

Coordinated Onsite
Wastewater Management Program
to Protect the Water Quality
Along the Malibu Coast



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Fig. 1 - Sunset at Surfrider beach (beach closure posting in background)

I. Executive Summary

There is a long history of high bacterial levels in the near shore waters of Surfrider Beach near Malibu Lagoon. Monitoring indicates that Surfrider Beach regularly exceeds healthy thresholds for bacteria, and signs are posted much of the year warning beach goers of the health risks associated with swimming at Surfrider Beach.

Onsite wastewater treatment systems in the lower Malibu Creek watershed have long been suspected of being a contributing source of pathogens and nutrients to Malibu Creek, Malibu Lagoon, and ultimately Surfrider Beach. While onsite systems are not considered the only source (other potential sources include stormwater runoff, the Tapia Treatment plant, wildlife, etc.), they are one of the key areas that had not been adequately managed and was in need of stronger policy and oversight implementation.

The goals of this project were to implement policy and oversight recommendation as outlined by the Santa Monica Bay Restoration Task Force focused on onsite wastewater treatment systems in the region. The Task Force was composed of individuals from local and State agencies and key environmental and industry organizations. Together this Task Force developed eight recommendations, which became part of the Bay Restoration Plan, five of which were critical short-term actions that developed a foundation for effectively managing onsite systems.

These five action items were the following:

- 1. Address the problem of existing multi-family and commercial establishments not being properly permitted or monitored through WDR permits.**
- 2. Establish a more comprehensive permitting program that includes both the operation and inspection of systems.**

3. **Design a better groundwater monitoring program to assess onsite wastewater treatment systems impacts to receiving waters and groundwater.**
4. **Establish a coordinated approach for oversight of onsite wastewater treatment systems, including modification/update of the WDR waivers between the Regional Board and local agencies.**
5. **Conduct public outreach to system owners/operators regarding the proper operation and maintenance of onsite wastewater treatment systems.**

The Clean Beach Initiative Grant effectively funded the implementation of these five action items. The Grant's core tasks were broken into four areas which were successfully implemented over the course of the Grant term from July 1, 2001 through December 31, 2005. These four areas are outlined below and detailed in the body of the report (Tasks 4.1 – Task 4.4):

1. **System Inventory/File Survey:** This task was aimed at developing a complete online inventory system in the City and developing a robust online permitting and tracking database to lay the foundation for meeting action item #2 - Establishing a Comprehensive Permitting Program. The goal of this effort was to understand exactly what type of systems were out there and be able to track and monitor system information. Through the grant, the City of Malibu successfully completed the development of a database system that tracks onsite wastewater treatment systems, tracks operating permits and inspections, and uses an integrated GIS application to visually present information based on the data in the system and target problematic systems or areas. In addition, because the database was created as a web-based online application, it will allow the City of Malibu and the Regional Board to share and view the others information and data to better coordinate the management of systems.
2. **Identification of Systems Requiring WDR Permits:** This task was aimed at addressing the over 400 commercial and multi-family onsite systems operating in Malibu without proper permitting from the Regional Board as outlined in action item #1 - Improperly Permitted Multi-Family and Commercial Systems. As a result of the effort, 443 sites were identified and filed and the required permit information was compiled for the Regional Board to issue General WDR permits. As of December 2005, 84 of these systems were issued permits and 89 sites had been referred to the enforcement section and sent notices of non-compliance. (Note, all residential systems fall under the jurisdiction of the City and do not require a WDR permit).

In addition, based on this research, the City then created a groundwater monitoring plan that would use the groundwater monitoring required through the WDR permits to monitor the protection of groundwater in the area (addressing action item #3 Designing a Groundwater Monitoring Program) and follow up on initial monitoring the City had completed as part of a local groundwater risk assessment project.

3. **Develop Protocol for Inter-Agency Coordination:** This task focused on developing stronger oversight policies within the City of Malibu and better coordination between the City of Malibu and Regional Board and other local

agencies (addressing action item #4 – Establishing a Coordinated Approach). Out of this effort, the City passed an ordinance mandating operational permits for all commercial, multi-family, and new residential systems. The ordinance requires periodic inspections and the use of registered professionals. In addition, the City and the Regional Board developed a Memorandum of Understanding (MOU) regarding the oversight of onsite systems, defining areas of coordination, areas of delegation of authority for oversight, minimum standards for oversight, and requirements for system inventory and tracking. This MOU then was used as a template to develop MOUs for the other local agencies including the County of Los Angeles.

- 4. Public Education/Outreach to Community Stakeholders:** This task targeted on working with the public and key stakeholders to get “buy-in” regarding the shift to a more comprehensive oversight program for onsite systems. The City made presentations to key stakeholders, a brochure was created outlining the changes and providing tips on how to prevent pollution, and materials were distributed to all businesses and residents within the City. This effort has proved successful and has helped pave the way for future initiative within the City, including the implementation of a point of sale permit for all residential systems.

In the final analysis, the results of the project have put into place policies and actions that have made the management of onsite systems a comprehensive and coordinated effort between the State and the City. The effort clearly makes water quality protection a top priority in the oversight of onsite wastewater treatment systems and establishes tools for the City to use to monitor the effectiveness of the oversight efforts. Overall, the Grant has developed an effective model program that systematically addresses the proper management and oversight of onsite wastewater treatment systems while at the same time developing coordination and collaboration to make the program work over the long term.

II. Introduction

Surfrider Beach is at the mouth of the Malibu Creek Watershed and is a very popular recreational beach for surfers, swimmers, and area beach-goers. However, Surfrider Beach consistently exceeds healthy thresholds for bacteria, and signs regularly warn beach goers of the health risks associated with swimming at Surfrider Beach. Each year since 1999, Surfrider Beach has received “F” or “D” water quality grades in more than half of weekly grades with the exception of 2002¹.

Year	No. of Weekly Samples	No. of Weeks Graded “D” or “F”	% of Weeks with “D” or “F” Grades
2005	50	46	92%
2004	48	31	65%
2003	51	48	94%

¹ Based on Heal the Bay’s Beach Report Card (<http://www.healthebay.org/brc/gradingsystem.asp>)

2002	45	19	42%
2001	46	26	57%
2000	48	36	75%
1999	50	30	60%

Since 1991, when the City of Malibu became incorporated, controversy has existed regarding the sources of pollution causing the water quality problems for the area. Suspected sources included: the Tapia wastewater treatment plant, stormwater runoff, onsite wastewater treatment systems, and other natural non-point sources.

The first two sources are being addressed by the Regional Water Quality Control Board through a WDR permit issued to Tapia and through a Countywide NPDES permit issued to the cities and County in Los Angeles County. Onsite wastewater treatment systems though have proven to be a more difficult challenge in terms of identifying them as a specific source of pollution and determining what to do about them. The nature of these systems (i.e., discharge of wastewater underground to allow soil treatment) makes it hard to monitor which systems are effectively treating their wastewater and which systems are not. Because of this and various inconclusive studies during the 1990's, there had been a slow response in addressing onsite wastewater treatment systems as a potential source.

In 1999, the Santa Monica Bay Restoration Commission established an Onsite Wastewater Treatment System Task Force of local, State, and environmental stakeholders to address the management of onsite wastewater treatment systems in the region. The Task Force identified eight specific actions that should be taken to reduce/prevent the impact onsite systems have on water quality.

The purpose of the CBI grant for Surfrider Beach was to change the way onsite wastewater treatment systems are managed in the City of Malibu. To accomplish this, the grant's goal was to begin work to implement five of the Task Force's action items, which included following:

- 1. Address the problem of existing multi-family and commercial establishments not being properly permitted or monitored through WDR permits.** Lack of coordination between the City of Malibu and the Regional Board left the majority of commercial and multi-family systems within the City of Malibu without proper WDR permits from the State (over 90%). Most businesses or property owners simply went to the City or County (before the City was incorporated) for a permit. There had been no coordination between the City/County and the Regional Board outlining which systems were under whose jurisdiction and what the permitting requirements were from each agency.
- 2. Establish a more comprehensive permitting program that includes both the operation and inspection of systems.** Historically, local agencies mandate regarding overseeing onsite systems was not directly connected with protecting water quality. Their direction was based on the plumbing code, which viewed the system as simply part of the building structure and focused primarily on ensuring that the

- system was built properly. The agency did not actively regulate the systems once they were installed. By developing a more comprehensive permitting program that includes operation and inspection, local agencies are able to proactively protect water quality instead of just responding to problems when they become severe (i.e., daylighting of sewage or high bacteria levels in receiving water).
3. **Design a better groundwater monitoring program to assess septic system impacts to receiving waters and groundwater.** Lack of information regarding groundwater quality conditions has impeded a proper response to effectively managing onsite systems. By developing a plan to assess groundwater conditions through WDRs and other existing monitoring sources, agencies can better apply regulations to address problematic systems or sensitive areas not conducive to soil adsorption of wastewater treatment.
 4. **Establish a coordinated approach for oversight of onsite wastewater treatment systems, including modification/update of the WDR waivers between the Regional Board and local agencies.** Lack of coordination between local and State agencies regarding what is needed to effectively manage onsite wastewater treatment systems has resulted in varied requirements for onsite systems and a fragmented approach to protecting water quality. By developing a coordinated approach, the R is able to delegate authority to local agencies for overseeing residential systems while still ensuring that water quality is being effectively protected.
 5. **Conduct public outreach to system owners/operators regarding the proper operation and maintenance of onsite wastewater treatment systems.** Lack of information on how to properly manage and operate onsite wastewater treatment systems leads to many of the problems associated with malfunctioning systems. Most of the new homeowners that move to Malibu had previously lived in the urban parts of Los Angeles County, where a local agency managed wastewater through the sewer system. These homeowners have no experience or understanding that owning an onsite system means that they now need to be actively involved in the management of their wastewater. Through education, the City of Malibu can work with this key stakeholder group to help prevent possible pollution caused by improper system operation/maintenance.

These five action items formed the basis of the CBI grant's primary purpose, which is to develop a more systematic and comprehensive approach to managing onsite wastewater treatment systems around Surfrider Beach and in the region.



Fig 2 – View of the Malibu Civic Center area, Malibu Lagoon, Surfrider Beach and adjacent coastline

III. Scope of Work

The work to be performed under this contract was broken into five main areas: Project Management, CEQA, Quality Assurance, Work Scope, and Reporting. Task 4 of the contract (Statement of Work) formed the basis of the proposed work, which included developing an information management system, conducting research for WDR permitting, developing inter-agency coordination, and public involvement and outreach. The outline for the entire scope of work is the following:

- Task 1 – Project Management
- Task 2 – CEQA Documents and Preparation
- Task 3 – Quality Assurance Project Plan
- Task 4.1 - System Inventory/File Survey
 - a. Development of an information management system
 - b. Data collection and population
 - c. Develop a system to identify problem systems
 - d. Incorporation of information management into the agency oversight programs
- Task 4.2 - Identification of systems requiring WDR permits
 - a. Work cooperatively with the Regional Board to prioritize systems and develop template WDR permits
 - b. Obtain site specific information necessary for WDR permits
 - c. Prepare regulatory forms and documentation for sites
 - d. Develop a regional monitoring plan
- Task 4.3 - Develop protocol for inter-agency coordination
 - a. Develop guidance to determine jurisdictional oversight
 - b. Develop an agreed upon procedure to coordinate oversight and enforcement

- c. Develop enforcement guidance
 - d. Develop a comprehensive management program for the City of Malibu
 - e. Develop a procedure for periodic sharing of information between information management systems
 - f. Develop guidance for the regional management of new and existing septic systems
 - g. Coordinate the Task Force meetings to help share information between jurisdictions
- Task 4.4 - Public Education/Outreach to Community Stakeholders
- a. Develop plain language informational materials and notifications
 - b. Distribute informational materials and notifications to all affected property owners
 - c. Conduct a minimum of four presentations to stakeholders
- Task 5 - Reporting

Task 1 - Project Management and Administration

The City of Malibu was responsible for seven key management and administration items:

1. Provide all technical and administrative services as needed for contract completion; monitor, supervise, and review all work performed; coordinate budgeting and scheduling to assure that the contract is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.
2. Ensure that the contract requirements are met through completion of quarterly progress reports and through regular communication with the SWRCB Project Representative. The progress reports shall describe activities undertaken and the accomplishments of each task during the quarter, milestones achieved, and any problems encountered in the performance of the work under this contract. The description of activities and accomplishments of each task during the quarter shall be in sufficient detail to provide a basis for payment of invoices and shall be translated into percent of task work completed for the purpose of calculating invoice amounts.
3. Ensure that all documents, written reports, or brochures have a “State Disclosure” which are prepared in whole or in part pursuant to this contract include the following disclosure statement:

“Funding for this project has been provided in full or in part through a contract with the State Water Resources Control Board (SWRCB) pursuant to the Costa-Machado Water Act of 2000 (Proposition 13) and any amendments thereto for the implementation of California’s Nonpoint Source Pollution Control Program. The contents of this document do not necessarily reflect the views and policies of the SWRCB, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.” (Gov. Code 7550, 40 CFR 31.20)
4. Ensure that the SWRCB Project Representative is notified at least ten working days prior to any public or media event publicizing the accomplishments and/or results of this contract and provide the opportunity for attendance and participation by SWRCB representatives.

5. Complete a one-page contract summary form (form to be provided by the SWRCB) within one/three month(s) of the contract execution.
6. Award contract(s) to appropriate organization(s) to perform tasks as outlined in this agreement. Document steps taken in soliciting and awarding the contract and submit them to the SWRCB Project Representative for review. Document all contractor activities in quarterly/monthly reports.
7. At the completion of this project and prior to final payment, the Project Representative shall fill out and provide a project survey form to the SWRCB Project Representative.

As a part of completing this work, the City submitted the following information to the State, which is included: 1) quarterly progress reports, 2) contract summary form, 3) subcontractor documentation, and 4) project survey form.

Task 2 - CEQA Documentation

Prior to beginning work, the City of Malibu researched the possible requirements that may be applicable under the California Environmental Quality Act (CEQA). However, based on the type of work that was to be performed -- data management, policy coordination, and public outreach -- and the fact that there was to be no construction elements to be implemented, the City filed a "Notice of Exemption." (Appendix)

Task 3 - Quality Assurance Project Plan

The City of Malibu prepared a Quality Assurance Project Plan (QAPP) that was combined with the project's Monitoring and Reporting Plan. This project did not have direct water quality monitoring or sampling because of the nature of the project (i.e., the project did not involve direct construction of BMPs that would alter the quality of the water during the course of the project). Instead, QAPP's purpose was to ensure that the project maintained data integrity in the transfer of permit information to the information management system.

Task 4.1 - System Inventory/File Survey

The goal of Task 4.1 was to develop an information management system that would allow for better tracking and analysis of onsite systems in the region. Based on the finding of the Task Force, there needed to be more proactive management of onsite wastewater treatment systems. Unfortunately, with limited staffing and a paper filing system at the City, it was very difficult to implement. The City of Malibu was committed to the goal of developing a proactive management program that shifted the emphasis from reaction to prevention.

Rather than waiting for a problem to occur, the new approach would ensure that systems are operating properly in the first place.

This shift in management required a new approach to overseeing systems. Now, renewable operating permits require inspections to ensure that systems are being properly maintained and are not impacting water quality. However, to implement this type of program, the City needed to develop an information management system that would allow staff to create reports, conduct GIS analysis, and allow for online data access/permit filing, all of which would help facilitate the staff's implementation of this effort. The system would also allow for the exchange of information between the City of Malibu and the Regional Water Quality Control Board to better regulate the operation and permitting of systems in the region. This task had the following objectives:

- a. Develop an information management system
- b. Data collection and population of the information management system
- c. Develop a system to identify problem systems
- d. Incorporate information management into the agency oversight program

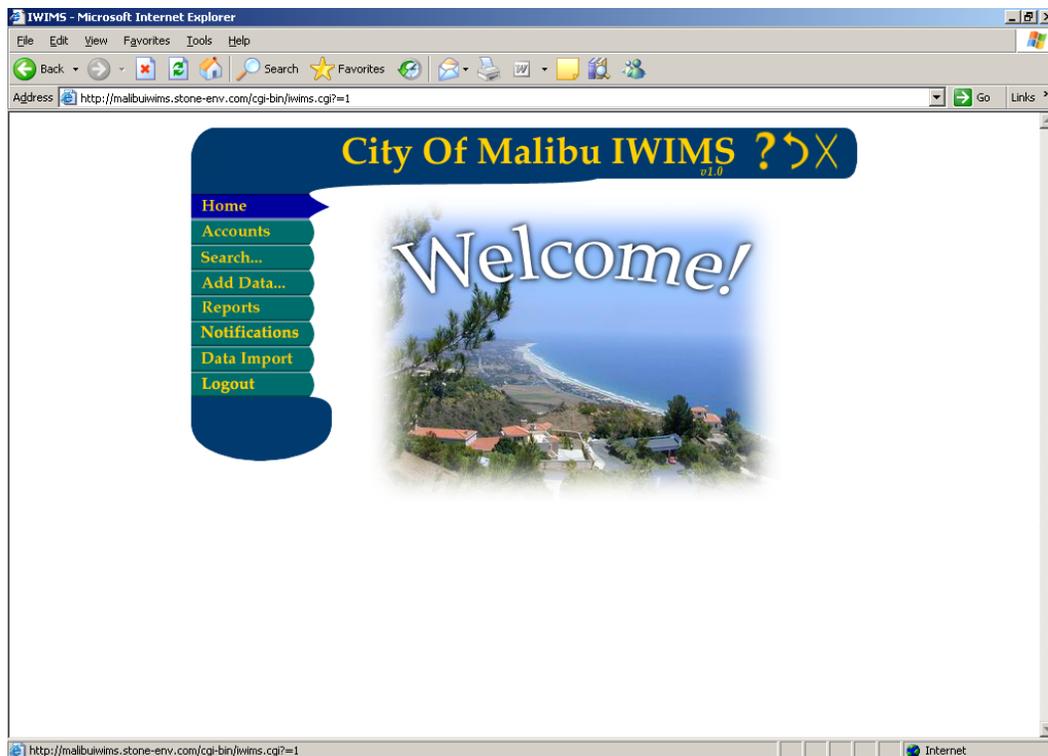


Fig. 3 - Opening screen for the IWIMS online database application

Information Management System

One of the key deficiencies found regarding the management of onsite wastewater treatment

systems was the tracking of permit information both within and between agencies.

In response to these difficulties, the City of Malibu contracted with Stone Environmental, Inc. to design and develop a comprehensive information management system. The Integrated Wastewater Information Management System, or IWIMS, was designed to act as a regional online resource for both the City of Malibu and the Regional Water Quality Control Board, and to serve as the primary permitting and tracking system for the City.

The following components were incorporated into the information management system to accommodate the City of Malibu's oversight of onsite wastewater treatment systems:

1. **Permit Record Storage:** IWIMS was designed to be able to accommodate both the then current permit tracking needs of the City (i.e., simple installation permits) and future needs, which includes operational permits, the inspector registration program, point of sale permits, permit enforcement modules, and inspection modules for operation permits and point of sale permits (note, all of these "future" needs have now been incorporated into Malibu permitting program except for point of sale permitting which is still in the development stage).
2. **Report Generation:** IWIMS report generation was designed to include permit forms, inspector registration, progress reports, and operating permit compliance information, including tracking the frequency of site conditions, whether certain site conditions have been met, etc.
3. **System Integration:** The City uses a separate database to track building permits and planning and zoning projects (CASE LOG 2000). Methods were developed to integrate IWIMS with CASE LOG 2000.
4. **On-line Application Forms:** IWIMS incorporated the ability to apply online for permits and registration based on the project design documents. This feature helps to facilitate permit applications, reduce staff time in the population of data into the system and reduces error through the direct incorporation of information into the information management system.
5. **Data Import Tool:** A data import tool was developed to allow users (with appropriate permissions) to import data sets by defining the data fields in their dataset and the appropriate target fields in the IWIMS database. It enables users/agencies to import parcel data, monitoring well analytical data, and other data sets (in text file format). This feature allows for the transfer of data between agencies and assists with information exchange.
6. **Program Data Query and Export Tool:** A data reporting tool was developed to allow the City to extract key data from the system for analysis by selecting data fields and specify criteria. The City is able to export the data to a comma delimited text

format or MS Excel file format. This allows for further manipulation of the data outside of the IWIMS interface including graphing and joining with GIS shapefiles for complex GIS mapping and analysis.

7. **Implement GIS Functionality:** IWIMS incorporated GIS functionality that allows the City to map the following information:
 - a. Parcel location of the current records
 - b. Navigation to a system or parcel record from a GIS parcel map by clicking on the desired parcel
 - c. Generate maps that summarize the following information:
 - i. Permit type
 - ii. System type
 - iii. Operating permit expiration data
 - iv. Operating permit compliance status
 - v. Inspection date and results
 - d. Print and export GIS Maps

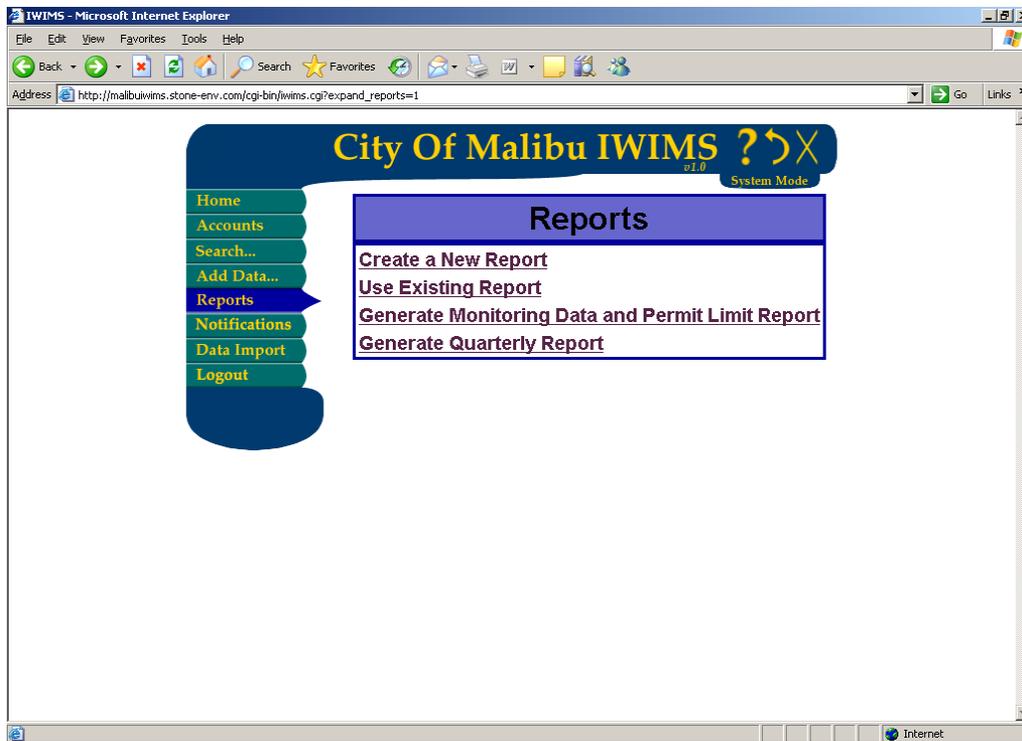


Fig. 4 – IWIMS Report page for producing tracking reports on onsite systems

In addition, IWIMS was developed to allow information exchange between the City of Malibu and the Regional Water Quality Control Board. To address the needs of the Regional Board the following items were designed and incorporated into the system:

1. **Groundwater Data:** IWIMS included the ability to review groundwater data over time, graphically, and view the data spatially either by exporting data in a GIS-compatible format or by viewing the data spatially as part of the IWIMS application
2. **Data Analysis:** A tool was designed to allow users to sort through the data and look at surrounding parcels. In addition, a report generation module was developed to allow for comparison between permit limits and monitoring data
3. **Permit Requirements:** A module was developed to allow for entry of permit limits for both general WDR permits and site-specific WDR permits
4. **System Integration:** IWIMS included an import tool to integrate the State's SWIM database of WDR permits into IWIMS

Once the system was developed, both the City and the Regional Board attended a two-day training session. These sessions gave the individuals hands on training using the system and covered all the facets of IWIMS use and data maintenance.

Data Collection and Population

The most labor intensive part of switching from a paper file system to an electronic/online information management system was transferring permit data into an electronic format. This effort required researching specific paper file permit information for each data field in the database, digitizing maps, geocoding system locations (both the tank and leachfield or seepage pit), and matching up addresses with parcel numbers.

In total, there are over 6,000 system permits in the City. As a part of the data collection, the City purchased the current Los Angeles County Assessor database containing all the parcel records so that systems could be uniquely identified by parcel numbers.

While IWIMS was being developed, the City first worked with Questa Engineering on segregating and collecting information on commercial and multifamily systems in the central area of the City. The Los Angeles County Assessor's data was used to identify all systems with use codes that indicate commercial, institutional or multifamily occupancies. Malibu's Community and Environmental Development building inspection staff reviewed and field checked the data for accuracy by "windshield survey."

The resulting list was used to extract approximately one hundred fifty (150) files for parcels with apparent commercial and multifamily occupancies from the City of Malibu's Environmental Health files. One hundred thirty (130) City of Malibu Building "street files" were used to find additional information on commercial and multifamily systems. Data in the County of Los Angeles Health Department files revealed about a dozen addresses with an apparent commercial and multifamily occupancy but didn't have an environmental health file to match.

Another set of data that was included in the information management system was research completed from the Proposition 12 Grant to the City of Malibu (the Malibu Civic Center Groundwater Risk Assessment Study of Onsite Wastewater Treatment Systems in the Lower Malibu Creek Watershed). This information included groundwater information, groundwater

quality data, monitoring well locations and depths, and onsite wastewater treatment system information for the area.

As part of the Prop 12 project, all available information was compiled for onsite wastewater treatment systems in the Malibu Civic Center area extending along the Pacific Coast Highway from Sweetwater Canyon to Bluff's Park. This data, which included residential and commercial/multi-family occupancies, was entered into IWIMS in 2002. All system locations that could be documented were digitized and entered into the City of Malibu's ArcView GIS database. The locations of all available and documented test pits, geotechnical borings, and monitoring wells were also digitized while elevations of groundwater levels and available groundwater quality data in the Civic Center area were entered into IWIMS.

S. Groner Associates reviewed this data, and gathered and verified any additional site data that may identify systems requiring a WDR permit. S. Groner Associates then conducted a systematic search of the City of Malibu's remaining building and safety "street files" (totaling approximately 6,200 sites) to identify all systems that are either multifamily or commercial. This information was compared to known WDR permits to track down systems not properly permitted. In total S. Groner Associates found 343 files requiring permits.

As a final step to ensure the accuracy of the property owner information, S. Groner Associates went to the County Assessor's office to cross check sites with property owner information. This included two steps: 1) tracking down the Assessor's ID number (AIN number) for each site and 2) reviewing the Assessor's database of property owner information to obtain the current property owner and contact information.

Develop a System to Identify Problematic Systems

The third goal of developing the information management system was to develop a system to identify problematic onsite wastewater treatment systems. To accomplish this goal, IWIMS was designed with capabilities to identify problematic systems in three ways:

1. Tracking of Inspection Information: the City can identify systems that continually have problems with their operation.

2. Tracking of Permitting: IWIMS has automated reports that can print lists identifying systems that are not properly permitted whether they are not up to date on the renewal of an operating permit/inspection or not fully permitted by both the City and the Regional Board.

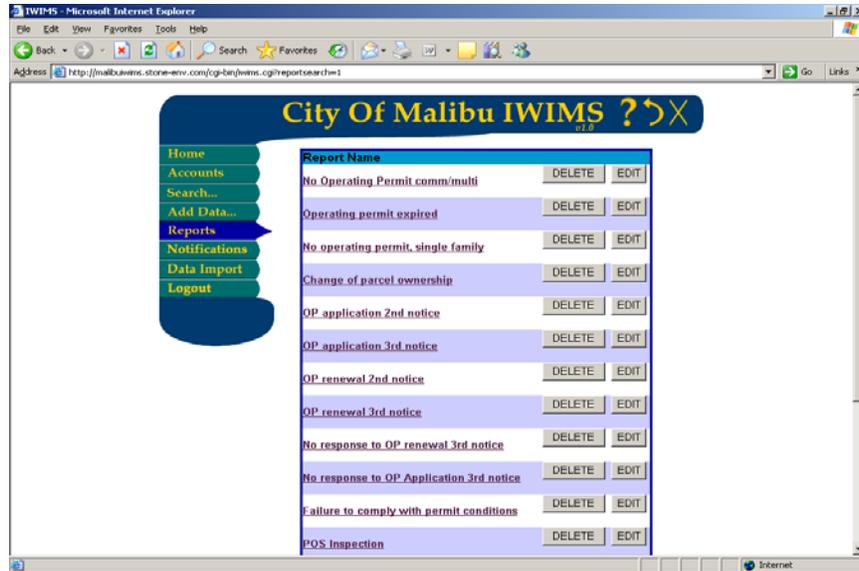


Fig. 5 – List of reports for tracking systems out of compliance

3. GIS Analysis of Problem Systems: the system can also plot out problematic systems to determine if there are any areas with a higher likelihood of problems. For example, an area with a shallow groundwater table, poor soil conditions, etc.

As the City enrolls systems into the new operational permit program and begins to collect inspection data on these systems, these tools will become an effective way to routinely identify systems and focus on areas with water quality problems and or in need of increased oversight.

Incorporation of Information Management into the Oversight Program

The information management system was designed, developed, and tested during 2004 by Stone Environmental in conjunction with the City of Malibu. Once the development was completed Stone held a two day training course for both the City and the Regional Board. The goal of the training was two fold:

1. To familiarize staff with the use of the systems
2. To facilitate the incorporation of the information management system into the overall procedures for the oversight program

The IWIMS training took place on January 11, 2005 and January 12, 2005. The training covered the following areas:

IWIMS BASICS

- ♦ IWIMS Structure – Parcels, Systems, Components and how they relate to one another
- ♦ Accessing IWIMS and Logging In
- ♦ Searching for Data
- ♦ Navigating IWIMS – Menus, Tabs, and Hyperlinks
- ♦ Viewing/Editing Permit Information
- ♦ Adding Permit Limits
- ♦ Viewing/Editing

LARWOCB Specific Functionality

- ♦ Adding Permit Limits
- ♦ Adding new users with Board specific permissions

Advanced Features

- ♦ Using the Help System
- ♦ Adding/Editing Images
- ♦ Map It Button
- ♦ Permits – WDR vs. City Permits
- ♦ How Accounts/roles will affect ability to view/edit data for the Board vs. City of Malibu
- ♦ Monitoring Data, Samples and Analytical Data
- ♦ Data Import
 - SWIM data import
 - Discussion regarding Analytical Data import tool
- ♦ Reporting Tool

Incorporating into City's Oversight Program

- ♦ Generating Permits
- ♦ Notifications Tool
- ♦ Creating a Mail merge for use with Notifications mailing lists
- ♦ Correspondence
- ♦ Launching IWIMS from the Permit/ECD Database
- ♦ Reporting Tool
- ♦ Additional IWIMS/GIS Needs
 - Condos
 - GIS Functionality

Task 4.2 - Identification of Systems Requiring WDR Permits

One of the key findings of the Onsite Wastewater Treatment System Task Force was that there was a very significant problem with commercial and multifamily systems in the City of Malibu. A report conducted by Heal the Bay stated that 98% of multi-family homes in Malibu did not have WDR permits and 95% of commercial facilities did not have WDR permits from the Regional Board. In total it was estimated that approximately 390 commercial or multifamily systems were operating without a WDR permit in the City of Malibu.² While these numbers were difficult to verify by the Task Force at the time, Task Force members agreed that steps needed to be taken to address these systems.

The problem seemed to occur because of the separate but overlapping permitting processes of both agencies. For the City of Malibu, onsite system permits were issued as a part of the construction of the building (note: the permitting requirements have since been modified which is covered in Task 4.3). The system was more or less considered an extension of the plumbing system and was issued permits as a part of the plan check process. The City issued permits for all systems regardless of whether the Regional Board issued a WDR for a buildings' system. On the other hand, the Regional Board issued WDRs only for systems that met certain requirements (i.e., commercial or multi-family systems) and waived WDR requirements for systems deemed less problematic (i.e., residential systems).

The goal of Task 4.2 was to work with the Regional Water Quality Control Board to identify existing commercial and multifamily systems and then determine systems that required WDR permits but did not have one yet. S. Groner Associates, who was the key facilitator of the Task Force, was contracted to work with both the Regional Board and the City of Malibu to address this issue.

Work with the Regional Board to Prioritize Systems and Develop Templates WDRs

The systems that require WDR permits by the Regional Board (Los Angeles Region) meet the following criteria:

- Generate over 20,000 gallons per day, or
- Discharge waste from residential developments of more than two homes, or
- Discharge wastes from multi-family residential facilities, or
- Discharge wastes from commercial facilities that generate over 2,000 gallons per day, or
- Dispose of sewage containing any industrial waste, or
- Are proposed to utilize above ground dispersal or storage of sewage effluent.

As a first step in this process, S. Groner Associates worked with the Regional Water Quality Control Board to identify priority systems to target. The Regional Board had previously

² Omission Accomplished: Lack of A Los Angeles Regional Board Enforcement Program, 1992-1997, Heal the Bay, January 1999

worked on trying to develop a database of non-permitted systems; however, there is no reliable and easily accessed source of information regarding who owns onsite systems in the City of Malibu. The Regional Board originally started this process of identifying non-permitted systems by compiling a list of 507 businesses and multi-family buildings in the City that they thought could potentially be owners/operators of systems. Note that this assumption turned out to be faulty because most of the businesses in the City did not own the building or property and were just lease holders. This became the starting point for identifying system owners and the Regional Board and S. Groner Associates worked together to prioritize the list and attempt to gather the necessary information.

The conclusion reached was that the efforts should be focused in two areas:

1. Systems closest to water bodies (i.e., systems around the civic center and along Pacific Coast Highway)
2. Systems handling wastewater with more potential problems (i.e., restaurants)

Based on these two criteria, 237 businesses/multi-family buildings were selected out of the 507 businesses the Regional Board had previously identified (follow up actions were taken as a part of the next task under “Obtain Site Specific Information...”).

The second part of this task was to work with the Regional Board to streamline the permitting process and use “template permits” to reduce the time necessary to research and issue WDR permits. Through this process, the following steps were identified to streamline the permitting process:

1. **Eliminate the “septic system survey questionnaire:”** This questionnaire was redundant with the Form 200 paperwork that was required and only served the purpose of filtering out the systems that only needed a permit from the City of Malibu. Instead, S. Groner Associates recommended that it be mandatory for permit applicants to submit a copy of their City of Malibu operational permit application or original installation permit, which would provide the same information.
2. **Use the State Water Resource Control Board’s statewide general permit application:** This permit application is very generic and requires very little information to file. In essence, the Regional Board only needs to verify that the system falls under their jurisdiction (in regards to the waiver parameters) to have a permit issued for the system. The advantages of this permit is that it requires no documentation or information from the system owner and it quickly puts the system into compliance and into the State’s permit database while other issues are worked out. (permit template attached in appendix)
3. **Use the Los Angeles Regional Water Quality Control Board’s General WDR permit:** This permit application is also a generic permit, but has additional requirements and information that would need to be submitted to the Regional Board prior to issuance per Form 200. However, this permit is a standard template, which does not require that it be tailored to each site based on site specific parameters. (permit template attached in appendix)

S. Groner Associates recommended using the two permit templates in a serial process. The State permit would be used first, essentially as a “holding place” for new or as of yet non-permitted onsite wastewater treatment systems. This would get these onsite systems into the State’s permit database system. Then, as the onsite system owners complete Form 200 and apply for the Regional Board’s General WDR permit and any necessary upgrades are made, these onsite systems can be switch to the General WDR permit.

Obtain Site Specific Information Necessary for WDR Permits

Following up on the initial prioritization, S. Groner Associates conducted research to obtain the necessary site specific information to determine if these businesses and multi-family buildings required WDR permits and if so to then obtain the necessary information to allow the Regional Board to issue WDR permits. S. Groner Associates researched this information through two processes: initially through following up on Regional Board data and then through file reviews at the City of Malibu.

Initially, S. Groner Associates conducted their research at the Regional Board by following up on 237 of the identified priority sites within the Regional Board’s list of unpermitted sites. They researched assessor records, Regional Board files, and worked with the businesses/property owners to obtain information on the identified sites and systems to move them through the permit application process.

The goal of this effort was to do one of three things:

1. Obtain the necessary site specific information from the businesses/property owners that required a permit and move them into the permit process,
2. Remove from the list businesses/property owners that did not need WDRs because either they were determine that they were misidentified as system owners or that they were system owners but did not meet the requirements for a WDR permit or
3. Pass on non-responsive businesses/property owners to enforcement for non-compliance.

However, based on the follow up research, the Regional Board’s database of businesses/property owners was unreliable in identifying sites that needed WDR permits. Much of the individuals/businesses identified in the Regional Board’s database were incorrect because of the following reasons:

- The information was not current (i.e., property owner sold building; business had closed or was sold, etc.)
- The business listed only leased the facility and did not operate the system
- A multifamily facility that was a duplex facility was listed

In total, out of 237 individual/businesses initially targeted, only about 20% (or 47) of the individuals/businesses identified were the appropriate system owners to follow up with in issuing for enrolling them into the WDR permit program.

S. Groner Associates then changed strategies and they relied on Questa’s research and their own research of the City of Malibu’s building permit files, geological files, and City Health

Officials files. By focusing on building permit files, the emphasis was shifted from focusing on individual businesses or property owners to targeting specific sites.

S. Groner Associates then identified 628 systems that could possibly meet the requirements for a WDR. (Note, the 628 included all of the 507 listed in the Regional Board database). From this research a total of 443 onsite systems were identified as meeting the basic parameter to require a WDR permit. For each system, photocopies of City information was obtained to document site specific information on each system, and current records from the County Assessor's office were reviewed to obtain the most recent property owner information.

As a last step, S. Groner Associates worked with the Los Angeles County Department of Public Works to obtain water usage information for the sites to include in the site files.

Prepare Documentation for Sites

Final breakdown of the 628 sites:

- 443 require permits
- 168 exempt from WDRs
- 17 special cases – determination needed by RWQCB

Based on the research of the City of Malibu files, S. Groner Associates prepared site files for the Regional Board for the systems identified as commercial and multi-family facilities needing WDR permits. The files contained relevant documentation from the City's files to assist the Regional Board in issuing either the statewide general permit or Form 200 to initiate the permitting process for a Regional Board general permit. The documentation includes: information on the system owner, the type of facility, the onsite wastewater treatment system, the site location, daily water usage, and corresponding assessor number/information to uniquely identify the site.

S. Groner Associates also worked with the Regional Board to initiate the permitting process for the sites that could be moved into the permitting process. By the end of the grant term (December 2005), they were able to work with the Regional Board to complete permitting on 84 sites and referred 89 sites to the enforcement section to follow up with Notices of Violations (NOVs) due to non-responsiveness; S. Groner Associates then prepared documentation for the enforcement section. The Regional Board is now working to issue State General WDR permits to the remaining 270 sites.

One difficulty that slowed the process of issuing permits was the Regional Board's lack of staffing resources. During the course of the project the Regional Board staff working in this area shrunk by approximately 75% due to attrition, a hiring freeze, and then a consolidation of the unit into another section. Currently, no staff is assigned to working on issuing WDRs to onsite systems on a full time basis.

Develop a Regional Monitoring Plan

A regional monitoring plan was developed as a long term strategy to manage onsite wastewater treatment systems in the Malibu Creek Watershed and protect Surfrider beach.

Questa developed this monitoring plan based on the recommendations of the Prop 12 Risk Assessment project and Regional Board data (from information provided by WDR permits). The aim of this plan is to consolidate all of the data collected from these WDR permits within the City. To achieve this, the City of Malibu will request that copies of this data be provided to the City, including water level and water quality data collected from monitoring wells installed for OWTS monitoring.

The plan is divided into short-term and long-term objectives, with the short-term objectives being relatively obtainable through existing resources and the long-term objectives requiring additional resources to implement. The objective of the plan is to obtain a consistent source of groundwater quality information that would be incorporated into IWIMS. This information could then be analyzed and assist in identifying problem systems or hotspot areas.

The regional monitoring plan is included in the appendix.

Task 4.3 - Develop Protocol for Inter-Agency Coordination

Another of the key findings of the Task Force was inter-agency coordination between the Regional Board and the local agencies. This problem was manifested through systems having local permits but not obtaining WDR permits and eventually became even more of a concern when agencies were discovered to have different requirements for depth to groundwater, set backs, etc. This was also a problem for owners and system designers who installed systems based on local permits and then realizing that they needed a WDR permit with differing requirements.

To address this issue, the grant focused on three areas to facilitate improved regulatory management of onsite wastewater treatment systems. These areas were the following:

1. Facilitate the development of memorandum of understandings (MOUs) between the Regional Water Quality Control Board and the local agencies
2. Develop a model management program for systems in the City of Malibu
3. Continue to coordinate Task Force meetings to help share information between jurisdictions

Development of Memorandums of Understanding

The development of the MOUs between the Regional Board and the local agencies covered four key subtasks, which included:

1. Development of guidance to determine jurisdictional oversight
2. Agreement on procedures to coordinate oversight and enforcement
3. Development of enforcement guidance

4. Development of guidance for the regional management of new and existing systems

S. Groner Associates facilitated the development of the template MOU primarily for the City of Malibu and the County of Los Angeles. The template MOU was used for all the local agencies managing onsite wastewater treatment systems in the Los Angeles Regional Water Quality Control Board's jurisdiction.

Each of the MOUs outlined the areas of responsibility for the agreeing agencies including the following:

1. Applicability of the MOU: created clear guidance on jurisdictional oversight for all systems
2. General Agency Responsibilities: outlined responsibilities for oversight criteria including the siting, design, approval, installation, operation, maintenance, and monitoring of systems; requirements for information management, inventory of systems and enforcement
3. Evaluation: outlined a mechanism to evaluate the effectiveness of the MOU and a timetable for the MOU's review (all MOUs are open to review every five-years)
4. Interim Measures: outlined steps needed to be taken to move both agencies from the present system of essentially independent operation to the agreed upon coordinated implementation of oversight

Each of the MOUs was then approved by both the City Council or Board of Supervisors and the Regional Water Quality Control Board. The City of Malibu's MOU with the Regional Board was the first MOU negotiated. MOU negotiations began in early 2004 and continued through August 2004. Copies of the City of Malibu's and the County of Los Angeles' MOUs are included in the appendix (Appendix, p. x)

The one logistical issue that did arise and may change the content of the MOU is the final language of AB885's regulations. At the time the MOUs' were drafted, only tentative drafts of the regulations were released, and already, these drafts have undergone major changes. Each of the MOUs has provisions that allow the MOUs to be reopened and amended to accommodate any significant changes that may adjust the requirements regarding the management/oversight of onsite wastewater treatment systems Statewide.

Develop a Comprehensive Management Program for the City of Malibu

The goal of this subtask was to develop the City of Malibu's onsite wastewater treatment system management program into a proactive program and a model program in the State. There were three major components of this task:

1. Develop and implement an operation permit program for onsite wastewater treatment systems
2. Develop and implement an inspector certification program

3. Develop a point of purchase permit program for existing residential onsite wastewater treatment systems

This program came out of the perspective that onsite wastewater treatment systems require ongoing management to assure suitable long-term service and performance. The goal of the program is to manage these systems as a means of protecting groundwater, creeks, lagoons and the surf zone water quality, while also meeting basic sanitation needs of the properties served. These systems require responsible operation along with periodic maintenance and inspections to ensure that they function properly.

In essence, the City shifted its approach from treating onsite systems that only required installation permits—with follow up when problems arose, to focusing on managing the systems throughout their life of operation, preventing problems through proactive inspection, maintenance, and system monitoring.

The City of Malibu's Environmental and Community Development Department is responsible for implementing the management program. In 2001, Malibu's City Council adopted an "Onsite Wastewater Treatment System Management Plan". This plan included modifications to the City's ordinances to include an operating permit program. These program elements were included in ordinance 242U passed by City Council in October, 2002.

On January 1, 2003, the City of Malibu instituted the operator permit and inspector registration program to provide better water quality protection.

Operating Permit Program: These permits are issued by the City of Malibu to provide appropriate levels of management based on two key criteria: 1) types of facilities generating wastewater and 2) types of onsite wastewater treatment systems, and the potential for negative water quality impacts.

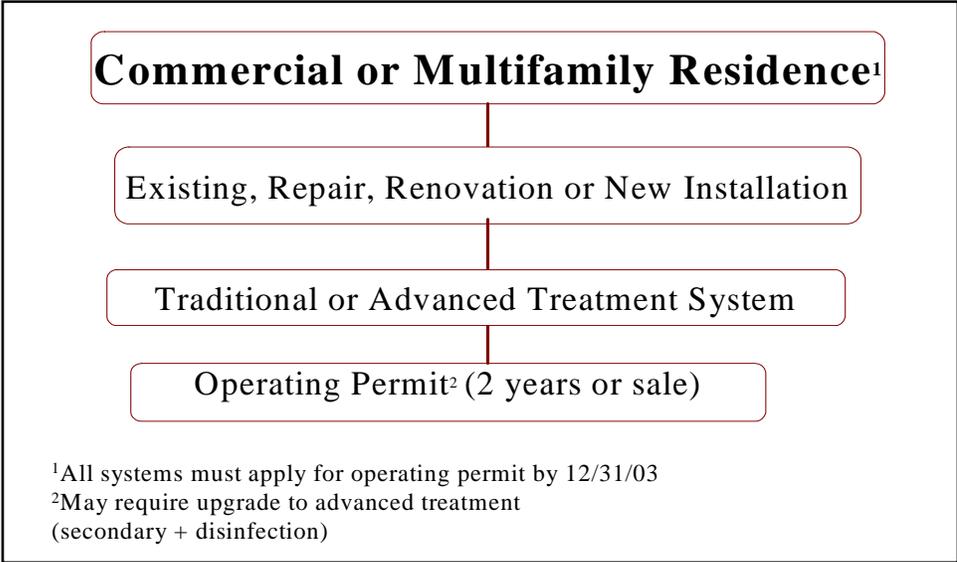


Fig. 6 – Commercial/Multifamily Operating Permits

An operating permit is required for all systems serving commercial facilities (including institutional, religious, educational, and government facilities), multifamily occupancies (any property with three or more residential units), and all new installations, renovations and repairs of residential onsite wastewater treatment systems (Figure 6).

The operating permits require renewals periodically as noted in Figures 6 and 7. Types of wastewater treatment systems can be defined as traditional (septic tank and drainfield or seepage pit) or alternative (systems including advanced treatment component). It is significant to note that the majority of systems in Malibu (existing one and two-unit residential systems) will not fall under this program unless they are repaired, renovated or replaced (Figure 7).

Inspector Registration Program: The inspector registration program for onsite wastewater treatment system practitioners is to ensure that qualified technicians and professionals are available to inspect systems at the time of operating permit renewal. There are two requirements for certification: 1) professional registration or license in appropriate fields; 2) satisfactory completion of City-approved training and examination programs.

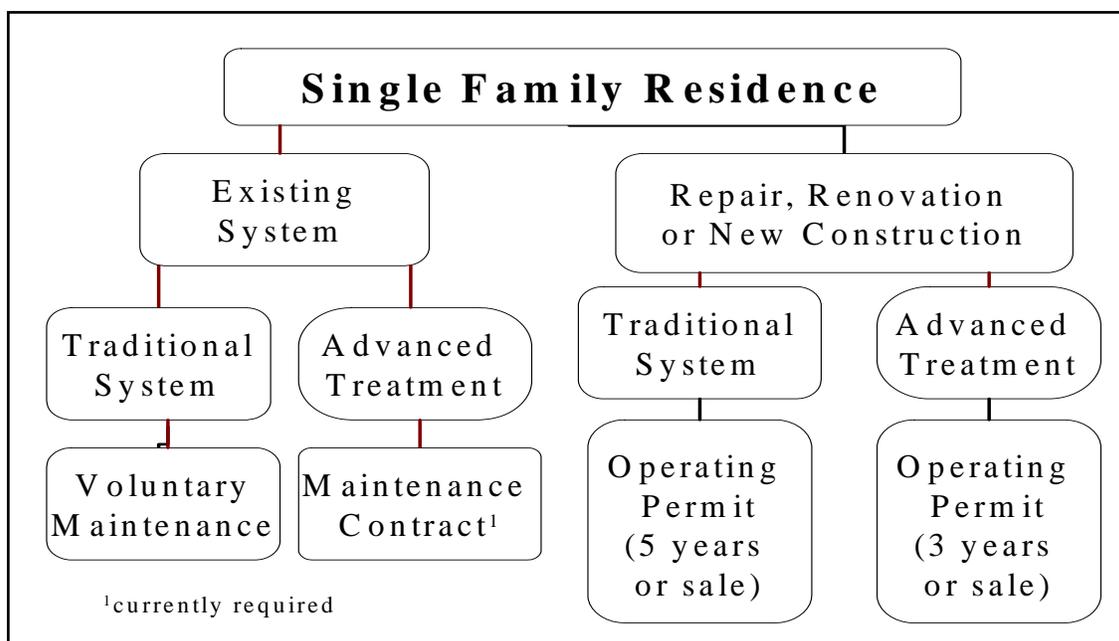


Fig. 7 - Residential Operating Permit (includes duplexes)

The program requires Onsite Wastewater Treatment System Inspector Registration by credentials and examination. In August, 2003, the City of Malibu sponsored a National Association of Wastewater Transporters (NAWT) training and examination process to confirm competency in onsite wastewater treatment system inspection procedures for practitioners and professionals with the following credentials:

- a) California Registered Environmental Health Specialist;
- b) California Registered Geotechnical or Civil Engineer;
- c) California Registered Engineering Geologist; or
- d) California Licensed Contractor (A or C-42 license).

The registration can be revoked by the City with due process. The revocation process requires an administrative hearing to determine whether an Onsite Wastewater Treatment System Inspector has “falsified, or fraudulently altered a system inspection report, or misrepresented, or failed to provide a copy of an inspection report to the Administrative Authority of the results of an inspection.”

Point of Purchase Permit: The City is currently in the final stages of developing the Point of Purchase Permit program. The program will be used to reinforce the operating permit program by addressing residential systems that are already in place. The City sees the transfer of property as the most effective way to gradually bring those onsite wastewater treatment systems into the overall management program.

Currently, the City of Malibu is conducting outreach within the City to get comments and address stakeholder concerns regarding the program. The City hopes to enact the Point of Purchase Permit program in 2007.

Coordinate the Task Force/Information Sharing Between Jurisdictions

S. Groner Associates was tasked with the role of continuing to facilitate the Santa Monica Bay Restoration Commission's Task Force. The key purpose of the Task Force was to continue to discuss common issues regarding the management/oversight of onsite wastewater treatment systems and to share information between jurisdictions.

The key issues that the Task Force focused on were threefold:

1. TMDLs in the Malibu Creek Watershed
2. Regulations stemming from AB885
3. The development of the MOUs between the Regional Board and local agencies

The Task Force acted as a forum to discuss these three issues for stakeholders involved in the managing of onsite systems. The Task Force brought together all the local agencies including the City of Malibu, the County of Los Angeles (Public Works, the Health Services, and Regional Planning), the Regional Water Quality Control Board, the Coastal Commission, California Onsite Wastewater Association, Heal the Bay, and the Santa Monica Bay Restoration Commission.

Task Force meetings usually revolved around one or two key issues and brought in key people to present information on the topic and provide expertise on the issue. The process allowed organizations/individuals to move past rhetoric and begin to find common ground in figuring out solutions that worked for each party.

The Task Force initially met monthly, but overtime as issues got resolved and common ground began to be reached, meetings were made bimonthly and then as needed.

Task 4.4 - Public Education/Outreach to Community Stakeholders

The final piece of the core scope of work was conducting outreach to the community. This effort entailed providing information to the public regarding how to prevent pollution and stay in compliance, presenting the proposed changes to them, and soliciting feedback from the public in an effort to get input and buy-in from stakeholders during the process of improving the regulatory management program.

The outreach effort was comprised of three components:

1. Developing a "plain language" educational outreach brochure

2. Outreaching to all affected property/system owners regarding changes and proactive steps they could take in managing their onsite wastewater treatment systems
3. Conducting public outreach and involvement of stakeholders regarding the changes to the overall management and obtaining buy-in and feedback from the stakeholders

Developing a “Plain Language” Educational Outreach Brochure

In order to outreach to the community, the City of Malibu created an educational brochure to outline the various issues for individuals in terms of their management of onsite systems. The brochure covered the following topics:

1. Operation and maintenance
2. Proper permitting
3. Water conservation

The goal of the outreach was to educate system owners on both the requirements of owning an onsite system and simple best management practices that they should follow to improve the operation and extend the life of their system. The outreach piece was developed as a four-panel brochure. A sample is included in the appendix.

Conducting Outreach and Distributing Education Materials

As a follow up to creating the brochure, the City of Malibu worked to distribute the brochure throughout the City. The key audiences the City wanted to reach were home owners, real estate agents, and the business community.

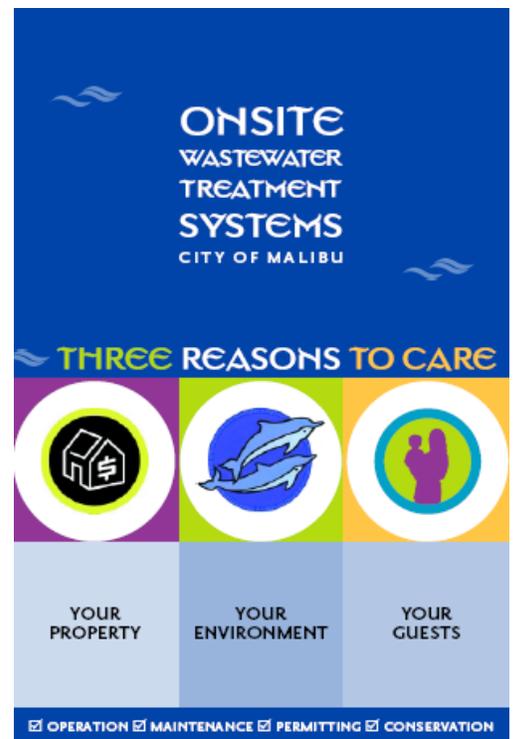
Distribution of the brochure was done through the following ways:

1. Mailed out to all residents
2. Distributed to all real estate offices working in Malibu (both for their knowledge and to pass on to new home buyers)
3. Placed at key community centers and libraries within the City

In total, 10,000 brochures were printed and distributed throughout the City.

Presentations to Stakeholders

Figure 8. – Brochure cover



Throughout the process of making changes to the management of onsite systems, the City met with various stakeholders to discuss the proposed changes, answer stakeholders' questions, and listen to feedback. The outreach effort was coordinated by the Environmental and Community Development Department. Overall, the City made presentations at 5 venues to various stakeholder groups, these included:

1. Saturday, May 8, 2004 at Pepperdine University: A regionwide forum regarding onsite wastewater treatment systems held at Pepperdine University
2. Friday, August 20, 2004 at City Hall: A meeting of the Malibu Chamber of Commerce
3. Wednesday, April 20, 2005 at School Library: A meeting of the Point Dume Community Association
4. Monday, September 19, 2005 at City Hall: A presentation at the City Planning Commission meeting
5. Saturday, October 14, 2005 at City Hall: A forum of the real estate office owners/managers regarding the point of sale ordinance

In each of these venues, the City's goal was to explain the approach of proactively managing the onsite systems and layout the changes the City is proposing to address this approach. The City then listened to comments and questions from the stakeholders.

The first set of changes to the City's management program was passed by Council. This included the requirement for all existing commercial and multi-family systems to obtain operating permits, all new residential systems to obtain operating permits, and all contractors to become registered by the City.

The second set of changes that the City is currently conducting outreach on is a "Point of Purchase" permit requirement for existing residential systems. The City is continuing to conduct outreach to the real estate community and homeowners regarding this requirement.

Task 5 - Reporting

The reporting requirements for this project included two parts: 1) A Monitoring and Reporting Plan and 2) A Final Report for the project.

Monitoring and Reporting Plan/ Quality Assurance Project Plan

This project did not include any water quality sampling or monitoring given the objectives of the project. As mentioned above in the description of Task 3, this project did not involve the implementation of structural BMPs, but instead focused on policy and management issues. Thus it was understood that the impact on water quality would not be seen in the short term.

As a result and with the approval from the State Water Resources Control Board, no water quality monitoring was completed, and the Monitoring and Reporting Plan and the QAPP were combined.

The combined report addresses the overall quality assurance of the project, specifically focusing on data collected from existing sources such as the City of Malibu, County of Los Angeles, and the Regional Water Quality Control Board. The information was extracted from paper files and digital datasets. The collection, management, usage and reporting of data is described in the QAPP.

The non-point sources of pollution addressed by this project are onsite wastewater treatment systems in the Malibu Civic Center and commercial and multi-family systems throughout the City of Malibu. The baseline water quality at Surfrider Beach is described in the Santa Monica Bay Beaches Bacteria TMDL (see Appendix). The pollution from these sources will be prevented or removed overtime as systems become enrolled in the City's new operating permit program or issued WDR permits and are required to upgrade or redesign their systems. All commercial and multi-family systems will need to incorporate disinfection, as required by the City of Malibu's Operating Permit. Furthermore, the enhanced documentation of facilities that need to meet Waste Discharge Requirements (WDR) will result in reduction or prevention of pollution from these systems as they come into compliance with the WDR.

The initial draft QAPP was circulated for review in December 2003. Review comments were received in July 2004. In November 2005 a revised QAPP incorporating the Monitoring and Reporting Plan (M&R Plan) was submitted to the SWRCB for approval.

Final Report

The last task required as a part of the grant was the preparation of this Final Report. As presented above, this report covers the following items:

1. A brief introduction section including a statement of purpose, the scope of the project, and a brief description of the approach and techniques used during the project.
2. A list of task products previously submitted as outlined in the Schedule of Completion.
3. Any additional information that is deemed appropriate by the Project Representative.
4. Indicate whether the purposes of the project have been met.

As a part of this report we have included a copy of all the task products completed during the term of the grant in the appendix for reference.

IV. Conclusion

Onsite wastewater treatment systems in the lower Malibu watershed have long been suspected of being a contributing source of pathogens and nutrients to Malibu Creek, Malibu Lagoon, and Surfrider Beach.

The results of this project clearly addressed the management and oversight issues and effectively change the way onsite wastewater treatment systems are managed in and around the lower Malibu Creek watershed so that water quality protection is a top priority.

The clearest measure of this is the changes in the City of Malibu's ordinances. The City now requires operating permits for all new residential systems and all existing commercial and multi-family systems. This new permit requires inspections and permit renewal every 2-5 years. The City also requires that all contractors performing inspections or work on systems be registered with the City. And the last change which is the final stages of development is a "Point of Sale" ordinance for the permitting and inspection of all existing residential systems. In total, these requirements will make the City of Malibu's oversight programs one of the toughest in the nation.

Along with this, the City of Malibu and the Regional Water Quality Control Board were able to develop a collaborative approach in hammering out a strong comprehensive Memorandum of Understanding (MOU) between the two agencies regarding coordinated responsibilities for management of onsite systems in the City. The MOU is by far the most comprehensive and progressive of all the MOU's in the region and outlines an aggressive timeline and implementation steps for the program.

As a part of this, the City has developed a state of the art information management system to track the operation and maintenance of systems within the City. The new information management system allows the City to proactively oversee the management of onsite systems, pin point potential problems sites or areas through GIS mapping, and collaborate effectively with the Regional Water Quality Control Board by making all the data available online so that decision can be made based on all the information available between the two agencies.

The project also funded research assistance to the Regional Board to identify all the commercial and multi-family systems in the City that were not issued WDR permits. In total 443 systems were identified and the necessary site specific information was provided to the Regional Board to facilitate the issuance of general WDR permits. And the project developed a regional groundwater monitoring plan based on information collected through WDR and other sources of existing water quality information.

As a last step, the project funded a public information and public participation effort. Through this effort, the City was able to educate stakeholders, businesses, and residents regarding the new requirements for managing onsite systems and the proper BMP's for the operation of their systems. The City then presented the proposed program changes to stakeholders and listened to their comments and questions in order to implement the new and more comprehensive management program.

As a result of the Grant, the project successfully put into place the five key Action Items of the Santa Monica Bay Restoration Commission's Task Force on Onsite Wastewater Treatment Systems. This effort has built a foundation for the effective management of onsite systems in the region and has helped open the various regulating agencies (i.e., the City and the State) to a collaborative approach for implementing solutions to protect water quality in the area. In addition, the results of the project have put into place a model program that systematically addresses the proper management and oversight of onsite wastewater treatment systems and can be used as an example for other agencies Statewide.

In the final analysis, the development of a comprehensive and proactive onsite wastewater management program is a key step in helping to restore and protect Surfrider Beach. However, this effort is just one piece of a multi-pronged effort to restore water quality to Surfrider Beach which also includes the management of stormwater runoff, the management of discharge from the Tapia treatment plant, and working with the natural habitat to accommodate the natural sources of pollutants that make their way into the water body as well. Over the long term, the City of Malibu is committed to continue working with stakeholders and regulators in addressing all of these key issues to ensure that we continue to move toward the goal of a beach without impairments.

Funding for this project has been provided in full or in part through a contract with the State Water Resources Control Board (SWRCB) pursuant to the Costa-Machado Water Act of 2000 (Proposition 13) and any amendments thereto for the implementation of California's Nonpoint Source Pollution Control Program. The contents of this document do not necessarily reflect the views and policies of the SWRCB, nor does mention of trade names or commercial products constitute endorsement or recommendation for use." (Gov. Code 7550, 40 CFR 31.20)

Appendix

Appendix for CBI Final Report:

I.) Malibu Creek TMDL Resolution

II.) Task 1

- a.) Quarterly Reports
- b.) Contract Summary Form
- c.) Subcontractor documentation (Council Agenda Report)
- d.) Project Survey Form

III.) Task 2

- a.) CEQA Documentation – Notice of Exemption

IV.) Task 4

- a.) List of Systems Identified by System Inventory/File Survey & Procedures to Incorporate Information System into existing Oversight Program – IWIMS Data, Help System Documentation Manual, IWIMS Training Agenda
- b.) General and Site Specific Permit Templates – Order 01-030 and Order 97-10
- c.) Example Data Sheet – Form 200
- d.) Regional Monitoring Plan
- e.) Protocol for On-going Oversight and Enforcement – Memorandum of Understanding
- f.) Copy of Information Materials & Notification/Attendance Sheets for presentations

V.) Task 5

- a.) QAPP/Monitoring and Reporting Plan