

Pollution Identification and Correction (PIC) Program Guidance



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Introduction	4
Part 1: PIC Grant and 319 (4B) Funding Guidance	5
Part 2: How to Implement a Pollution Identification & Correction (PIC) Program.....	11
Background	11
Creating a prioritized work plan	13
Project Preparation.....	15
Project Area Evaluation.....	15
Public Notification and Information	16
Public Meetings and/or OSS Workshops	16
Field Preparation & Safety	17
Monitoring & Identification of pollution sources	17
Shoreline Surveys.....	18
Property Inspections.....	26
PIC property inspections involving farms	31
Correcting Pollution Sources.....	34
Partner collaborations and referral	34
Education and Outreach	34
Technical and Financial Assistance:	35
Enforcement (local authority).....	36
Appendix A: Examples of Public Notification & Educational Materials.....	38
Appendix B: Example of PIC Property Inspection Form & Field Equipment List.....	39
Appendix C: Example of Interlocal Agreement.....	43
Appendix D: Examples: Enforcement Letter and Citation	48
Appendix E: Private Property Access and Consent Policy.....	50
Appendix F: Skagit County Integrated Pollution Identification & Correction (PIC) Protocol for Site Inspections.....	54
Appendix G: Successful PIC Projects	57

Introduction

Pollution Identification and Correction (PIC) Programs have been used by Puget Sound counties to find and remove bacteria sources that threaten human health in areas where people harvest shellfish and enjoy other forms of water recreation. PIC programs can be a valuable tool for restoring shellfish growing areas and counties have used PIC to respond to shellfish bed closures and reverse declining water quality trends. PIC was originally designed to find, correct, and prevent fecal pollution sources. The adaptive management methodology used in PIC programs links identification of pollution sources through monitoring with corrective action. PIC methods can be used for nutrients, sediment, temperature and other pollutants. This guide focuses on bacteria sources, but much of the information can be adapted to address other pollutants.

The PIC Guide is divided into two parts. Part 1 identifies the primary components and minimum requirements of a PIC program that State agencies will look for in funding proposals.

Part 2 presents ideas and resources to implement a PIC program. This section was developed in partnership with Kitsap Public Health District and is based substantially on their PIC program. The primary focus is identifying and correcting fecal pollution sources from onsite sewage systems, pet and livestock waste and other sources.

Part 1: PIC Grant and 319 (4B) Funding Guidance

The following nine (9) key elements have been identified by the Department of Ecology for lead agencies that are seeking PIC program funding. Ecology anticipates providing additional guidance for each element in subsequent versions of this document. While additional guidance is being developed, lead agencies should contact and work with Ecology to design a program that meets the intent of each element. Program funding applications will be assessed based on the criteria set forth by these nine elements.

Nine (9) Key Elements for PIC funding:

1. Identify/prioritize areas (problem watersheds) for PIC investigations.
 - a. Identify a set of criteria to rank watersheds for investigations (e.g. Kitsap Public Health's prioritized work plan found in Part 2 of this document).
 - b. Focus on a limited geographic scope for implementation.
2. Identify the causes and sources of pollution.
 - a. Identify sources by parcel on a map.
 - b. Gather background information on the PIC site (s).
 - c. Describe methods used to identify pollution problems (source identification monitoring, shoreline surveys, dye tests etc.). Monitoring must follow an approved quality assurance project plan (QAPP).
3. Describe the best management practices (BMPs) that will be used to correct sources.
 - a. Specify the suite of BMPs that will be used to address sources. Only BMPs that are known to be effective for achieving compliance with water quality standards will be funded. Ecology and EPA are developing more detailed guidance on eligible BMPs for livestock management. The Term and Conditions for establishing riparian buffers on agricultural lands are included on pages 4 - 7 of this document.
 - b. Provide site specific instructions on BMPs to the landowner including instructions on types of BMPs, how and where they will be installed, and how they will be operated and maintained.
 - c. Lead agency will be responsible to ensure implementation of BMPs by partners.
4. Include an information and education component to help landowners understand water quality problems, purpose of the program and how they can be better stewards of their property.
5. Describe the technical and financial assistance that will be provided to landowners.
 - a. Provide one or more follow up visits to assist the landowner with any problems and ensure that they have implemented the BMPs.
6. Describe a schedule for implementing corrections.
 - a. Include a schedule specifying the amount of time landowners have to correct problems before enforcement is used.
 - b. Describe the lead agency's enforcement authority and if this is not possible, work with Department of Ecology to provide regulatory authority.
7. Describe milestones for implementing corrections.
 - a. Examples include: number of inspections that will be conducted, percentage of corrective actions implemented by a certain date, etc.

8. Monitor to evaluate effectiveness/determine whether water quality is improving.
 - a. Describe effectiveness monitoring, parties responsible, sampling and reporting schedule.
9. Obtain sustainable funding.
 - a. Include a plan for sustainable funding if local resources are not currently adequate.

Terms and Conditions for Riparian Buffers

To be eligible for National Estuary Program (NEP) implementation funding, provided directly or through a subaward, an agricultural land owner whose property borders fresh or estuarine waters must establish and maintain a riparian buffer on all water courses on the property consistent with the National Marine Fisheries Service (NMFS) guidelines for Riparian Buffers Along Agricultural Water Courses in NW Washington and EPA's implementation guidance on the NMFS guidelines. A land owner may be excluded from meeting this requirement if the funding is used solely for removal of shoreline armoring, onsite sewage system repair or replacement, engineered dike setbacks, or culvert or tide-gate replacements that provide for fish passage at all life stages. In some cases, the NMFS recommendations are framed in terms of ranges of buffer widths rather than point estimates, and expressed as probabilities of achieving desired outcomes. Local conditions and local circumstances matter, and may affect the choice of the riparian buffer most effective at achieving salmon recovery. Buffer widths may be less than specified in the table in cases where there is a scientific basis for doing so and all affected tribes in the watershed agree to deviations from the NMFS guidelines or where there are physical constraints on an individual parcel (e.g. transportation corridors, structures, naturally occurring conditions).

FAQs on the NMFS buffer table term and condition for Puget Sound Lead Organizations **Final 12-3-13**

EPA and Puget Sound Lead Organizations, working with Puget Sound tribes, have agreed to include the attached term and condition in 2013 NEP funded subawards. It is expected that Lead Organizations will be working with subaward applicants on a case by case basis to determine eligibility, exclusions and deviations from the NMFS guidelines in the spirit of this agreement. The following FAQs provide further guidance that Puget Sound LOs may consult while working with applicants.

Is State match subject to the term and condition?

No, but State agencies are encouraged to utilize the NMFS recommendations to maintain consistency and ensure resource protection on agricultural lands.

The term and condition states that to be eligible for NEP implementation funding, provided directly or through a subaward, an agricultural land owner whose property borders fresh or estuarine waters must establish and maintain a riparian buffer on all water courses on the property consistent with the National Marine Fisheries Service (NMFS) guidelines for Riparian Buffers Along Agricultural Water Courses in NW Washington and NRCS guidance on the NMFS guidelines. What is the definition of agricultural?

Agricultural land, for the purposes of this term and condition, includes lands that meet the definition of agricultural lands and activities in the Washington Shoreline Management Act. (RCW 90.58.065). If a parcel is zoned agricultural it will generally be considered agricultural for the purpose of implementing this term and condition. Properties zoned as rural residential and are hobby farms or nonrevenue

producing farms will also be considered as agricultural land for the purpose of implementing this term and condition.

When does the recommended site assessment apply?

The buffer widths provided in the guidance on the table are default minimums designed to provide a minimum level of designated use protection and grant accountability. Grant recipients are strongly encouraged to conduct site assessments to design larger buffer widths. We also expect recipients to conduct site assessments to justify deviations described below.

Is there a process to identify alternative buffers that are different than the NMFS guidelines and EPA’s implementation guidance on the NMFS guidelines?

Yes, In those instances where applicants are intending to establish riparian buffers that are larger than those called for by the NMFS guidelines and EPA’s implementation guidance on the NMFS buffers, there is no need to document justification or seek approval. However, there are some situations where funding could be sought to implement buffers smaller than those proposed in the buffer table. These are:

1. **Infrastructure Limitations**—Where implementing the buffers called for by the buffer table is prevented by physical constraints, such as transportation corridors, structures, or naturally occurring conditions. In this situation, the buffer implemented could be narrower at the location occupied by the road or structure, but must meet the requirements of the buffer table on the rest of the property. Or,
2. **Significant Hardship**--The landowner’s property is no greater than 10 acres and the landowner demonstrates that implementing the buffers called for by the buffer table would preclude reasonable use of his/her property. Reductions in buffer sizes must be supported by documentation, reviewed and approved by the LO, and agreed to by affected tribes. Or,
3. **Site Specific Science**— Site specific scientific information is available to support a different buffer that will meet water quality standards and protect salmon. For example, there may be some situations in which the site potential tree height for the site is under 100 feet. Based upon a site-specific soils or other scientific analysis conducted by a soils scientist, or other qualified scientist (e.g. wetland scientist, botanist) the applicant could propose a riparian buffer less than those called for in the buffer guidance.

Note: To be eligible for funding, hardship or science-based buffers must be no less than 35 feet wide alongside ditches or fish-bearing intertidal/estuary streams (category I and V watercourses) and no less than 50 feet wide for other fish bearing streams (categories II, III, and IV watercourses). Reductions in buffers must be supported by documentation, reviewed and approved by the LO, and agreed to by affected tribes.

The term and condition states that *buffer widths may be less than specified in the table in cases where there is a scientific basis for doing so and all affected tribes in the watershed agree to deviations from the NMFS guidelines or where there are physical constraints on an individual parcel (e.g. transportation corridors, structures, naturally occurring conditions)*. What constitutes a scientific basis?

Generally, a scientific basis means supported by (preferably local) fisheries biologists or peer reviewed research. A scientific basis for deviations from the NMFS table may be established in existing documents such as TMDL documents, local Salmon Recovery Plans, as well as supported by information collected during a site assessment.

Who determines if all affected tribes agree to deviations? In 2012, EPA established a new process for tribes to review project work plans that Lead Organizations have selected for funding. EPA will use this process to ensure that potentially affected tribes review projects that may contain restoration projects subject to the term and condition. When possible, EPA encourages project sponsors to work with tribes prior to submitting an application for funding to ensure that any deviations are acceptable. However, often initial project work plans will be for a targeted stretch of stream with specific parcels to be identified as project sponsors recruit landowner participants. In these instances, LOs should work with project sponsors as landowners and specific properties are identified to ensure tribal approval where there are proposed projects that deviate from the NMFS table. When requested, EPA will provide assistance to Lead Organizations to identify affected tribes.

What technical assistance is available to applicants or Lead Organizations to determine buffer width and composition?

It is expected that applicants will have worked with tribes, local soils scientists, fisheries biologists, conservation districts, nonprofit organizations, consultants and others to develop an application package. As Lead Organizations receive applications, upon request, EPA will work to connect Lead Organizations with tribes, NMFS, NRCS, Ecology, WDFW and other restoration experts to provide technical assistance.

How was the NMFS table developed?

Please see the attached letter from the National Marine Fisheries Service that describes the table and its origins.

What resources are available to help Lead Organizations and applicants interpret the NMFS buffer table?

EPA has developed simplified NMFS buffer table implementation guidance that includes minimum buffer width values based on stream type. In addition, the Washington State Department of Ecology has developed a GIS based stream mapping tool that includes fish presence based on WDFW and Northwest Indian Fisheries Commission databases.

<http://waecy.maps.arcgis.com/explorer/?open=d5478a4aaf704d81bac63ffc934e1549&extent=-13922905.3138354,5784350.44593158,-13140190.1441951,6268043.96092021>

As with all EPA grants, EPA Project Officers will work with Lead Organizations as LOs develop solicitations and review applications to provide technical assistance and/or to connect LOs with NMFS, tribes, WDFW, Ecology, NRCS or other agencies/organizations if there are technical questions on buffers for a specific project.

How should Lead Organizations determine whether or not applications demonstrate compliance with the table term and condition?

It is expected that LOs will follow their existing agency guidelines for determining compliance with terms and conditions of grants. LOs can determine what should be included in application materials to demonstrate how the applicant would meet the term and condition. Application materials should include aerial photos, descriptions of planned riparian buffers (width and composition) and other materials used to form the basis for the planned buffers. LOs are also strongly encouraged to collect data on project implementation, including buffer width, length, and composition. In cases where project proposals include deviations from the NMFS buffer table based on science, applicants should submit documentation of agreements with tribes and fisheries biologists as well as supporting documentation of the scientific basis for the deviation with application packages.

EPA and Puget Sound Lead Organizations, working with Puget Sound tribes, have agreed to include a term and condition requiring use of the NMFS buffers in 2013 NEP funded subawards, however, other state and federal agency programs funding habitat restoration on Puget Sound waters may not

require use of the NMFS buffers. What can LOs tell landowners/applicants/others on this to avoid confusion or “buffer shopping”?

The NMFS buffers represent federal fish agency recommendations to protect anadromous and ESA listed fish on agricultural lands. While other state and federal grant programs may not currently require use of the NMFS buffers, many federal and state agencies are working to align conditions to ensure consistency and resource protection. For example, NRCS Biology Technical Note 14 Wildlife Habitat Evaluation Guide is currently being updated, with the intent to provide buffer widths consistent with NMFS recommendations. Also, science on buffers is evolving through NEP funded efforts to develop consolidated riparian management recommendations over the next 1-2 years through the WDFW led review and development of Riparian Habitat Guidelines.

**Interim Riparian Buffer Recommendations for Streams in Puget Sound Agricultural Landscapes
(Originally proposed as federal Option 3 for the Agriculture Fish and Water (AFW) Process, March 2002)**

NMFS Channel Type ⁱ	Channel Types	Habitat Functions/Composition	Buffer – Minimum Default Width ⁱⁱ
Class I Constructed ditches; fishless streams.	<ol style="list-style-type: none"> Constructed Ditches, Intermittent Streams and Ephemeral Streams that are not identified as being accessed and were historically not accessed by anadromous or ESA listed fish species Perennial waters that are not identified as being accessed and were historically not accessed by anadromous or ESA listed fish species 	Water quality protection; shade; sediment filtration	<ol style="list-style-type: none"> 35' 50'
Class II Fish bearing, modified natural channel, entrenched or spring fed watercourses that do not move	Modified or highly entrenched perennial, intermittent and ephemeral waters that are identified as being accessed or were historically accessed by anadromous or ESA listed fish species	Water quality, large wood debris (LWD) for cover, complexity and shade	100' supporting site assessment recommended to increase buffer width
Class III Fish bearing	Unconfined perennial, intermittent and ephemeral waters that are identified as being accessed or were historically accessed by anadromous or ESA listed fish species	Water quality, large wood debris (LWD) for cover, complexity and shade	100' supporting site assessment recommended to increase buffer width
Class IV. Diked, permanently fixed ⁱⁱⁱ	N/A	N/A	N/A

Class V^{iv} Fish bearing, intertidal/estuary	Perennial, intermittent and ephemeral waters that are identified as being accessed or were historically accessed by anadromous or ESA listed fish species in intertidal and estuarine streams and channels	Site potential vegetation (salt water) sedges, shrubs, etc.	35' – 75' Supporting site assessment of adjacent land use recommended to increase buffer protections needed to meet all applicable water quality standards.
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Part 2: How to Implement a Pollution Identification & Correction (PIC) Program

Kitsap Public Health has had an established PIC program since the mid-1990s; the following information is being presented based on Kitsap Public Health's experience and includes input from other local health jurisdictions as well as the Departments of Health and Ecology.

Background

In the early 1990s, Kitsap County agencies faced several difficult issues:

- The Public Health District sought more permanent funding to deal with shellfish closures, failing septic systems, and other water quality problems.
- The Department of Public Works needed to develop a stormwater management program in response to the U.S. Environmental Protection Agency's National Pollutant Discharge Elimination System Permit Program.
- The Conservation district needed to respond to 1989 legislative approval to seek a fee to fund programs for landowner assistance.
- The Department of Community Development sought more permanent funding for state mandated watershed planning efforts.

A group of County Managers and Commissioners with a long range vision for water quality began working together to design a coordinated interagency partnership to meet multiple needs in the county.

In October 1993, after two years of planning and public process, the Kitsap County Board of Commissioners adopted Ordinance 156-1993 establishing the Surface and Stormwater Management (SSWM) Program. The goals of the program are to: protect public health, minimize institutional costs, meet state and federal regulatory requirements and provide permanent funding source to address nonpoint source pollution.

Kitsap Public Health is the primary agency responsible for monitoring, identifying, and prioritizing nonpoint fecal pollution correction programs in Kitsap County. In response to the fecal pollution problem, Kitsap Public Health developed a Pollution Identification and Correction (PIC) program, an Onsite Sewage System (OSS) Monitoring and Maintenance program, and a Water Protection Complaint Response program. The PIC program receives a significant portion of its funding from Kitsap County's Surface and Stormwater Management (SSWM) Program.

Kitsap Public Health's PIC program, OSS Monitoring and Maintenance program and Complaint response program utilize existing local regulations and authority to address FC pollution sources and enforce correction when necessary. These programs incorporate a strong educational element to prevent future fecal pollution.

Kitsap Public Health developed the PIC program to prioritize and address water quality problem areas in Kitsap County. Fecal coliform (FC) pollution problem areas are thoroughly assessed for land uses and ranked by water quality data and public accessibility. Door-to-door PIC inspections are conducted in top-priority areas to identify and correct fecal pollution sources. PIC inspectors provide free technical assistance to guide property owners through the process of correcting identified pollution sources, such as failing onsite septic systems, pet waste, livestock and agricultural animal manure, failing sewer infrastructure, and correcting illicit discharges to storm water and storm water conveyances.

Kitsap Public Health PIC projects utilize community participation by proactively educating owners and residents while identifying and correcting FC sources. The Kitsap PIC program has been responsible for performing FC source identification projects at the watershed and sub-watershed scale resulting in documented improved water quality in streams, lakes, marine waters as well as upgrades of shellfish harvest areas, including Dogfish creek, Burley Lagoon, Cedar Cove, Dyes Inlet, and Yukon Harbor.

The Kitsap Public Health District has monitored major streams and marine waters for FC on a routine basis since 1996. This extensive monitoring program has resulted in the listing of many Kitsap County marine and freshwater bodies for FC pollution on Washington State's 303(d) List of impaired or threatened waters.

Elevated levels of fecal pollution are responsible for posting of selected streams with warning signs that guard against contact with the water. Additionally, documented FC pollution or the threat of pollution has caused the closure and restricted use of commercial shellfish beds in Burley Lagoon, Dyes Inlet, Hood Canal, Liberty Bay, Port Orchard Bay, Port Gamble Bay, Sinclair Inlet, and Yukon Harbor. FC pollution may come from point or nonpoint sources. Point sources like wastewater treatment plants are regulated by the Environmental Protection Agency's (EPA) National Pollution Discharge Elimination System (NPDES) permitting program.

Nonpoint pollution is a combination of discharges from many activities on many land parcels and as such is more difficult to identify and control. The identification and correction of nonpoint pollution is primarily the responsibility of local jurisdictions in Washington State.

Quality improvement in public health is the use of a deliberate and defined process, such as Plan-Do-Check-Act, which is focused on activities that are responsive to improving public health. It refers to a continuous and ongoing effort to achieve measurable improvements in efficiency, effectiveness, performance, accountability, outcomes and other indicators of quality to improve the health of the community as well as the environment. (Source: [Riley et al, "Defining Quality Improvement in Public Health", JPHMP, 2010, 16\(10\), 5-7](#)).



Kitsap Public Health uses this quality improvement process (PDCA) for the water quality monitoring program. Collection and analysis of water quality monitoring data is conducted to Plan and prioritize the areas that show impairment of water quality. PIC methods are implemented (the Do and Act segments of the cycle) to identify and correct pollution sources. Water quality monitoring data as well as

other factors, such as land use, are Checked during and at the conclusion of a project which then informs what additional Action is needed.

The use of this process has provided evidence for not only prioritizing water cleanup projects, but also has shown positive outcomes, such as upgrades of shellfish harvest areas.

Water quality monitoring program and watershed prioritization plan

The Kitsap Public Health water quality trend monitoring program is a county-wide assessment program that assesses 121 stations in 58 streams and 65 stations in 12 marine embayments annually. These stations are sampled on a monthly basis, for most sites. Kitsap Public Health began this program approximately 17 years ago, which provides a long-term picture of the FC contamination history. This history demonstrates both the short term and long-term trends, as well as the current status of the contamination level.

This information is used to identify and prioritize watersheds and/or areas to conduct pollution identification and correction projects.

Creating a prioritized work plan

The prioritization process is a collaborative effort between Kitsap Public Health, Kitsap Public Work’s Surface and Stormwater Management program (SSWM), and the Kitsap Conservation District.

The first step in the process is to list all water bodies with water quality problems in an inventory for assessment and ranking. For example, for the priority list of 2012, monitoring data from the water years of 2010 and 2011 were used. Areas are listed when:

- Health District monitoring data indicates the water body does not meet Washington State Primary Contact Water Quality Standard for FC.
- Volunteer monitoring data (collected pursuant to an Ecology or Health District approved Quality Assurance Project Plan) indicates that the water body does not meet Washington State Primary Contact Standard;
- The area has been determined to be impaired for commercial and/or recreational shellfish harvest by the Washington State Department of Health and/or the Health District;
- The Health District has issued an ongoing health advisory for the water body, or it has a history of intermittent advisories.

Points are assigned to each area on the list for various criteria, *e.g.* not meeting Part 1 and/or Part 2 of the State primary contact water quality standard, beach closures or public health advisories, as shown in the example below.

							Two Year GMV	Points					
ID	#	Range	GMV	#>200	%>200	Meets Stnd?	All	Wet	Dry	FC	Health Advisory	Shellfish Impairment	WQP
BRO1	12	60 - 580	190	5	42	FAILS Both	231	163	378	4	4	4	12

The next step is to take the ranked list of the water bodies and include additional ranking considerations. These include:

- Washington State Department of Health (DOH) shellfish classification impairment.

Chapter 90.72 RCW authorizes counties to establish shellfish protection districts and programs for areas where State Health has downgraded commercial or recreational shellfish classifications. The statute encourages counties to take “strong and swift action” to control pollution from nonpoint sources in order to protect or restore water quality in tidelands. Therefore, project areas that drain into the shellfish harvest areas meeting one of the following criteria will receive special consideration:

- Downgraded by DOH
- “Threatened” List
- DOH initial “prohibited” classification
- “Unclassified”

- Water Quality Assessment Requires Health Advisory Posting

If water quality assessment results in the issuance of a health advisory for a water body, the project area will receive special consideration.

- Approved or Pending Department of Ecology (DOE) Total Maximum Daily Load Study (TMDL)

If there is an approved or pending DOE TMDL in a proposed project area, and that project will implement the TMDL, that project area may receive special consideration.

- Health District Designation of Marine Recovery Area

In developing on-site program management plans required under RCW [70.118A.030](#), the local Health Officer shall propose a marine recovery area for those land areas where existing on-site sewage disposal systems are a significant factor contributing to concerns associated with:

- OSS Area of Concern

The Health District, in partnership with the cities and counties, determined “OSS Areas of Concern.” These areas are of concern because of previous high OSS failure rates due to poor soils, high water table, and small lot sizes. Areas included within or contiguous to “OSS Areas of Concern” may receive special consideration.

- Other Criteria for Ranking OSS Problem Areas

Other circumstances, which should be considered before finalizing the priority work list, include, but are not limited to:

- A determination by the Health Officer that an area requires investigation due to evidence of a public health threat.
- New information becomes available which determines that an area should be re-ranked.
- City government offers funds to conduct a PIC project in city limits.
- Funding availability from grants or partners

Project Preparation

Project Area Evaluation

Once a priority watershed has been identified (utilizing the prioritization criteria set forth during the planning phase of the performance improvement process), then the project area evaluation is initiated.

Project area evaluation includes:

- Evaluate information related to the project area.
- Review water quality data.
- Conduct an initial project area visit.

Evaluate information related to the project area

An evaluation of the project area shall be conducted to review available data and background information before visiting a project area, or conducting a parcel inspection. Examples of data include area maps, water quality monitoring data, project area soil conditions, farm inventories, onsite septic systems in the area with associated records and/or properties served by sewers, stormwater maps, DOH shellfish areas and reports.

If the project is grant funded, consult the project scope of work and/or Quality Assurance Project Plan (QAPP). These documents specify the project components, commitments, timeline, field and laboratory methodologies to be used.

Once sufficient background information is gathered, the information should be organized into project file(s) which includes property parcel information organized by road, water quality monitoring data, maps, project QAPP, grant requirements, etc. This information will be needed during the project for the preparation of public notification, meetings, door-to-door inspections, press releases, and the final report.

Conduct an evaluation of water quality data

Gather and evaluate available water quality monitoring data for the area to determine general areas with elevated bacteria levels. Water quality data is used to determine where water quality problem areas are located.

Conduct initial project area visit (a.k.a “ground truthing”)

An initial project area visit should be conducted to determine the following:

- Identify surface waters such as drainage in roadside ditches, pipe discharges, streams, and marine water to take water samples to assist in identifying priority areas within the project area.
- Determine project boundaries and note road segments to be inspected, along with property addresses.
- Confirm storm water drainage patterns of the PIC area for sampling.
- Look for potential fecal pollution sources in the area, including pet or livestock waste, grease, and food waste.

Public Notification and Information

Public notification is important for informing and engaging Kitsap County residents about PIC projects. After the project area evaluation, water quality evaluation and initial project area visit are complete, the next step is to notify the public within the PIC boundary of the lead agency's intent to conduct a PIC project. It is also recommended to notify other local agencies like public works, cities, public utility districts, county departments etc. and explore cooperative relationships with these entities.

Public notification is accomplished using the following resources and/or methods: hosting public meetings, press releases, direct mailings to households, project fact sheets, articles in local news media and/or publications. The information presented should be direct, concise, and complete.

It should contain the following items:

-
- Why and where the PIC project is being conducted;
- Applicable water quality results;
- Who is doing the PIC project, and by what authority;
- How and when the PIC project will be conducted;
- Possible sources of fecal pollution; and
- Who to contact for answers to questions.

Examples of a Press Release and a fact sheet are found in Appendix B. A short informational fact sheet about area water quality is an effective way to introduce and provide information to residents about the project.

Public Meetings and/or OSS Workshops

Public meetings are held to launch a new PIC project, provide an update on an existing project, and/or to host nonpoint pollution workshops including; how to protect your onsite sewage system investment, livestock waste management, natural yard care, natural cleaning products and natural stormwater controls.

The public meeting is held at a convenient location, and as close as possible to the project area. The elements of the public meeting include a short presentation about the FC pollution problem, project information such as water quality data, the goals and objectives for the project and who to contact for more information. In circumstances when there will be a focus on onsite septic systems, it is helpful to include specific information about onsite septic systems in the presentation, such as types of systems, steps to take to get the most life from the system, resources available to the public, such as repair loans or inspection fee waivers.

Sufficient time should be allotted to enable the public to ask questions. Invite project partners, for instance, local Conservation District, Department of Ecology, Department of Health, Environmental Protection Agency, and the local Surface and Storm water Management agency. Members of the public that should be invited to these public meetings include residents of the project area, local government and agency representatives, the Kitsap Board of Health, and grant officers (if applicable).

Identify community groups in the project area to determine and address local concerns (e.g. Friends of Miller Bay, a local community group interested in restoring shellfish harvest to Miller Bay). It may be useful to hold your public meeting in conjunction with regularly scheduled meeting of a community group.

Field Preparation & Safety

Personal safety in the field is extremely important. Safety equipment and supplies that each field staff should carry includes cell phone, pepper spray, dog treats, protective gloves, reflective vest, identification badge, and business cards.

Inform supervisors and colleagues about field work locations. Coordinate with other inspectors in the area. Inspectors are encouraged to ask for a “ride along” if they are uncomfortable visiting a particular property alone or if they want another “set of eyes” to assess a possible problem or violation. However, there are certain circumstances when “a ride along” is not necessary, including consecutive visits (with owner/renter permission) to a property undergoing a dye test. Use your best professional judgment in determining where and when to ask for a “ride along” – safety is the first concern but financial impacts should also be considered. When conducting a site visit it is recommended to follow the tip below:



TIP: Park your vehicle in a manner that does not interfere with the movement of other vehicles and provides you with the opportunity for a quick exit (if needed).

Cut the site visit short if the homeowner shows any signs of hostility. If an individual makes threats or threatening gestures towards you, leave the property immediately. Do not inspect the property in this situation. Drive away and find a safe location to note the details on the inspection form. Inform your project lead, field supervisor or program manager immediately.

Field Equipment List

A list and description of the standard and specialized equipment necessary to conduct property inspections and investigations is located in Appendix A.

Monitoring & Identification of pollution sources

PIC programs use various types of monitoring to identify sources of pollution. Many counties have established monitoring stations to assess water quality in a watershed. Sampling routinely takes place near confluences of freshwater flows to marine water shellfish areas (shoreline surveys) and at selected upstream locations on tributaries (upland sampling). Sites with fecal coliform counts equal to or exceeding 200 cfu/100 ml for FC (or exceeding 160 cfu/100 ml for E. coli) are re-sampled to determine whether further investigation is needed to identify and correct the issue. Frequently, additional sites need to be sampled (special investigations) to determine the location of the bacterial source. If the source is determined to be caused by humans, the corrective action is handled by the lead or partnering agency.

Kitsap developed a water quality trend monitoring plan, which has been approved by Ecology. The following information regarding monitoring station locations comes from this document.

Monitoring Station Locations

The number of stations actively monitored by the Kitsap Health District varies from year to year. Detailed descriptions of each station are listed in the Kitsap water quality monitoring trend plan. Maps showing the location of trend analysis stations are provided in each annual water quality monitoring

report prepared by the Health District. Station locations are determined through review and consideration of the following:

- Geographical and hydrological characteristics of each watershed;
- Kitsap County waterbodies on the state 303(d) List;
- Water quality results and findings from earlier watershed assessment projects;
- Types, locations, and densities of land uses within each watershed;
- Locations of public parks and recreational shellfish beaches;
- Monitoring station locations from other monitoring efforts (Puget Sound Assessment and Monitoring Program, (PSAMP), Public Utility District No. 1 of Kitsap County, etc.);

Precision, comparability, and reproducibility of station locations are achieved through the identification and documentation of major landmarks and road crossings (visual and descriptive), on-water triangulation, and identification of Geographic Positioning System (GPS) coordinates of latitude and longitude. The Health District boat is equipped with a Garmin GPSMAP unit to locate marine water stations in a consistent manner. Detailed sampling station lists, maps and descriptions ensure consistency in locating the stream stations.

Marine Water Stations

The majority of marine water stations are located in near shore areas adjacent to potential sources of pollution such as

- Stream mouths;
- Major stormwater outflows;
- Wastewater treatment plant outfalls or combined sewer overflows; and
- Marinas.

The purpose of siting marine water stations in these near shore areas is to assess water quality and public health impacts to the area's most accessed by, Kitsap County residents and visitors. Because tide changes mix marine waters, and water quality problems from one watershed may affect the water quality of another, several offshore marine water stations have also been established to provide background data for each major water body. This data compliments the ambient monitoring information currently collected through PSAMP.

Stream Stations

Most of the stream stations are located at, or near, the mouths of streams prior to their discharge to the marine environment. The purpose of siting stream stations at the mouths is to assess the cumulative impacts of the stream basin on overall stream water quality.

The remaining stream stations are sited at either strategic segment locations upstream of the mouth station and/or near the headwaters of the stream. Segment stations help to assess an individual segment's contribution to overall stream water quality and help to separate and identify pollution problem areas. Nearly all of the stream stations are located in public access areas, such as road right-of-ways, to ensure unlimited and continued access to these sites over the long term.

Shoreline Surveys

A shoreline survey is the inventory and bacterial assessment of all flowing discharges to the shoreline within a project area. Most project areas require both wet and dry weather shoreline surveys. Wet

weather season surveys are conducted from Oct. 1 through April 30. Dry weather season occur surveys from May 1 through Sep 30.

Dry weather events can identify problems in areas where storm water masks FC sources or where residences are only occupied in the summer. Wet weather assessments can identify OSS failures caused by high seasonal groundwater and surface water drainage issues. Wet weather conditions are met when water is flowing off parcels and stormwater is flowing in roadside ditches or storm systems.

The following checklist will help staff prepare and gather the necessary equipment and supplies to conduct shoreline surveys

Shoreline Survey field preparation checklist

__ Check tides (<http://www.protides.com/washington>) and weather conditions.

__ Determine access location(s) to shoreline and length of shoreline to be surveyed.

__ Determine whether you will need a shoreline survey partner. Partners are recommended when the area is unknown or unusually soggy, muddy or marshy or when distances or tasks can be more efficiently conducted with a partner. Always err on the side of caution, while using resources carefully and wisely. When working in pairs, park one vehicle at the “start” access point and one at the “end” point.

__ Estimate the number and type of samples to be collected. Become familiar with the sample holding time, and be sure that the samples will be delivered within the required time.

__ Gather field supplies:

- Personal protective equipment: boots, rain gear, hat, gloves.
- Sampling wand*, bottles, cooler, ice packs,
- Field notebook pen(s) (a permanent marker) or pencil(s), wrist watch or stop watch
- GPS, camera, cell phone
- First Aid Kit & hand sanitizer
- Fact sheet about the project/shoreline area being surveyed
- Business cards, identification badge
- Dog treats, pepper spray

*sampling wand is made from an extendable paint pole with a cut Nalgene bottle attached at the end with electrical tape that holds a 100 ml sample bottle.



__ Work out a sampling strategy and nomenclature system for labeling the samples ahead of time.

__ In the office, map the “start” and “end” access points at the shoreline. Visit these sites to determine accessibility. These points can be a public access area like a public boat launch, or a property parcel where consent has been granted to access the shoreline. The County’s Assessor database and Washington State Department of Ecology’s shoreline aerial photos can help to determine potential public access points.

There are several ways to name the sampling stations. It is important to choose carefully because you will need to track data collected from each sampling station over the course of the project. Examples from previous shoreline surveys are shown in the following table.

Project Area	Naming Description	Sampling Station Identifier
Hood Canal	Hood Canal may be abbreviated HC followed by sequential number	HC 1,2,3....
Murden Cove	MUR followed by sequential number	MUR 1, 2, 3

Conducting the shoreline survey

When you arrive at the “start” access point, park your vehicle safely and in a manner that will not obstruct traffic. Place your business card, with cell phone number, either on the dashboard or inside the driver’s side window, to provide contact information. Inspectors are responsible for knowing the rules for property access and consent.

Proper technique for collecting, labeling, and transporting samples is critical to ensure that sampling data is valid. To be representative, water samples should be collected from free falling surface water flow. Sediments and surface bacteria can skew results.

Collecting water samples:

- Wear nitrile gloves if you are concerned for your safety, for example, if you detect odor or the appearance of potential sewage or other fecal bacteria source.
- Collect water samples from all flowing discharge points including storm water outfalls, yard drains, bulkhead drains, pipes, drainage ditches, seeps, and sheet flow.

NOTE: If necessary, a composite sample may be collected when there are multiple small discharges that appear to emanate from one parcel and/or are close together, (e.g. a bulkhead that has several discharge points but clearly all come from the same property.)

Sometimes discharges are too small to sample without capturing underlying sediment. This is not a significant problem - simply try to minimize the amount of sediment collected.

- Note any unusual odors, matting, vegetative growth, laundry lint, food waste, temperature, animal tracks, animal waste, or any other characteristics that may indicate a sewage or laundry source at or near the water sample. Document these conditions in the field notebook.
- Wash hands and/or use hand sanitizer as soon as possible after sampling and before you eat.

Labeling and Recording samples:

- Use a black permanent marker to label the 100 milliliter sample bottle with the sample identifier, date, and time the sample was collected on the label.
- Clearly record the sample name, collection time, location, drainage size, pipe diameter, and pipe material (if applicable) in the field notebook.
- Record detailed parcel-oriented sample descriptions in the field notebook so that outfalls can be re-sampled by different staff, if necessary.
- Note any characteristics that will help distinguish the property when accessed from upland so that the outfall can be easily found for resampling and the associated property address can be identified, if necessary.
- Record latitude and longitude of the discharge with a GPS unit and take digital photographs.
- Photographs are helpful for re-identification of sample stations during subsequent surveys.
- Generally, it is most efficient to have one person collect the water sample and photo and the other record field notes and GPS coordinates.
- Enter the sample information in the field notebook.
- Print the Project Name at the top of the page, the start/end locations, include the date, staff initials and the weather and tide conditions. An example of the field notebook entry is shown below:

SAMPLE ENTRY IN FIELD NOTEBOOK

Hood Canal Shoreline Survey Staff Initials DATE					
Weather conditions, <i>e.g. Rain, Temp 50F, wind S at 10 mph</i>					
Start: Address and/or landmark and approximate distance					
Sample ID	Time	Latitude	Longitude	Description	Comments
HC 1	10:15	xx.xxxxx	xx.xxxxx	6 in black flex in bulkhead	Matting at base of bulkhead
HC 2	10:25	xx.xxxxx	xx.xxxxx	Beach seep	Raccoon tracks
HC 3	10:43	xx.xxxxx	xx.xxxxx	4 in pvc pipe under dock	Suds
HC 4	11:02	xx.xxxxx	xx.xxxxx	Stormwater diffuser on hillside	

- Record the GPS coordinates at the sampling location. Enter the sample identifier into the GPS unit. This information can be downloaded to the computer at the office, and added to a parcel map to match the sample site to a property parcel if needed. Entering the sampling station to the GPS also facilitates relocating the sample site on subsequent shoreline surveys.
- Take a photograph of the sampling location. Be sure to include a distinguishing feature in the area that will help identify the location, for example, if the sample location is a beach seep next to a house, be sure to include a portion of the house in the photograph. In some instances more than one photo may be necessary.

Transporting samples

When water samples are collected they should be transported in coolers with ice packs partly submerged in water. The recommended temperature, according to *APHA Standards Method* is 10 degrees Celsius.

Chain of custody

Kitsap Public Health works with an accredited contract laboratory to have water samples analyzed. Following the collection of all water samples, a chain of custody form must be completed. Check the QAPP to verify whether samples should be analyzed for FC or EC. A chain of custody form is also submitted when additional analytical sampling is needed, e.g. ammonia, nutrients, etc.

Sample results and data organization

Water quality sample results are reported by the contract laboratory and sent to staff either electronically or via hard copy. Sample results will be reported according to the turnaround time checked on the chain of custody, and can range from 24 to 48 hours.

Water quality sample results are entered into a water quality database. Kitsap's water quality database is a Microsoft Access database developed by Kitsap Public Health Information Technology and water quality staff. A screen shot of the entry page is shown in Figure 1.

There are a variety of databases and/or spreadsheets that can be used to record and organize data. Kitsap chose this tool because it allows for the PIC program to record and report on its wide variety of water quality monitoring and PIC projects.

Figure 1. Water quality database entry page for shoreline survey results

The screenshot displays the 'WATER QUALITY MAIN MENU' interface. At the top, there are tabs for 'Stream', 'Marine', 'Lake-Swimming Beach', and 'Shoreline'. The 'Shoreline' tab is active. The main form includes fields for 'Date' (09/09/2010), 'Staff1' (EMC), 'Staff2' (AF), 'Tide' (Low/High), 'Time', and 'Feet'. There are also buttons for 'Import Twiss Data', 'Edit a specific visit', 'Result Date' (09/10/2010), 'QA completed', 'Print QA/QC', and 'Delete Visit'. Below the form is a table with the following data:

Station	Event	Dup	Time	FC	E. Coli	Temp	pH	Tide Cycle	Notes
COL27	Shore	<input type="checkbox"/>	11:26	190					
COL28	Shore	<input type="checkbox"/>	11:30	70					
COL29	Shore	<input type="checkbox"/>	11:38	60					
COL29	Shore	<input checked="" type="checkbox"/>	11:38	80					
COL30	Shore	<input type="checkbox"/>	11:45	60					
COL31	Shore	<input type="checkbox"/>	11:49	40					
COL32	Shore	<input type="checkbox"/>	11:55	120					
COL33	Shore	<input type="checkbox"/>	12:00	340					
COL34	Shore	<input type="checkbox"/>	12:03	100					
COL35	Shore	<input type="checkbox"/>	12:07	50					
COL36	Shore	<input type="checkbox"/>	12:29	120					
COL37	Shore	<input type="checkbox"/>	12:35	240					
COL38	Shore	<input type="checkbox"/>	12:41	5					
COL39	Shore	<input type="checkbox"/>	12:45	40					
COL39	Shore	<input checked="" type="checkbox"/>	12:45	70					
COL40	Shore	<input type="checkbox"/>	12:46	5					
COL41	Shore	<input type="checkbox"/>	12:50	760					

Water quality data for monitoring of lakes, beaches, marine monitoring, stream trend monitoring, and shoreline surveys are entered into this database.

Confirmation sampling

Kitsap Health District re-samples all shoreline survey discharges with FC results exceeding 200 FC/100ml or EC results exceeding 160 EC/100ml to confirm whether or not they may be categorized as "hot-spots".

Re-sampling should occur as soon as possible. Samples must be collected within the same sampling season, e.g. if the samples were collected as part of a wet weather event, then confirmation samples must also be collected during the wet season. This is required because a discharge can be a “hot spot” during the dry season, or during the wet season, or during both seasons.

Once three samples are collected, the geometric mean is calculated. When the geometric exceeds 200 FC/100ml, or 160 EC/100m, these locations are categorized as “hot spots” and investigated.

Typically there will be several confirmed “hot spots” within a project area. It is best to rank these according to the geometric mean. Initiate investigation of those hot spots with the greater geometric means first.

An investigation package or file is assembled for each hot spot. This file includes photos, maps, segment sampling when applicable, and building and OSS records for nearby residences. Potential fecal pollution sources are evaluated and identified through property inspections and segment (or impact) sampling. Starting at the discharge, the flow is segmented and samples collected uphill toward the source of the flow.

Kitsap uses the following “hot spot” response process when investigating hot spots.

STEP 1	Confirm “hot spot” during dry or wet season by collecting a minimum of three samples for GMV calculation.
STEP 2	Create map of “hot spot” area with 200 foot buffer.
STEP 3	Conduct reconnaissance to assess # of homes, proximity to drainage, presence of livestock, possible access points for segment sampling, etc.
STEP 4	If # homes ≤ 10 , review onsite sewage system (OSS) records for all homes and inspect them.
STEP 5	<p>If # homes > 10, conduct segment sampling. Collect minimum 3 sampling events and calculate geometric mean for each segment. Note that segment sampling must occur during the same season that “hot spot” was proved.</p> <ul style="list-style-type: none"> ✓ if drainage is “hot” throughout, conduct OSS record search for all homes within 200 feet of the segment and inspect according to matrix below. ✓ if drainage is not “hot” throughout, conduct OSS record search for all homes within 200 feet of the “hot” segments, then inspect all homes according to matrix below.

Property Inspection Prioritization Process

Consider Distance of OSS or Livestock Activity to Surface Water as the most Critical Factor

PRIORITY 1	Homes with no OSS records and livestock present.
PRIORITY 2	Homes with no OSS records
PRIORITY 3	Homes with gravity OSS ≥ 25 years old
PRIORITY 4	Homes with gravity OSS and livestock present
PRIORITY 5	Homes with gravity OSS 10 – 24 years old
PRIORITY 6	Homes with alternative OSS with deficient report
PRIORITY 7	All other gravity OSS, and homes with alternative OSS but no current maintenance contract.
PRIORITY 9	Homes with alternative OSS and current maintenance contract

Pierce County collects data on a variety of water quality parameters. Their PIC manual states--*Fecal coliform data interpreted outside the context of water quality can lead to a limited understanding of potential impacts. Additional data parameters such as temperature, pH, and conductivity provide a more robust interpretation of the sample. Pierce County has invested in portable water quality probes which have facilitated their collection of accurate water quality data.* A description of these additional parameters from Washington State Department of Ecology follows:

Water Quality Parameter Interpretation¹

Temperature affects the solubility of oxygen in water, the rate of photosynthesis by algae and higher plants, the metabolic rates of aquatic organisms, and the sensitivity of organisms to toxic wastes, parasites, and diseases. Many of the physical, biological, and chemical characteristics of a surface water system are directly affected by temperature. Fecal coliform bacteria are considered mesophiles and as such their optimum temperature range is generally considered to be in the 10-40° C range.²

pH, or potential for hydrogen, is a general measure of the acidity or alkalinity of a water sample. The pH of water, on a scale of 0 to 14, is a measure of the hydrogen ion concentration. A higher pH means there are more hydronium ions available. Too low or too high of a pH can inhibit bacterial growth. The preferred range of pH for many aquatic organisms, including most fecal coliform bacteria, is 6.5 to 8.5. Changes in pH can be caused by atmospheric deposition, surrounding rock, and wastewater discharge. Solubility and bio-availability are also determined by pH. Generally speaking, a lower pH will increase the solubility of such things as oxygen, metals, and nutrients. As these constituents are dissolved in the water, they become more available to aquatic organisms.

Because polluted conditions are typically correlated with increased photosynthesis in stream conditions, pollution may cause a long-term increase in pH. A common concern is a change in natural pH levels caused by the discharge of municipal or industrial effluents. Most effluent pH is fairly easy to control, and all discharges in Washington State are required to have a pH between 6.0 and 9.0 standard pH units, a range that protects most aquatic life. Therefore, although these discharges could have a measurable impact on pH, it would be unusual (except in the case of treatment plant malfunction) for pH to extend beyond the range for safety of aquatic life. However, due to its influence on the availability and solubility of all chemical forms in the stream, small changes in pH can have many indirect impacts on a stream.

Conductivity is a measure of the ability of water to pass an electrical current. Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate, and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron, and aluminum cations (ions that carry a positive charge). Organic compounds like oil, phenol, alcohol, and sugar do not conduct electrical current very well and therefore have a low conductivity when in water. Conductivity is also affected by temperature: the warmer the water, the higher the conductivity. For this reason, conductivity is reported as millisiemens/centimeter (mS/cm) at 25 degrees Celsius (25° C).³

¹ Washington State Department of Ecology, A Citizens Guide to Understanding and Monitoring Lakes and Streams

² Dictionary of Biology, Definition of Mesophilic, <http://www.encyclopedia.com> (August 1, 2012).

³ United States Environmental Protection Agency, Water: Monitoring & Assessment – Fecal Bacteria. <http://water.epa.gov/type/rs/monitoring/vms511.cfm> (August 1, 2012).

Property Inspections

The purpose of property inspections is to provide property owners with education, information and technical assistance related to controlling various fecal pollution sources such as onsite septic systems, pet waste, run-off from livestock pastures and any other site specific practices as well as identify sources of pollution following shoreline surveys. Additionally financial assistance information such as onsite septic system loans and cost share for livestock best management practices are also provided during property inspections.

Property Parcel Inspection Preparation

Before conducting property inspections, staff prepare PIC inspection forms, assessor records, OSS records, applicable OSS monitoring and maintenance (M&M) records, and other correspondence for each individual property parcel in the project area before the property inspections.

In some cases, project areas include residential properties served by sewer. Sewer billing departments can confirm properties served by sewer. Inspectors may make a courtesy site visit to sewer properties and let them know about the FC pollution problem and potential sources. Look for potential FC sources including sewage leaks, pet and livestock waste, and grease and food waste. Conservation Districts may be able to provide information about farms in the project area.

Property parcel inspections consist of:

- Contacting the property owner/occupant to conduct the informational interview.
- Obtaining access and consent to perform a field inspection of the property including an inspection of the onsite septic system and animal waste management practices.
- Evaluating discharges leaving the property during wet weather conditions.
- Making any site specific recommendations to reduce stress to the onsite system.
- If a problem is suspected, the OSS is tested, using a tracer dye to determine if the system is failing.

Conducting the property inspection

Although Health District inspectors have the legal right to access a property, they follow the Property Access and Consent Policy (see Appendix F).

Health Inspectors have the right to approach a property via the normal access route to the front door. When there is "No Trespassing" sign, inspectors leave a door hanger at a gate or fence post. Door hangers should not be placed in or on mailboxes, since mailboxes are legally reserved for U.S. Postal Service only.

When conducting the property inspection it is very important that the inspector be confident, cordial, well-organized, and professional. The job of inspecting private properties to identify pollution sources is much easier when the public perceives the inspector as an objective and trustworthy professional. Developing a good relationship and trust with the owner/occupant is the key to a successful site visit.

When approaching a property, it is recommended to call out a friendly greeting and enter a property along the main access route to the front door. Following no response at the front door, it is also acceptable to follow the main access route to the back door. Call out a greeting in case someone is working outside and knock on a side or back door, provided this does not infringe on the curtilage of the

property. Curtilage is the land immediately surrounding and associated with the home and is described in the next section that addresses private property access.

When collecting samples at a property, PIC staff will either have the property owner's permission to sample, or the sampling area is in a road right of way or some other public area that does not require permission. Photographs should also be taken at the same time that samples are collected and/or to document physical observations.

Handling Dogs

Dogs can be a major threat in the field. PIC staff carry both dog treats and pepper spray when doing property inspections.

When entering a property, look for signs of dogs, such as barking, doghouses or leashes. Stay in the car when dogs are present to assess whether the dogs are friendly or aggressive.

Stay near the car with the door open for a minute or rattle a fence or gate and/or call out your name and affiliation several times to draw attention to yourself and listen for dog barking. If you feel confident that there is no immediate threat, continue to follow the main path to the front door.

If there is a dog on the property, use your best professional judgment to decide if the dog is friendly or not. If the dog is friendly, continue with your approach to the front door. If not, wait a few minutes to give the resident time to notice the dog barking and come to the door. Note the address of the home, and if possible, the homeowner's name, and contact the homeowner/occupant by phone to schedule an appointment. You can also leave your business card or door hanger at the door or gate with the date and time you were on the site.

Door Hangers

When property owners/occupants are not home, inspectors leave door hangers with a brief description for the purpose of the visit and their contact information.



Keep track of address, location, and contact information for properties that have received door hangers. PIC inspectors should make three attempts to contact each property owner/occupant by door hangers left at the door. One of these attempts should be on a Saturday. Note dates and results of contact attempts on the PIC inspection form. For complaints the information should be entered on the complaint form.

Meeting the owner/occupant

If the owner or occupant (must be over 18) is there, provide a brief introduction about your visit, whether it be the reasons for the PIC project, the problem alleged in a public complaint, or deficiencies noted in the certified pumpers or maintenance specialists report.

The PIC inspection form includes a checklist of topics that the inspector should address during the property inspection. Using this form, provide the owner or occupant with a copy of their OSS records (when available). This is used to provide an overview of their system. Ask whether they have been experiencing problems with odors, soggy spots, or backups. Make site-specific suggestions to protect their OSS investment (i.e. conserve water, route surface or ground water away from components, reduce waste strength, do not use harmful chemicals, and prevent physical damage).

It is important that the inspector walk over the drainfield during PIC site inspection. Use this as an opportunity to educate the owner/occupant about the signs of septic system problems/failure, as well as what a properly functioning drainfield should look like.



For unknown OSS systems, if the owner/occupant is aware of the approximate location of the OSS be sure to make a rough sketch of this on the PIC property inspection form. This information will be added to Kitsap Public Health's OSS database for Monitoring and Maintenance reporting requirements. The 2020 target for OSS in the Puget Sound Action Agenda aims to document all OSS in marine recovery areas and other designated areas with 95% of systems current with inspections and all deficient systems repaired or replaced.

This is a good time to identify whether the property is upland, streamside, on a marine shoreline, drains to storm water systems, or has potential FC sources. The information from the property inspection should be recorded on the PIC inspection form. Following the inspection, PIC staff will assign a rating to the OSS. Table 1. provides the criteria for rating the onsite septic system and associated actions.

Property parcels where the owner/resident denies access to inspect the drainfield are rated "Denied Access." These properties are evaluated by reviewing OSS records, noting other potential FC sources, and determining the proximity of surface waters to the property. Those parcels draining to surface waters are investigated during wet weather conditions by collecting FC or EC water samples leaving the property. In the event the water samples show elevated bacteria levels that are impacting surface water, the inspector will contact the property owner to request a dye test. In the event the owner remains unresponsive, Kitsap Public Health will pursue obtaining a search warrant. This is coordinated with the Kitsap County Prosecutor's office.

Table 1. Rating classification for OSS inspection results

Rating Classification	Criteria for Meeting Classification	Action
No Apparent Problems	<ul style="list-style-type: none"> Completed/signed Sewage Disposal Permit on file at Health District, or provided by owner at time of inspection and entered into our systems by support staff. No illegal repairs or alterations have been performed on OSS. All applicable setbacks and conditions in effect at the time of permitting are in place. 	None
No Records	<ul style="list-style-type: none"> No completed/signed Sewage Disposal Permit on file at the Health District, or in possession of the owner/occupant. No Concern, Suspect or Failure conditions were observed. 	None
Concern	<p>Concerns include, but are not limited to:</p> <ul style="list-style-type: none"> System with no records and drainfield less than 50 feet from surface waters or wells Improper use of designated reserve area Vehicular traffic and/or pavement on OSS components Roof drains or other drainage/infiltration systems potentially impacting the OSS Unpermitted expansion or modification of existing structure(s), or addition of new structures, or recreational vehicle connections, that impacts the OSS Unpermitted work conducted on the OSS Excavation or excess fill within the OSS area, or a cut down slope of the OSS that has the potential to impact the performance of the OSS. 	<p>For unpermitted alterations, expansions, repairs, connections or new construction, consult with Program Manager regarding enforcement options.</p> <p>No Logger flag without Program Manager approval</p>
Suspect	<ul style="list-style-type: none"> Drainfield area is saturated. Collected water sample results from bulkhead drains, curtain drains, or other pipes or seeps, at or above 500 FC/100 ml (or 406 EC/100ml) and a positive non visual dye test confirmed by Ozark Underground Laboratories Collected water sample results from bulkhead drains, curtain drains, or other pipes or seeps, less than 500 FC/100 ml (or 406 EC/100ml) and positive visual dye-test. 	<p>Mail Suspect Letter</p> <p>Follow up with wet season dye trace</p> <p>Flag Logger (Other)</p>
Failure	<ul style="list-style-type: none"> Sewage on the surface of the ground Sewage discharged directly to surface water or upon the surface of the ground unless the discharge is under permit from WA DOE. Sewage backing up into, or not draining out of a structure caused by slow soil absorption of septic tank effluent. Sewage leaking from a septic tank, pump tank, holding tank, or collection system. Any component of an onsite sewage system or public sewer connection found to be broken, in disrepair, or not functioning as intended. Inadequately treated sewage effluent contaminating ground or surface water. Collected water sample result from bulkhead drains, curtain drains, or other pipes or seeps, at or above 500 FC/100 ml (or 406 EC/100ml) and positive <u>visual</u> dye-test results. Cesspools or seepage pits where evidence of ground water or surface water quality degradation exists, or inadequately treated effluent contaminating ground or surface water Non compliance with standards stipulated on the permit, with the regulations in effect at the time the system was approved for use, or with the regulations in effect at the time the structure was constructed or modified. Straight discharge (greywater or blackwater) from any indoor plumbing, including recreational vehicles, is observed and documented 	<p>Enforcement</p> <p>Flag Logger (Failure)</p>

Assessment of Non-OSS FC Pollution Sources (PET WASTE)

State and local regulations require that pet waste not be discarded in areas where it may pollute surface or ground water. Kitsap County's solid waste regulations require that pet owners pick up pet waste at least weekly, or more often as necessary, double bag, and dispose in a sealed trash container. During PIC property inspections, staff review the proper disposal of pet waste with owners (as it applies). Pet waste information may also be helpful to provide to residents.

Assessment of Non-OSS FC Pollution Sources (FARMS)

Kitsap Public Health's solid waste regulations (Kitsap County Board of Health Ordinance 2010-1 Solid Waste Regulations) require that animal waste, which includes manure from livestock, be managed properly. According to the solid waste regulations, "animal manure shall not be deposited, or allowed to accumulate, in any ditch, gulch, ravine, river, stream, lake, pond, marine water or upon the surface of the ground, or on any highway or road right of way, where it may become a nuisance or menace to health or pollution of water." It is recommended to start agricultural PIC inspections early in a project since the investigation and correction can be time consuming and challenging.

Counties are responsible for enforcing ordinances related to critical or sensitive areas as required under the state's Growth Management Act. Kitsap Public Health has an interlocal agreement and memorandum of understanding for agricultural and livestock sites with the Kitsap Conservation District (KCD). KCD often works as a partner in PIC projects. They conduct an agricultural inventory and generate a list of high priority farms for investigation.

KCD offers and provides free technical assistance for animal waste management and other agricultural challenges. KCD provides information for best management practice cost shares and techniques for livestock and mud management. The Washington Conservation Commission, National Estuary Program and other programs provide financial assistance to help landowners implement water quality best management practices.

PIC property inspections involving farms

Conduct initial project area visit

The success of animal waste management projects can be greatly enhanced through early determination of extent and type of animal waste present in the area of concern. The goal is to assess the size of the problem and the likelihood it will impact water quality and public health.

An initial project area visit should be conducted. It is used as a tool to determine the following:

- Identify surface waters (drainage in roadside ditches, pipe discharges, streams, and marine water) for FC “impact” monitoring to assist in identifying priority areas. Determine project boundaries and note road segments to be inspected, along with property addresses.
- Determine/confirm storm water drainage patterns of the PIC area.
- Look for potential fecal sources in the area, including pet or livestock waste, grease, and food waste.

Contact local conservation districts, Health, and Ecology to gather any available farm inventory or ranking information. Conservation District agricultural inventories are performed using windshield surveys, ground observations and aerial photography. Site conditions are noted including: number and type of animals, acreage, pasture conditions, waste management, livestock confinement, barns and outbuildings, topography and proximity of agricultural land use activity to surface waters. A 1-5 rating scale, based on potential to pollute, is used to evaluate properties. Parcels ranked “1” and “2” are considered high priority.

1: High Priority	Pasture in poor condition. Livestock have access to surface water and/or there is a high probability of contaminated runoff due to topography sloping toward water body. Visual evidence of contamination problem.
2: Medium-High Priority	Pasture in poor condition. Some reason to believe degraded conditions are seasonal or could get worse seasonally. Some areas on property reflect higher levels of management
3: Medium Priority	Pasture is in fair condition. Open water in vicinity of the property but with limited access or evidence of use. A moderate probability of runoff.
4: Medium-Low Priority	Pasture in good condition. No open water in vicinity and/or a low probability of contaminated runoff reaching surface water.
5: Low Priority	Visual inspection from roadside indicates historic or recent past farming activity. Pastures not utilized by livestock. No livestock currently on site. Old barns and/or farm equipment evident.

Project Partnerships

Partnerships with local agencies and community groups can increase project effectiveness. Many state and federal funding sources encourage project partnerships. Project partners work together to determine potential animal waste sources and develop effective parcel-specific educational information (e.g. natural landscaping). Potential partners for pet waste problems include Washington State University County Extension offices, University of Washington SeaGrant, local stormwater utilities, and local Health District solid waste department.

Potential partners for livestock or agricultural animal waste are local Conservation Districts, Washington Department of Agriculture, Washington State University Extension offices, University of Washington SeaGrant, and local storm water utilities.

Local Conservation Districts are valuable resources for agricultural waste management. They can conduct prioritized farm inventories in the project area, contact high priority farms, help develop investigation and correction strategy, conduct project area outreach, and provide free technical assistance to plan and install Best Management Practices (BMPs). Conservation Districts also facilitate available BMP funding programs.

When performing PIC inspections involving agricultural properties follow the same procedure as described in conducting the property inspection section, page 16, but add the following items:

__Identify the property parcel boundaries (with the owner's permission) to document and sample any flowing surface waters that leave the property.

__Photograph potential fecal pollution sources to the sampling points such as:

- Accumulated animal waste (pets and livestock);
- Non-vegetated, heavily used or muddy pastures or animal holding areas draining to surface waters;
- Animals with uncontrolled access to surface waters;
- Discharge pipes or ditches;
- Stormwater systems; and
- Inadequate grease or food waste management which can attract wildlife.



__Include a sketch on the PIC inspection form, with a map showing the sampling locations.

Include information such as a map or sketch of surface waters marine water, lakes and ponds, streams, wetlands, and storm water originating on or running through or contiguous to the parcel; outfall

material and diameter; number and locations of animals or birds at time of inspection; animal waste observed; curtain drains or outfalls to surface water; stormwater system components; stream access points for livestock; fencing.

__Collect at least three (3) water samples from the same location(s) on different days to best represent field conditions. Sampling during wet weather conditions is recommended.

When the geometric mean value (GMV) for these samples is equal to, or exceeds, 200 FC /100 ml or 160 EC/100ml, across the property, FC source correction will be needed.

Inform the owner/resident of the fecal pollution and require that they remediate the problem by working with the local conservation district to help them develop and implement a waste management plan. Document this information on the PIC inspection form. Ask them if you can have a Conservation District representative contact them via telephone and/or email.

When Skagit County finds an obvious and serious pollution problem during a site visit to a farm, inspectors require that the property owner implements a short term solution to abate the problem.

- For livestock with unfettered access to water courses, the landowner can be required to move the animals to another location temporarily or put up emergency exclusion fencing.

In the event the owner/resident refuses assistance from the local Conservation District, and/or does not want to address/correct the fecal pollution issue, PIC staff will need to take enforcement action and utilize appropriate local legal authority. If the county doesn't have legal authority they should contact the Department of Ecology.

Assessment of Non-OSS FC Pollution Sources (Wildlife)

Wildlife can be a serious FC source, especially in areas where outdoor pet feeding occurs. PIC staff should inform residents about this issue, and encourage them to keep sources of food inaccessible to wildlife. For example, during a shoreline "hotspot" investigation, PIC staff found a large raccoon latrine adjacent to a shellfish growing area. Washington State Department of Fish and Wildlife has information on how to safely remove raccoon latrines.

Investigate discharges at least three times, ideally within a one month period, from a property where human activity is attracting wildlife. Look for grease and food waste management or evidence of feeding.

Kitsap enters the information from the property site visit, including the rating into a PIC database. An example of Kitsap's PIC property inspection form is found in Appendix C.

The PIC database was developed to track PIC inspections and associated information. Completed inspections are entered into the database. It is a useful tool that provides information for follow up and reporting.

Correcting Pollution Sources

Partner collaborations and referral

One of the keys to a successful PIC program is actively collaborating with a variety of partners. Kitsap Public Health's partners include the Kitsap Conservation District, Kitsap County Public Works Surface and Stormwater Management Program, Washington State University Extension, a variety of local volunteer groups and non-profit agencies, the University of Washington and local municipalities.

Kitsap has an interlocal agreement with the Kitsap Conservation District that outlines the scope of the work to be completed during various projects. This agreement also includes a reporting process so that the Health District and Conservation District continue to communicate and report on the progresses made during PIC project.

It is important for a county or tribal agency that takes the lead on a PIC program to see that referrals are followed up with corrective action in a timely manner. An example of a site inspection protocol that describes the referral process between Skagit County Public Works and the Skagit Conservation District is available in Appendix G.

Education and Outreach

Kitsap PIC staff perform most of the education and outreach for projects during door to door property inspections. Staff utilize the PIC property inspection form to serve as a checklist/reminder regarding the topics to cover. The topics presented are tailored to site specific practices, e.g. picking up pet waste, natural landscaping for onsite septic systems, handling runoff from roof drains, etc.

Follow-up Mailings to Landowners

Immediately after a sanitary survey visit, Pierce County field staff send a Thank You Letter expressing the Health Department's gratitude for the property owner's participation and sampling results. Once all the surveys in a drainage or neighborhood have been completed, a Summary Letter is distributed to all property owners in the survey area, outlining the number of total surveys completed, the number of failures identified, and any updates on water quality in the area.

Public meetings are another method for community outreach. For example, onsite septic system workshops, Low Impact Development workshops, and conservation district annual plant sales can provide opportunities to educate landowners about how to prevent pollution.

Project specific fact sheets can be developed and disseminated at public meetings and property site visits.

Press releases to local media are issued to launch projects, provide updated information, and advertise public meetings.

Kitsap Public Health staff also serve on an education committee comprised of partner agencies. These include Kitsap Public Work's Surface and Stormwater program (SSWM), WSU extension, and Kitsap Conservation District. This group provides information in a variety of forms to the public. For example, the group publishes newsletters sent to particular watersheds describing projects in the area and provides information about a variety of water quality topics.

Technical and Financial Assistance:

Kitsap Public Health staff can provide technical assistance to property owners regarding the mitigation of a variety of fecal pollution sources. The most common assistance is provided to property owners with onsite sewage system issues. Typically prior to initiating enforcement actions, PIC staff can work with property owners to assist with identifying the cause(s) of the septic system problem and offer suggestions for mitigation. Also, when a Notice and Order to Correct Violation (NOCV) letter has been issued, PIC staff will work with the owner to ensure that the repair process remains on track and the owner has the information and resources to comply with the order and correct the problem.

Additionally, financial assistance information is provided to residents by PIC staff during the site visits as well as in cases when enforcement action has been initiated.

Craft3 is a non-profit community development financial institution with a mission to strengthen economic, ecological and family resilience in Pacific Northwest communities. They do this by providing loans and assistance to individuals who may not have access to financing. One of the products Craft3 offers are low interest loans to residents of Kitsap, Mason and Jefferson counties for the repair and/or replacement of onsite septic systems. Some counties manage their own low-interest loan programs. Additional financial assistance may be available to qualified residents through the US Department of Agriculture, Indian Health Service and in Kitsap County a local Self-Help program.

Kitsap Public Health's experience in doing PIC work has shown that often residents are unable to make repairs to their septic systems for financial reasons. Low interest loan programs offer a valuable resource to residents that they otherwise may not have.

Enforcement (local authority)

The following tools are used by Kitsap Public Health when enforcement actions are necessary.

Notice and Order to Correct Violation (NOCV) Letter

Kitsap's PIC staff will write and issue a Notice and Order to Correct Violation (NOCV) letter when conditions exist that are in violation of either the onsite sewage system and/or solid waste regulations. The content of a written NOCV must conform to items described in either Kitsap Public Health District's Board of Health onsite sewage system or solid waste ordinances.

For a failing OSS, the NOCV requires the owner/operator to contact a licensed designer or professional engineer within an appropriate time period - typically 30 days, although a 7 or 14 day time period may be used in cases where there is a threat to public health, (e.g. surfacing sewage). PIC staff may issue a pump-out order for properties with failing OSS, as part of the NOCV. A pump-out order means that the tank is pumped as often as is necessary to keep sewage off the ground surface and from backing up in the residence. The owner/occupants are required to conserve water to prevent untreated sewage from surfacing and flowing into surface, ground or into storm water.

The NOCV must be served on the person to whom it is directed by mailing the order via certified and regular mail to the individual's last known address. An example of an NOCV is found in Appendix F. After the deadline specified in the written notice has been reached, the status of the violation must be determined. If a violation still exists, other enforcement options may be appropriate. Under normal circumstances, failure to comply with an NOCV is followed by a Notice of Civil Infraction (ticket).

Notice of Civil Infraction (Ticket)

The notice of civil infraction procedures, also known as the "ticket writing" procedures, are referenced in Section 19(4)(2) of the onsite sewage regulations and Section 950(6)(b) of the solid waste regulations and described in Chapter 7.80 Revised Code of Washington (RCW), Civil Infractions. An example of a completed ticket is provided in Appendix F.

In most cases, tickets are issued following failure to comply with the NOCV. However, an NOCV is not required prior to issuing a ticket. A ticket can be issued to a defendant during the initial site inspection or any other time the inspector has reasonable cause to believe that the person has violated the regulations; typically in a manner that is egregious, for example, piping surfacing sewage effluent away from the drainfield and into a ditch, or surface water.

Dismissal Order

Kitsap County informs the defendant that the ticket can be dismissed if the infraction is corrected prior to the court date. The court evaluates reduced fee requests, as appropriate.

The inspector may dismiss any ticket pending against a first time violator if the violator complies with Health District's NOCV prior to the court date. A Stipulated Order can be filed with the court prior to the court date, in which the defendant agrees that the violation was committed and agrees to a set of required conditions.

Search Warrants

Kitsap County can obtain an administrative search warrant to conduct a dye test of an OSS if data shows the OSS may be polluting fresh or marine waters of the state. Administrative search warrants to address suspected OSS failures are only used after all other options are exhausted. The decision to pursue an administrative search warrant is made in coordination with the Program Manager, Environmental Health Director, the Health Officer, and the Kitsap County Prosecuting Attorney's Office. A description of the administrative search warrants follows, and is taken from the Private Property Access and Consent Policy found in Appendix F.

Administrative Search Warrant:

State and local agencies are allowed to conduct administrative searches when implementing their civil enforcement authority, where specifically authorized by statute (Chapter 70.118 RCW).

The local health officer may apply for an administrative search warrant to identify failing septic tank drainfield systems. The administrative warrant application may be based on specific evidence of an existing violation or on a general inspection program based on reasonable legislative or administrative standards for conducting an area inspection. The agency may apply for the warrant only after the local health officer has requested inspection of the person's property under a specific administrative plan and that the person refused the health officer access to the property.

The specific administrative plan is developed in response to pollution in commercial or recreational shellfish harvesting area or pollution in freshwater. The plan must include: the overall goal of the inspection; the location and address of the properties being authorized for inspection; requirements for notifying the owner or resident of the plan and its provisions and times of any inspections; the survey procedures to be used in the inspection; the criteria that would be used to define an onsite sewage system failure; and the follow-up actions that would be pursued when an onsite sewage system failure is confirmed.

The local health officer shall develop and submit the plan to the court as part of the justification for the warrant, along with specific evidence showing that it is reasonable to believe pollution is coming from the septic system on the property to be accessed for inspection. The court official may issue the warrant upon probable cause."

News Release

FOR IMMEDIATE RELEASE

February 1, 2014

CONTACT: Name

Tel: () -

Health District to Kick Off Shellfish Restoration & Protection Project and Offer Onsite Septic System Workshop

Seabeck - The Kitsap County Health District will hold a public meeting on Wednesday, February 16th, 2011, from 6:30 p.m. to 8:00 p.m., at the Seabeck Conference Center, 15395 Seabeck Highway, Seabeck WA. The purpose for the meeting is to present information about the Shellfish Restoration and Protection project and provide education about septic systems.

The goal for the project is to restore and protect shellfish growing areas by identifying and correcting sources of fecal pollution through a routine shoreline monitoring program. Attendees

will also learn about septic systems and what they can do to help maximize the life of their systems. A wide variety of printed information will be available, including Health District homeowner's manuals for septic systems. Kitsap Conservation District staff will also be present to share information about rain gardens and best management practices for livestock waste. Water conservation items, such as low-flow shower heads, will also be made available upon request.

The Health District will be working with the Kitsap Conservation District and the Kitsap County Surface and Stormwater Management Program, to conduct this project, which is being funded through a grant by the Environmental Protection Agency.

For more information, please contact Name at Telephone or email

Appendix B: Example of PIC Property Inspection Form & Field Equipment List

PROPERTY TAX ID:

PROJECT AREA	SITE ADDRESS
OWNER NAME	MAILING ADDRESS
OCCUPANT NAME	PHONE

PROPERTY INFORMATION:

<u>Occupancy type</u> __ Commercial __ Single family __ Multi-family	<u>System type</u> __ Standard gravity __ Pressure __ Drip irrigation __ Glendon __ Other _____ __ M & M contract	<u>Records on file</u> __ BSA __ Permit __ As built	<u>#Bedrooms</u> <u>#Occupants</u>	__ Marine shoreline __ Fresh shoreline __ Upland <u>Distance to OSS</u>
<u>Survey date(s)</u>	<u>Staff</u>	<u>OSS rating</u>	<u>Farm rating</u>	<u>Date last pumping</u>
<u>Roof drains</u> __ OK __ needs improvement	<u>Curtain drains</u> __ OK __ needs improvement	<u>Bulkhead drains</u> __ OK __ needs improvement	<u>Pets present</u> (# and type)	<u>Livestock present</u> (# and type)

Animal waste management: __ OK __ Needs improvement __ Violation

Notes/Comments on OSS and/or other property conditions
--

OSS EDUCATION CHECKLIST:

- __ Water usage: (hydraulic loading, plumbing leaks, laundry, garbage grinder, low flow fixtures, runoff, sprinklers)
- __ Waste strength: (use of additives, chemical drain cleaners, bleach, fabric softener, meds, fats/oils/greases)
- __ Physical damage: (driving over drainfield, bldgs/structures, heavy equipment etc.)
- __ Inspect system regularly (pump/inspect frequency, warning signs of failing OSS, purpose for reserve area)
- __ Educational materials provided circle 1 or more (Fact Sheet, OSS manual, Repair brochure, Pet waste)

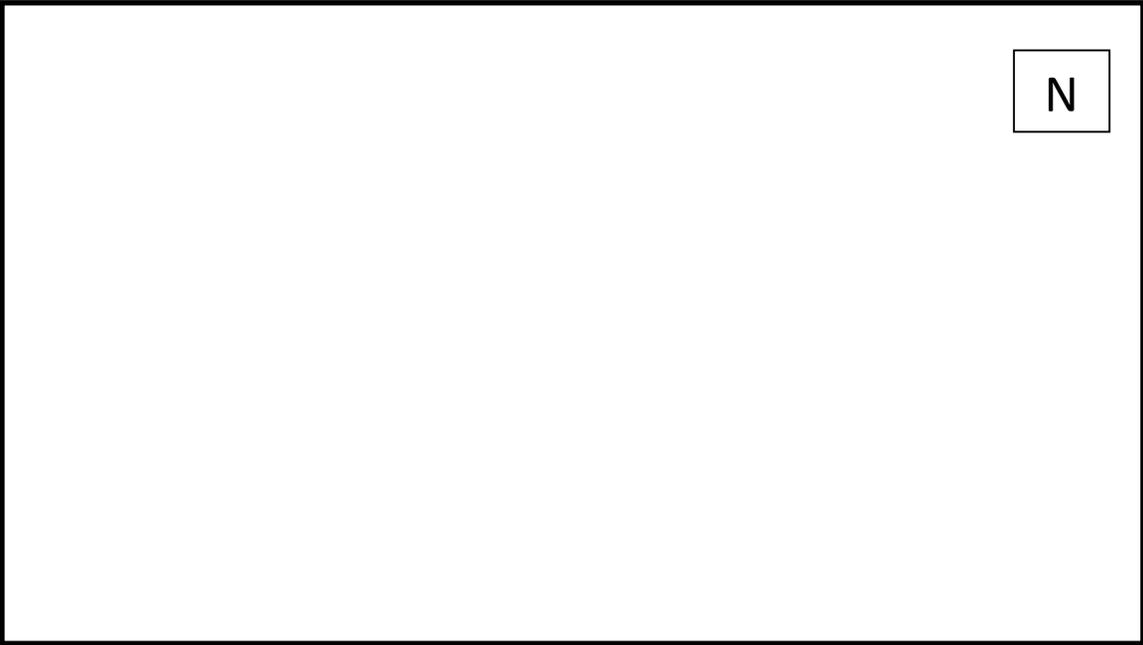
ANIMAL WASTE CHECKLIST:

- __ Pet waste
- __ Manure from livestock
- __ Referral to Kitsap Conservation District _____

If Flows from this Property are Potentially Impacting Water Quality, or if there no As built.

Complete the Following:

In the box below, indicate sources/areas of animal waste, surface water flows, locations of OSS and where samples/dye tests were collected/placed on the property. For consistency, indicate distances and directions on the drawing (Not To Scale). **IF, No As built, draw OSS per owner's information.**



Notes: _____

Dye Test Date:		Dye Used:										
Location Number	Control (BAC)			Pack Week #1			Pack Week #2			Pack Week #3		
	Placed	Retrieved	Result	Placed	Retrieved	Result	Placed	Retrieved	Result	Placed	Retrieved	Result
1												
2												
3												

<p>WATER SAMPLE DATA: (FC per 100mL)</p> <p>Water Sample Taken: Date: _____ Inspector: _____ Result: _____ Location: _____</p> <p>Water Sample Taken: Date: _____ Inspector: _____ Result: _____ Location: _____</p> <p>Water Sample Taken: Date: _____ Inspector: _____ Result: _____ Location: _____</p> <p>Water Sample Taken: Date: _____ Inspector: _____ Result: _____ Location: _____</p>

Appendix B (cont'd)

Field Equipment List

Sampling/Testing Equipment

100ml sterile plastic water sample bottles. Used to collect water samples for FC or EC analysis.

Sample wand. Telescoping wand used to collect water samples.

Cooler with ice and/or ice pack(s). Used to store samples until delivered to lab.

Digital camera. Used to document violations/items of interest. All inspectors are issued a digital camera in the Pollution Identification and Correction Program.

GPS unit; used for shoreline surveys, trend and impact monitoring.

Dye tracers. Ready-for-use individual liquid dye mixtures in 500 ml Nalgene® bottles stored separately from other PIC supplies in a water proof container. Used to dye-test OSS.

Charcoal packs. Used during dye tests to “catch” dye. Packs are available in the storage cabinet located in the office and in a separate location from the dye tracers.

Whirl-Pak™ bags. Used for storage of individual control and dye packs retrieved from sampling sites.

Water proof markers, e.g. “Sharpie”. Used to write on water sampling bottles for identification purposes.

Rubber bands and plastic bags. Used to post and protect written materials left for property owners/occupants.

Paperwork

OSS permit records. Used to assist inspectors locate the OSS on a specific property.

OSS monitoring and maintenance records. Used to determine if the alternative OSS on the property has been properly maintained through the monitoring and maintenance program.

PIC property inspection form. Used to record needed information regarding the property being inspected.

PIC door hanger. Used to inform area residents that a Health Inspector visited that property, and to provide information regarding the purpose of this visit.

“Rite-in-the-Rain” notebook. Used to map sampling locations.

Safety Equipment

Kitsap Public Health District identification badge. Used to identify yourself to property owners. Badges are issued to the inspector.

Kitsap Public Health Business card. Used in conjunction with badge to identify yourself to property owners. Cards are issued to the inspector.

Cellular phone. Inspectors are issued a cellular phone for use while conducting Health District business, or they may use a personal cell phone.

Pepper spray. Used for self-defense. Inspectors are trained annually in the use of pepper spray. Pepper spray containers are issued by the Health District after completion of the training.

Disposable latex gloves. Used to protect an inspector from pathogenic organisms that are associated with sewage.

Personal Protective clothing includes; steel toe or safety toe boots and rain gear (jacket and rain pants). These items are provided to staff according to the Collective Bargaining Agreement.

Hand-wipes/sanitizer. Used to clean hands. Always use a hand-wipe after collecting water samples or charcoal packs.

Chlorine bleach solution. Used for cleaning-up spilled dye. Wear gloves while handling.

INTERLOCAL AGREEMENT

BETWEEN KITSAP PUBLIC HEALTH DISTRICT AND KITSAP CONSERVATION DISTRICT

CONCERNING INVESTIGATION AND CORRECTION PROCEDURES FOR LIVESTOCK WASTE HANDLING VIOLATIONS

1.0 Purpose and Applicability. This Interlocal Agreement (hereinafter referred to as the “Agreement”) is between the Kitsap Conservation District (hereinafter referred to as the “Conservation District”) and the Kitsap Public Health District (hereinafter referred to as the “Health District”). Recognizing the need to carry out the responsibilities for which each is charged under State law and under the Kitsap County Surface and Storm Water Management Program, the Conservation District and the Health District consent to enter into this Agreement. This Agreement serves as the foundation for an enduring, cooperative working relationship for the purpose of protecting public health, improving water quality, and promoting agriculture stewardship through the investigation, identification and correction of inadequate livestock waste handling practices that are found to be causing a nuisance or menace to health. For the purposes of this agreement, livestock waste sources are typically manures generated by animals that are stabled, pastured, or otherwise managed, whether for private or business reasons. In addition, a “nuisance or menace to health” includes but is not limited to the pollution of water, harboring of rodents and breeding of flies. Pollution of water is defined as violations or exceedances of Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A WAC, as amended) or Water Quality Standards for Ground Waters of the State of Washington (Chapter 173-200 WAC, as amended).

This Agreement specifically addresses the Health District’s investigative response procedures and technical assistance referrals to the Conservation District related to livestock waste handling practices. Through this Agreement, inadequate livestock waste handling practices will be investigated by the Health District in response to public complaints or as part of a Pollution Identification and Correction project (hereinafter referred to as “PIC project”) undertaken by the Health District.

2.0 Background. The Conservation District is a non-regulatory agency that works cooperatively with landowners under guidelines established by Washington State Conservation District Law (Chapter 89.08 RCW) and standards established by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). The Conservation District compiles farm status inventory information from targeted areas, and prioritizes agricultural operations based on standardized rating criteria. The Conservation District provides technical assistance to small farm owners and develops Farm Plan elements specifically designed and implemented to provide best management practices (BMP) for land supporting livestock or under cultivation. These BMPs address the potential loss of protective vegetation adjacent to streams, severe soil erosion, and pollution of ground and surface water by manure and agricultural chemicals.

The Health District is responsible for regulating animal waste handling under the authority provided in Kitsap County Board of Health Ordinance Number 2010-1 “Solid Waste Regulations”, (Solid Waste Regulations) as amended. These regulations provide minimum standards for the safe handling of animal wastes, including, but not limited to, manure, dead animals, and agricultural wastes. The Health District coordinates with the Conservation District when conducting PIC projects or responding to complaints involving livestock wastes.

3.0 Livestock Waste Handling Complaint Response Procedures. The Health District and the Conservation District agree to undertake the following steps to respond to complaints of inadequate livestock waste handling practices filed with the Health District.

- 3.1 The The Pollution Identification and Correction Program (PIC) will respond to livestock waste handling complaints in PIC project areas. The Solid & Hazardous Waste Program responds to livestock waste handling complaints outside of PIC project areas.
- 3.2 The Health District will make an initial phone call to the complainant to verify information related to the complaint and, if needed, to collect additional information needed to respond to the complaint. Next, the Health District will conduct a site visit to confirm the livestock waste handling violation. In order to document a violation, the Health District must collect evidence (surface and/or drinking water samples, photographs, etc.) that livestock handling practices are creating (or may create) a “nuisance or menace to health” through the pollution of water (surface or ground water), harboring of rodents, or breeding of flies, etc. If a violation is confirmed, the Health District will present the collected findings to the landowner, and refer them to the Conservation District for the development and implementation of a Waste Management Plan (WMP). (If the violator refuses to work with the Conservation District, the Health District will give the violator the option of developing their own waste management plan. They will be given no more than 60 days to implement the plan and contact the Health District for an inspection (and follow up sampling if possible). If the violation represents an imminent threat to public or environmental health, the Health District proceeds to Section 3.4. If the violation does not present such risk, the Health District proceeds to Section 3.3. If the Health District is unable to confirm a violation, it may proceed to Section 3.8 or 3.9, or abate the complaint.
- 3.3 If the disposition of the livestock waste does not represent an imminent threat to public or environmental health (e.g., contamination of drinking water, the potential for direct public contact with contaminated runoff, contamination of shellfish resources, potential impacts to endangered species), the Health District will ensure correction of the violation in one of two ways:

Compliance Agreement

The landowner signs a “Compliance Agreement” with the Health District. The Compliance Agreement carries the full force and effect of an NOCV and establishes a timeline for the mitigation of the violation and development/implementation of the WMP. The landowner is responsible for mitigating the violation within ten (10) days, completing a waste management plan within 60 days, and fully implementing the waste management plan within 90 days . If any of these tasks are not completed within the specified time frame , the Health District will proceed to Section 3.6. If both of these items are complied with, the Health District will proceed to Section 3.5.

Verbal Agreement

If the landowner has demonstrated a strong level of commitment and ability to correct the violation, the Health District may reach a verbal agreement with the landowner regarding correction of the violation and development of a WMP with the Conservation District. This verbal agreement will be formalized with a letter from the Health District specifying the agreement and associated timelines – the Conservation District will receive a copy of this letter. The landowner is responsible for mitigating the violation as soon as practical, completing a waste management plan within 60 days, and fully implementing the waste management plan within 90 days. If any of these tasks are not completed within the specified time frame a Notice and Order to Correct Violation (NOCV) letter will be sent (as specified in Section 3.4). If both of these items are complied with, the Health District will proceed to Section 3.5.

- 3.4 If the disposition of the livestock waste represents an imminent threat to public or environmental health, or if the landowner fails to adhere to the verbal agreement discussed above, the Health District will send the landowner a Notice and Order to Correct Violation (NOCV) letter. The letter will be sent by certified mail requesting that they mitigate the violation within five (5) days of receipt of the NOCV, complete a waste management plan within 60 days, and fully implement the waste management plan within 90 days. (KCHD may require a shorter compliance period for completion of corrective actions if required to protect public health.). In addition to including all items required in the Solid Waste Regulations, the NOCV will explain the nature of the complaint and document the public health nuisance associated with current livestock waste handling practices.
- 3.6 If the requirements of a Compliance Agreement or NOCV are not adhered to, the Health District may issue a civil infraction notice as specified in the Solid Waste Regulations.

- 3.7 The Health District will terminate all complaints for cooperative landowners after verifying that the violations have been corrected. Verification will require a written notice from the Conservation District that the Waste Management Plan has been implemented, a Health District field inspection, and water quality monitoring (if feasible).
- 3.8 The Health District may refer owners of properties with **potential** livestock waste handling violations to the Conservation District by sending a copy of a letter to the landowner detailing the potential sources and **recommending** that they contact the Conservation District within ten (10) working days. The purpose of such a referral is to formally notify the landowner that a **potential** violation exists, giving them an opportunity to proactively correct the problem(s) before a Health District investigation proves a violation. Therefore, the letter will be written so that the landowner both understands the problem and the potential impacts, and how he/she can fix the problem voluntarily by cooperating with the Conservation District. Either the Pollution Identification and Correction Program Manager or the Pollution Identification and Correction Program Supervisor must review such letters before they are mailed. A “blind” copy of the letter will be sent to the Conservation District for their reference. The Conservation District will notify the Health District when the landowner has made contact with them. If the landowner contacts the Conservation District within ten (10) days, the Health District will postpone its investigation pending development and implementation of a WMP and elimination of the potential source(s). However, if the landowner is uncooperative in taking corrective actions and does not contact the Conservation District within this time frame, the Health District will initiate an investigation.
- 3.9 The Health District may refer owners of properties that have no proven or suspected livestock waste handling violations to the Conservation District. These will not be considered formal referrals to the Conservation District and they are not required to notify the Health District if contact is made.

4.0 Livestock Waste Handling PIC Procedures. The Health District and Conservation District use procedures specified in both Section 3.0 of this document and the Health District’s “Manual of Protocol: Fecal Coliform Bacteria Pollution Identification and Correction” (Version Ten, 2011 or subsequent revisions) to correct livestock waste handling violations in PIC areas. However, due to the fact that the express purpose of a PIC project is to address bacterial contamination of surface waters (which can subsequently lead to contamination of ground waters), the Health District and the Conservation District will place highest priority on sites where animal waste management practices are causing surface and/or ground water pollution. The Conservation District will contact all “high priority” agricultural sites identified in PIC areas either by telephone or by conducting a visit to the property. Sites not classified as “high priority” need only be contacted by mailing. The Conservation District will track all high priority farm contacts in PIC areas and will report this information to the Health District on a quarterly basis.

5.0 Indemnity. The Health District agrees to hold the Conservation District, its agents, officers and employees, harmless for all losses, claims and damages caused by the sole negligence of the Health District, its agents, officers and employees which arise directly or indirectly out of or in consequence of the Health District’s or its agents’ or officers’ or employees’ performance under this Agreement. The Conservation District agrees to hold the Health

District, its agents, officers and employees, harmless for all losses, claims and damages caused by the sole negligence of the Conservation District, its agents, officers and employees which arise directly or indirectly out of or in consequence of the

Conservation District's or its agents' or officers' or employees' performance under this Agreement.

6.0 Dispute Resolution. The parties to this agreement shall first attempt to resolve disputes informally at the staff level. In the event that the dispute cannot be resolved informally at the staff level, a dispute resolution procedure shall be followed. Each party to this agreement shall appoint one member to the Dispute Board. The members so appointed shall jointly appoint an additional member to the Dispute Board. The Dispute Board shall review the facts, terms, and applicable statutes and rules and make a determination of the dispute. The determination of the Dispute Board shall be binding on parties hereto. Each party to this agreement shall be responsible for paying for its own costs resulting from a dispute. Any additional costs resulting from resolution of a dispute shall be shared equally by both parties.

7.0 Modifications of this Agreement. Modifications to this Agreement shall only be made in writing and with the written consent of both parties.

8.0 Review of the Agreement. The parties agree to review the Agreement, its provisions and procedures at least once each year. The review will consist of a meeting of the parties, or their designated representatives, whether by telephone or otherwise to review and evaluate the continued necessity of the Agreement and to recommend any modifications thereto.

9.0 Termination. This Agreement will continue in full force and effect until such time as it is terminated by one of the parties. Either party can terminate this Agreement by notifying the other party in writing at least thirty (30) days in advance of such termination.

10.0 Signatures. The undersigned representatives accept the provisions of this Agreement. This Agreement shall be in effect when signed by both parties.

KITSAP CONSERVATION DISTRICT
HEALTH

KITSAP COUNTY BOARD OF

District Board of Supervisors

Chair

Appendix D: Examples: Enforcement Letter and Citation

Notice and Order to Correct Violation Letter

SENT REGULAR AND CERTIFIED MAIL

DATE
ADDRESSEE

RE: SEPTIC SYSTEM FAILURE AT ADDRESS, TAX ID XXXXXXXXXX

Dear

A violation of Kitsap County Board of Health Ordinance 2008A-01 "Onsite Sewage System and General Sewage Sanitation Regulations" has been identified at the above referenced property owned or occupied by you.

On **SPECIFIC DATE**, an authorized representative of the Health Officer determined that sewage effluent was discharging onto the surface of the ground from the above referenced property. This determination was made by visual observation of the sewage on the ground, water testing of a sample from the discharge and a positive dye test. Discharging sewage effluent to the surface of the ground or to waters of the State violates the following provisions of said regulations:

2008-01 Sections 6.B.2 - "Discharge of Sewage Effluent" ; and
2008A-01 Section 6.C, 6.D - "Insanitary Conditions"

The Health District hereby gives you notice to correct the violations identified above within **thirty days** of receiving this notice by doing the following:

Immediately prevent sewage from discharging to the ground surface and becoming a public health nuisance. To protect public health, hire a licensed designer to evaluate the system as soon as possible. **By specific date**; Submit a building site application developed by an Onsite Wastewater Treatment Designer licensed under Chapter 18.210 RCW, or a Professional Engineer licensed under Chapter 18.43 RCW, and; Obtain a Sewage Disposal Permit from the Health District pursuant of Section 6.F of said regulations.

Failure to comply with this notice and order to correct violation will result in the issuance of a civil infraction notice to you pursuant to section 19.B of said regulations. The civil infraction notice may result in a fine of up to \$524.00 per violation per day to be assessed to you.

Please note that pursuant to Section 20.A. of the above regulations that any person aggrieved by the contents of a notice and order to correct violation issued under this regulation, or by any inspection or enforcement action conducted by the Health District under this regulation, may submit a completed application for appeal with the applicable fee to the Health Officer within 10 business days of the action appealed.

Please call me at (360) 337-xxxx, Monday through Friday from 8 a.m. to 4:30 p.m. if you have any questions or comments regarding this matter.

Name, Title of Inspector

Example of Kitsap County Citation

2811 MICRO DATA OLYMPIA (360) 570-8400

INFRACTION **TRAFFIC** **NON-TRAFFIC** **I 202728**

IN THE DISTRICT MUNICIPAL COURT OF KITSAP COUNTY, WASHINGTON
 STATE OF WASHINGTON, PLAINTIFF VS. NAMED DEFENDANT
 COUNTY OF KITSAP HEALTH DISTRICT
 CITY/TOWN OF

LEA ORI #: WAO180000 COURT ORI #: WAO18013J

THE UNDERSIGNED CERTIFIES AND SAYS THAT IN THE STATE OF WASHINGTON

DRIVER'S LICENSE NO. STATE EXPIRES PHOTO I.D. ON PERSON
 YES NO

NAME: LAST FIRST MIDDLE

ADDRESS IF NEW ADDRESS
 PASSENGER

CITY STATE ZIP CODE EMPLOYER LOCATION

DATE OF BIRTH RACE SEX HEIGHT WEIGHT EYES HAIR

RESIDENTIAL PHONE NO. CELL / PAGER NO. WORK PHONE NO.

VIOLATION DATE MONTH DAY YEAR TIME INTERPRETER NEEDED
ON OR ABOUT 24 HOUR LANG.

AT LOCATION M.P. CITY / COUNTY OF

DID OPERATE THE FOLLOWING VEHICLE/MOTOR VEHICLE ON A PUBLIC HIGHWAY AND

VEHICLE LICENSE NO. STATE EXPIRES VEH. YR. MAKE MODEL STYLE COLOR

TRAILER #1 LICENSE NO. STATE EXPIRES TR. YR. TRAILER #2 LICENSE NO. STATE EXPIRES TR. YR.

OWNER/COMPANY IF OTHER THAN DRIVER

ADDRESS CITY STATE ZIP CODE

ACCIDENT COMMERCIAL YES HAZARD YES EXEMPT FARM FIRE
NO NR R I F VEHICLE NO PLACARD NO VEHICLE R.V. OTHER

DID THEN AND THERE COMMIT EACH OF THE FOLLOWING OFFENSES

1. VIOLATION/STATUTE CODE VEHICLE SPEED IN A ZONE SMD
 PACE
 AIRCRAFT

2. VIOLATION/STATUTE CODE

3. VIOLATION/STATUTE CODE

RELATED # PENALTY U.S. \$
DATE ISSUED

WITHOUT ADMITTING TO HAVING COMMITTED EACH OF THE ABOVE OFFENSE(S), BY SIGNING THIS DOCUMENT I ACKNOWLEDGE RECEIPT OF THIS NOTICE OF INFRACTION AND PROMISE TO RESPOND AS DIRECTED ON THIS NOTICE.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF WASHINGTON THAT I HAVE ISSUED THIS ON THE DATE AND AT THE LOCATION ABOVE, THAT I HAVE PROBABLE CAUSE TO BELIEVE THE ABOVE NAMED PERSON COMMITTED THE ABOVE OFFENSE(S), AND MY REPORT WRITTEN ON THE BACK OF THIS DOCUMENT OR ATTACHED TO THIS INFRACTION IS TRUE AND CORRECT.

OFFICER #

OFFICER #

DEFENDANT'S SIGNATURE

INFRACTION

LINE	RESPONSE	DISPOSITION	PENALTY	SUSPENDED	SUB-TOTAL	FNDGJUDGT DATE
1	C NC	C NC D P DF	\$	\$	\$	ABSTRACT MLD TO OLYMPIA
2	C NC	C NC D P DF	\$	\$	\$	
3	C NC	C NC D P DF	\$	\$	\$	
TOTAL COSTS \$						

WASHINGTON UNIFORM COURT DOCKET - COURT COPY January 2003
WASHINGTON UNIFORM COURT DOCKET - DOL COPY January 2003
WASHINGTON UNIFORM COURT DOCKET - DEFENDANT COPY January 2003
WASHINGTON UNIFORM COURT DOCKET - LEA COPY January 2003

✓ Check Non-Traffic
✓ County of Kitsap Health District

Complete as much information as available. Be certain it is accurate.

DO NOT FILL IN THIS BOX

Include the Kitsap County Board of Health Ordinance and associated sections regarding the violation(s).

- ✓ Include the Penalty
- ✓ Date Issued
- ✓ Your name
- ✓ Inspector number
- ✓ Your signature

IT IS IMPORTANT TO COMPLETELY AND ACCURATELY FILL OUT INFORMATION WHEN WRITING A TICKET.

Appendix E: Private Property Access and Consent Policy

Private Property Access and Consent

This discussion of search and seizure law and access procedures is intended to provide guidance only. Search and seizure analysis is very fact-intensive and inspectors are cautioned to discuss field conditions with their supervisors and to seek legal counsel where appropriate. Private Property Access and Consent information provided by the Kitsap County Prosecuting Attorney's office. The basis for the guidelines comes from interpretation from State Law cases and so should be transferrable to other Counties, however Kitsap recommends that Counties check with their legal contacts before adopting these guidelines.

Private Property Access and Consent

Site Entry and Searches

Inspectors must enter private property while conducting inspections or surveys. Because the state and federal constitutions prohibit unreasonable searches, an inspector must decide whether he or she may legally enter a particular property to conduct an inspection. In all cases, an inspection can occur only if (1) the inspector makes observations from a place where the inspector may legally be without consent, or (2) after obtaining consent from a responsible party (owner or tenant). To assist you in determining whether you may enter a property some basic constitutional doctrines are discussed below:

Reasonable Expectation of Privacy: There are two components to a reasonable expectation of privacy. The first is a subjective component: Does the person have a subjective expectation of privacy in a particular object or location? The second is an objective component: Is this expectation one that society recognizes as reasonable? Generally, a person has a reasonable expectation of privacy in his home, in the area immediately adjacent to the home, and in areas where he/she has taken steps to exclude the public and shield the area from the public's view.

Residence: A person always has a reasonable expectation of privacy in his/her home. You may not enter a person's home, except with the resident's consent.

Curtilage: The land immediately surrounding and associated with the home, i.e., that area associated with the intimate activity of a home and the privacies of life. Curtilage receives the highest level of protection under both the federal and state constitutions. You may not enter the curtilage without a resident's consent, except as explained below. To help determine if an area is within the curtilage, answer these questions:

Q: How close is the area you want to inspect to the house?

A: *The closer the area you want to inspect is to the house, the more likely it will be considered within the curtilage.*

Q: Is there a fence or other enclosure that surrounds the house *and* the area you want to inspect?

A: *A fence that surrounds the house suggests the limits of the curtilage. Accordingly, where a house is situated on a standard lot and the lot is fenced, that is the limit of the curtilage. On a larger piece of property there may be a fence around the perimeter of the property, and an inner fence enclosing the house. In that case, the interior fence would indicate the limits of the curtilage. A clearing or maintained*

area has the same effect. Thus, on a larger piece of property that is forested, the cleared area surrounding the house would indicate the limits of the curtilage.

Q: What is the area you want to inspect used for?

A: *The concept of the curtilage is to protect those activities normally associated with the home and the privacies of life. Thus, if an area near the house is used for family or personal activities (e.g., play area, patio, garage), then it is probably within the curtilage. However, if the area is used for activities not associated with home life, especially illegal activities, then it probably will not be considered within the curtilage. You may use evidence you observe from the road or a neighbor's property, or information a neighbor gives you, to determine if an area is being used for an activity associated with the home or some other activity.*

Q: Has the resident taken any steps to protect the area you want to inspect from observation of passersby?

A: *If a fence -- especially a sight-obstructing fence -- or hedge shields the view of the house from the street and neighboring properties, then the area within the fence or hedge will probably be considered within the curtilage.*

Q: Can an inspector ever enter the curtilage?

A: *Yes. You may enter the curtilage to contact the resident. In doing so, however, you may use only a recognizable access route, such as a driveway, walkway, or path. Approach the house as any reasonably respectful citizen would. Normally, you should not enter a side or back yard. You may, however, call out or try to get someone's attention if you see or hear something that leads you to believe the resident is in a side or back yard.*

Other factors to consider when conducting an inspection of private property:

No Trespassing Signs: A "No Trespassing" or "No Solicitors" sign does not prohibit you from approaching a residence using a recognized access route for the purpose of contacting the resident.

Open Fields: Areas that are outside the curtilage are considered "open fields" and do not always receive the same high level of constitutional protection that the curtilage does. In an urban area, you may not find any open fields. In outlying areas, however, you are likely to encounter them. An open field doesn't need to be either "open" or a "field." It could be a thickly wooded area or a beach. Generally, an open field is any unoccupied or undeveloped area outside the curtilage.

In many instances, you will be able to enter open fields without the permission of the owner. However, you need to consider whether the owner has manifested an "expectation of privacy" in the area you want to enter. Some manifestations of an expectation of privacy are: 1) a long driveway; 2) "No Trespassing" signs; 3) fences, especially sight-obstructing fences, or maintained hedges; 4) a locked gate; or 5) the area cannot be seen from a road or neighboring property.

Each situation is different, so it is not possible to provide a blanket rule for entering open fields. It may be best to consult with a supervisor before entering.

Open View: If you are in a place you may legally be, such as a roadway, public property, a neighboring property that you have permission to be on, or are approaching the residence via a recognized access route, then you can base an enforcement action on anything you can see from that vantage point.

Accordingly, if a person allows you in his/her backyard, and you can see illegally stored solid waste on the neighbor's patio, you can write a notice and order to correct the violation or a notice of civil infraction, based on what you can see from the neighbor's property. As long as you remain on the property you have permission to be on, you can climb a ladder to see over a fence, or use binoculars. You may take photographs from a place you may legally be.

Plain View: The plain view doctrine applies when you have entered a property with the resident's consent. The plain view doctrine allows you to use anything that you see inadvertently as you walk through the area. The object must be in plain view; you may not move anything. You may not remove a lid on a trash container to see inside. Plain view works the same way when the resident has given you permission to look around. If you want to see inside or under something, ask the resident if it's okay.

Consent: An inspector obtains valid consent to inspect when he or she asks the resident for permission to conduct an inspection and receives an affirmative response through words or action.

When seeking consent to access a property, it is important to set the property owner's or user's expectations. Explain the purpose of your entry into a residence or curtilage and explain the scope of consent you are requesting. Document the consent in field notes, including from whom it was requested and obtained, and any limitations on time, location, and repeat visits.

Avoid statements like "I'm going to look around," or "I have to inspect the property". A person who submits to an inspection after such a statement has not necessarily given his/her consent to the inspection and a court could suppress anything that is found during the inspection. A civil enforcement inspector need not inform a person of his/her right to refuse an inspection but, if the person asks whether he/she may refuse, the inspector must tell the person that he/she may refuse (or may limit the scope of the inspection).

Where two or more persons may claim a reasonable privacy interest in a particular dwelling or premises, consent given by one individual may be valid only as to common areas and to the specific area over which the giver of consent has authority or control.

Administrative Search Warrant: State and local agencies are allowed to conduct administrative searches when implementing their civil enforcement authority, where specifically authorized by statute.

The local health officer may apply for an administrative search warrant to identify failing septic tank drainfield systems. The administrative warrant application may be based on specific evidence of an existing violation or on a general inspection program based on reasonable legislative or administrative standards for conducting an area inspection. The agency may apply for the warrant only after the local health officer has requested inspection of the person's property under a specific administrative plan and that the person refused the health officer access to the property.

The specific administrative plan is developed in response to pollution in commercial or recreational shellfish harvesting area or pollution in freshwater. The plan must include: the overall goal of the inspection; the location and address of the properties begin authorized for inspection; requirements for notifying the owner or resident of the plan and its provisions and times of any inspections; the survey procedures to be used in the inspection; the criteria that would be used to define an onsite sewage system failure; and the follow-up actions that would be pursued when an onsite sewage system failure is confirmed.

The local health officer shall develop and submit the plan to the court as part of the justification for the warrant, along with specific evidence showing that it is reasonable to believe pollution is coming from the septic system on the property to be accessed for inspection. The court official may issue the warrant upon probable cause.

Appendix F: Skagit County Integrated Pollution Identification & Correction (PIC) Protocol for Site Inspections



Clean Samish Initiative Protocol for Site Inspections

Data Analysis

- Analysis of water quality will determine area of focus.

Property Evaluations

- Initial evaluation of properties will be completed through drive-by assessments conducted by the Planning Department's Critical Areas Ordinance inspector or Public Work's property inspector hired as a part of the NEP PIC grant. These inspectors will complete an inspection form for each property (attached). This form will include information on Protected Critical Areas, onsite and aerial photo land use observation, nearby streams or waterbodies, buffer widths, suspected discharge source, and whether an inspection is required. If an inspection is required, a notification of site visit will be mailed to the property owner.

Notification of Site Visits

- Property owners will be sent a letter of introduction, stating that their neighborhood and/or area has been identified as having chronic fecal coliform water quality problems and that their property in particular was noted as having a potential fecal coliform source.
- If there is no response after **2 weeks**, the County will send out a letter that there will be an unannounced site visit within **30 days** by Skagit County Public Health (SCPHD) and Skagit County Planning & Development Services (SCPDS).
- If, 30 days after the second site visit request, contact with property owner has not been made or owner is refusing access to the property, the County will attempt to get another agency to request a visit, contingent upon availability.

Initial Site Visit:

- Both human and animal sources of fecal loading will be investigated.
- A follow-up letter within **2 weeks of the visit** will be sent confirming conditions noted at the site visit. A copy of the letter will be sent to the agency to which the landowner is being referred.
 - If there are no fecal coliform sources, a thank you letter will be sent to the landowner.
 - If potential fecal coliform sources are identified, the landowner will be informed of these potential sources and the County will refer the landowner to the appropriate agency(ies). A copy of the inspection form will also be sent to the appropriate agency(ies).
 -

Referrals to Resources Agencies

- Skagit Conservation District -- farm plan and BMPs
 - County will inform SCD of landowners referred to SCD within two days of completing a site visit
 - Landowners will contact SCD within 10 business days of receiving referral letter from the County.
 - Following landowner contact, SCD will schedule a joint site visit with the County and will inform the County in writing within five business days of the actions recommended to the landowner.
 - If there are egregious violations occurring, SCD will work with landowner to quickly implement immediate action BMPs to eliminate sources of pollution within five business days. Other BMPs will follow if needed; all referrals will receive a farm plan.
 - SCD will provide the County with a list of the water quality-related BMPs included in the Farm Plan as well as an implementation timeline. County inspector will monitor on the ground-progress as outlined in Tracking section below**.

- If the property owner does not contact SCD within **10 days** of referral, SCD will notify the County. County will turn to SCPH, SCPDS, or Ecology to investigate potential septic issues, Critical Areas ordinance violations, or file an ERTS as outlined below *******.
- Skagit County Planning & Development Services (SCPDS) regarding Critical Areas Ordinance (CAO). The Skagit County CAO is very site-specific. The zoning of a parcel dictates the areas of the CAO the property owner needs to meet.
 - SCPDS will follow-up within 30 days.
 - **FOLLOW CAO PROTOCOL.**
- Skagit County Public Health Department regarding septic systems.
 - **FOLLOW HEALTH DEPARTMENT PROTOCOL.**
- Washington State Department of Ecology regarding potential to pollute or water pollution not covered above.
 - ERTS system. Ecology will keep the County informed of progress on a **monthly basis**.

****Tracking Progress**

- Follow-up visits will be made by County personnel to ascertain progress. If progress is being made as indicated by actions taken by the property owner (e.g. contacting a septic system designer, working with SCD on a farm plan, or building fences to keep animals out of the water), additional follow-up visits will be scheduled as appropriate. Property owners preparing farm plans will be provided with information regarding the Conservation Reserve Enhancement Program (CREP), Natural Resource Stewardship Program (NRSP), and Agricultural Best Management Practices Funds as appropriate.
- Dates by which certain actions are to be completed by the property owner can be negotiated to help ensure progress continues. A letter from the County outlining this agreed upon progress schedule will be sent to the property owner. The schedule will direct subsequent site visits to the property.
- If the property owner does not meet the agreed upon schedule for improvements enforcement actions will be taken.

Interim Solution

If there is an obvious source of fecal contamination, the property owner is responsible for implementing a short-term solution to abate the fecal contamination source.

- If it is an on-site sewage system (OSS) failure, a Health Officer order can be issued to plug the outlet baffle of the septic tank and have the tank pumped regularly until the OSS is repaired.
- If it is a water quality violation, the interim solution will be dependent upon the type and extent of the violation, but will typically result in an Immediate Action Plan (IAP). Examples include:
 - Livestock have unfettered access to the water course – moving the livestock to another location temporarily.
 - SCD deploys emergency exclusion fencing

*****If no response following two letters and final site visit attempt**

On Site Sewage: *On site sewage (OSS):* Skagit County Code 12.05, *On Site Sewage Systems* in Marine Recovery Areas have the same inspection requirements as OSS systems elsewhere. Conventional systems are to be inspected once every three years and more complicated systems require annual inspections. If these inspections are not completed, a \$75 per day fine can be issued to the property owner. If an inspection is not forthcoming and the fine accumulates to \$5,000; the file is turned over a collection agency if there is no evidence that the system is failing.

If the OSS system is failing, Health Department personnel are authorized under WAC 246-272A, and SCC 12.05 to order a repair and issue a fine. Past experience has shown this to be effective in getting repairs completed once a failing OSS system is identified.

Critical Areas: Skagit County's Critical Areas Ordinance is very site specific. The zoning of a particular parcel will determine what portions of the CAO need to be met. If a property owner does not allow access to the property, field staff will make their best effort to view areas of the property from public access points and/or neighboring properties where access has been granted.

1. If an obvious CAO violation is observed, it is then reported as a Request for Investigation (RFI) to PDS. RFIs regarding water quality within the Samish Watershed will be investigated within 2 working days.
2. If a potential CAO violation is observed, it will be documented and the property will be noted in the County's tracking system as needing seasonal follow up.

Ecology: Incidents will be reported to Ecology via ERTS if pollution of waters of the State are observed, or there is a substantial potential to pollute, and there is no progress on the part of the property owner to remedy the cause of the pollution.

Appendix G: Successful PIC Projects

Kitsap County

Dyes Inlet Restoration Project. (Ecology grant \$525,925 (2005-2009)).

This project was completed in 2009 with a final technical report submitted and approved by Ecology. The project plan was exceeded with the expansion of shoreline surveyed. 22 miles were surveyed (instead of the 6 miles originally planned) without the need for additional funding. The goals of the Dyes Inlet Restoration project were met. Water quality improvements in Clear Creek, Chico Creek, Ostrich Bay Creek, and Phinney Bay Creek, Enetai Creek, Kitsap Mall Creek, and Strawberry Creek between 2005 and 2009, were shown through monitoring data. 120 acres of shellfish growing areas in Chico Bay were upgraded from Restricted to Approved in 2007.

Yukon Harbor Restoration Project (Ecology grant \$333,000 (2001-2007))

The final technical report for this project was submitted and approved. The goals and objectives of this project were also exceeded with six full shoreline surveys conducted instead of the contracted two. As a result of the successful completion of this project the shellfish growing area in Yukon Harbor, (including 935 acres) were upgraded to Approved by DOH.

Jump Off Joe, Vinland, Lofall Pollution Identification and Correction Project (Ecology grant \$331,000 (2007-2011))

This grant is expected to be completed as contracted in 2011. Quarterly program reports have been submitted on time. Staff have completed 84% of the property surveys and found 4 failing onsite sewage systems. The closure at the mouth of Jump Off Joe was removed by DOH in 2009.

Henderson Inlet, Thurston County

Thurston County created the Henderson Inlet shellfish protection district in 2001 after Washington Department of Health downgraded part of the shellfish growing area in 2000. Subsequent studies showed that onsite sewage systems were contributing to the water quality program. A stakeholder committee recommended adoption of rigorous inspection and maintenance requirements for the 6000+ onsite sewage systems within the watershed. In 2007, a risk-based onsite sewage system operation and maintenance program went into effect as part of a marine recovery area designation by the Thurston County Board of Health. Routine inspections have led to the discovery of tens of leaking sewage tanks and failing systems, hundreds of minor repairs needed, and thousands of tanks overdue for pumping. Dye testing helped identify failing systems along the marine shoreline. Over 2,100 homeowners attended classes to learn how to maintain and inspect their systems. The outcome of the Henderson O&M program, along with significant stormwater, agriculture, and pet waste improvements, was measurable water quality improvement in Henderson Inlet and its tributaries. The improvement was significant enough to warrant upgrades of 240 acres of shellfish growing area in 2010 and another 100 acres in 2012. Thurston County's website provides more information about this work: <http://www.co.thurston.wa.us/planning/natural-res/shellfish-home.htm>.

Oakland Bay, Mason County

Oakland Bay is very important to the shellfish industry and to Mason County, providing numerous shellfish industry jobs and over \$10 million in product to the market. Oakland Bay is the largest producer of Manila clams in the country.

When a shellfish growing area experiences poor water quality forcing a downgrade or closure of the harvest area, the local government must form a shellfish protection district by law. The Oakland Bay Clean Water District Advisory Committee was formed in 2007 in response to a downgrade in Oakland Bay. The committee worked together to improve water quality through pooling resources and expertise and has been recognized at the state and national level as a successful model of partnering to achieve a common goal. As a result of this work, 750 acres were upgraded in 2012. More information about this program can be found on Mason County's website:

http://www.co.mason.wa.us/health/environmental/water_quality/oakland_bay_grants_reports.php

ⁱ Fish presence based on Washington's Integrated Fish Distribution database. Fish presence includes all classes of presence of anadromous or ESA listed fish. Where no fish distribution data is available, fish presence must be determined by contacting local WDFW or Tribal biologist.

ⁱⁱ Buffer widths are required minimums, however, if a landowner believes that the buffers called for by the table significantly interfere with his/her ability to reasonably use their property, there is a process to identify alternative buffers that are smaller. Please see FAQs for more information.

ⁱⁱⁱ Generally, buffer vegetation is required between the watercourse and dike, based upon the criteria of the corresponding channel type. However, levee vegetation requirements are subject to U.S. Army Corps of Engineers (Corps) guidance which can be found in Engineering Technical Letter No. 1110-2-571, "Engineering and Design: Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures", as well as in the USACE Levee Owner's Manual for Non-Federal Flood Control Works.

^{iv} Estuarine channels are defined as stream channels having direct, daily tidal influence such that the vegetation is adapted to saltwater or intertidal conditions.