

**OREGON'S ON-SITE SEWAGE PROGRAM**

**Summary  
And  
Program Recommendations to DEQ**

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For  
The Oregon Department of Environmental Quality  
Water Quality Division**

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# INTRODUCTION

## **Purpose and Scope**

This report to the Water Quality Division of the Department of Environmental Quality (DEQ) reviews the Oregon On-Site Sewage Program statutes, rules, and implementation.

The report is intended to be a beginning point for a more formal rule review process that the Department intends to begin in the spring or summer of 2002. As Water Quality Administrator Mike Llewelyn put it, the report was intended to identify key issues and changes needed, "at the 50,000 ft. level".

This review of the On-Site Sewage Program was specifically designed to help DEQ answers four critical questions about the program:

- Are the rules and standards for siting, construction, and installation too prescriptive?
- Are there policy or rule revisions that could improve customer service?
- Are there policy or rule changes that could help improve the long-term fiscal outlook for the program?
- What is the best way to regulate on-site systems that require long-term monitoring or oversight?

In the process of answering these questions, key stakeholder groups were surveyed or interviewed to determine their perceptions about what's working in the On-Site program and what's not. These stakeholder perceptions led to a number of important insights about the program. Consequently, the program review went beyond the initial questions and includes specific findings and recommendations on six key issues:

Fees and budget

Operation and maintenance

Operating permits for On-Site systems

Consistency versus flexibility

Timeliness

Accommodating financial hardship

Most of the twenty-eight recommendations involve rule changes of one sort or another, and are so designated. Some, however, can be implemented simply through policy changes or management decisions.

Nearly all of the recommendations can be broadly described as ways to improve “customer service” (though perhaps for different customers) in the On-Site program. And, while this report has been conducted for Oregon’s Department of Environmental Quality, virtually all of the findings and recommendations apply equally well to “direct service” counties, where DEQ operates the program, or “contract counties” where the county government runs the program.

### **Acknowledgements**

I would like to thank the many people whose time, counsel, and constructive ideas contributed to this report. Statewide, over 220 installers took the time to fill out and mail in a detailed survey form that provided valuable feedback. My thanks to each and every one of them. More than thirty in-depth interviews were conducted of: installers, contract county staff, DEQ staff, system designers, manufacturers, and county commissioners. The frank and honest assessments of the program provided through these interviews were essential to the “ground-truthing” of the findings in this report.

Special thanks, also, to the following:

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Last, but far from least, to Janice Leber for her much appreciated work in conducting and compiling the results from the survey of installers.

## EXECUTIVE SUMMARY

This report to the Water Quality Division of the Department of Environmental Quality (DEQ) reviews the Oregon On-Site Sewage Program, its statute, rules, and current implementation.

The report is intended to be a beginning point for a more formal rule review process that the Department intends to begin in the spring or summer of 2002. It is based largely on extensive interviews with key stakeholder groups, including DEQ and Contract County On-Site programs, and a statewide survey sent to more than 900 system installers.

### Key Findings

The On-Site Program is not “broken”. Virtually all stakeholder groups had moderately high marks for the program overall. Installers, for example, gave the program an average rating of slightly more than 3.3 (on a scale from 1 to 5, five being highest). Among all the groups contacted for this report, including staff, there was considerable agreement on the strengths of the program and those aspects needing improvement. The highest ranked part of the program, by far, was the “professionalism and courtesy of inspectors” which received an average rating from installers of nearly 4.0 in DEQ-served counties, and 3.9 in contract counties.

The lack of a statewide program to encourage/require long term maintenance of on-site systems presents the biggest obstacle to fulfilling the statutory mission of the program. In the decades ahead, more and more systems on more marginal sites, requiring proper maintenance to work well, pose a significant environmental and public health threat. The steadily increasing number of alternative technology systems will require the program to move from one that focuses only on ensuring proper siting and installation to one which will need to focus on longer term concerns about proper operation and maintenance.

“Prescriptiveness” is not a four-letter word. With the exception of repairs and alterations, most installers strongly preferred prescriptive rules for construction and installation of single-family systems. The prescriptive rules provide a desired level of consistency and a “level playing field” in this competitive business, and allow installations to happen more quickly. Larger systems requiring a WPCF permit need more flexibility and designers and installers interviewed felt that program provided an adequate level of flexibility.

“Program fees” were the most frequently mentioned customer service issue. Current fees, based closely on program costs, often create political friction because they often seem out of proportion to the value of the service to the property owner. Changes in fee structure should address this discrepancy, and recognize that individual property owners view fees in a more personal way than large industries that are regulated by DEQ. The Department needs to develop a long-term budget strategy that addresses the fee structure, allocation of resources, and potential new sources of funding.

Certification of installers and pumpers would have multiple benefits for the program and the environment. There is considerable support and desire for a certification program, and it will not only raise the general level of knowledge among on-site professionals, but will allow development of a private-sector based maintenance program.

The 1994 rule changes, requiring many small systems to receive a WPCF permit, was a mistake. Right idea, wrong program. The WPCF permit was never intended for single-family residences or very small businesses, and has created great animosity. However, some kind of operating permit, with conditions that are more geared to the smaller property owner, is needed.

“Timeliness” has a different meaning for installers than it does for property owners. Efforts tend to be focused on timeliness of Site Evaluations and Permit issuance, both of which are important to property owners. For installers, however, two other needs have a far more direct impact on their costs: (1) being able to get questions answered immediately when they are doing work on the site, and (2) getting pre-cover inspections completed (or waived) on the same day that construction is completed.

The area where the program falls most short of the needs and expectations of stakeholders is in accommodating the needs of those with financial hardship. The Department needs to change its rules to better accommodate those needs, and to develop an alternative to fees that put a disproportionate burden on lower-income homeowners. A low- or no-interest loan program would allow the program to better meet the needs of those with financial hardship without compromising the environmental and public health protections of the program.

The LaPine Project represents a major leap forward, and a significant opportunity to help Oregon re-establish its national leadership in the On-Site sewage field. The thorough evaluation of new technologies, maintenance programs, and loan programs provide an opportunity to improve the program in several critical areas.

## **Seven Deadly Sins**

(As seen through the eyes of key stakeholders: Avoidable offenses that make stakeholders mad and give the On-Site Program a bad name)

1. Conducting a pre-cover inspection within the seven days stipulated by rule, but still causing the installer to either leave his equipment or return later to the site, costing him up to hundreds of dollars.
2. Charging homeowners and small businesses an annual compliance determination fee, as part of their WPCF permit, and then not doing an inspection.

3. “Punishing” homeowners who want to voluntarily “do the right thing” by repairing their systems by charging high fees, delaying work through extensive review, and making the project too expensive.
4. Putting an installer, who is on the site and has a question that needs to be answered before proceeding, through to voice mail, with the inspector returning the call within 24 hours (normally an acceptable response time). In this case, however, the frustrated installer has to hold up work, costing him time and money.
5. Charging fees that are in proportion to the On-site staff work involved, but are out of proportion with the value to the homeowner, particularly if they come as an “expense” rather than a capital cost at time of home building or purchase.
6. Not responding in a timely way to complaints from the general public about failing systems, giving the misleading impression that the program “doesn’t care”.
7. Regulating some single-family homeowners (and very small businesses) as though they were a large business or industry, through a WPCF permit. Charging high fees and adding significant on-going costs. Worse yet: “Ping-Ponging” applicants in contract counties from the county to DEQ and sometimes back again.

### **Summary of Recommendations**

(Please note:

- All recommendations designated with this arrow do not require rule changes and can be implemented by policy or management decision.
- All recommendations designated with this bullet require rule revision.)

#### *Fees and Budget*

- Shift the burden of fee *increases* to occur as capital costs of new construction and home purchase, rather than as expenses to homeowners.
- Cease charging annual compliance fees for single family dwellings and give small commercial facilities an out if they have an annual maintenance contract.
- Reduce or in some cases eliminate fees for repairs, alterations, particularly if there are no or minimal increases in flow.

- Raise license fees significantly if an installer is found violating the rules or doing an illegal installation.
- Shift the surcharge to a percentage of the county fee (rounded to the nearest dollar) and make sure that the fee is set to fully cover the statewide administrative costs of the program. Along with this, do a better job of articulating and delivering on the benefits of this surcharge to contract counties.
- Consider making pre-cover inspections an option for property owners that they pay for.

### *Operation and Maintenance*

- Implement a state certification program for installers, pumpers, and maintenance providers.
- Work with O2WA to conduct Inspection/Maintenance training
- Revise the rules on alternative technologies to make requirements for operation and maintenance both more enforceable and more consistent
- Begin a statewide maintenance requirement on a smaller scale in the Coastal Non-point Source counties, with time-of-sale inspections and reports to DEQ/counties, with a \$25 fee from the private inspector to DEQ for maintaining the statewide program (including training).
- Provide a fee incentive in all small On-site operating permits, waiving annual compliance fees in exchange for contract with a certified O & M provider.
- Utilize the results of the LaPine project to develop a longer-term and statewide maintenance requirement/program.

### *Operating Permits*

- Revise the rules requiring certain very small on-site systems to obtain a WPCF permit. Develop, instead, an operating permit that would have no expiration date (or, no renewal fee if the renewal application is submitted with an inspection/maintenance report from a certified provider).
- Put more emphasis on periodic inspection and maintenance by *private* (and certified) providers rather than monitoring and On-Site Program inspection, as the means to ensure proper functioning of single family systems.

- Either require, or provide incentives for, periodic inspection and maintenance of these systems in the newly developed operating permit.

#### *Consistency versus Flexibility*

- Maintain the current prescriptive rules for the construction permit program, with some continued tweaking where necessary.
- Make repairs and alterations easier, either through relaxing the prescriptiveness or increasing the level of financial help. One idea along this line is to require that certified installers certify that the system will be protective of public health and the environment.
- Work with contract counties to improve consistency of rule interpretation around the state.
- Provide an easier, less expensive mechanism for approving minor variances in the rules.

#### *Timeliness*

- Provide more flexible staffing in the program to more closely parallel the seasonal variations in construction activity.
- Address the need for installers to be able to get questions answered immediately while on site, either through pagers or cell phones for inspectors, or duty officers.
- Establish a program goal of conducting at least 50% of all pre-cover inspections on a "same day" basis. Track timeliness of pre-cover inspections.
- Once installer certification is in place statewide, require that a certified installer "certify" in writing that the system meets the plan and permit requirements. Then, significantly reduce the number of pre-cover inspections to an audit basis.
- Respond in timely fashion to complaints of failing systems.

#### *Accommodating the Needs of those with Financial Hardship*

- Revise the fee waiver provisions for variances to better accommodate those with financial hardship

- Revise the financial hardship provisions, so that those seeking financial hardship don't first have to pay a \$1300 fee
- Develop a statewide low-interest loan program that can be utilized by those with financial hardship, particularly for repairs and system alterations. Make the On-Site fees an eligible expense for those loans, and, for those with financial hardship, make payment on sale of property.

*Other Customer Service Recommendations*

- Provide a feedback form for all permittees, self-addressed, that can be mailed back to the program upon completion of the on-site system.

# HISTORICAL, ENVIRONMENTAL, AND POLITICAL CONTEXT

## **History**

Prior to 1973, On-site systems in Oregon were the purview of local county health departments (or, in some cases, building departments) under the general oversight – without much authority – of the State Health Division. There were numerous problems, no permits, little science involved, very little consistency among counties, and consequently, several instances of significant health impacts from failing systems. Jackson County, for example, had hepatitis outbreaks linked to failing systems.

In 1973 the Oregon Legislature gave new and real authority to DEQ to oversee a statewide On-Site permitting program, and to set standards that would be applied consistently throughout the state. Under the leadership of Jack Osborne, and including the soils science of Bob Paeth, Oregon's program became an acknowledged national leader by the late 1970's because of its pioneering work in permitting, using soils science, and, through its experimental technology program, approving several "alternative technologies" to standard drainfield systems. The approval of alternative technologies in 1979 provided unprecedented flexibility in terms of site approvals. (By comparison, in Jackson County, which has difficult soils, the site disapproval rate before 1979 was 50 %. Today it is below 3%.)

As early as 1984, funding in the On-Site program has created budget problems. General Fund support for the program was phased out, resulting in staffing decreases, higher fees, and discontinuation of some of the central administration activities (such as the experimental technology program). At the same time, however, the number and percentage of systems using alternative technologies (sand filters, etc.) rose steadily, as rural development expanded into increasingly difficult sites. These alternative systems have required more staff time for siting and installation, further exacerbating the budget crunch.

## **Program Definition: Just what *is* the On-Site Program?**

The Oregon On-Site Program is overseen by DEQ, though conducted by local government in the majority of counties statewide, under contract with DEQ as authorized by statute. For the purposes of this report, the "program" includes the county-run operations and the DEQ-served counties, as well as the statewide administration of the program by DEQ.

A number of larger political and organizational issues in the On-site program stem from an ambivalence about whether the program is best viewed as a "public health" program, designed to prevent disease, or as an "environmental program", designed to prevent

groundwater and surface water pollution. Or, as it is structured in a number of contract counties, largely as a “development” or “building codes” program. In this report, all of these purposes are assumed to be important to the mission of the program.

Still reflected in the organization, culture, budget, and rules at DEQ is a distinction between the “On-Site Program”, and the Water Pollution Control Facilities (WPCF) permitting program for large systems, a vestige of the time when the program came to DEQ almost 30 years ago. For many people -and also for the DEQ budget – “On-site” means only the single-family construction permit program. This, despite the fact that both the single-family construction permit program and the WPCF program have now been combined under one organizational unit in the Water Quality Division at DEQ, and WPCF permits are sometimes used today for single-family on-site systems.

### **Command and Control**

The On-Site program is by design (and in fact by statutory direction) largely a “command and control” program, very prescriptive in nature. This is due to the fact that most of the permits issued are “construction-installation” permits, with no oversight by DEQ or the counties once the systems are in place. This distinguishes it from most other DEQ regulatory programs, in which permits are the beginning step in an on-going regulatory relationship.

The rationale for the prescriptiveness is this: an on-site system which is sited properly, built properly, and installed properly will be protective of public health and the environment for a very long time, even with minimal maintenance. To assure this, there is considerable redundancy built into the rules. For example, just to ensure that the system equipment to be installed will work correctly, the On-site rules provide up to six separate thresholds which must be met:

- The manufacturer may be required to submit engineering plans/specs (from an engineer registered in Oregon) to be approved by DEQ
- The manufacturer must additionally *certify* that it’s plans/specs meet the substantive DEQ criteria
- Plans and specs for the system must also be submitted by the installer, and approved as part of the permit process
- Specific performance criteria (strength, etc)
- Specific design criteria (size, materials, etc.)
- In some cases, actual performance testing on the site must also be performed (e.g. water tightness test for tanks)

It should be noted that these are the thresholds for standard or approved technologies. For new technologies, there is an even more rigorous set of procedures or thresholds that must be met.

Another important distinction is that the On-Site program primarily regulates citizens not accustomed to being on the receiving end of environmental regulations (and the associated costs). Rules, procedures, and costs that might seem perfectly acceptable to larger businesses or industries can sometimes appear overwhelming to the average homeowner.

### **Important Trends and Challenges in the years ahead**

While alternative technologies such as sand filters and aerobic systems treat the wastewater to a higher level and thus allow much greater flexibility in terms of siting, all of these systems require proper maintenance in order to maintain that level of treatment. Under the present rules, the responsibility for that maintenance is in the hands of the homeowner, and virtually everyone interviewed saw that as a weak link in the long term effectiveness of the program. If one projects 10 or even 40 years into the future, with more and more alternative systems put in place, Oregon is highly likely, without changes in the program, to experience significant environmental and even public health problems.

The trend for the fiscal health of the program is also a concern. The review of sites and systems in this “command and control program” is going to get more, not less, labor intensive over time, as sites and technology become more complicated. Many believe we are already bumping up against the limits of acceptable fee levels. And, neither federal funding or state general funding is likely to “come to the rescue” in the foreseeable future.

What role will new technologies play in providing more effective or lower cost options for decentralized wastewater treatment? The La Pine project, funded through a grant from EPA, is currently testing 14 systems, and could have an enormous impact both in Oregon and nationally, in terms of assessing the effectiveness of several types of alternative systems. Although somewhat controversial, many system designers I spoke to suggested that drip irrigation and water re-use would be the “wave of the future”, and DEQ should stay abreast of these and other technological developments.

# KEY STAKEHOLDERS

## Installers of On-Site Systems

There are more than 900 installers of on-site systems in Oregon, and this group has the greatest interaction with the program on a continual basis. It is also the group that in many ways has the greatest impact on the effectiveness of those systems in protecting public health and the environment.

After conducting a statewide survey of installers, and corroborating the results of that survey through personal interviews, a clear picture emerged of their perceptions of the program (in both contract counties and direct service counties). Not surprisingly, those aspects of the program most important to installers were those that had the most direct economic impacts on their business. In descending order of importance, those things were:

- An ability to reach an inspector and get questions answered when they had questions while doing a job on site. Often, an inability to get an immediate response results in the work on site being halted, resulting in lost time and money.
- Getting pre-cover inspections done (or waived) on the same day that work is completed. Anything beyond the same day results in their having to either leave equipment at the site or return it to a site. In either case, they are losing time and money. One installer indicated that this delay can cost the homeowner “hundreds of dollars”.
- The clarity and prescriptiveness of the rules. For single-family dwellings, speed and predictability is the name of the game in the installation business. Having clear rules that spell out what is acceptable avoids a lot of negotiation and guess-work on their part.
- Consistency. The installers I interviewed gave a strong preference for consistency in how the rules are interpreted and enforced. The experienced installers want enforcement of the rules to ensure a level playing field. Installers doing business in more than one county want DEQ to play a bigger role in ensuring consistency between various counties.
- Flexibility. This seems a bit at odds with the desire for prescriptiveness and consistency. However, the desire for flexibility was frequently related specifically to repairs of existing systems, so there appears to be a distinction between new systems and repairing or modifying old ones.

- Timely ( and predictable) site review and permit review times. This was clearly less important to installers than other aspects of the program, but still important, in part because predictability of review times helps them plan work. Also, timeliness of permit review becomes significantly more important toward the end of the building season, as it may mean the difference between their working and not working on a site.
- Professional, knowledgeable, and courteous inspectors/staff. There was little middle ground here. Most installers gave county and DEQ inspectors very high marks, but a few gave very low marks.

Aspects of the program installers felt the On-Site program does best (in descending order):

- The professionalism and courtesy of inspectors;
- Protection of public health and the environment;
- Clarity of the rules; and
- Timeliness of permit reviews and approvals.

Those things installers thought the On-Site program does least well (starting with the worst) included:

- Addressing the needs of those with hardships;
- The reasonableness of fees;
- Flexibility of the rules; and
- Encouraging innovative approaches.

## **Property Owners**

Property owners are the stakeholders most directly affected by the On-Site Program, though they do not have on-going contact with the program in the same way installers do. They are most involved with the On-Site program at the site evaluation stage, except for those few (10%) who do their own installation work. (Once an installer is hired, that person normally serves as their agent through the permitting and site inspection process.)

In addition to feeling the economic impact of On-Site Program decisions, property owners also often have a high emotional stake in the process. They may have purchased a lot for their retirement “dream home” and may be former city dwellers who have finally found their “acre of paradise”. Many believe that Oregon’s land use planning and zoning laws have already given them a green light to develop their property. Disapproval at the

site evaluation stage, though it now happens infrequently, is almost certain to elicit an angry response.

Through interviews with installers, designers, program staff, and county commissioners, the following list of property-owner “wants” (roughly in order of importance) was compiled:

- Approval to build on their property (or be able to sell the property as buildable). Without a positive site evaluation, their property is essentially worthless. Rarely (< 3%) do sites receive outright disapproval, but it happens.
- Lowest-cost options for on-site systems. A site approval for a sand-filter or an aerobic system, costing \$15,000 to \$20,000 more than a standard system, is not likely to be seen as evidence of program flexibility.
- Getting construction started before end of the current construction season. Many try to “beat the clock”, and emotions run higher as the season progresses and the possibility of having to wait until the next building season gets greater.
- Program fees that are seen as “reasonable” from their point of view; i.e. in proportion to their perceived value of the “service” given, as opposed to DEQ’s costs.
- Program fees that have the least impact on their normal cash flow. Property owners are much more willing to pay for fees when assessed as part of a capital investment (either at time of purchase or at construction) than when they are an “expense” out of their own operating budget. Fees for new construction, for example, are less controversial than fees for repairs, authorizations, and compliance determination.
- If they pay an annual compliance fee, they expect an inspection.
- Property owners don’t want to be “punished” with high fees or significantly higher system costs (imposed by the program) for “doing the right thing” – voluntarily proceeding with repairs that will make the system better.
- Low-income families in particular would like help, in the form of low- or no-interest loans, to do repairs or authorizations.
- Property owners often expect or believe that DEQ or Contract Counties provide a level of “consumer protection” by doing a pre-cover inspection. Pre-cover approval by On-Site Program staff is seen by many property owners as a kind of limited warranty.
- Friendly, courteous service when they have questions or come into the office.

## **Environmental and Public Interests**

This grouping of interests represents the “public interest” and includes the stakeholders largely responsible for the initial program being set up by the state legislature in 1973. It is not, however, a grouping that speaks with one voice, and in some cases does not really speak about the On-Site Program at all. The On-Site Program does not figure highly, for example, in the priorities of the state’s major environmental groups. Nor, currently, is it prominent in the agenda of the various public health organizations in Oregon, in part perhaps because of the success of the program over the past 25 years in stemming outbreaks of disease caused by failure of septic systems.

This makes assessing their needs or concerns about the On-Site program difficult, and the following list is based primarily on anecdotal evidence.

- DEQ and Contract counties should respond to complaints of failing systems, to prevent disease and environmental impacts.
- DEQ should address areas of Groundwater Concern (like LaPine and Coburg) where on-site systems are a significant contributor.
- The public wants periodic reminders of DEQ or County “toughness” (through enforcement or other actions) to reassure them that someone is “minding the store”.
- Counter-balancing the point above, the rural public is against “over-regulation”, i.e. rules, fees, enforcement actions that seem to be overly burdensome, inhibiting private development. This is especially true if the regulation or enforcement comes across as big government pushing around the “little guy”.

## **Contract Counties**

Although these counties are part of the On-Site Program (with their own On-Site staff), they have their own set of needs of DEQ and the statewide program. They utilize the same set of rules as DEQ, although the fees for contract counties vary slightly from DEQ’s fee schedule. Interestingly, although the fees are similar, there was significant differentiation between counties as to how much of the program is funded by fees. Several counties were 100% fee-funded, but others ranged as low as 40% to 50%. It is not clear how much of this is due to differences in service level or program management and how much is due to differences in accounting.

Interviews and surveys of county agents indicated the following set of needs from the statewide program (in descending or of priority):

- Rule interpretation and refereeing. Noted in some comments was the desire for more memos to counties on rule interpretation and better information dissemination on decisions about rule interpretation.
- Technical assistance. Many voiced the desire to have DEQ act as a “technical clearinghouse” including posting lists of approved products, and providing training.
- Regular meetings, on at least a regional level if not a state level, to discuss common issues.
- A clearer sense (and perhaps negotiated agreement) on what “service” they get in exchange for the state surcharge. Many suggested that they feel like it is their money, since they collect it. Some indicated they are willing to pay more, in exchange for additional service.
- Some felt that the straight \$40 surcharge can seem disproportional (since it applies to any activity, whether the fee is \$800 or \$150) and suggested the surcharge be based instead on a percentage of the county fee.
- DEQ Certification of installers was seen as helpful to them for a number of reasons, including upgrading the general level of installation work.
- Public outreach. Contract counties recognize the importance of educating the general public about the need for the program, how to apply, and proper maintenance. Virtually all counties now distribute their own material, but see DEQ helping in the design as well as the dissemination of information.
- Help, when requested, with enforcement, particularly for illegal installations. One county agent said, “We like DEQ to come in and wear the black hat”

### **Oregon Onsite Wastewater Association (O2WA)**

This organization, formed in the mid-1990’s, includes installers, system designers, regulators, manufacturers, soils scientists, pumpers, and sanitarians. It is the primary organized constituency for the On-Site Program in Oregon, and could have a powerful influence on the direction of the program.

In interviews with several current and past board members, including the current president, the priorities of O2WA were articulated quite clearly. They include:

- Oregon keeping up with current developments in the onsite or decentralized wastewater field, and regaining its former position of national leadership.

- Certification of (at least) system installers. This has the dual effect of elevating the professionalism of the field and reducing the potential for environmental or public health problems.
- A closer partnership with DEQ on training, policies, and joint meetings.
- A higher level of statewide consistency in applications of the rules and policies.

# KEY ISSUES

## Fees and Budget

The most frequently mentioned “customer service” issue for the On-Site Program is the level of fees charged to property owners for site evaluations, permits, repairs, and other program activities. These fees have risen steadily in recent years, as state general fund support has disappeared, and the proportion of more difficult (labor intensive) sites has increased.

## Findings

Statewide, there are some minor differences in the level of fees among counties. Some counties are charging higher fees than those found in rule (and charged by DEQ). Agents interviewed in those counties with higher fees held a strong belief that the level of “customer service” they provided had a direct relationship to the level of fees they were able to charge. There was a wider discrepancy among counties in the degree to which their fees were able to support the On-Site Program. County agents estimate the following levels of support provided by fees:

100%	DEQ
100%	Marion County
100%	Deschutes County
100%	Crook County
100%	Lane County
70%	Yamhill County
60%	Jackson County
45%	Benton County
40%	Multnomah County

While the reason for these differences is not entirely clear, it should be noted that there are also significant differences between counties DEQ-served (direct service) counties, in terms of the ability of fees to pay for the program. In the eastern Oregon counties DEQ serves, for example, where there are fewer permits and longer driving distances, program fees have never covered the full cost of the program.

A difference in perspective. To a great extent, the On-Site fee structure in the rules is based upon estimates of the average time and cost to conduct a regulatory activity. Unfortunately, that is not the criteria that the public uses to determine the reasonableness of the fees. They look at it in terms of the relative value to *them*. And, as opposed to industries regulated by other DEQ programs (who also complain about high fees), homeowners take fee increases personally.

Keeping this different perspective in mind, it is easier to understand why some fees create more resentment and complaints than others:

- Fees related to home construction tend to be seen as a “capital investment”, and thus having value to the homeowner (i.e. getting their home built). This would also be true for fees at time of purchase. Other fees, however, for authorizations, repairs, and compliance determination are felt as out-of-pocket expenses and homeowners are much more price-sensitive about these. As DEQ revises fees in the future, it should keep this distinction in mind.
- In cases where homeowners (or small business owners) have a WPCF (operating) permit and are paying an annual compliance determination fee, they become extremely upset when (as in nearly all cases) DEQ does not conduct an annual inspection. They think of this ACD Fee as a fee for service. (\*note: this is a quite different reaction than DEQ normally gets from large industries, who are only too glad to have DEQ not do an inspection)
- Authorization fees for changing a use for a dwelling that seems relatively minor to a property owner can cost nearly as much, or even more in some special cases, than an initial site evaluation. For the property owner, this seems wildly out of proportion, even if the On-site staff time required is the same. This is particularly true when the conclusion of the On-site staff is that the change in use poses no threat to proper functioning of the system.
- Repairs and alterations to systems can involve both high fees and substantial capital costs (sometimes requiring replacement of the entire system and a new construction permit). These fees and costs are quite logical from the program perspective. Unfortunately, the property owner often feels “punished” for wanting to do the right thing, voluntarily. Many installers stated that the fees and process had caused many property owners to not go forward with a project that would have had public health and environmental benefits. One installer voiced his frustration with this process by saying, “give people encouragement!”

Size matters. The perceived value of the fees to the property owner is also affected by the size of their capital investment. Although there are provisions for financial hardship (discussed below), all other applicants for a permit or site evaluation pay the same amount, regardless of the size of their capital investment – with some rare exceptions where the projected flows exceed 1000 gallons per day. This means that the owner of a 2-bedroom mobile home will pay the same amount as the owner of a 5-bedroom, 6000 square foot, \$2.5 million mansion. The fees obviously have a much bigger impact on the owner of the mobile home. An argument could be made that the square footage of a dwelling poses long-term potential for greater risks and higher peak flows, and that the fees should be adjusted accordingly.

The state surcharge. Another fee that DEQ charges is a \$40 surcharge on all fees charged by contract counties, to pay for statewide administrative costs for the On-Site Program. The counties add this surcharge to their fees, and then pass on the amount to DEQ. This surcharge has also risen in recent years, and a number of counties (though this was not universal) expressed major dissatisfaction with what they receive from DEQ in return for the surcharge. Because they pass on the surcharge to DEQ, they think of it as a fee to DEQ *they* pay (rather than their simply being the collection agency). Among the comments received from counties about the surcharge were:

“What are we getting for our money?” - DEQ has not clearly articulated what the statewide administrative costs are and how they help the counties.

“We would be willing to pay higher surcharge if we could get more from DEQ”.

“At a straight \$40, the surcharges on some of our fees/services seem disproportional...you may want to make the surcharge be a percentage of the county fee.”

Using fees as incentives. On-Site fees are not currently used to send market signals for changing behavior to achieve program goals, but there may be opportunities to do this. There may, for example, be benefits for lowering fees in exchange for low flow appliances. Or for having a signed contract with a maintenance provider. Conversely, there may be a benefit in having higher license fees, for example, for installers who have been cited for illegal installations or other violations. (Other specific ideas for adjusting the fee structure for incentive purposes are discussed elsewhere in this report.)

Other sources of funding? Although the On-Site Program at DEQ receives a limited amount of general fund and federal fund support through the WPCF program, that support has been significantly curtailed over the past 15 years, and is not likely to increase in the near future. Some significant exceptions to this pattern exist for special projects: a major EPA grant was received for the LaPine project, EPA 319 Funds are being used to test experimental systems elsewhere in the state, and there is exploration of State Revolving Loan Fund (SRF) monies for a loan program for repairs.

Are there additional fees or sources of funds to support the program? Few were identified during my investigation. The most promising, perhaps, involves the development of a statewide maintenance program. If such a program is developed, requiring maintenance to be done with private providers, a small (\$25) surcharge on that work could be used to help support the training, certification, and oversight of that program. Another idea suggested is making pre-cover inspections an optional “consumer protection service” that property owners could pay for.

Without changes, the On-Site budget “crunch” will only get worse over time. In a command-and-control regulatory program, where the technology gets more complicated, and sites become more problematic, more staff time will be involved with each new system. On the positive side, a number of recommendations made in other sections of

this report may have a positive budget impact by making program operations more efficient.

### Recommendations

There is no “silver bullet” to solve the fee/budget issues. All options need to be considered, including a) making operations more efficient, b) restructuring fees to more closely fit with the perceived value to the fee-payer, c) providing higher value to the fee-payer through better and more targeted customer service, and d) finding new sources of funding.

- Shift the burden of fee increases to capital costs of new construction and home purchase, rather than expenses to homeowners. This will increase the perceived value to the property owner.
- Do not charge annual compliance fees for single family dwellings, and do give small commercial facilities an out if they have an annual maintenance contract.
- Reduce or in some cases eliminate fees for repairs, alterations, particularly if there are no or minimal increases in flow.
- Raise license fees significantly if an installer is found violating the rules or doing an illegal installation.
- Shift the surcharge to a percentage of the county fee (rounded to the nearest dollar) and make sure that the fee is set to fully cover the statewide administrative costs of the program. Along with this, do a better job of articulating and delivering on the benefits of this surcharge to contract counties.
- Make pre-cover inspections an option for property owners that they pay for. Property owners tend to think of pre-cover inspections as a value-added consumer protection service. One way to institutionalize this relationship is to make this an optional service that they pay for. Of course, once paid, the inspection would need to be done and no waiver would be involved. This option is admittedly risky and would only be advisable if there were both certification of installers statewide, and if installers were required to certify that the installation met the requirements of the permit.

### **Operation and Maintenance of On-Site Systems**

The emerging issue of greatest importance to the program’s central mission of protecting public health and the environment is the proper maintenance of on-site systems. State law states that “It is the policy of the State of Oregon to encourage...maintenance of...subsurface and alternative sewage disposal systems”. The statute goes on to say

(ORS 454.615) “The Environmental Quality Commission shall by September 1, 1975 . . .prescribe minimum requirements for the operation and maintenance of subsurface sewage disposal systems. . .”. Unfortunately, more than 25 years later, the administrative rules are still largely silent on the issue of operation and maintenance.

### Findings

The down side of alternative technologies. The good news about the adoption of alternative treatment systems in the early 1980’s was that it allowed more sites to be developed because of better treatment technologies. The bad news is that those treatment technologies require proper maintenance in order to be more effective, and that there are an increasing amount of those systems in place every year. About 25% of all systems installed statewide require more maintenance than standard systems. There are already 800 sandfilter systems in Deschutes County alone, and the number grows every year. If one projects out over the next 10, 20, or 50 years the number of alternative systems will achieve a potential for significant cumulative environmental impacts in areas where soil conditions are less forgiving and the number of systems has reached a critical mass.

The potential risk would not be so great if there were reasonable certainty that these systems would be properly operated and maintained. Unfortunately, in nearly all cases, maintenance is left in the hands of homeowners, with no requirement for maintenance. And, as one DEQ manager put it succinctly, most homeowners believe, “If the toilet flushes, the system must be working.”

Current rules inconsistent. Although current rules do not, as the statute directs, prescribe minimum requirements for operation and maintenance of subsurface sewage systems, maintenance issues are addressed for many (but not all) of the alternative technologies approved in rule. However, the requirements are often inconsistent, sometimes confusing, and often not followed in actual practice.

For example: the language for sandfilter systems says that maintenance of the systems shall be “as specified in the Certification of Satisfactory Completion”. Further on, the rule appears to mandate maintenance requirements by rule, including an owner inspection and sending to the DEQ/county agent a “certification of tank pumping”. There was no indication from DEQ or county staff that these requirements are enforced or implemented on any kind of consistent basis.

There is no requirement for owner inspection of aerobic systems, but there is a *requirement* for DEQ/County agent inspection “at least once per year”. There is also a *requirement* that “parts must be locally available for the expected life of the unit” (though not clear exactly how one would show this) and that “the supplier of the plant shall be responsible for operation training” and “provide the owner with an operation and maintenance manual”. The owner is required to remove “excess solids from the plant at least once per year.

For recirculating gravel filter systems, there is yet another set of requirements. The permittee is required to submit to DEQ/agent a “draft O & M manual” to include “as-constructed details” and a “statement of Inspection and Certification of Proper Construction”. Although the rule specifies “draft”, there is no explicit authority given for the agent to approve or disapprove the manual. And, if the “statement of Inspection and Certification of Proper Construction” is a good idea (and it very well may be), why not require it for all systems?

It should be emphasized that different types of on-site systems will require different types of maintenance. The concern about consistency is for the differences in the regulatory process and reporting. Further, many of these requirements appear either unnecessarily prescriptive and, in any case, either unimplementable or unenforceable.

The need for a statewide O & M program. The improvement for the On-Site program most frequently suggested by stakeholders was the development of a statewide maintenance requirement. Although there were differences in the suggested form the requirement should take, all involved utilizing private sector inspection/maintenance in order to minimize DEQ costs and paperwork. Other states have begun to implement similar programs, with positive results. In all of the options suggested for a statewide maintenance program, certification and training of installers/pumpers/providers was seen as a prerequisite.

There are several options for structuring a requirement for system inspection and maintenance, all of which are being considered currently as part of the LaPine project. The results of that work will be a good jump-start to any such program. The most viable options appear to be:

- Requiring a maintenance contract with a certified provider prior to receiving a permit, or certificate of satisfactory completion.
- Requiring an inspection and required repair/maintenance by a certified provider at time of sale. (average turnover of residential property is 5-7 years). This is the requirement being recommended as part of the Coastal Non-point Program and has the advantage of being a capital cost rather than an on-going expense (see fee discussion, above).
- For operating permits, require inspection and maintenance reports to be submitted to the county/DEQ every three years (as currently in rule for sandfilters). A less obtrusive option for operating permits is to provide an incentive in the form of a fee waiver for those who have a maintenance contract and/or submit a report.

## Recommendations

- Implement a state certification program for installers, pumpers, and maintenance providers.
- Work with O2WA to conduct Inspection/Maintenance training for private providers.
- Revise the rules on alternative technologies to make requirements for operation and maintenance both more enforceable and more consistent
- Begin a statewide maintenance requirement on a smaller scale in the Coastal Non-point Source counties, with time-of-sale inspections and reports to DEQ/counties, with a \$25 fee from the private inspector to DEQ for maintaining the statewide program (including training).
- Provide a fee incentive in all small On-site operating permits, waiving annual compliance fees in exchange for contract with a certified O & M provider.
- Utilize the results of the LaPine project to develop a longer-term and statewide maintenance requirement/program.

## **Operating Permits**

In 1994 the Department looked at the trend toward more alternative systems, determined that even relatively small systems (between 2500 and 5000 gallons per day, in some cases even smaller) need on-going oversight, and revised the rules to require that these systems obtain a Water Pollution Control Facility (WPCF) permit.

## Findings

Right idea. Wrong mechanism. The WPCF permit was designed for much larger systems, the land-equivalent of sewage treatment plants that discharge to streams. It was never intended for single family residences or for “homeowner” implementation. In short, the WPCF program, with its substantial requirements for plan review, monitoring, and its annual compliance determination fees, was overkill.

“Ping-Ponging”. Perhaps worse, the WPCF permits were, by law, not delegable to contract counties, resulting in applicants too often being “ping-ponged” from the contract county office, to the DEQ office, and sometimes (if they hadn’t given up) back to the county office.

Most of the systems affected by the 1994 rule change have been small commercial facilities and holding tanks. However, some single-family residences have also been

included. In Western Region, for example, nearly 20 residences have received WPCF permits since 1994.

Higher costs of monitoring performance. One of the reasons for the poor fit of WPCF permits for very small systems is the fact that WPCF permits are largely “performance-based” permits, rather than *prescriptive* permits. The benefit to these WPCF permits is that they allow significant flexibility in design, which is one reason that system engineers and designers have been very happy with the WPCF program for *large* systems. Unfortunately, a performance-based permit requires measurement of performance, and the costs of performance measurement (in the form of groundwater monitoring, etc.) are simply too high for very small systems. One system designer estimated that the additional costs of the WPCF permit for a homeowner or small business is \$450 per year in sampling costs, \$300 per year in annual compliance fees, and \$150-\$250 per year in annual inspection/maintenance costs. This is a total of nearly \$1000 *per year* in additional costs for the permittee, *not* including permit renewal fees every five years.

### **Recommendations**

- Revise the rules requiring certain very small on-site systems to obtain a WPCF permit. Develop, instead, an operating permit that would have no expiration date (or, no renewal fee if the renewal application is submitted with an inspection/maintenance report from a certified provider).
- Put an emphasis on periodic inspection and maintenance by private providers rather than monitoring and On-Site Program inspection, as the means to ensure proper functioning of the systems.
- Either require, or provide incentives for, periodic inspection and maintenance of these systems in the newly developed operating permit.

### **Consistency and Flexibility**

One of the primary questions this report was intended to address is whether the On-Site rules are too prescriptive. Is there a need for greater flexibility, either in the rules or in their implementation?

### Findings

The On-Site Program is, at least for single-family and smaller commercial systems, unabashedly prescriptive, a classic “command and control” program. The reason for this prescriptiveness is due in large part to the “one-shot” nature of construction permits. Because there will be no on-going monitoring or oversight of systems that may be in place for 40-50 years, there is an understandable desire to ensure that systems are properly sited, properly constructed, and properly installed.

Consistency and Predictability. Another reason for the prescriptiveness, however, is that most installers tend to want it. Two of the highest priorities for installers are consistency and predictability. Certainty and prescriptiveness provide a “level competitive playing field” so that they know how to bid. Plus, they want to get on and off site as quickly as possible and move on to the next job. In this sense, the fewer uncertainties they encounter as they approach a job, the better.

The goal of *geographic* consistency was stressed by a number of installers who perform work in different counties. Their perception is that there are significant differences in policy and rule implementation among the various counties, and they look to DEQ to help resolve some of those differences.

Good installer – bad installer. Many installers in the state survey indicated their desire for greater flexibility, which seems counter-intuitive to their need for certainty. Many of those comments, however, were clearly directed toward repairs or alterations of existing systems. More in-depth interviews revealed another distinction: those installers who are more experienced or enjoy a higher reputation tend to desire “more consistency” and even “more enforcement” over “more flexibility”. In part, this is because they believe that other installers are allowed to do lower-quality (or illegal) work, and thus underbid them. There is also anecdotal evidence that installers with better reputations for the quality of their work *are* given more flexibility than those whose work quality is not deemed as high. One installer said, “I do feel listened to and my opinions usually do matter”.

Flexibility is in the eye of the beholder. There are a number of areas where flexibility is built into the rules to co-exist with prescriptive requirements. There is a variance system, as well as a hardship variance system, built into the process. However, the rules hardly *encourage* variances, as they require hearings before a Commission-appointed hearings officer, and, except for hardship variances, a fee of \$1300. The Department may wish to consider distinguishing between types of variances in order to give DEQ/County inspectors or managers the authority to approve minor variances under certain circumstances.

The 1979 changes to the On-Site Program, allowing alternative technologies, was seen as a major leap forward in terms of providing flexibility. As mentioned above, Jackson County had a site disapproval rate of 50% prior to the adoption of alternative technologies. Today, that site disapproval rate is below 5%. Ironically, the rules for the alternative technologies, because they allow development on sites/soils that would otherwise not be adequate, are in many cases *more prescriptive* than the specifications for standard systems. And, the cost of alternative systems can often be three to five times the cost of a standard system, so applicants who are told they can put a sandfilter system on a site may be excused if they do not immediately thank the program for being so flexible.

Thus, the program’s biggest attempt at flexibility often makes the On-Site program seem more rigid, rather than less in the eyes of property owners.

## Recommendations

- Maintain the current prescriptive rules for the construction permit program, with some continued tweaking where necessary.
- Address the issue of repairs and alterations, either through relaxing the prescriptiveness or (preferably) increasing the level of financial help. One idea to reduce DEQ staff time on repairs and alterations is to require that *certified* installers certify that the system will be protective of public health and the environment.
- Work with contract counties to improve consistency of rule interpretation around the state.
- Provide an easier, less expensive mechanism for approving minor variances in the rules.

## **Timeliness**

An important component of “good customer service” is the timeliness of DEQ/Contract County reviews and actions. Timely permits and evaluations are very important to a variety of key stakeholders: property owners, installers, real estate interests, and the general public. However, each set of stakeholders views “timeliness” in a different way, and understanding these differences can help the On-Site Program provide better customer service.

## Findings

Statutory timelines. The On-Site statutes (ORS 454) mandate that all permits shall be issued within 20 days of application, except those specifically delayed by weather conditions. In the late 1990’s, DEQ often exceeded this timeframe, particularly during the height of the building season. In the 1999 Legislature, DEQ made commitments to improve the timeliness of both permit reviews and site evaluations following the fee and staffing increases approved by the Legislature. DEQ performance with respect to these commitments appears to be better, though it is not meeting the targets 100% of the time.

Seasonal nature of the program. Timeliness of reviews varies by season, with summer and early fall the peak seasons. Late November to early spring are normally much slower. To optimize resources and make the program as efficient as possible, the program should attempt to match its resources with consumer demand as much as possible: increasing staff in summer months, decreasing staff in winter months. This could have the dual advantage of reducing budget demands in winter months and actually improving timeliness during the peak season. Actions by Western Region and, more recently, in Eastern Region are laudable efforts in this direction.

Affecting the queue. Another option to consider, particularly in times of tight budgets, is to change the “queuing behavior” (i.e. timing of applications) by encouraging more applications during off-peak periods through the fee structure. This is essentially what airlines, phone companies, and hotels do when they vary rates.

Installers have a different view. While timeliness of permit reviews and site evaluations are most important to property owners, and are appropriately given significant attention by DEQ, the timing issues of most importance to installers are often overlooked. The timeliness issues that have by far the greatest economic impact on installers are:

Being able to get questions answered by an inspector during construction; and

Being able to get a pre-cover inspection (and Certificate of Satisfactory Completion) on the same day construction is completed.

In both of these cases, installers are on the site and unable to move forward, either to complete the construction or to move on to their next job. This costs the installer real dollars in either wasted time or having to leave the site and bring back their equipment later. One installer estimated that having a pre-cover inspection done on the same day could “save the homeowner hundreds of dollars”.

It is critical to understand the difference between the installer perspective and the DEQ/County perspective on these two issues. In most public agencies, returning a phone call within 24 hours is considered the standard for good customer service. For an on-site system installer in the middle of construction, however, 24 hours can be a lost day of work. Similarly, the program rules give DEQ/County agents 7 days in which to conduct pre-cover inspections. If a pre-cover inspection is completed within 4 days, the inspector feels he has met the performance standard in this regard. However, an installer who has to wait four days has had to leave the site, bring his equipment back to the site several days later at a substantial cost, is unlikely to feel like they got “good customer service”.

Response to failing systems. For the general public, there is yet another yardstick for timeliness. Often, members of the public will call DEQ or county offices to report a failing system (often that of a neighbor). The response to complaints of this sort varies, depending on the office. In many cases, particularly during the peak construction season, the On-Site program will log the complaint and send a letter, and may defer a full site visit or investigation for months (or longer). This lack of immediate response can have an impact the agency’s credibility, and lead the public to believe that the agency “doesn’t care”.

### Recommendations

- Provide more flexible staffing in the program to more closely parallel the seasonal variations in construction activity.

- Address the need for installers to be able to get questions answered immediately while on site, either through pagers or cell phones for inspectors, or duty officers.
- Establish a program goal of conducting at least 50% of all pre-cover inspections on a “same day” basis. Track timeliness of pre-cover inspections.
- Once installer certification is in place statewide, require that a certified installer “certify” in writing that the system meets the plan and permit requirements. Then, significantly reduce the number of pre-cover inspections to an audit basis.
- Respond in a timely manner to complaints of failing systems.

### **Accommodating Those with Financial Hardship**

ORS 454 states that “The Department shall strive to aid and accommodate the needs of applicants with hardship.” This is a critical element of providing good customer service, and nearly all persons surveyed or interviewed for this study identified this as the area where the On-Site Program needs to improve the most. In the statewide installer survey, for example, “Accommodating the needs of applicants with financial hardship” was given the lowest rating of any aspect of the program.

### Findings

Hardship variances. The On-Site program rules do provide for “Personal Hardship” variances for hooking up mobile homes to an existing structure when, for example, one family member is being cared for by another. In addition, Hardship Variances to the On-Site rules are specifically allowed “in cases of extreme and unusual hardship”. There is also an exception to the general variance fee of \$1300 if the applicant for the variance is “65 years of age or older, *and* has an annual household income of ...less than \$15,000”.

There are a number of reasons why these provisions are inadequate, and should be revised to more effectively meet the intent of the statute. First, the financial criteria for waiving the general variance fee is, in the year 2002, quite extreme. It is an all or nothing proposition, and one has to be *both* quite poor *and* over 65 years of age. Those two criteria should be uncoupled, and the income threshold revised upward. Secondly, *hardship* variances are considered under the rule *only* after an applicant is “denied for a standard variance” on the basis of technical considerations. Therefore, someone who applies for a variance because of financial reasons must (unless they are destitute and over 65) first pay the \$1300 fee for a standard variance and be denied. Small wonder that there are very few applicants for a hardship variance.

Need for loans. Because of the potential health and environmental impacts from variances, there should be a loan program developed so that the appropriate repairs and/or

installations can happen, even in cases where financial considerations are a significant barrier. This is being considered by the Department for both the La Pine project and the Tenmile Lakes area (utilizing SRF funds), and a model will hopefully emerge that could be expanded for statewide use.

### Recommendations

- Revise the fee waiver provisions for variances to better accommodate those with financial hardship.
- Revise the financial hardship provisions, so that those seeking financial hardship don't first have to pay a \$1300 fee.
- Develop a statewide low-interest loan program that can be utilized by those with financial hardship, particularly for repairs and system alterations. Make the On-Site fees an eligible expense for those loans, and, for those with financial hardship, make payment on sale of property.

## **APPENDIX**



State of Oregon  
 Department of Environmental Quality  
 Water Quality Division  
 811 SW 6<sup>th</sup> Avenue  
 Portland, Oregon 97204-1390

**ON-SITE SEWAGE PROGRAM  
 SURVEY FOR INSTALLERS**

RESPONSES COMPILED MARCH 29, 2002  
 REVISED APRIL 16, 2002

**Background**

This survey was mailed to Oregon's 900 septic installers. (Pumpers were not included in this survey.) Within a month, 218 answers had been received.

Not every respondent answered every question. Four respondents did not indicate what county they primarily worked in.

Questions 1-11 asked the installers to give a numeric rating between 1 and 5, 5 being best. Question 12 asked if the respondent thought the on-site program's customer service had improved, gotten worse, or stayed about the same. Their response was given a numeric rating (1=improved, 2=stayed the same, 3=gotten worse, which meant that a low rating was better on this question).

Responses were tabulated in MS Access and charted in Excel.

**Please answer each of the following questions by rating the program on a scale from 1 to 5, with five being best:**

1. Based on your experience, how would you rate the On-Site Sewage Program in Oregon overall?

<b>Number of responses:</b>		<b>218</b>	<b>Overall rating:</b>		<b>3.376</b>
No county/region given:		5	Rating (no county):		3.22
<b>Contract counties</b>			<b>Direct Service</b>		
ER:	3.39	48	ER:	3.04	23
NWR:	3.35	40	NWR:	3.25	4
WR:	3.38	69	WR:	3.69	29
overall:	3.375	157	overall:	3.39	56

2. How well does the On-Site Sewage Program in Oregon protect public health and the environment? (What changes, if any, would you recommend to improve the program in this regard?)

<b>Number of responses:</b>		<b>208</b>	<b>Overall rating:</b>		<b>3.688</b>
No county/region given:		5	Rating (no county):		3.6
<b>Contract counties</b>			<b>Direct Service</b>		
ER:	3.69	45	ER:	3.91	22
NWR:	3.63	40	NWR:	3	4
WR:	3.56	64	WR:	4	28
overall:	3.62	149	overall:	3.89	54

3. How well does the On-Site Program in Oregon encourage proper **operation and maintenance** of on-site systems? (What changes, if any, would you recommend to improve operation and maintenance of on-site systems in Oregon?)

<b>Number of responses:</b>	<b>203</b>	<b>Overall rating:</b>	<b>3.138</b>
No county/region given:	4	Rating (no county):	2.25
<b>Contract counties</b>		<b>Direct Service</b>	
ER:	3.3	46	ER: 3 22
NWR:	2.89	36	NWR: 2.75 4
WR:	3.06	64	WR: 3.31 28
overall:	3.617	144	overall: 3.31 54

4. How well does the On-Site Sewage Program encourage innovative and more effective approaches to on-site sewage treatment? (What changes, if any, would you recommend that would encourage greater innovation?)

<b>Number of responses:</b>	<b>201</b>	<b>Overall rating:</b>	<b>2.915</b>
No county/region given:	4	Rating (no county):	2.25
<b>Contract counties</b>		<b>Direct Service</b>	
ER:	3.09	46	ER: 2.86 21
NWR:	2.89	36	NWR: 2.25 4
WR:	2.75	64	WR: 3.31 26
overall:	2.89	146	overall: 3.039 51

5. How well does the On-Site Program provide good customer service? (What changes, if any would you recommend to improve customer service?)

<b>Number of responses:</b>	<b>202</b>	<b>Overall rating:</b>	<b>3.134</b>
No county/region given:	4	Rating (no county):	2
<b>Contract counties</b>		<b>Direct Service</b>	
ER:	3.39	46	ER: 2.35 20
NWR:	2.92	39	NWR: 3 4
WR:	3.16	61	WR: 3.68 28
overall:	3.17	146	overall: 3.115 52

6. How would you rate the timeliness of reviews and approvals for On-Site permits and site evaluations? (What changes, if any, would you recommend to improve timeliness of reviews?)

<b>Number of responses:</b>	<b>208</b>	<b>Overall rating:</b>	<b>3.149</b>
No county/region given:	3	Rating (no county):	2.33
<b>Contract counties</b>		<b>Direct Service</b>	
ER:	3.4	45	ER: 2.48 21
NWR:	3.1	40	NWR: 2.75 4
WR:	3.27	66	WR: 3.17 29
overall:	3.265	151	overall: 2.87 54

7. How would you rate the "reasonableness" of the fees in the On-Site program? (Given that the On-Site program is 100% funded through fees, what changes in the fee structure, if any, would you make?)

<b>Number of responses:</b>		<b>202</b>	<b>Overall rating:</b>		<b>2.68</b>
No county/region given:		3	Rating (no county):		2.33
<b>Contract counties</b>			<b>Direct Service</b>		
ER:	2.76	45	ER:	2	20
NWR:	2.55	40	NWR:	1.75	4
WR:	2.89	61	WR:	2.97	29
overall:	2.75	146	overall:	2.51	53

8. How well does the On-Site Sewage Program address the needs of applicants with financial or other hardships? (What changes, if any, would you recommend to improve the ability of the program to meet the needs of applicants with hardship?)

<b>Number of responses:</b>		<b>166</b>	<b>Overall rating:</b>		<b>2.56</b>
No county/region given:		3	Rating (no county):		1.67
<b>Contract counties</b>			<b>Direct Service</b>		
ER:	2.54	35	ER:	2.38	16
NWR:	2.76	29	NWR:	1.67	3
WR:	2.58	53	WR:	2.63	27
overall:	2.615	117	overall:	2.478	46

9. How clear (on a scale from 1 to 5, five being highest) are the On-Site rules in Oregon in describing the standards for siting, design, and construction?

<b>Number of responses:</b>		<b>209</b>	<b>Overall rating:</b>		<b>3.57</b>
No county/region given:		3	Rating (no county):		3.33
<b>Contract counties</b>			<b>Direct Service</b>		
ER:	3.72	47	ER:	3.32	22
NWR:	3.41	39	NWR:	3	4
WR:	3.54	65	WR:	4.03	29
overall:	2.563	151	overall:	3.67	55

10. How well does the On-Site Sewage Program provide flexibility in its rules, to accommodate different circumstances? (What changes, if any, would you recommend to improve program flexibility?)

<b>Number of responses:</b>		<b>204</b>	<b>Overall rating:</b>		<b>2.882</b>
No county/region given:		2	Rating (no county):		1.5
<b>Contract counties</b>			<b>Direct Service</b>		
ER:	3.13	46	ER:	2.5	22
NWR:	2.76	41	NWR:	2.25	4
WR:	2.82	61	WR:	3.29	28
overall:	2.899	148	overall:	2.889	54

11. How would you rate the On-Site inspectors you come in contact with in terms of their professionalism and courtesy?

<b>Number of responses:</b>		<b>208</b>	<b>Overall rating:</b>		<b>3.875</b>
No county/region given:		2	Rating (no county):		2.5
<b>Contract counties</b>			<b>Direct Service</b>		
ER:	4.07	45	ER:	3.64	22
NWR:	3.8	41	NWR:	4	4
WR:	3.77	66	WR:	4.18	28
overall:	3.868	152	overall:	3.944	54

12. In the last five years, has customer service to you in the On-Site Sewage Program improved, gotten worse, or stayed about the same?

*improved = 1; stayed about the same = 2; worse = 3*

<b>Number of responses:</b>		<b>206</b>	<b>Overall rating:</b>		<b>1.854</b>
No county/region given:		2	Rating (no county):		3
<b>Contract counties</b>			<b>Direct Service</b>		
ER:	1.71	48	ER:	2.48	21
NWR:	1.85	41	NWR:	1.25	4
WR:	1.86	65	WR:	1.58	26
overall:	1.817	153	overall:	1.922	51