities, budgets, and timelines for repairing or replacing failing OSSFs.

The steps in this process include:

3.1.1 Map permitted and unpermitted OSSFs in the H-GAC and BIG Regions. H-GAC began mapping OSSFs in the region in 2009. Initial funding was secured from American Recovery and Reinvestment Act (ARRA) grant funds. H-GAC is working with TCEQ and the region's Authorized Agents to gather an inventory and create a map of permitted OSSFs and reported OSSF violations. As part of the study, H-GAC will identify unpermitted OSSFs by analyzing data from appraisal districts, wastewater treatment plant service areas, census data, and other sources of information.

Initial efforts, including data collection and standardization and mapping, should be completed in August 2010.

Ongoing data collection should be continued by H-GAC as resources are available. Authorized Agents or TCEQ shall submit information about OSSF locations as frequently as reporting requirements are specified in 30 TAC Chapter §285.11(e)(2). Currently, reporting requirements are monthly.

3.1.2 Identify target areas, timelines, and costs. H-GAC, working with stakeholders, will analyze the initial mapping data and prepare a report of recommended target areas, timelines, and budgets. H-GAC will solicit input from Authorized Agents and other interested parties. When possible, target areas will be identified using the geographical prioritization recommendations [described elsewhere in the document]. Additional criteria to select target areas will include proximity to an impaired waterway and density of failing systems. The report will be used to facilitate grant applications and identify appropriate resources.

3.1.3 Address target areas. Local governments or other agencies will address failing systems in target areas with appropriate actions which may include enforcement, owner education, repair, replacements, connection to municipal treatment works, and public education. Projects should be undertaken in each of the target areas.

3.1.4 Pursue funding. Local governments and H-GAC shall secure funding to address failing OSSFs, particularly in target areas. In addition to local funding, a variety of funding sources may be available.

3.1.5 Reevaluate plan. Annually, H-GAC shall convene TCEQ, Authorized Agents, and other stakeholders to review progress, priority areas, funding opportunities, and other elements of the regional plan.

Implementation Activity 3.2:

Create a Regional Plan to Address Inadequate Maintenance of OSSFs

Authorized Agents and other stakeholders are concerned that homeowners do not know enough about maintaining an OSSF to identify problems and solutions to prevent failures. Measures to address inadequate OSSF maintenance include:

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3.2.1 *Homeowner education.* As resources are available, H-GAC will create or adapt a website to provide OSSF homeowner education. An interactive function of this website will encourage OSSF owners to sign up for automatic reminders of required maintenance activities. This interaction not only benefits the homeowner, but also serves as an information gathering tool for H-GAC regarding ownership, permitting and maintenance of OSSFs. Other possible elements of the website could include an on-line pumpout and maintenance log for homeowners and a list of licensed maintenance providers. Municipalities, counties, communities, homeowner associations and other interested parties can post a link to the website from their websites, creating a familiar portal for residents.

H-GAC will create or adapt collateral material, such as flyers, advertisements, mailers, and other marketing pieces for distribution at schools, in newspapers and publications, and to real estate agents and property inspectors.

3.2.2 *Encourage repair and pumpout logs be kept by homeowners and/or maintenance providers.* Authorized Agents are encouraged to persuade homeowners and/or maintenance providers to maintain a repair and pumpout log, which may consist of proof of a valid maintenance contract, for their facilities. The log should describe repair and pumpout data for the previous five years. Authorized Agents may choose to require such a log by way of updates to their permit regulations. Homeowners and/or maintenance providers are encouraged to allow potential homebuyers to review the log upon request. Homeowners and/or maintenance providers are encouraged to provide the log or a copy thereof to new homeowners upon transfer of the house. Homebuyers will be given a flyer or information sheet, possibly by real estate agents or property inspectors, that provides information about what a homebuyer or new owner should look for in the logs.

3.2.3 *Coordinate with real estate industry.* H-GAC, Authorized Agents, and other entities shall, as resources are available, work with the real estate industry to provide education opportunities to real estate agents, property inspectors, and, ultimately, consumers about identification and consequences of inadequate maintenance and the failure of OSSF. In particular, the Texas Real Estate Commission (TREC) regulates real estate transactions in the State of Texas. As such, TREC requires property inspections for the sale of properties, it specifies education and certification requirements for licensed real estate salespersons and inspectors, and it develops forms for use during sales and inspections. Each of these items can be modified to provide additional resources for homeowners related to OSSFs.

3.2.4 *Additional actions.* TCEQ, Authorized Agents and other parties are encouraged to develop actions to address inadequate maintenance of OSSFs, including increased inspections, incentives for proper maintenance, and requirements that OSSFs must be maintained by a maintenance company or a trained homeowner. Furthermore, TCEQ is encouraged to be more vigilant in its enforcement of violations by installers and

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maintenance providers, and to suspend or revoke licenses and registrations of installers and maintenance providers as allowed under 30 TAC §285.65. *Suspension or Revocation of License or Registration*. As resources are available, H-GAC and other stakeholders shall work to develop continuing education opportunities regarding OSSF regulations and enforcement for district attorneys and justices of the peace to increase prosecution of OSSF violations.

Implementation Activity 3.3:

Legislation and Other Regulatory Actions

The following changes to Texas legislation, rules, and agency policy should be considered to improve the management of OSSFs:

3.3.1 Texas On-Site Wastewater Treatment Research Council (TOWTRC) Fee. As of 2010, new permit applications include a fee of \$10 to be directed to the TOWTRC. This fee should be increased to \$20 for each OSSF by changing the Health and Safety Code, Chapter 367, §367.010 (Fees) and 30 TAC §285.21(Fees). Furthermore, the Health and Safety Code, Chapter 367, §367.008 should be changed to indicate that funds could be awarded through a competitive process to facilitate the mapping, identification, and evaluation of OSSFs. These changes would require legislative action.

3.3.2 Model Order, Ordinance, or Resolution. TCEQ is required, by 30 TAC Chapter 285, §285.10, to provide a model order, ordinance, and resolution that can be used by Authorized Agents to meet the minimum requirements of OSSF laws and rules. TCEQ should be petitioned to maintain a list of more stringent local rules that have been adopted. Authorized Agents are encouraged to adopt more stringent local rules as appropriate.

3.3.3 Biennial Review. TCEQ shall consider providing a biennial forum to consider changes to legislation, rules, policies, and guidance relating to management of OSSFs. As part of this forum, TCEQ shall discuss and consider appropriate mechanisms for funding OSSF programs.

[appendix of more stringent rules included in rules or ordinances.]