

# FUNDING ONSITE SEWAGE SYSTEM REPAIRS: A PROVEN APPROACH

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## Abstract

When faced with the need to do a major repair, or replace, their onsite sewage (septic) system, owners typically exhibit three concerns: fear of unknown process details; anxiety around the need to engage local health regulators; and, most-significantly, panic about the need to find an emergency funding source. Craft3, one of 260 U.S. Treasury certified Community Development Financial Institutions (CDFI), successfully developed and demonstrated means to address all three concerns. Beginning in 2002, Craft3, engaged private and public partners, raised capital, developed program infrastructure, and successfully managed underwriting risk, while building a scalable revolving loan fund. The program, which operates in Washington and Oregon, has funded more than 1,480 system repair or replacements with a value of over \$33.6 million from program start through June 31, 2019 (of which 40 percent served low-income households), while ensuring that more than 190 million gallons of sewage is properly treated annually. This paper describes the process by which this private/public partnership was developed, is successfully implemented to serve borrowers across the income spectrum. The authors encourage others to explore development of similar programs based on this model, to address the growing national backlog of malfunctioning and failing onsite sewage systems.

## Introduction

Lacking structured management, such as through a utility district, what are the ways to upgrade onsite sewage systems when, through advanced age or failure, they pose public health or environmental risks? This was the mission of a few Northwest champions. Persisting in a spirit of continuous improvement for over a decade, they engaged a consortium of stakeholders to develop a successful and replicable answer. This paper documents their work, describes lessons learned and offers best practices to encourage the application of this model to a broader geography.

## The Problem

Most onsite sewage (septic) systems installed prior to the 1980s were, by design, simple devices, intended for use in rural areas and to process the smaller volume of sewage common to an earlier era. There is well documented evidence these types of systems, now often located in more developed suburban settings and needing to handle the larger sewage volumes produced by modern appliances and lifestyles, are inadequate.<sup>1</sup>

Until the USEPA report to Congress in 1997 confirmed the value of decentralized treatment, as an alternative to sewers, septic systems were generally considered to serve only as temporary utilities until public sewers were extended from urban to outlying areas.<sup>2</sup> Though broadscale extension of sewers is now impractical often no longer economically viable, many of those early systems remain in use until age or outright failure necessitates major repair or replacement.

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When an onsite system fails, attention to its remediation can be viewed from the perspectives of various stakeholders. In addition to the owner, those affected by the failure may include neighbors, and businesses dependent upon clean water, such as shellfish growers and the tourist industry. When affected, they want a quick correction to a perceived nuisance and potential health hazard.

Owners fear the unknowns, including the source of funds to cover the cost of system repair or replacement, plumbing, electrical, landscaping and other ancillary work. Of equal, and maybe more, significance is the anticipation of an adversarial relationship with the regulatory agency during permitting.

Regulator staff recognize the potential cost of the system improvement, as well as the need to correct the problem. They are conflicted between their official responsibilities and their empathy for the owner, whose lack of financial capacity might result in reduced equity to the point of homelessness.

Local elected officials fear constituent ire over perceived regulatory excess. They may be hesitant to administer a loan service, because of the potential need to accommodate borrower defaults using taxpayer funds.

Private designers are reluctant to commit field and office time to a project whose owner is unable to advance payment. And, installers are apprehensive to invest in project materials and labor when there is no availability of advance funds or guarantee of immediate payment following completion.

The underlying challenge is the provision of capital. During the 1990s, some Washington counties recognized the need and public benefit in helping people with the cost of improving their onsite sewage systems. To do so they established local septic loan programs, which, despite innovative approaches to their management, were unable to achieve sustainability. Seeking a solution, one local government engaged the nonprofit lender, Craft3, to professionally establish and manage a revolving loan fund. That experience led to an effective relationship between Craft3 and multiple state and local governments faced with the same need.

### **Craft3, Not A Traditional Lender**

Craft3 is a Community Development Financial Institutions (CDFI) that makes loans to strengthen families, jobs, and the environment in the Pacific Northwest states of Oregon and Washington. It lends to established nonprofits and growing and start-up businesses – including those that don't qualify for traditional loans. It also helps families of all income levels finance energy efficiency, build accessory dwelling units, and replace failing septic systems and aging manufactured homes. Since 1994, Craft3 has invested more than \$530 million in Northwest communities from its regional offices in Port Angeles, Seattle, Spokane and Walla Walla, Washington and Astoria, Bend, Klamath Falls and Portland, Oregon.

Traditional financial institutions, such as banks and credit unions, receive their capital through deposits, which they then lend to individuals and businesses in accordance with federal and state regulatory guidelines. The greater the perceived loan risk, (e.g. lower credit score or lower household income) the more costly to the borrower through higher interest rates. To ensure compliance with regulatory requirements, they generally have a low risk tolerance.

As a non-bank commercial and consumer lender, Craft3 does not receive deposits, hold accounts and is not regulated by the FDIC. For this reason, it can develop creative loan products from the ground up to solve unique community needs that traditional banks cannot. Craft3 is exempt from some federal and state banking rules, which limit the terms and conditions other consumer lenders can offer. Significant to the Clean Water Loan, this means Craft3 can offer options of fully deferred or interest-only payments to lower-income households and can approve higher-risk loans than a traditional financial institution. Without deposits to capitalize its loans, Craft3 obtains capital in the form of grants, loans, and investments from financial, corporate, philanthropic and religious institutions, government agencies and individuals. Craft3 then offers interest rates and terms to borrowers that reflect its cost of funds. With a strong and growing demand for its Clean Water Loans, Craft3 has endeavored to secure funds to capitalize its loans that are patient and flexible to support a loan product in which 40 percent of Craft3 borrowers do not make principal payments for up to 15 years.

### **The Clean Water Loan Product**

Craft3's Clean Water Loan is uniquely structured to provide inclusive credit and meet the needs of property owners and their industry professionals. As a consumer and commercial lender, Craft3 offers its Clean Water Loan a wide range of property types including owner- and non-owner-occupied single-family homes, multi-family properties including manufactured home parks, and commercial properties. The loan covers the cost of all project components, including design, pumping, permits, installation. The 15-year term loan offers affordability tools for households with lower incomes, including reduced interest rates and options to defer principal and/or interest payments until maturity. Inclusive underwriting criteria institution enables support to those with low- or fixed-incomes, credit/equity challenges, high loan to value ratios, or those unable to obtain loans from traditional sources. To ensure ongoing water quality, health, property benefits, and regulatory compliance is maintained, a \$2,000 reserve is added to each loan for future inspections and minor repairs.

### **Evolution of the Clean Water Loan Program**

#### **Pacific County**

In 2002, Craft3 (then named Shorebank Enterprise Pacific) was headquartered in Pacific County, Washington, where the economy was characterized by a dwindling forest industry, small agricultural operations and shellfish propagation. Craft3 initiated its consumer lending service to help the local government provide loan capital to low-income families for repairs to their onsite sewage systems. With home offices in this rural county, Craft3 was the logical go-to entity to supply expert loan management.

Willapa Bay is the largest oyster growing area in the country. Funding to capitalize Craft3's loans was authorized by the Washington Legislature at the request of shellfish growers whose Willapa Bay tidelands were being polluted with septic effluent. The Legislature authorized harvest on state tidelands to generate the revenue used to capitalize sewage system repairs. Collaboration by the Washington Department of Fish & Wildlife, Puget Sound Action Team (now Puget Sound

Partnership), shellfish growers, Craft3 and the local Pacific County government completed several repairs and demonstrated the effectiveness of a public/private partnership.<sup>34</sup>

### **Hood Canal**

During the ensuing two years, effluent from failing onsite sewage systems was identified as a partial cause of severely deteriorating water quality in the Hood Canal portion of the Puget Sound, that was publicly visible through a significant “fish kill” event in 2006. The Pacific County collaboration led Hood Canal stakeholders and Craft3 leaders to approach the Hood Canal Coordinating Council (the five-member regional council of governments--three counties and two tribes) as partners in expanding repair loan services. Their efforts were supported by the Bill & Melinda Gates Family Foundation and the Russell Family Foundation. This foundation support and engagement with Hood Canal leaders spurred two legislative appropriations of capital grants delivered through the Washington Department of Ecology (Ecology), which acted as grant manager. Funding restrictions required Ecology to provide the funds to Kitsap County which executed an inter-local agreement with Mason and Jefferson Counties, and a contract with Craft3 to launch the Clean Water Loan. After two years, Craft3 retained a program evaluation consultant, to complete an assessment, which resulted in a determination that the Hood Canal Loan Program was successful in meeting its objectives and should consider expanding to a broader geography.

Through the development of the Hood Canal expansion, Craft3 established the main pillars of the program that would become its key to scale and longevity:

- Extensive stakeholder engagement: including engaging with the onsite industry, elected officials, local health agencies, environmental educators, community members, and local businesses.
- Robust program guidelines that addressed stakeholder concerns, such as:
  - Project eligibility (system documented as failing or over 25 years old)
  - Property eligibility (owner and non-owner occupied and commercial properties that have a permanent dwelling and existing or outdated onsite system)
  - Eligible system fixes (permitted repairs/replacements only with a maximum capacity expansion of up to one bedroom, or connection to sewer if mandated by health agency)
- A loan product and work-flow tailored to community and stakeholder needs
- A regular forum for cross-collaboration, best practices, and coordination between local health jurisdictions.

### **Incremental Additions**

Collaboration with the Department of Ecology brought forth the availability Puget Sound Restoration Funds under the Puget Sound Partnership’s National Estuary Program (NEP), administered by the U.S. Environmental Protection Agency (EPA). These additional resources facilitated the expansion of the lending program to two new counties’ water quality improvement areas – Clallam County’s Dungeness Bay Clean Water District in 2011 and King County’s Quartermaster Harbor Marine Recovery Area 2012. Community outreach by Craft3 and Seattle-King County Public Health was supported by a separate US Fish & Wildlife/Wells Fargo special

project grant. In 2013, after experiencing low uptake from properties within the Clean Water District and turning away applications for ineligible areas, Craft3 expanded its Hood Canal Program to serve the entire Clallam County area, which generated loans in both the Clean Water District and other county areas. King County faced similar circumstances but was not able to expand the geographic eligibility due to funding constraints. Craft3 brought the Clean Water Loan to Pierce County in 2014, capitalized by a grant from the Tacoma Pierce County Health Department, sourced from its general funds and a NEP grant, which Craft3 matched with Program Related Investments from the Russell Family Foundation, Greater Tacoma Community Foundation, and Laird Norton Family Foundation. Demand continued to grow in both the Hood Canal and the new counties, yet there was insufficient capital to expand programs to meet the need.

Out of the necessity to recapitalize the Hood Canal program, Craft3 assisted with a four-county proposal to Ecology for a grant and Clean Water State Revolving Fund Loan. Though the application was successful, the complexities of state and county contracting for a grant and a loan took multiple years, municipal attorneys and creativity by Ecology to develop a contract to enable Craft3 to meet local needs with Clean Water Loans.

In 2012, Puget Sound local health jurisdictions (LHJs) collectively asked for help exploring alternative approaches and assessing financial need for a regional scale program. The subsequent analysis emerged as a priority project of the 2012 Puget Sound Action Agenda. Using National Estuary Program funds, the Washington State Department of Health (Health) led the project and completed recommendations in 2014.<sup>4</sup> This study recommended “transition to a unified, regional program.”

### **Regional Loan Program, An Innovative Solution To Scale**

Even with a compelling recommendation for a “unified, regional program,” the structure of available capital from the State of Washington was an obstacle to realizing this goal. Like other states, Ecology utilizes federal Clean Water State Revolving Fund (CWSRF) – low cost and flexible loans – to pass through to local governments and health jurisdictions for a variety of clean water uses, including land acquisition, municipal wastewater infrastructure, and septic repair and replacement loans to individual homeowners. In Washington State, this capital may be combined with grants from Ecology to support complementary program activities, but both grant and loan capital sources are only available to government entities, not nonprofit CDFI lenders.

Prior to 2016, each county in which Craft3 offered loans required Craft3 to reply to a Request for Proposals, complete a challenging contracting process requiring amending boilerplate public agency contract language to be relevant for a revolving loan program. Multi-county partnerships additionally required interlocal agreements signed by commissioners in each county. Many counties and health jurisdictions with water quality needs lacked the infrastructure, capacity, and/or appetite for lending risk to create such programs.

Empowered by the Septic Financing Advisory Committee recommendations and building from the model of the four-county Hood Canal collaboration, Ecology was able to offer a new approach – the Regional Loan Program (RLP) – to overcome these capital structure barriers. The RLP delivers a single, cost-effective program across many geographies by joining Washington State Department of Health and Local Health Jurisdictions (called the “Partners”) through a Memorandum of Understanding and contracting with the competitively selected nonprofit lender, Craft3. As the

Partner’s Fund Administrator, Ecology thoroughly assessed Craft3’s financial statements and balance sheet, and lending abilities, to lend the CWSRF capital directly to Craft3, which took on all the lending risk instead of the Partner health jurisdictions.



Figure 1: Regional Loan Program Funding Model

Through the delivery of affordable loans, the RLP reduces barriers landowners face in complying with regulatory requirements to improve water quality. By providing inclusive loans with flexible terms, the RLP also assists low-income families (hardship) who would otherwise be at risk of losing their homes. The partnership offers a proven, cost-effective, scalable solution to this growing problem of failing septic systems. The RLP’s benefits are experienced on a deeply personal level by program participants, such as Chris P, a Whatcom County Homeowner who shared, “I was in a critical situation that left me in a financial bind, then [Craft3] stepped in. Having the opportunity to work with Craft3 didn’t just save me financially, it’s given me peace of mind. My home is safe and secure – that wouldn’t have happened without Craft3.”

The RLP is governed through its MOU and program guidelines, updated and signed annually by all Partners, which establish Partner and lender responsibilities, project eligibility, allowable uses of loan funds, and commits the Partners to oversee the RLP. Each Health Jurisdiction leads compliance, inspections, permitting, contractor certification, and landowner outreach.

Craft3, having accomplished over a decade of clean water lending and risk mitigation expertise, efficiently manages the lending process, including application, underwriting, origination, servicing, and risk management. Ecology and Craft3 manage the complex program reporting and data tracking requirements, allowing the Partners to serve their constituents without the burden of managing federal and state grant compliance. Partner Island County Environmental Health summarized the Regional Loan Program’s benefit to Island County, “Our old program just could not scale up to that kind of volume given our limited staff resources - referring people to Craft3 for septic funding assistance allows us to spend more time helping them with all the permitting details and the technical assistance. It has been an incredible burden lifted off me to know that so many more of our citizens in need are being helped with their septic repairs.”

For Ecology, administering one loan program instead of eight parallel programs eliminated redundancy, lowered operational costs, and increased projects completed. The RLP was able to

serve counties with no capacity to develop a loan program, as well as those re-prioritizing staff time to water quality.

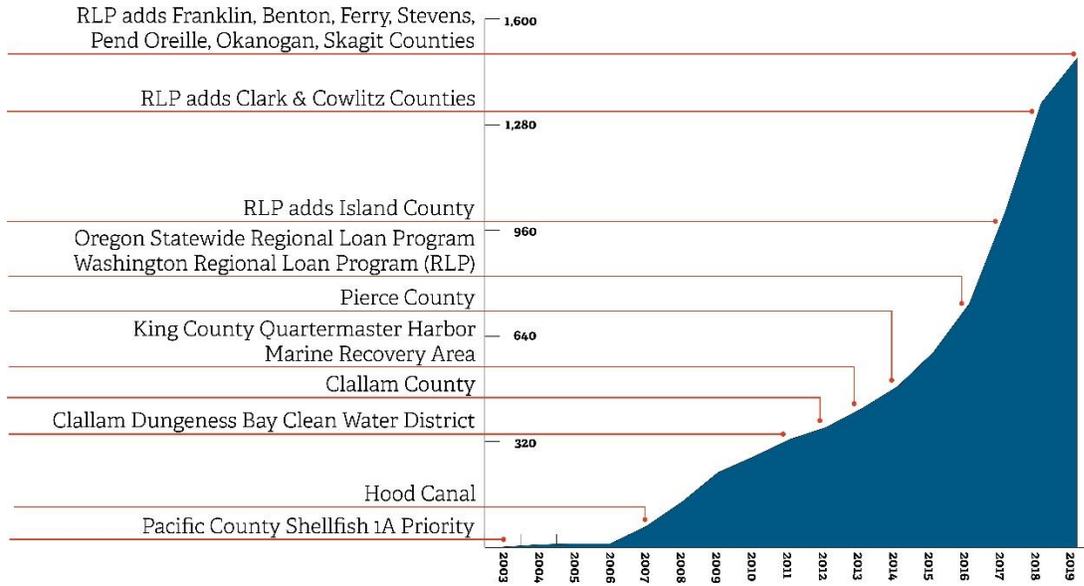


Figure 2: Clean Water Loan Growth and Cumulative Results

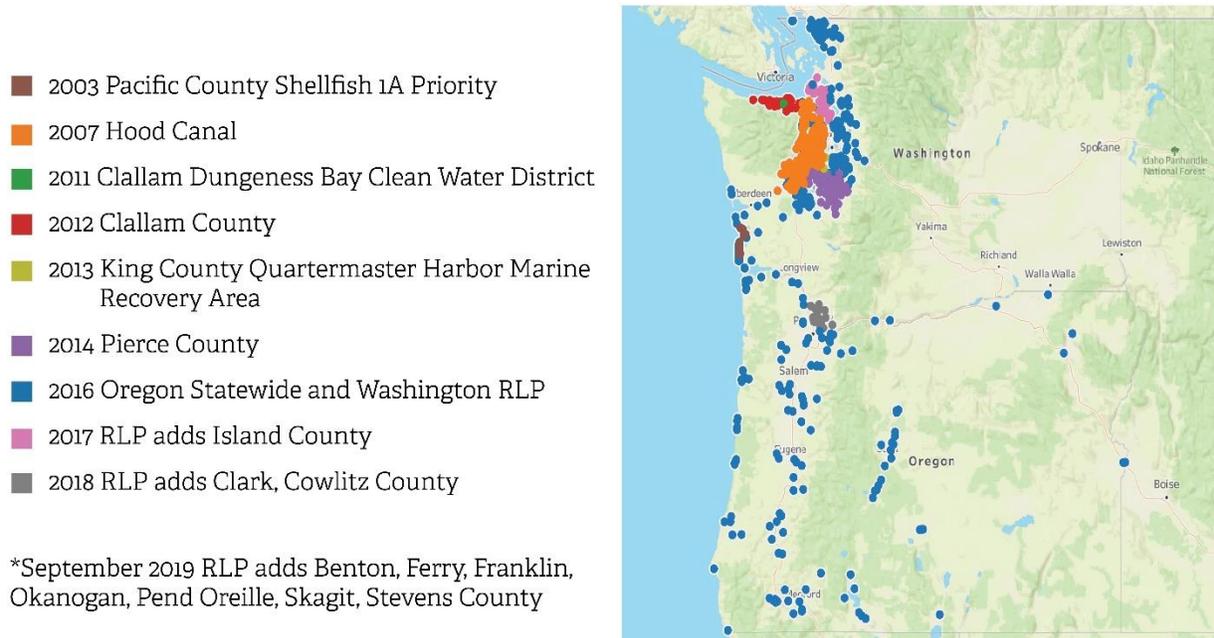


Figure 3: Map of Clean Water Loan Growth and Results

This structure has facilitated scale making it easy for new jurisdictions to join and to apply for additional funding. The RLP launched in 2016 to 11 counties and now serves 22 of Washington's 39 counties and has completed over 650 projects, for \$15 million in its first three years.

### **The Oregon Clean Water Loan, Applying Lessons Learned**

The successful growth of the program in Washington led to engagement with the Oregon Department of Environmental Quality (DEQ) in 2016, when the state legislature passed a bill directing DEQ to create a third-party administered septic loan program and established guidelines informed by Ecology, it's Washington State counterpart.

Craft3 successfully responded to DEQ's request for proposals. After examining lessons learned and engaging with stakeholders (industry professionals, watershed groups, DEQ and County staff, Community Action Agencies, and others), Craft3 proposed to offer its Clean Water Loan statewide, instead of taking the incremental approach it had in Washington.

Craft3 matched the state's \$200,000 grant with a \$250,000 grant from Meyer Memorial Trust and a \$200,000 Program Related Investment loan from Laird Norton Family Foundation. Within days of program launch, Craft3 closed its first Oregon Clean Water Loan to a moderate-income Portland homeowner who was in danger of losing her home.

In response to growing demand, the Oregon State Legislature provided another grant of \$1.4 million for loan capital to ensure continued lending and support to low-income households. Collaboration with industry professionals DEQ and County health agency staff, members of the Oregon On-Site Wastewater Association (O2WA), Oregon Watershed Enhancement Board, The Lower Umatilla Groundwater Management Area and Legislators has provided ongoing support to the program. At the time of writing, three years after launching in Oregon, Craft3 has deployed nearly \$3 million in 27 counties.

### **Lessons Learned and Best Practices**

- **Failing** septic systems pose large-scale problems and will require large-scale solutions.
- **Fear** is the primary deterrent to efficient remediation of old and failing onsite sewage systems, both for homeowners and stakeholders. Owner fear of regulators and cost; regulator fear of the impact of enforcement on the family; elected officials fear of constituents' ire and the need to cover loan defaults with tax revenues; contractors fear that they will not receive payment for services.
- **Stakeholders.** Understanding and tailoring the loan product and delivery program to the needs of clean water stakeholders – including homeowners, industry professionals, health agencies, and others reliant on clean water, ensured the program effectively addressed local needs. In doing so, Craft3 also built trust and an evolving group of dedicated champions who advocated and innovated on behalf of the program.
- **Geography and scale.** Serving a broad geography is important to achieving concentration and scale, even if the priority areas are small and targeted. Large geographies allow for more effective awareness building and marketing with a single, consistent message. Industry professionals can serve all their clients in the same manner, rather than remembering who might be eligible. Limiting the lending resources to a subset of a community may cause additional confusion, contention and inequity. Administrative and operational costs can also be higher when serving small areas due to need for careful messaging, limiting communication

channels, turning people with needs away and pursuing legal enforcement, and managing compliance. A statewide program is best, and no smaller than a county program is recommended.

- **Loan product that meets the range of community needs.** Ensure the loan may cover the full cost of all project components design, pumping, permits, installation, ongoing inspections and repairs. In many areas, allowing the loan to finance connection to municipal sewer systems may be necessary. Serve a wide range of incomes and property types. It is not recommended to limit loans only to low-income homeowners earning under 80% of the area median income. Craft3's lending has demonstrated that many property owners lack access to credit, even those with higher incomes. Finally, the ability to offer deferred repayment options has ensured that lowest-income constituents are not displaced from their homes.
- **Patient, scalable, low-cost, capital sources.** The story of Clean Water Loan also tells a story of Craft3's persistent efforts to obtain enough reliable grant and loan capital to meet the substantial and growing statewide need for affordable clean water loans in Oregon and Washington. Scaling delivery of the loan, in which 40 percent of borrowers make no principal repayments for 15 years requires grants and patient low-cost loans. Craft3, with its community, health jurisdiction, and state partners, continues to innovate to solve this ongoing challenge.
- **A non-profit third party administered loan program can assist a range of underserved property owners.** A non-profit third party administered loan program can help meet many of the challenges faced by regulators and local politicians in addressing this topic. Non-profit CDFI lenders are likely able to approve more loan applicants than public agencies and traditional financial institutions. They also bring to the partnership, the lending infrastructure, higher risk tolerance, commercial lending capacity, and the ability to scale.
- **Reducing bureaucracy, while managing complex compliance requirements.** A third-party administrator eliminates bureaucracy for homeowners, OSS professionals, and local health jurisdictions and brings the capacity to handle complex, long-term compliance requirements. The homeowner and the industry professional experience a simple and streamlined process; local health agencies gain a resource to help their community, while the lender handles the complexity through its lending infrastructure.
- **Commitment to continuous learning and improvement.** Assessment and iterative change are necessary to achieve continuous program improvement.

### How to find your local CDFI

Champions seeking to develop an onsite sewage loan program in another part of the country might explore the interest of another CDFI. These organizations, of which there are more than 260 across the country, work to provide affordable, responsible credit, create and sustain jobs and stabilize communities. Their mission and capabilities make them potentially attractive public/private partners. Their locations and contact information can be found at: <https://ofn.org/cdfi-locator>.

### Acknowledgements

It is impossible to name all the individuals and organizations that have helped to make the Clean Water Loan a success. The initial concept, early development and continued expansion can be attributed to the vision, determination and persistence to a group we call champions. But success comes from the participation of a large network; from those who make loan capital available to the more than 1,300 individual system owners who made a long-term commitment to proper onsite sewage management.

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## References

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<sup>2</sup> Response to Congress on the Use of Decentralized Wastewater Treatment Systems  
[www.epa.gov/owm/decent/response/index.htm](http://www.epa.gov/owm/decent/response/index.htm)

<sup>3</sup> At the time Craft3 operated under the name Shorebank Enterprise Pacific.

<sup>4</sup> Septic Financing Advisory Committee Documents and Reports:  
[www.doh.wa.gov/CommunityandEnvironment/WastewaterManagement/OnsiteSewageSystems/OSS/SepticFinancingAdvisoryCommittee](http://www.doh.wa.gov/CommunityandEnvironment/WastewaterManagement/OnsiteSewageSystems/OSS/SepticFinancingAdvisoryCommittee)