Culvert Assessment and Prioritization Plan for Fish Passage in the Tillamook Bay Watershed, Tillamook County, Oregon – Version 1.1





Prepared by

Scott Jay Bailey, Project Manager Tillamook Estuaries Partnership PO Box 493 613 Commercial Street Garibaldi, Oregon 97118 503-322-2222

September 2012

National Fish and Wildlife Foundation Disclaimer

The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the National Fish and Wildlife Foundation. Mention of trade names or commercial product does not constitute their endorsement by the National Fish and Wildlife Foundation.

Acknowledgements

The document you hold in your hands would not have been possible without the contributions of several organizations and individuals who provided financial, logistical, and technical support for this project. We are grateful for their assistance.

Grants of funds for this project were received from the National Fish and Wildlife Foundation, Oregon Governors Fund for the Environment; Tillamook County Public Works Department; and the Norcross Wildlife Foundation.

Oregon Department of Forestry (Tillamook and Forest Grove districts) and Tillamook County provided spatial data used for Geographic Information System analyses and map production.

Tillamook Motor Company, Inc. helped us obtain and maintain vehicles used by our field crews during the data collection process.

Numerous private landowners allowed us to access their properties to collect field data on road-stream crossings throughout the Tillamook Bay Watershed.

We contracted with the Business Education Compact (BEC), an Oregon nonprofit, to recruit and hire the student interns who helped collect culvert data during summer 2011.

The following individuals provided invaluable technical assistance and review during this project: S cott Bushnell (Oregon Department of Forestry), Mitch Cummings (USDA Natural Resources Conservation Service), Howard Harrison (Oregon Department of Forestry), Chris Knutsen (Oregon Department of Fish and Wildlife), Steve Pilson (Portland State University), Dave Plawman (Oregon Department of Fish and Wildlife), Jeanette Steinbach (Tillamook County Public Works Department), Roger Weeks (Tillamook Motor Company, Inc.), and Liane Welch (Tillamook County Public Works Department).

Field data was predominantly collected during the summer of 2011 by student interns from several Oregon universities: N athan Atchison, Christian Lauder, Gabrielle Pauling, Joseph Meyer, Jonathan Robertson, and Nicholas Williams. We thank them for all their hard work!

Table of Contents

1.0.	Introduction	. 1
1.1.	Background	. 1
1.2.	Study Area	. 1
2.0.	Methods	. 3
2.1.	Preliminary Analyses	. 3
2.2.	Field Methods	. 3
2.3.	Post-Field Work Analyses	13
2.4.	Prioritization Action Plan	18
3.0.	Results2	20
3.1.	Prioritization Analysis	20
3.2.	Road Ownership Patterns	31
3.3.	Clustering	32
4.0.	Literature Cited	34
	List of Figures	
Figure 1	1. General overview map of Tillamook Bay Watershed.	. 2
Figure 2	2. Map of Kilchis River Basin	. 4
Figure 3	3. Map of Miami River Basin.	. 5
Figure 4	4. Map of Tillamook River Basin	. 6
Figure 5	5. Map of Trask River Basin	. 7
Figure 6	6. Map of Wilson River Basin.	. 8
Figure 7	7. Map of Tillamook Bay Tributaries	.9
Figure 8	8. Illustration depicting typical points where longitudinal profile data was collected at road-streat crossings in the Tillamook Bay Watershed, Tillamook County, Oregon	
	List of Tables	
Table 1	. US Bureau of Land Management, Coarse screen filter for juvenile salmonid passage assessment Version 2.2	
Table 2	2. C ulvert Prioritization Model used to compare and prioritize culverts in the Tillamook Bawatershed for replacement.	-
Table 3	. Prioritization table for Kilchis Basin.	23
Table 4	. Prioritization table for Miami Basin.	24
Table 5	. Prioritization table for Tillamook Bay tributaries	25

Table 6. Prioritization table for Tillamook Basin.	26
Table 7. Prioritization table for Trask Basin.	27
Table 8. Prioritization table for Wilson Basin.	29
Table 9. Summary of priority ratings and miles of affected upstream habitats across entire Tillame Watershed	•
Table 10. Summary of road ownership for fish culverts in the Tillamook Bay Watershed	31
Appendices	
Appendix 1. Tillamook Bay culvert prioritization field data sheet	36
Appendix 2. Culvert tables and cluster maps for each basin in the Tillamook Bay Watershed	39

1.0. Introduction

1.1. Background

Improperly designed, constructed, or damaged culverts and other stream crossing structures can impede passage for migratory fishes and other aquatic wildlife; fragment and disconnect aquatic habitats; impair water quality; and compromise movement of stream bed materials, organic matter, and nutrients. Such structures have been implicated in dramatic reductions in accessible suitable habitats and associated with localized population declines, increased mortality and predation, decreased egg production, and other problems for many different fish species (Meehan 2005). The Tillamook Bay Watershed (the Watershed) consists of numerous stream systems and an extensive road network. As a result there are numerous road crossings within the Watershed, many of which use culverts to convey stream flows.

In the past, the Tillamook Estuaries Partnership (TEP) and partners have pursued opportunistic projects to upgrade culverts known to impede fish passage or impair habitat quality. Fish passage issues also have been addressed during crossing replacement projects where the primary goal was transportation safety or road corridor upkeep. However, until now, we have had insufficient information to develop a more systematic approach and prioritize passage barrier culverts for replacement throughout the Watershed.

In 2006, TEP and several partners completed a project in the Nestucca and Neskowin basins, Tillamook County, Oregon, during which existing and gathered data was used to identify barrier culverts and prioritize them for replacement (based primarily on their potential to impede fish passage and the quantity and quality of upstream habitats [Hoffman 2006]). The information generated during that project has facilitated cooperative efforts in strategically addressing fish passage issues in those watersheds. TEP and our partners regularly consult the final report for that project during work planning and project implementation efforts. Several barrier culvert replacement projects have been implemented in those watersheds as a result of the study. The study reported in this document utilized and built upon techniques and analyses developed during the Nestucca-Neskowin study.

A considerable amount of information on fish distribution and culverts and other potential barriers in the Watershed existed prior to this study. However, much of the information on culverts was outdated or insufficient to compare and contrast culverts and develop a strategic plan to replace fish passage barrier culverts. In addition, these existing data were insufficient to understand the general condition of culverts as needed by agencies responsible for transportation infrastructure.

With the above facts in mind, TEP undertook a project to identify, characterize and prioritize culverts for replacement throughout the Watershed. This document reports on the methods used to accomplish the study and it provides detailed information on culverts throughout the Watershed. Also included are the results of the process used to prioritize these culverts for replacement based primarily on their potential to impede fish passage and the quantity and quality of upstream habitats.

1.2. Study Area

This project investigated road-stream crossings throughout the Tillamook Bay Watershed, Tillamook County, Oregon (Figure 1). Five 5th Field Watersheds contribute freshwater to the bay: Kilchis River

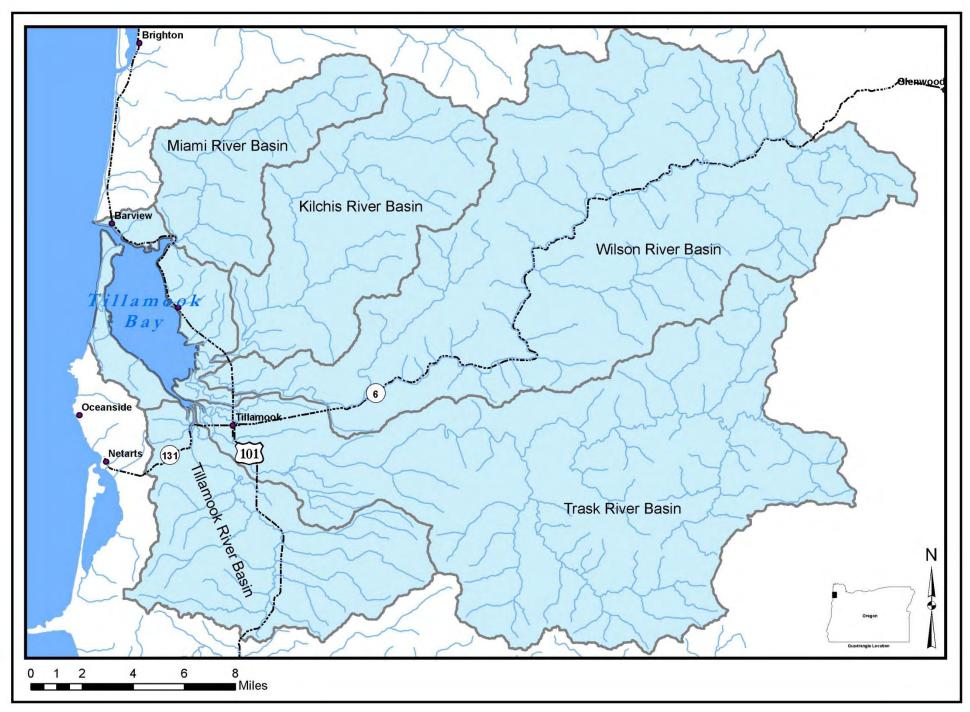


Figure 1. General overview map of Tillamook Bay Watershed.

Basin (Figure 2), Miami River Basin (Figure 3), Tillamook River Basin (Figure 4), Trask River Basin (Figure 5), and Wilson River Basin (Figure 6). In addition, there are several small tributaries that outlet directly into the Bay and are not included in these larger watersheds (Figure 7).

2.0. Methods

2.1. Preliminary Analyses

We used an ArcGIS (ESRI, Inc.) analysis to preliminarily identify road-stream crossings throughout the Watershed. Two data layers were critical to this automated analysis: a road layer and a stream layer that included stream gradient as one of its data fields. We used this analysis to identify potential crossings anywhere a mapped road intersected a mapped stream segment with a gradient of less than 15 percent slope. We used 15 percent as our cut off to minimize the potential that stream reaches occupied by anadromous fishes would be excluded from our analysis. Anadromous salmonids that regularly occur in the Watershed (Cutthroat trout [Oncorhynchus clarki], Steelhead trout [O. mykiss], Chum salmon [O. keta], Coho salmon [O. kisutch], and Chinook salmon [O. tshawytscha]) do not typically occupy stream reaches where gradients exceed 15 percent. This initial analysis did not attempt to differentiate between fish-bearing and non f ish-bearing streams. We acknowledge that this analysis may not identify all crossings that may affect fish passage within the Watershed, but we believe that it was sufficient to identify a majority of crossings capable of affecting passage.

Using the above GIS analysis, we identified 1,529 potential crossings throughout the Watershed. These potential crossings occurred on roads administered by federal, state, and local governments and private roads owned by industrial and non-industrial land owners. Adjacent lands also were under varied ownership: federal-, state- and county-owned public lands, private industrial forest lands, and private agricultural, commercial and residential properties.

Before beginning field work, we used a Tillamook County taxlot data layer for an additional GIS analysis to identify owners of properties where the GIS-identified crossings occurred. We contacted all private property owners identified during this analysis by mail to request permission to access their property and investigate the crossings. We did not visit crossings that required crossing private lands where access was not provided. Most crossings on public roads were inspected. Access to the adjacent private property was not provided for some public road crossings. When this occurred, we were generally able to collect specific information about the crossing itself (e.g., crossing type, culvert dimensions, culvert gradient, etc.) but sometimes could not directly measure other variables if collecting that information required access outside of the public road right-of-way (e.g., bankfull width, upstream gradient, etc.). In these situations, we recorded visual estimates for such data (if possible). In some instances, the crossing inlet and outlet were outside of the road right-of-way and we were unable to collect most data on the crossing. We include two culverts in this report that meet this description.

2.2. Field Methods

2.2.1. Field Training

We hired six college student interns to complete the bulk of field work for this project. Interns completed an approximately two week orientation and training session before they began independent site visits.

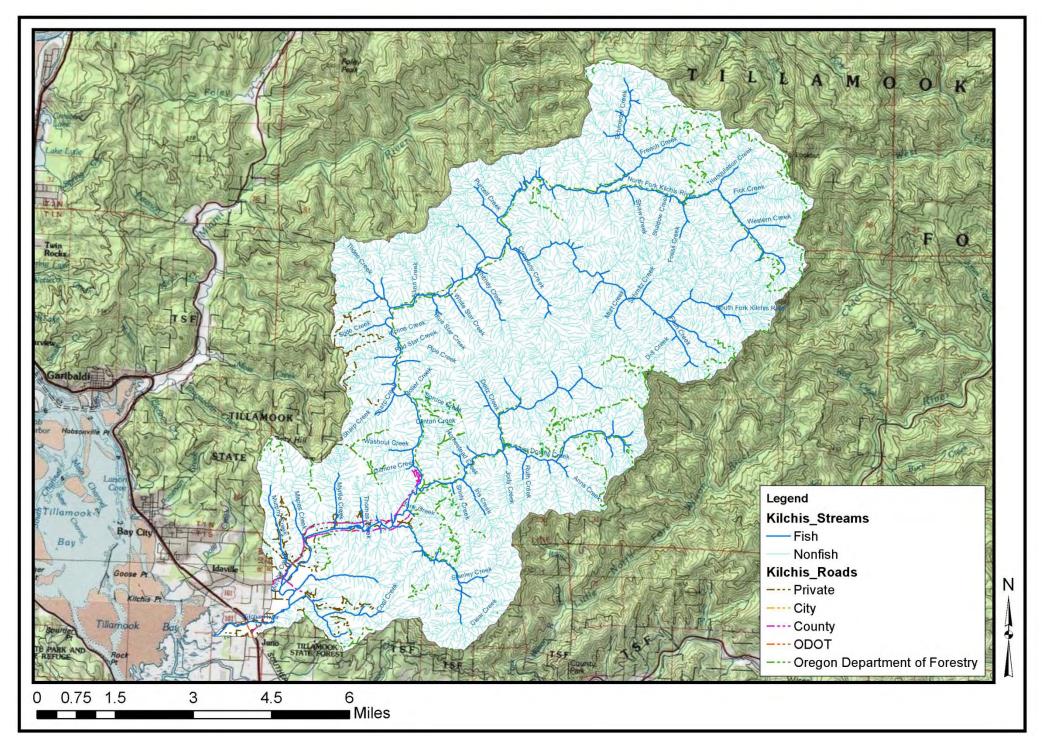


Figure 2. Map of Kilchis River Basin.

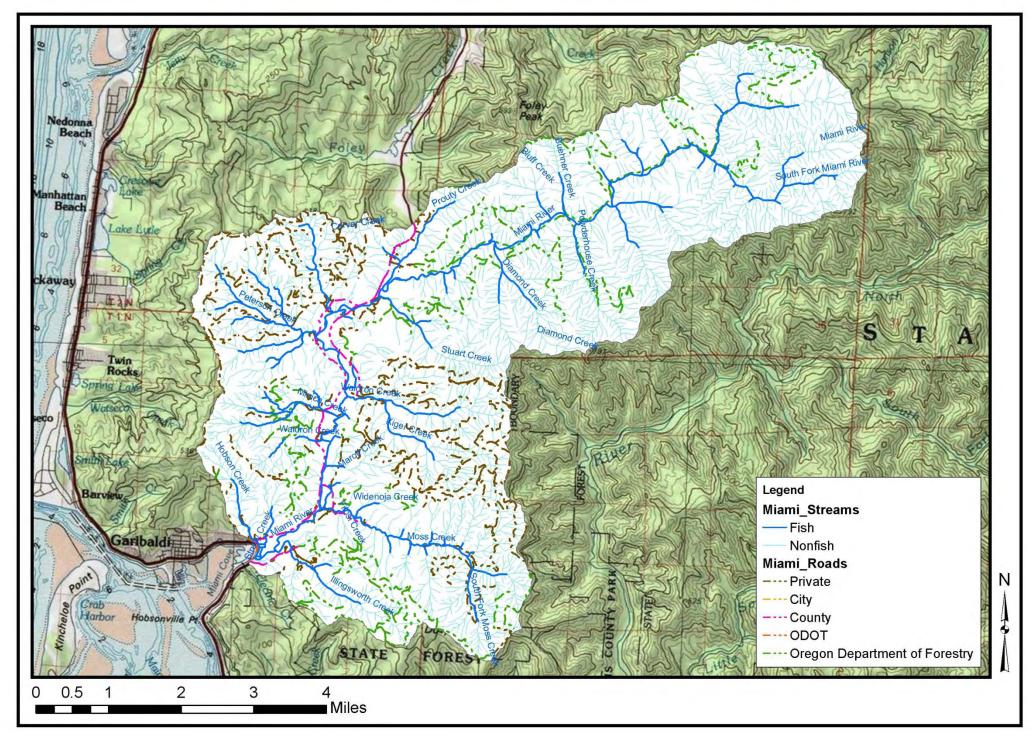


Figure 3. Map of Miami River Basin.

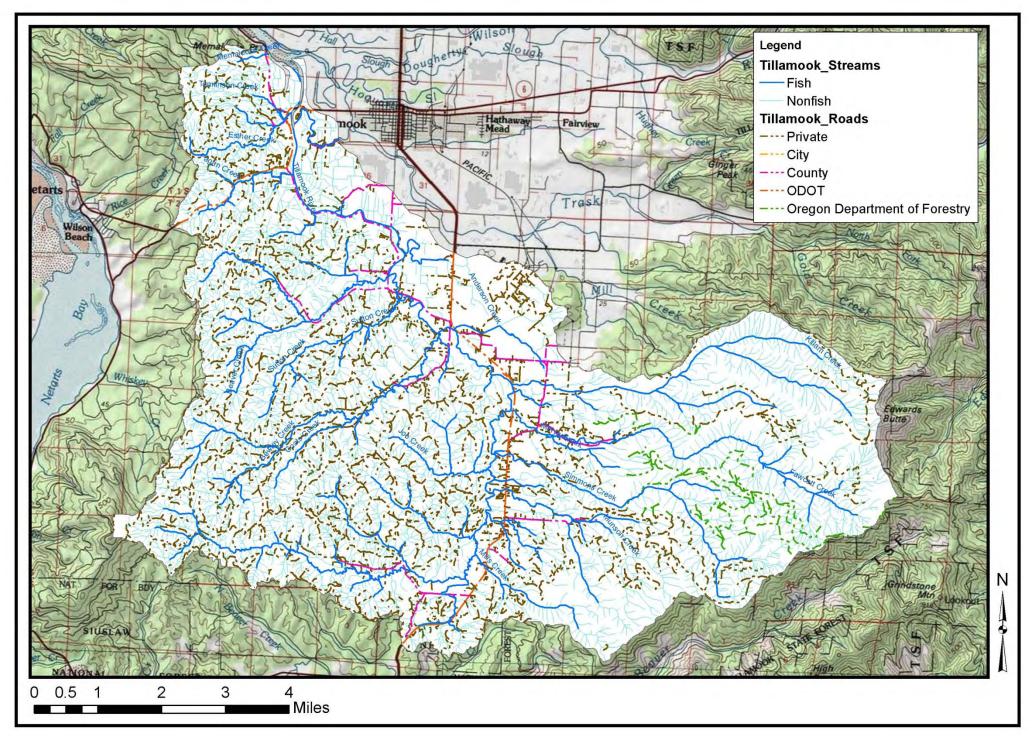


Figure 4. Map of Tillamook River Basin.

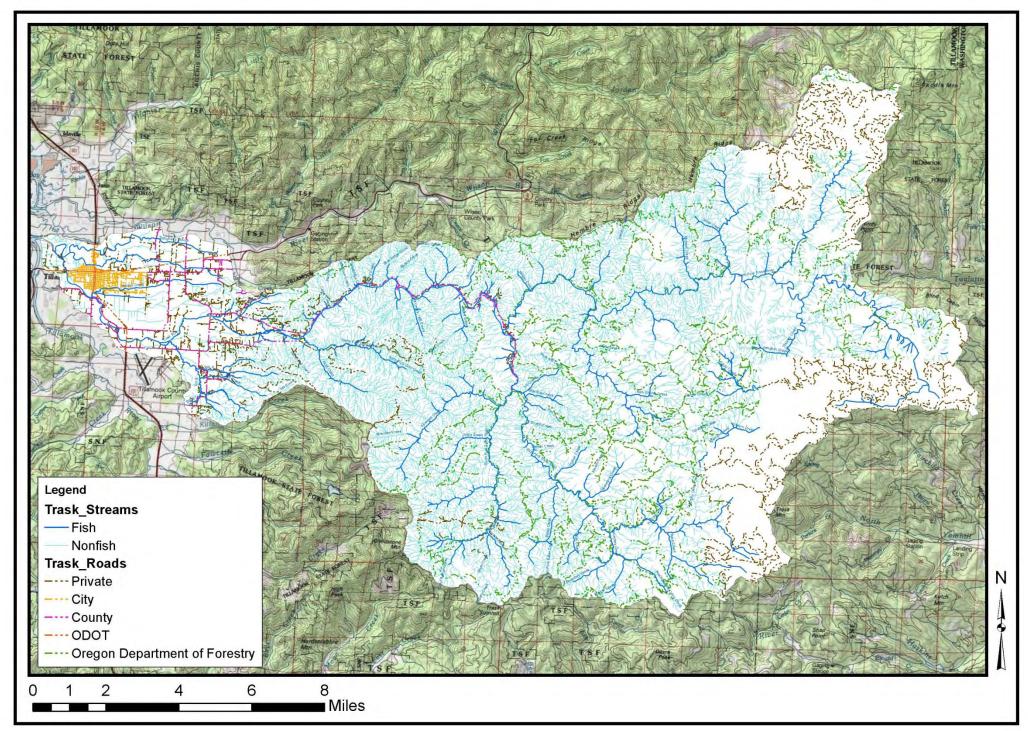


Figure 5. Map of Trask River Basin.

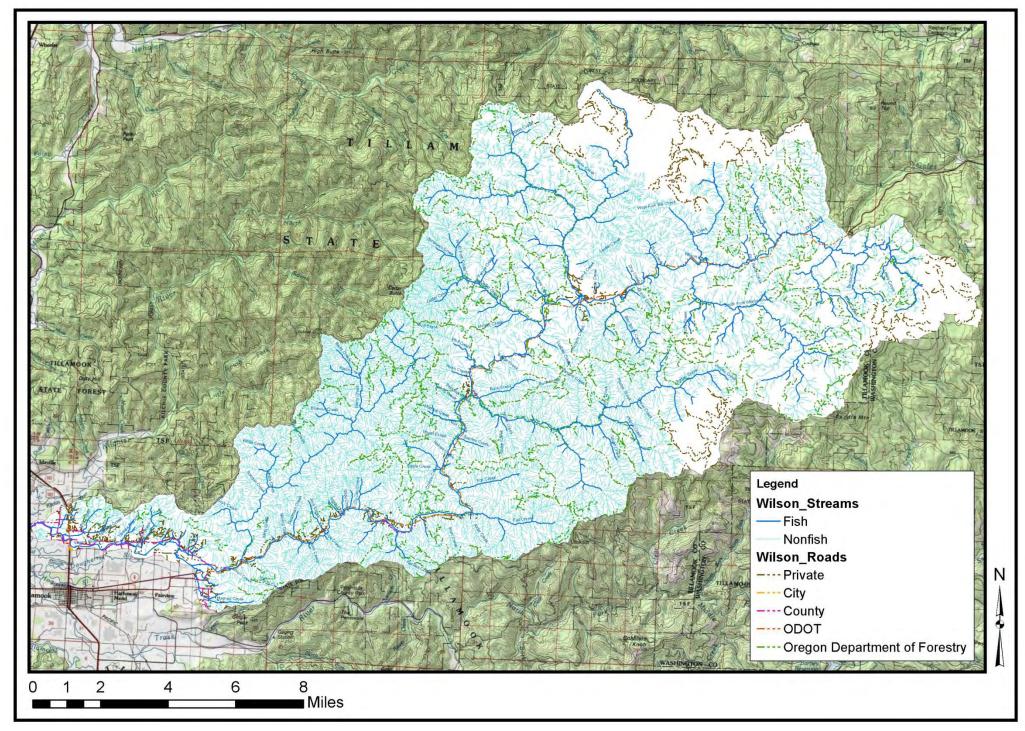


Figure 6. Map of Wilson River Basin.

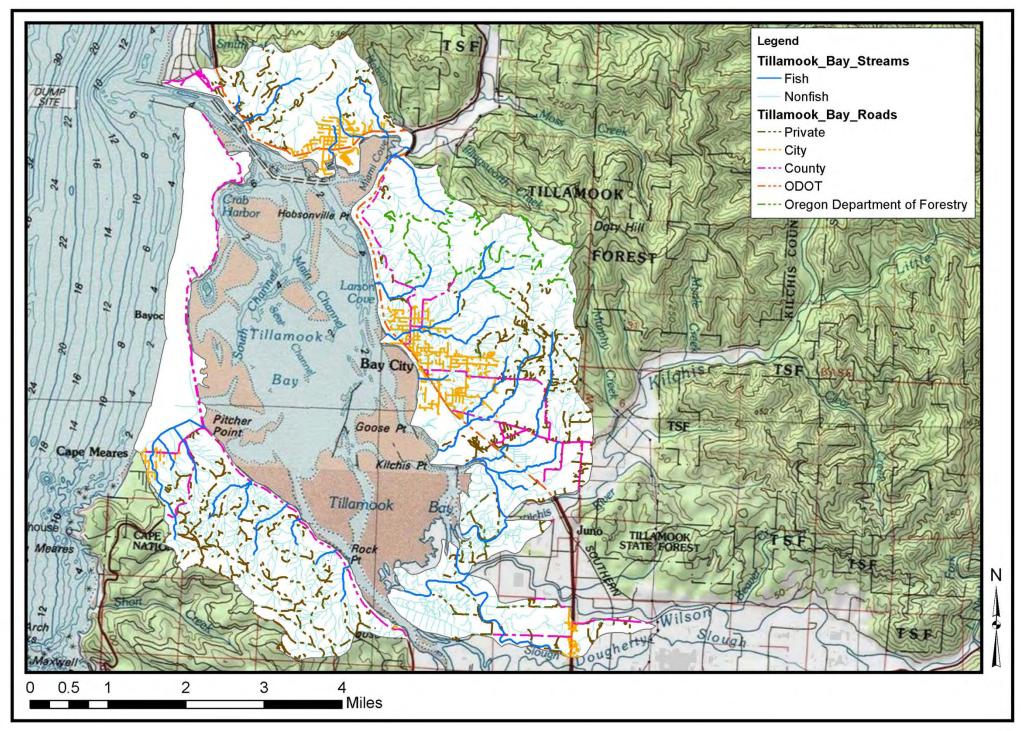


Figure 7. Map of Tillamook Bay Tributaries.

This consisted of two days of classroom training followed by field training. Classroom presentations covered a variety of topics including the Watershed, anadromous fish and their ecology, crossing structure classification and condition assessment, work safety, field methods, data management, etc. Interns spent the remainder of the training period working directly with the Project Manager conducting actual culvert surveys (see below). Together, we surveyed several GIS-identified crossings. This group field effort assured that each intern performed and became familiar with all aspects of the data collection and management process and were collecting data in a similar manner before they worked independently.

2.2.2. Preliminary Classification and Data Collection at Culverts

After the training, we established three, two-person field crews. Between late June and mid-September, 2011, these crews visited (or attempted to visit) each of the GIS-identified crossings that we had permission to access.¹

At each crossing, we completed an initial screening process to establish whether the crossing was a "Fish Culvert" or "Not a Fish Culvert" (NFC). This process was the first step of our assessment and prioritization scheme and determined the appropriate data collection effort that the crew would need to complete for each crossing.

Crossings classified as "Fish Culverts" consisted of a culvert crossing structure on a known or potentially fish-bearing stream. The results section of this report primarily addresses these crossings. Crossings classified as NFC were crossings where (a) the crossing structure was something other than a culvert (e.g., a ford or a bridge)², and/or (b) the stream reach was identified as Nonfish and/or appeared to lack suitable habitats for fishes (based on field observations). Although field crews had access to Oregon Department of Forestry (ODF) stream information as presented in figures 2-7 (and discussed in greater detail later in this report), they also made field determinations. The crews assessed whether a stream appeared fish-bearing or non fish-bearing based on a review of in-stream habitats and the surrounding riparian and upland communities (coupled with review of mapped information). This could be a challenging decision and often involved repeat visits and/or post-fieldwork review of additional data sources (e.g., RBA and fish distribution data). It is important to note that these determinations were made outside of the normal period for ODF fish presence/absence surveys and did not follow ODF protocols (ODF 2009).

In a few cases, we made determinations that differed from the ODF designation. There was a single instance, where we made an NFC determination on a stream verified as supporting fish. This culvert (#280) occurs on a small tributary of Elliot Creek in the upper Wilson River Basin. Our crew felt that the stream above this crossing was too small to support fish. The Fish-Verified reach of this stream extends approximately 0.1 miles above culvert #280. Because the segment above the culvert was so short and only resident fish occupy this portion of the Wilson River Basin, we did not return to the crossing to resample. We made a few NFC determinations for crossings on modeled fish streams. This decision was typically made when the stream was very small with marginal instream habitats and highly disturbed riparian and upland communities. There also were instances where the stream appeared capable of supporting fishes (upstream and/or downstream of the culvert), but where topographic and geophysical conditions at or near the culvert seemed to preclude upstream passage regardless of whether a culvert was present (e.g., culvert

¹ Between Fall 2011 and Summer 2012 we completed additional field work to clarify questions regarding previously surveyed pipes and to collect information on crossings not visited while field crews were employed.

² These structures were not necessarily on stream reaches that were "non-fish." In fact, bridges were often on larger streams known to support fish.

built on or near bedrock falls or in other extremely steep gradient conditions).³ Conversely, we made a few Fish Culvert determinations for crossings on s tream reaches designated Nonfish (verified and modeled – see below). These were generally situations where the crossing was located on a stream that appeared capable of supporting fish (at least seasonally) and flowed through naturally vegetated upland and riparian communities. In addition, these crossings also were typically in close proximity to stream reaches known to support salmonids.

During site visits at each fish culvert, crews collected a variety of data to characterize both the culvert and its adjacent stream reach and provide for subsequent analyses (Appendix 1-Crossing Assessment Form). We collected much of this data along a longitudinal profile that extended from above the culvert downstream to below the culvert and included all pertinent points needed to fully characterize the culvert and adjacent stream reach (Figure 8).⁴ We used an optical surveyor's level, levelling rod and fiberglass tape measure to collect elevational data along the longitudinal profile. Units for all our levelling rods and fiberglass tapes were decimal feet (i.e., feet, tenths, and hundredths).

We initially established a Temporary Bench Mark (TBM), selected a location for the surveyor's level, and stretched the fiberglass tape measure from upstream to downstream along the stream centerline. The TBM was typically established on the top of the culvert on the inlet side and was given an arbitrary elevation of 100.00 ft (Figure 8). All other elevations were recorded relative to this 100.00 ft TBM. Crews attempted to set up the surveyor's level in a location with a line-of-sight view of all data points depicted on Figure 8. In a few instances, this was not possible and the crew moved the level partway through data collection and followed standard surveying procedures to re-establish Height-of-Instrument (relative to TBM) before continuing collection of elevational data. Elevational data was used for several different calculations needed to characterize fish culverts (see Figure 8 and Section 2.3). In several cases site topography or other obstacles made it impossible to collect longitudinal profile data using surveying equipment. In such instances, crews measured gradients directly using an Abney level and measured perch height directly using the tape measure or levelling rod (if an outlet perch was present).

Crews also collected other data needed to fully characterize each fish culvert in addition to the aforementioned longitudinal profile data (Appendix 1-Crossing Assessment Form). These included:

- several stream attributes (e.g., bankfull width [generally based on an average of three upstream measurements] and substrate conditions),
- culvert location (UTM coordinates, Public Land Survey System coordinates [i.e., Township and Range coordinates], and mile post),
- culvert type (shape and material),
- culvert dimensions (horizontal and vertical measurements),

³ Resident cutthroat trout populations regularly occur upstream of both natural and anthropogenic barriers. However, in these situations, a resident fish passing downstream of these points would likely be incapable of returning upstream whether the culvert was there or not.

⁴ Data collection points along the longitudinal profile and methodologies used to measure and analyze these data generally follow Clarkin et al. (2005).

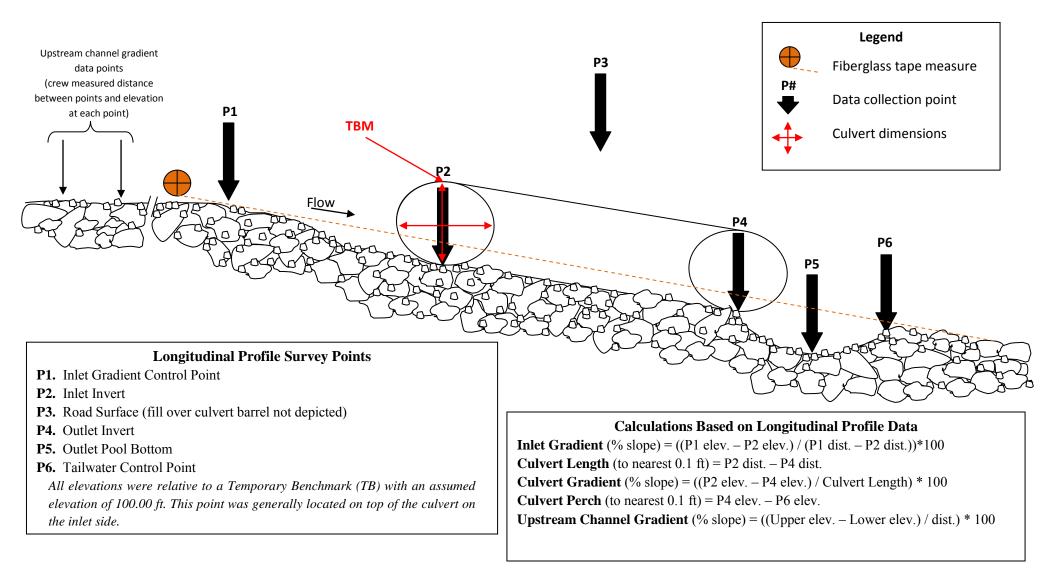


Figure 8. Illustration depicting typical points where longitudinal profile data was collected at road-stream crossings in the Tillamook Bay Watershed, Tillamook County, Oregon. At each of the points indicated, crews recorded both distance along the fiberglass tape and the elevation of the point relative to the Temporary Benchmark (TBM = 100.00 ft) elevation. Drawing also depicts culvert dimensions recorded during field work. Below the drawing are descriptions of longitudinal profile points and the calculations made with these data used to further characterize each culvert.

- culvert condition (problems that could cause the culvert to plug or fail and affect resources [Clarkin et al. 2005] and condition categories developed and used by transportation agencies to assess the condition and performance of culverts [Hunt et al. 2010]), and
- inlet rust line height⁵,

In addition, crews took a ser ies of photographs to better illustrate culvert conditions (inlet, outlet, upstream from inlet, downstream from outlet, and sometimes special condition photos [e.g., excessive corrosion or other damages]). They also drew a site sketch that depicted the culvert relative to the road corridor; locations of the surveyor's level, longitudinal profile data points, photo points; and other pertinent details regarding the crossing (e.g., aprons, wingwalls, riprap, boulders, large wood, etc.).

Crews did not collect the same level of information at crossings initially identified as NFC. For these crossings the crew simply recorded the coordinates of the crossing and noted the type of crossing present (e.g., bridge, culvert, etc.). In a few instances where an NFC culvert was in very poor condition, the crews also noted the condition of the culvert and took photographs.

2.3. Post-Field Work Analyses

Following field work, we performed additional analyses to assess the potential for culverts to impede fish passage and determine the amount of potentially suitable habitat upstream of each culvert. We also convened a group of local fisheries biologists and others familiar with the Watershed to classify the quality of habitats upstream of each culvert. We incorporated all of this information into a Prioritization Model, which forms the basis for our recommended replacement strategy. We discuss the above analyses and models in detail below. The scoring strategy for each variable in the Prioritization Model is discussed in Section 2.3.6.

2.3.1 Longitudinal Profile Data Analyses

We used longitudinal profile data to calculate several pieces of pertinent information: culvert length, inlet gradient, culvert gradient, upstream channel gradient, and culvert perch height. The formulas for these calculations are shown on Figure 8. We used average bankfull width and the horizontal dimension of the culvert to calculate a Bankfull Width:Culvert Width Ratio. The results of the above calculations for each of the assessed culverts were used in analyses discussed below and are incorporated into tables later in this report.

2.3.2. Barrier Determination Model

We used the results of the above calculations and additional information collected in the field in a model that assesses the potential for a culvert to impede fish passage. The result of the barrier determination model is one of the parameters considered in our Prioritization Model (see below).

We selected the BLM Coarse Screen Filter, Version 2.2 as our barrier determination model. (Table 1). This model is based on juvenile salmonid passage potential and was used for a previous TEP culvert

⁵ Rust lines typically form at the level of persistent high flows on steel culverts (similar staining can occur on concrete pipes). Rust line height is a good indicator of culvert capacity relative to stream flow. Rustline height exceeding 1/3 to 1/2 of the culvert diameter is a good indication that the pipe is undersized for the stream channel and its flows.

Table 1. U.S. Bureau of Land Management Coarse screen filter for juvenile salmonid passage assessment, Version 2.2.

	Structure	Green	Gray	Red
1	Bottomless pipe arch or countersunk pipe arch, Substrate 100% coverage through pipe and invert depth greater than 20% of culvert rise.	Culvert installed at channel grade (+/- 1%), culvert span to bankfull width ratio greater than 0.9, no blockage.	Culvert installed at channel grade (+/- 1%), culvert span to bankfull width ratio greater than 0.5, less than or equal to 10% blockage.	Culvert not installed at channel grade (+/-1%), culvert span to bankfull width ratio less than 0.5, greater than 10% blockage.
2	Pipe arches (1x3 corrugation and larger). Substrate less than 100% coverage through pipe or invert depth less than 20% of culvert rise.	Culvert gradient less than 0.5%, no perch, no blockage, culvert span to bankfull width ratio greater than 0.75.	Culvert gradient between 0.5 to 2.0%, less than 4" perch, less than or equal to 10% blockage, culvert span to bankfull width ratio greater than 0.5.	Culvert gradient greater than 2.0%, greater than 4" perch, greater than 10% blockage, culvert span to bankfull width ratio less than 0.5.
3	Circular CMP or ABS, 48 inch span and smaller, spiral or annular (CMP) corrugations, regardless of substrate coverage.	Culvert gradient less than 0.5%, no perch, no blockage, culvert span to bankfull width ratio greater than 0.75	Culvert gradient 0.5 to 1.0%, perch less than 4 inches, less than or equal to 10% blockage, culvert span to bankfull width ratio greater than 0.5.	Culvert gradient greater than 1.0%, perch greater than 4 inches, blockage greater than 10%, span to bankfull width ratio less than 0.5.
4	Circular CMPs with annular corrugations larger than 1x3 and 1x3 spiral corrugations (>48" span), substrate less than 100% coverage through pipe or invert depth less than 20% culvert rise.	Culvert gradient less than 0.5%, no perch, no blockage, culvert span to bankfull width ratio greater than 0.75.	Culvert gradient between 0.5 to 2.0%, less than 4" perch, less than or equal to 10% blockage, culvert span to bankfull width ratio greater than 0.5.	Culvert gradient greater than 2.0%, greater than 4" perch, greater than 10% blockage, culvert span to bankfull width ratio less than 0.5.
5	Circular CMPs with 1x3 or smaller annular corrugations (all spans) and 1x3 spiral corrugations (>48" span), 100% substrate coverage through pipe and invert depth greater than 20% of culvert rise.	Culvert gradient less than 1%, no perch, no blockage, culvert span to bankfull width ratio greater than 0.75	Culvert gradient 1.0 to 3.0%, perch less than 4 inches, less than or equal to 10% blockage, culvert span to bankfull width ratio greater than 0.5.	Culvert gradient greater than 3.0%, perch greater than 4 inches, blockage greater than 10%, culvert span to bankfull width ratio less than 0.5.
6	Circular CMPs with 2x6 annular corrugations (all spans), 100% substrate coverage through pipe and invert depth greater than 20% of culvert rise.	Culvert gradient less than 2.0%, no perch, no blockage, culvert span to bankfull width ratio greater than 0.75	Culvert gradient 2.0 to 4.0%, less than 4" perch, less than or equal to 10% blockage, culvert span to bankfull width ratio greater than 0.5.	Culvert gradient greater than 4.0%, greater than 4 inch perch, greater than 10% blockage, culvert span to bankfull width ratio less than 0.5.
7	Special items; log stringer or modular bridge,	No encroachment on bankfull width.	Encroachment on bankfull width (either streambank).	Structural collapse.
8	Baffled structure installations (all culvert sizes and configurations).	No perch, no blockage. Culvert span to bankfull width ratio greater than 0.75. 100% substrate in pipe but baffles protruding.	Outlet with less than 6 inch perch, less than or equal to 10% blockage, culvert span to bankfull width ratio greater than 0.5. Less than 100% substrate.	Perch greater than 6 inches, greater than 10% blockage, culvert span to bankfull width ratio less than 0.5. Less than 100% substrate.
9	Weir installations (all culvert sizes and configurations).	and no jumps exceed 4 inches.	Outlet with less than 6 inch perch, less than or equal to 10% blockage, culvert span to bankfull width ratio greater than 0.5. Weirs with pool depths less than 6 inches. Jumps over weirs greater than 4 inches.	Perch greater than 6 inches, greater than 10% blockage, culvert span to bankfull width ratio less than 0.5. Weirs without pools, no resting areas. Weir Jumps> 4 inches
10	Concrete Box Culverts	width ratio greater than 0.75. No blockage.	Culvert gradient up to 2%. Outlet with less than 4 inch perch. 100% substrate in pipe. Culvert span to bankfull ratio greater than 0.5.	bankfull ratio less than 0.5. Laminar flow. Less than 100% substrate in pipe.
11	Circular concrete and smooth wall ABS culverts.	100% substrate in pipe. Slope less than .5%. No Perch	Less than 100% substrate in pipe. Slope .5-1%. Perch less than 4 inches	No substrate. Slope greater than 1% Perch greater than 4 inches.

assessment for the Nestucca and Neskowin watersheds (Hoffman 2006).⁶ During preparation of that report, the author and her technical advisory committee evaluated this and two other commonly used barrier determination models. They selected this model because it is very conservative in determining whether a culvert is a barrier and it differentiates culverts based on the degree to which juvenile fish passage is impeded.

Based on the type of culvert and a suite of characteristics, the model places culverts into one of three passage categories: G reen = Not a B arrier (juveniles are able to move past the culvert under all conditions), Gray = Partial Barrier (under some conditions the culvert may preclude juvenile passage), and Red = Complete Barrier (the culvert may block juvenile passage under all conditions). Within the prioritization model, culverts classified as Green received 1 point, Gray culverts received 2 points, and Red culverts received 3 points.

As also stressed by Hoffman (2006), no barrier model is flawless and the determinations made by employing a model are not absolute (juveniles may occasionally get past a culvert classified as a complete barrier and under some conditions a green culvert may preclude juvenile passage). However, we have confidence in the results of the model. We believe that it provides a good approximation of real-world conditions and is sufficiently rigorous to allow comparisons among culverts.

2.3.3. Upstream Habitat Length

We used GIS to estimate the linear amount of potentially suitable habitat upstream of each culvert. This is one of the variables in the Culvert Prioritization Model and is termed Upstream Habitat Length (see below). For the prioritization model, upstream habitat lengths were divided into four classes (each encompassing a range of upstream habitat lengths): 0.0 - 0.5 miles, 0.6 - 1.0 miles, 0.6 - 1.0 miles, and 0.6 - 1.0 miles. Each culvert was placed in one of these four classes based on the total linear amount of suitable habitat upstream of the culvert and scored accordingly 0.0 - 0.5 miles = 1 point, 0.6 - 1.0 miles = 2 points, 0.6 - 1.0 miles = 3 points, 0.6 - 1.0 miles = 4 points).

We based our decisions for this parameter on a composite of fields in the attribute table of the ODF Stream Layer mentioned previously. These fields are: Fishpres (Fish Presence = Fish, Nonfish, or Unknown), Verfish (Fish Presence Verified? = Verified or Assumed) and Modfish (Fish Presence Modeled = Fish, Nonfish, or Not Modeled⁷). For presentation purposes, we considered six potential categories that result from this composite: F ish-Verified, Fish-Assumed, Fish-Modeled, Nonfish-Verified, Nonfish-Assumed, and Nonfish-Modeled. Figures 2-7 depict these different stream designations. Although we differentiated reaches based on these designations on maps provided in this report, we did not differentiate between the -Verified, -Assumed and -Modeled classifications for our analyses.

The vast majority of crossings we identified as fish culverts, were located on Fish-Verified, Fish-Assumed or Fish-Modeled stream reaches. For these crossings, we consider the amount of potentially

15

⁶ Adult salmonids are much more capable swimmers than juveniles and can move past obstacles that would preclude juvenile passage. Using juvenile passage potential results in a more conservative assessment and minimizes the potential for problem culverts to be overlooked. Our model considered a drop of ≥ 4 inches to be a juvenile barrier.

⁷ Only reaches designated Unknown in the Fishpres field are modeled.

suitable habitat to be the combined length of all reaches designated Fish-Verified, Fish-Assumed and Fish-Modeled upstream of the given culvert.

We used an alternative approach for the few crossings we classified as fish culverts, but which occurred on streams classified as Nonfish-Verified, Nonfish-Assumed and Nonfish-Modeled. For these culverts, the length of upstream habitat was subjective and based on review of stream gradients, intrinsic potential model outputs and other variables. We reviewed this suite of information and used professional opinion to define the upstream limit (generally where stream gradient became excessively steep and intrinsic potential fell to very low values).

We assumed no upstream barriers (anthropogenic or natural) for the upstream habitat length analysis. In other words, we assumed that the entire length of Fish-Verified, Fish-Assumed and Fish-Modeled reaches upstream of the subject culvert were accessible to juvenile salmonids. We acknowledge that this assumption is an oversimplified view of the watershed. There are known and possibly unknown barrier culverts above many of the culverts analyzed for this report (known culverts are included in this prioritization process). Other anthropogenic barriers also may occur. In addition, permanent and temporary natural barriers occur throughout the Watershed. Some of these barriers are known, while others may be unknown. The degree to which many natural obstacles (and unknown anthropogenic features) may impede fish passage also is largely unknown. Some may mark the end of fish distribution altogether, some may only preclude passage under certain conditions, while others may preclude anadromous passage, but may not mark the end of resident fish use.

We also acknowledge that our method places an enormous amount of faith in the data and model outputs used by ODF and Oregon Department of Fish and Wildlife (ODFW) to classify streams throughout the Watershed. The stream classifications are used for regulatory and management decisions, however, so we assume that they are suitably robust for the purpose of our analysis (ODF 2009).

There are a vast number of variables to consider and a great amount of uncertainty is inherent in obtaining results for the Upstream Habitat Length parameter. We believe the method we chose is an objective and data-driven approach to identifying and comparing upstream habitats for the culverts we analyzed and are confident in the results of this analysis.

2.3.4. Upstream Habitat Quality

We ranked the quality of habitats upstream of each subject culvert. This also is one of the variables in the Culvert Prioritization Model and is termed Upstream Habitat Quality (see below). Within the prioritization model there are three potential responses for this variable: Poor (1 point), Fair (2 points) and Good (3 points).

To populate this variable for each culvert, we convened a one-day meeting of local fisheries biologists and other technical specialists familiar with streams in the study area and GIS data sets with attributes that imply habitat quality. During this meeting, participants reviewed data for each individual fish culvert evaluated in this study and formulated a consensus opinion on the quality of habitats upstream of each culvert. If a participant had first-hand knowledge regarding a stream (typically information on water quality, in-stream and adjacent habitats, fish survey results, etc.) they provided that information to the group. The group also reviewed a variety of GIS data including mapped fish distributions (ODFW data layers for coho and winter steelhead distributions), juvenile snorkel survey results (Rapid Bio Assessment

[RBA] data – Bio-Surveys, LLC. 2005, 2006 and 2007), output from intrinsic potential models (Burnett et al. 2003 and 2007)⁸, and stream gradients. The group considered this suite of information in its entirety in formulating its consensus opinion for each assessed culvert.

We rated upstream habitat quality as Poor when the following attributes were predominant upstream of the subject culvert: very small streams with limited flows, steep stream gradients (generally > 8 percent gradient), compromised adjacent upland and riparian habitats (adjacent land primarily supporting agricultural, commercial or residential development or subject to recent and ongoing timber harvests, etc.), low intrinsic potential scores (scores generally < 0.300 for both coho and steelhead), and RBA data indicating low numbers of juvenile salmonids upstream of the subject culvert or in nearby reaches if no RBA data exists for reaches upstream of the subject culvert (juvenile coho, cutthroat and steelhead densities generally less that 0.3 fish per square meter of pool surface).

We rated upstream habitat quality as Fair when the following attributes were predominant upstream of the subject culvert: moderate gradients (generally 4-8 percent gradient), forested upland habitats and intact riparian habitats, moderate intrinsic potential scores (intrinsic potential scores generally between 0.300 and 0.600 for coho or steelhead), and RBA data indicating moderate numbers of juvenile salmonids upstream of the subject culvert or in nearby reaches if no RBA data exists for reaches upstream of the subject culvert (juvenile coho, cutthroat or steelhead densities generally ranging from 0.3-1.0 fish per square meter of pool surface).

We rated upstream habitat quality as Good when the following attributes were predominant upstream of the subject culvert: low to moderate gradients (generally < 6 percent gradient), forested upland habitats and intact riparian habitats, moderate to high intrinsic potential scores (intrinsic potential scores generally above 0.500 for coho or steelhead), and RBA data indicating moderate to high numbers of juvenile salmonids upstream of the subject culvert or in nearby reaches if no RBA data exists for reaches upstream of the subject culvert (juvenile coho, cutthroat or steelhead densities generally > 0.8 fish per square meter of pool surface).

In the tables that provide data on each individual culvert we analyzed for this report (see below), we also included a + or – modifier for some culverts. We included this modifier when the evaluation team felt that habitat conditions were somewhat better or somewhat worse than the Poor or Fair classification would otherwise suggest. In a situation where multiple culverts may have the same overall prioritization score and similar habitat quality scores, this qualifier may be used as a "tie breaker" to facilitate strategic planning of culvert replacements.

objectively evaluate the habitat potential of individual stream reaches across large geographic areas.

These models are based on physical landscape characteristics that have been positively correlated with productive habitats for coho and steelhead (valley width, channel gradient and mean annual flow). Intrinsic potential scores range from 0.0 to 1.0 (low to high). The models are not a perfect measure of habitat quality because they do not account for actual present conditions that affect habitat quality (e.g. condition of adjacent riparian and upland habitats, water quality and other in-stream conditions, etc.). However, they are one of the few tools that

2.3.5. Fish Species Present

We included the type of fish likely to be affected by a given culvert as one of the parameters in our prioritization model. There were three potential responses for this variable: No Fish (1 point), Resident Fish (2 points) and Anadromous Fish (3 points).

By definition, all culverts identified as fish culverts are likely to affect fishes, so we did not apply the "No Fish" category to any culverts evaluated for this report. For the few culverts that we identified as Fish Culverts, but which occurred on Nonfish designated stream reaches (see explanation above), we used the fish classification for the adjacent downstream reaches for that variable in our model. For example, if the adjacent downstream reaches supported anadromous fish, we populated the Fish Presence variable of the model with the value for anadromous fishes (we feel it is reasonable to assume that if a barrier culvert did not exist that the fish using the adjacent downstream reaches would have access to reaches above the subject culvert).

Most culverts in our assessment occurred on streams that are known or potentially occupied by anadromous fishes. As a result, most culverts we analyzed received a full score (3 points) for fish presence. There are a few notable exceptions.

Within the Watershed, there are a few large natural barriers (e.g., University Falls on Elliot Creek in the upper Wilson River Watershed) and anthropogenic barriers (e.g., the dam that forms Barney Reservoir on the Middle Fork North Fork Trask River) that prevent upstream migration of anadromous fishes. A few culverts assessed for this report are located on designated fish streams above these known anadromous barriers. These streams support resident cutthroat trout populations and the culverts on these reaches received scores for resident fish (2 points) within the prioritization model.

2.3.6. Prioritization Model

Results from the above analyses were incorporated into a Prioritization Model which yields a composite score for each culvert (Table 2). We used the model developed and used by Hoffman (2006) for this analysis.

Hoffman's model essentially compares culverts against one another by giving each a composite score based upon the severity of the barrier, the quantity and quality of upstream habitats, and the types of fish affected (resident or anadromous). The results of this model form the basis of our prioritization plan and are incorporated into tables later in this report.

2.4. Prioritization Action Plan

The final step in this culvert assessment project was to develop a plan to facilitate and guide replacement of fish passage barrier culverts in the Watershed based primarily on the outcomes of the above analyses. Our goal was to collect up-to-date information on as many potential barrier culverts as possible, make objective comparisons among these culverts, and facilitate development and implementation of projects to replace barrier culverts in a fashion that maximizes benefits to fishes.

Table 2. C ulvert Prioritization Model used to compare and prioritize culverts in the Tillamook Bay Watershed for replacement.

Parameter	Points	Criteria	Criteria Based on
	1	Not a Barrier (Green)	Juvenile Barrier Determination
Barrier Severity	2	Partial Barrier (Gray)	Model (BLM Coarse Screen Filter Version 2.2).
	3 Complete Barrier (Red) 1 0.0 – 0.5 miles		Ther version 2.2).
	$ \begin{array}{ccc} 1 & 0.0 - 0.5 \text{ miles} \\ 2 & 0.6 - 1.0 \text{ miles} \end{array} $		
Unstroom Hobitat I anoth	2 0.6 – 1.0 miles		Fish presence fields in Oregon
Opstream Habitat Length	Upstream Habitat Length	1.1 – 1.5 miles	Department of Forestry GIS stream layer.
	4	>1.6 miles	·
	1	Poor	Professional judgment of
Upstream Habitat Quality	2	Fair	advisory committee. Supported by review of several GIS data
	3	Good	layers and firsthand knowledge.
	1	No Fish	
Fish Species Present	2	Resident	Review of GIS fish distribution data.
	3	Anadromous	autu.

As noted above, the Tillamook Bay Watershed is quite large and is composed of five river basins and numerous tributaries that outlet directly to the bay. Larger basins (e.g., Trask and Wilson basins) have greater numbers of larger (longer) streams than the smaller basins (e.g., Miami and Kilchis basins). Thus, more culverts in the larger basins are likely to receive the maximum score for the Upstream Habitat Length parameter of the prioritization model than in smaller basins. As a result, comparing culverts across all basins would disproportionally bias our results towards the larger basins. To make our prioritization scheme more user-friendly, facilitate its use by partners that may work more in one portion of the Watershed than others, and remove the aforementioned potential source of bias we based our prioritization recommendations and present our findings below using a basin-by-basin format (rather than lumping culverts across all basins).

We ranked culverts with higher prioritization model scores as higher priority for replacement than those with lower scores. However, many culverts scored equally and the spread between the lowest and highest ranking culverts in some basins was only a few points. When end users use this document for planning replacement projects, we suggest that they use differences in ecological factors discussed above (e.g., + or – "tie breaker" modifier for habitat quality, actual Upstream Habitat Length values, etc.) and overall culvert condition scores to further inform their decision making processes.

Our goal was to prioritize culverts based on objective and measurable variables and facilitate an efficient and effective replacement strategy to improve conditions for fish populations in the Watershed. We recognize that some potential replacements may be easier to implement than others based on potential willingness of landowners to participate, potential to obtain funding, and other factors. However, it is beyond the scope of this project to consider such factors associated with replacement projects and, thus, they were not incorporated into our ranking process.

3.0. Results

We identified 1,526 potential crossings through the initial GIS-based identification effort discussed above.9 We did not receive permission to access 362 of the GIS-identified crossing locations that occurred on private lands or required travel on private roadways. In addition, we determined that 311 of the GIS-identified crossings do not exist (DNE). We identified a crossing as DNE for one of two reasons: (1) the road on which the crossing was expected to occur did not exist (typically these roads had been decommissioned by the land owner), or (2) the GIS-identified crossing was what our field crews referred to as a "Phantom Crossing." We believe phantom crossings were identified in GIS due to errors in the spatial data sets used for the analysis or errors associated with the geospatial analysis used to identify intersections of road and stream polylines. Phantom crossings occurred primarily where road and stream polylines ran parallel, and in very close proximity, to one another. In these situations, a slight alignment error in one or both polylines (as compared to "real world" conditions) could cause GIS to identify an intersection between road and stream polylines where none actually existed. Conversely, GIS could identify an intersection in error if the distance between the road and stream polylines was less than the tolerance level setting used for the ArcGIS intersect analysis (e.g., if the tolerance level for the ArcGIS intersect analysis is set at one meter and the polylines are less than one meter apart, the application would identify a crossing). In either of these circumstances, GIS could identify a crossing where none occurred.

We visited 853 of the 1,526 GIS-identified crossings during field work for this report. In addition, we collected information on 20 crossings not identified by GIS, but which appeared notable to field crews when observed in the field. Therefore, we surveyed a total of 873 crossings for this report. We identified 658 NFC crossings (465 culverts, 190 bridges, two fords, and one hatchery diversion structure) and 215 Fish Culverts: 21 (10 percent) were not barriers to juvenile fish passage (Green), 36 (17 percent) were partial barriers to juvenile fish passage (Gray) and 156 (73 percent) were complete barriers to juvenile fish passage (Red). We lacked sufficient information for two culverts to determine a barrier rating (2 unknown – 1 percent).

The sections that follow summarize our results and provide detailed information on the 215 fish culverts we surveyed (including maps and photos) and replacement prioritization recommendations for each basin in the Tillamook Bay Watershed.

3.1. Prioritization Analysis

As noted above, a majority of culverts included in this report were rated as complete barriers to fish passage. In addition, most culverts in this report also were on streams that should be accessible to anadromous fishes (if not for these anthropogenic barriers). As a result, the variables that most affected our prioritization rankings were habitat quantity and habitat quality.

9

⁹ GIS-identified crossings numbers 453 and 454 turned out to be a single long crossing that passed under several roads and city lots before terminating at Tillamook Bay. The number of culverts reported from this point forward treats these as a single crossing.

In general, culverts ranked as High Priority affected a considerable amount of potentially suitable habitat and/or affected relatively high quality habitats. Medium Priority culverts typically impeded passage to lesser amounts of potentially suitable habitat or somewhat lower quality habitats than those ranked as High Priority. Culverts ranked as Low Priority generally affected only small amounts of habitat and often these habitats were of relatively low quality. When using this report as a guide to identify and plan potential culvert replacement projects, culverts with higher priority ratings should take precedence over lower ranked culverts whenever possible.

We feel it is important to stress that although we rank many culverts as Low Priority for replacement in the following sections, this does not imply that these culverts are unimportant and should not be targeted for replacement. On the contrary, figures 2-7 graphically demonstrate that most streams in the Watershed are not fish-bearing. As a result, all anthropogenic barriers on fish-bearing streams are important with respect to the conservation and long-term viability of native fish populations in the Watershed. However, under most circumstances, culverts receiving Low Priority scores should be targeted for replacement to improve fish passage only after higher ranked culverts have been replaced.

We also include information below on several culverts that at the time of our surveys did not appear to be barriers to fish passage (Barrier Severity Rating = Not a Barrier). Based on their overall prioritization model scores, several of these culverts ranked as High or Medium Priority (despite scoring very low in one of the model parameters). These culverts occurred on streams with large amounts of upstream habitat and/or high-quality habitats and occupied by multiple anadromous species. Although these culverts didn't appear to impede upstream passage at the time of our survey, this may not always be the case. Culverts wear out and stream conditions change, so we recommend regular monitoring visits to verify that these pipes continue to allow access to the streams systems on which they occur.

As noted earlier, we implemented our prioritization process basin-by-basin to facilitate its use by end users and minimize potential bias. The following paragraphs summarize our findings for each basin.

Kilchis River Basin - We surveyed 24 fish culverts in the Kilchis River Basin (Table 3). These crossings affected a total of approximately 12.4 miles of upstream habitats (Table 9). There were 10 High Priority culverts in this basin. We rated four culverts in the Kilchis Basin as Medium Priority. Six culverts in this basin received scores that placed them in the Low Priority range. In addition, four culverts in this basin received scores that would have placed them in the Low Priority range, but these did not appear to be barriers to fish passage at the time of our survey.

Miami River Basin - We surveyed 21 fish culverts in the Miami River Basin (Table 4). These crossings affected a total of approximately 13.8 miles of upstream habitats (Table 9). There were seven High Priority culverts in this basin. We rated six culverts in the Miami Basin as Medium Priority. Six culverts in this basin received scores that placed them in the Low Priority range. In addition, two culverts in this basin received scores that would have placed them in the Low Priority range, but these did not appear barriers to fish passage at the time of our survey.

Tillamook Bay Tributaries - We surveyed 35 fish culverts on streams that outlet directly into Tillamook Bay or Cape Meares Lake (Table 5). These crossings affected a total of approximately 13.8 miles of upstream habitats (Table 9). There were 13 High Priority culverts on these streams. Notably, 10 of these 13 crossings occur on two streams in the Bay City area: Patterson Creek and Doty Creek. We rated 13

culverts on Tillamook Bay tributaries as Medium Priority. Nine culverts in this basin received scores that placed them in the Low Priority range.

Tillamook River Basin - We surveyed 15 fish culverts in the Tillamook River Basin (Table 6). These crossings affected a total of approximately 35.6 miles of upstream habitats (Table 9). There were five High Priority culverts in this basin. We rated three culverts in the Tillamook Basin as Medium Priority. Two culverts in this basin received Low Priority ratings. Additionally, we surveyed two culverts in this basin that did not appear to be barriers to fish passage at the time of our survey, but received scores that would have placed them in the High Priority range (due primarily to the quality and quantity of upstream habitats). There were three similar culverts that received scores that would have placed them in the Medium Priority range.

Trask River Basin - We surveyed 64 fish culverts in the Trask River Basin (Table 7). These crossings affected a total of approximately 35.8 miles of upstream habitats (Table 9). There were 17 High Priority culverts in this basin. We rated 11 culverts in the Trask Basin as Medium Priority. Thirty (30) culverts in this basin received Low Priority ratings. Additionally, we surveyed one culvert in this basin that did not appear to be a barrier to fish passage at the time of our survey, but received a score that would have placed it in the High Priority range (due primarily to the quality and quantity of upstream habitats). There were three similar culverts that received scores that would have placed them in the Medium Priority range and two that scored in the Low Priority range.

Wilson River Basin - We surveyed 56 fish culverts in the Wilson River Basin (Table 8). These crossings affected a total of approximately 30.9 miles of upstream habitats (Table 9). There were 12 High Priority culverts in this basin. We rated 10 culverts in the Wilson Basin as Medium Priority. Twenty-eight (28) culverts in this basin received Low Priority ratings. Additionally, we surveyed one culvert in this basin that did not appear to be a barrier to fish passage at the time of our survey, but received a score that would have placed it in the Medium Priority range (due primarily to the quality and quantity of upstream habitats). There are three similar culverts that received scores that would have placed them in the Low Priority range. Finally, two culverts in this basin were on public roads, but we were unable to collect any data on them because we did not have access to the adjacent private property. As a result, we were unable to calculate a prioritization score for these culverts.

Table 9 summarizes priority rankings and total miles of affected upstream habitat for each basin. It also includes the sum total of upstream habitat in the Tillamook Bay Watershed affected by the 215 fish culverts reported on in this document.

Table 3. Prioritization table for Kilchis Basin.

Crossing ID	Watershed	Stream Name	Road Name	Easting	Northing	Barrel Shape	Length (feet)	Width (inches)	Overall Condition	Culvert Slope (%)	Perch Height (feet)	Barrier Rating	Upstream Habitat (miles)	Prioritization Model Score	Priority
649	Kilchis	Murphy Creek	Curl Road	434654	5039811	Circular	40	48	Fair	-0.4	none	Gray	2.0	11	Н
640	Kilchis	Murphy Creek	Kilchis River Road	434871	5040218	Circular	40	66	Fair	1.6	none	Gray	1.7	11	Н
663	Kilchis	Unnamed trib, Kilchis River	Curl Road	435082	5039482	Circular	38	48	Fair	1.4	none	Gray	1.8	11	Н
262	Kilchis	Whitney Creek	Kilchis Forest Road	440298	5049327	Circular	100	84	Poor	7.0	4.5	Red	1.1	11	Н
603	Kilchis	Mapes Creek	Kilchis River Road	435239	5041132	Circular	50	54	Poor	2.5	none	Red	0.7	10	Н
591	Kilchis	Myrtle Creek	Kilchis River Road	436198	5041562	Circular	41	66	Poor	3.3	3.7	Red	1.0	10	Н
629	Kilchis	Vaughn Creek	Doughty Road	433319	5040431	Circular	35	29	Poor	1.9	0.1	Red	0.9	10	Н
620	Kilchis	Vaughn Creek	Private Drive	433396	5040789	Circular	30	48	Fair	1.9	0.7	Red	0.7	10	Н
608	Kilchis	Vaughn Creek	Pike Road	433409	5040853	Circular	34	48	Fair	5.9	0.8	Red	0.6	10	Н
621	Kilchis	Vaughn Creek	Private Drive	433393	5040779	Pipe Arch	23	74	Fair	1.7	0.4	Red	0.7	10	Н
327	Kilchis	Blue Star Creek	Kilchis Forest Road	438990	5048635	Circular	100	60	Fair	4.0	2.5	Red	0.5	9	M
472	Kilchis	Un. trib, Little S.F. Kilchis R.	Unnamed	441782	5045388	Pipe Arch	60	156	Fair	7.1	7.1	Red	0.6	9	M
674	Kilchis	Unnamed trib, Coal Creek	Private Drive	435604	5039169	Circular	40	30	Poor	5.5	4.5	Red	0.2	9	M
181	Kilchis	unnamed trib, N. Fk. Kilchis R.	Kilchis River Road	448643	5050834	Circular	50.5	66	Good	0.1	0.1	Red	0.5	9	M
292	Kilchis	Aiken Creek	Tilden Bluffs Road	438574	5048715	Circular	54	66	Poor	1.9	6.2	Red	0.1	8	L
673	Kilchis	Hathaway Slough	Alderbrook Loop Road	433617	5039600	Circular	38	24	Poor	1.0	0.1	Red	0.3	8	L
573	Kilchis	Tank Creek	Kilchis Forest Road	438509	5041958	Circular	69	30	Fair	5.6	3.1	Red	0.1	8	L
589	Kilchis	Thomas Creek	Kilchis River Road	437077	5041645	Circular	43	48	Poor	1.8	3.4	Red	0.5	8	L
120	Kilchis	Unnamed trib, Schroeder Ck	Miami Divide Road	444731	5052521	Circular	46	48	Fair	6.8	9.8	Red	0.3	8	L
329	Kilchis	White Star Creek	Kilchis Forest Road	439526	5048697	Circular	65	66	Poor	3.2	6.7	Red	0.5	8	L
658	Kilchis	Vaughn Creek	Alderbrook Loop Road	433158	5039725	Box	35	100	Fair	0.5	0.2	Green	1.4	8	N/A
514	Kilchis	Unnamed trib, Sam Downs Ck	Sans Down Road	444479	5044396	Pipe Arch	95	144	Good	6.7	none	Green	0.4	7	N/A
505	Kilchis	Unnamed trib, Sam Downs Ck	Sam Downs Road	444916	5044416	Pipe Arch	82	144	Fair	4.9	none	Green	0.4	7	N/A
510	Kilchis	Sam Downs Creek	Sam Down Road	445122	5044237	Pipe Arch	52	96	Good	6.7	none	Green	0.1	6	N/A

Table 4. Prioritization table for Miami Basin.

Crossing ID	Watershed	Stream Name	Road Name	Easting	Northing	Barrel Shape	Length (feet)	Width (inches)	Overall Condition	Culvert Slope (%)	Perch Height (feet)	Barrier Rating	Upstream Habitat (miles)	Prioritization Model Score	Priority
462	Miami	Illingsworth Creek	Ekroth Road	431174	5045718	Pipe Arch	37	72	Fair	0.1	none	Gray	1.3	12	Н
189	Miami	Peterson Creek	Miami Foley Road	431586	5050520	Circular	46	96	Poor	1.0	0.2	Gray	6.2	12	Н
138	Miami	Prouty Creek	Miami Forest River Rd	433364	5052149	Pipe Arch	45	110	Fair	3.8	0.2	Red	1.1	12	Н
448	Miami	Hobson Creek	Hobson Creek Road	430234	5046127	Circular	27	42	Poor	2.7	0.3	Red	0.8	10	Н
432	Miami	Hobson Creek	Hobson Creek Road	430115	5046264	Circular	24	40	Poor	1.3	3.6	Red	0.7	10	Н
352	Miami	Waldron Creek	Miami Foley Road	431665	5048197	Circular	52	36	Fair	2.5	none	Red	0.7	10	Н
320	Miami	Minich Creek	Minich Creek Road	431133	5048601	Circular	68	18	Poor	7.0	6.8	Red	0.6	10	Н
450	Miami	Hobson Creek	Miami Foley Road	430417	5045916	Pipe Arch	140	78	Unk	4.2	none	Gray	1.0	9	M
449	Miami	Hobson Creek	Private Drive	430308	5045955	Circular	26	36	Poor	-1.0	none	Gray	0.9	9	M
444	Miami	Struby Creek	Miami Foley Road	430542	5045965	Circular	43	24	Poor	4.6	none	Red	0.5	9	M
273	Miami	Unnamed trib, Minich Creek	Minich Creek Road	430996	5048047	Circular	61	24	Fair	7.0	1.8	Red	0.2	9	M
278	Miami	Unnamed trib, Minich Creek	Minich Creek Road	430917	5048132	Pipe Arch	75	60	Poor	4.0	3.0	Red	0.3	9	M
126	Miami	Carver Creek	Miami Foley Road	433224	5052341	Circular	91	36	Poor	3.1	2.2	Red	0.2	9	M
230	Miami	Unnamed trib, Miami River	Private Drive	432506	5049559	Circular	20	36	Poor	0.1	none	Gray	0.6	8	L
225	Miami	Unnamed trib, Miami River	New Miami River Rd	432423	5049870	Circular	93	48	Poor	4.7	0.9	Red	0.2	8	L
115	Miami	Unnamed trib, Miami River	Miami Forest River Rd	436328	5052920	Circular	30	36	Fair	4.4	1.6	Red	0.1	8	L
84	Miami	Unnamed trib, Miami River	Miami River Forest Rd	439281	5054779	Pipe Arch	55	120	Fair	3.6	10.3	Red	0.2	8	L
5101	Miami	Unnamed trib, Miami River	Miami River Forest Rd	439759	5054992	Circular	42	60	Fair	1.8	7.2	Red	0.1	8	L
87	Miami	Unnamed trib, Miami River	Miami River Forest Rd	440590	5054528	Pipe Arch	61	104	Good	3.3	0.4	Red	0.1	8	L
279	Miami	Unnamed trib, Minich Creek	Minich Creek Road	431186	5048972	Pipe Arch	60	97	Fair	2.0	none	Green	0.6	8	N/A
93	Miami	Unnamed trib, Miami River	Miami River Forest Rd	438027	5054143	Pipe Arch	55	120	Good	4.5	none	Green	0.2	6	N/A

Table 5. Prioritization table for Tillamook Bay tributaries.

Crossing	Watanahad	Stream Name	n IV	Etin-	N	Damal Chana	Length	Width	Overall	Culvert Slope	Perch Height	Barrier	Upstream Habitat	Prioritization Model	Deionidos
ID 647	Watershed Till. Bay	Doty Creek	Road Name Highway 101	Easting 431728	5039890	Barrel Shape Pipe Arch	(feet)	(inches)	Condition Fair	0.7	(feet) 0.5	Rating Red	(miles)	Score 12	Priority H
578	Till. Bay	Patterson Creek	5th Street	431728	5041806	Box	71	96	Fair	0.7	1.8	Red	3.6	12	Н
575	Till. Bay	Patterson Creek	Unnamed	430727	5041881	Circular	36	60	Critical	3.4	0.8	Red	2.3	12	Н
5555	Till. Bay	Patterson Creek	8th Street	430727	5041890	Circular	41	56	Critical	-0.2	none	Red	2.3	12	Н
572	Till. Bay	Patterson Creek	9th Street	430901	5041865	Pipe Arch	42	48	Fair	unk	unk	Red	2.2	12	Н
636	Till. Bay	Doty Creek	Vaughn Road	432285	5040153	Circular	37	36	Fair	0.3	0.1	Red	1.2	11	Н
581	Till. Bay	Patterson Creek	Highway 101	430242	5041650	Box	105	96	Fair	0.2	none	Gray	3.8	11	Н
579	Till. Bay	Patterson Creek	4th Street	430484	5041795	Circular	97	72	Fair	1.6	none	Gray	3.7	11	Н
637	Till. Bay	Doty Creek	Alderbrook Loop Road	432147	5040015	Circular	41	36	Fair	0.1	0.1	Gray	1.4	10	Н
622	Till. Bay	Doty Creek	Private Drive	432654	5040550	Circular	19	45	Poor	8.0	0.6	Red	0.8	10	Н
689	Till. Bay	Flower Pot Creek	Bayocean Road	427301	5038583	Circular	56	48	Fair	0.7	unk	Gray	1.4	10	Н
441	Till. Bay	Smith Creek	Highway 101	426950	5046015	Box	81	48	Poor	1.0	7.7	Red	1.0	10	Н
440	Till. Bay	Smith Creek	Harbor View Drive	427105	5046081	Circular	52	56	Critical	11.9	1.9	Red	0.9	10	Н
686	Cape Meares Lk.	Coleman Creek	Pacific Avenue	425312	5038726	Circular	39	36	Fair	3.1	2.1	Red	0.7	9	M
613	Till. Bay	Doty Creek	Doughty Road	432729	5040868	Circular	36	46	Fair	-1.1	none	Gray	0.7	9	M
605	Till. Bay	Doty Creek	Private Drive	432768	5041048	Circular	31	48	Fair	3.4	none	Red	0.5	9	M
599	Till. Bay	Doty Creek	Timberline Drive	432833	5041204	Circular	40	48	Good	1.2	0.9	Red	0.4	9	M
593	Till. Bay	Doty Creek	Private Drive	432915	5041390	Circular	44	24	Fair	6.3	4.2	Red	0.3	9	M
476	Till. Bay	Electric Creek	Highway 101	430186	5045387	Circular	~160	48	Critical	variable	none	Red	1.0	9	M
559	Till. Bay	Larson Creek	Old Bay City Road	430546	5042675	Circular	55	36	Poor	1.8	1.5	Red	0.4	9	M
542	Till. Bay	Patterson Creek	Unnamed	431891	5042999	Circular	43	36	Poor	5.0	1.6	Red	0.5	9	M
5304	Till. Bay	School Creek	Parking Lot	429112	5045771	Circular	~125	36	Poor	1.0	none	Red	0.7	9	M
453/454	Till. Bay	School Creek	Several in Garibaldi	429205	5045779	Circular	~700	36	Unk	2.0	none	Red	0.9	9	M
413	Till. Bay	Smith Creek	Barview Forest Rd	427659	5046723	Circular	45	36	Poor	3.0	7.5	Red	0.3	9	M
702	Till. Bay	Unnamed trib, McCoy Cove	Bayocean Road	428043	5038123	Circular	48	48	Fair	0.2	unk	Gray	0.9	9	M
543	Till. Bay	Unnamed trib, Patterson Creek	Unnamed	431979	5042920	Circular	41	42	Poor	4.2	3.1	Red	0.4	9	M
675	Cape Meares Lk.	Coleman Creek	5th Street	425267	5039131	Circular	50	42	Fair	6.1	unk	Gray	1.0	8	L
778	Till. Bay	Dick Creek	Bayocean Road	429330	5036881	Pipe Arch	44	72	Poor	2.1	unk	Gray	0.5	8	L
528	Till. Bay	Patterson Creek	Patterson Creek Road	432101	5043624	Circular	74	36	Poor	2.0	2.2	Red	0.1	8	L
452	Till. Bay	School Creek	Driftwood Avenue	429064	5045799	Pipe Arch	82	96	Fair	3.0	none	Gray	0.8	8	L
757	Till. Bay	Unnamed trib, Bock Point	Bayocean Road	429068	5037210	Circular	59	36	Fair	0.0	unk	Gray	0.3	8	L
725	Till. Bay	Unnamed trib, Boulder Point	Bayocean Road	428308	5037848	Circular	52	72	Poor	2.8	unk	Gray	0.4	8	L
5302	Till. Bay	Whitney Creek	Highway 101	429847	5045882	Circular	55	36	Poor	1.0	none	Red	0.5	8	L
5301	Till. Bay	Whitney Creek	Arizona Way	429817	5045895	Pipe Arch	61	42	Fair	1.0	none	Gray	0.4	8	L
5303	Till. Bay	Whitney Creek	Martin Smith Lane	429760	5045944	Circular	55	36	Critical	3.5	0.7	Red	0.4	8	L

Table 6. Prioritization table for Tillamook Basin.

Crossing ID	Watershed	Stream Name	Road Name	Easting	Northing	Barrel Shape	Length (feet)	Width (inches)	Overall Condition	Culvert Slope (%)	Perch Height (feet)	Barrier Rating	Upstream Habitat (miles)	Prioritization Model Score	Priority
1234	Tillamook	Killam Creek	Highway 101	437142	5022712	Box	109	96	Fair	0.4	4.4	Red	8.4	13	Н
1381	Tillamook	Munson Creek	Highway 101	437008	5024593	Box	69	144	Fair	0.1	1.0	Red	4.3	13	Н
908	Tillamook	Esther Creek	Highway 131	431197	5033781	Circular	155	66	Poor	1.0	none	Gray	3.9	12	Н
931	Tillamook	Esther Creek	Tomlinson Road	430928	5033563	Circular	25	60	Poor	1.2	0.1	Gray	2.9	12	Н
1438	Tillamook	Unnamed trib, Tillamook River	Private Drive	434395	5022847	Circular	17	60	Critical	1.6	none	Gray	2.4	12	Н
1330	Tillamook	Simmons Creek	Highway 101	437043	5025427	Open Arch	113	240	Fair	0.4	0.2	Green	6.5	11	N/A
1457	Tillamook	Mills Creek	Highway 101	436581	5022611	Box	134	120	Fair	0.2	none	Green	2.3	11	N/A
893	Tillamook	Tomlinson Creek	Private Drive	430943	5033987	Circular	19	60	Critical	-1.2	0.4	Red	0.5	10	M
932	Tillamook	Unnamed trib, Esther Creek	Private Drive	430845	5033558	Circular	34	30	Fair	-0.4	none	Gray	0.8	10	M
6666	Tillamook	Unnamed trib, Tillamook River	Highway 101	435587	5028596	Circular	109	56	Fair	3.5	none	Gray	1.6	10	M
1102	Tillamook	Unnaned trib, Beaver Creek	Private Drive	431060	5029663	Circular	40	90	Poor	-1.2	none	Green	1.5	10	N/A
1404	Tillamook	Unnamed trib, Munson Creek	Munson Creek Road	438611	5023756	Open Arch	61	156	Fair	4.2	0.2	Green	1.4	10	N/A
1401	Tillamook	Pleasant Valley Creek	Highway 101	437013	5023817	Box	80	96	Fair	0.5	0.3	Green	1.1	10	N/A
848	Tillamook	Memaloose Creek	Bayocean Road	430623	5035363	Pipe Arch	48	66	Poor	1.2	0.3	Red	0.5	9	L
985	Tillamook	Unnamed trib, Fagan Creek	Highway 131	429888	5032065	Circular	104	48	Fair	3.9	0.3	Red	0.3	9	L

Table 7. Prioritization table for Trask Basin.

Crossing ID	Watershed	Stream Name	Road Name	Easting		Barrel Shape	Length (feet)	Width (inches)	Overall Condition	Culvert Slope (%)	Perch Height (feet)	Barrier Rating	Upstream Habitat (miles)	Prioritization Model Score	Priority
	Trask	Mill Creek	Private Drive	440016	5029440	Circular	22	42	Poor	1.5	0.7	Red	1.8	13	Н
	Trask	Mill Creek	Brickyard Road	439145	5029501	Circular	56	32	Poor	1.1	unk	Red	2.4	12	Н
	Trask	Mill Creek	Private Drive	439439	5029531	Circular	26	48	Poor	0.1	1.2	Red	2.2	12	Н
	Trask	Mill Creek	Private Drive	439636		Circular	27	29	Poor	1.0	0.4	Red	2.1	12	Н
	Trask	Green Creek	Trask River Road	440497	5032236	Circular	50	53	Poor	5.6	1.0	Red	1.7	12	Н
	Trask	Mill Creek	Private Drive	439929	5029449	Circular	27	37	Poor	2.4	0.8	Red	1.9	12	Н
	Trask	Samson Creek	Trask River Road	449229	5033876	Circular	46	84	Poor	5.5	1.1	Red	1.5	12	H
	Trask	Unnamed trib, Mill Creek	Brickyard Road	438771	5029891	Circular	67	48	Poor	0.9	0.1	Red	3.5	12	Н
	Trask	Edwards Creek	Edwards Creek Road	450857	5029214	Pipe Arch	45	96	Fair	0.1	3.8	Red	0.8	11	H
942	Trask	Holden Creek	Lumber mill road	434837	5033295	Circular	199	78	Poor	unk	unk	Red	3.2	11	H
945	Trask	Holden Creek	Lumber mill road	435013	5033315	Circular	41	60	Critical	1.5	0.6	Red	3.1	11	Н
948	Trask	Holden Creek	Murray Way	435550	5033273	Circular	20	48	Poor	5.8	none	Red	2.7	11	H
1342	Trask	Pothole Creek	Murphy Camp Road	459224	5024799	Circular	53	60	Fair	6.6	1.3	Red	0.4	11	H
1134	Trask	Unnamed trib, Mill Creek	Magnolia Drive	438891	5028837	Pipe Arch	37	144	Fair	0.3	0.3	Gray	3.8	11	Н
1137	Trask	Unnamed trib, Mill Creek	Brickyard Road	439127	5028736	Circular	43	36	Poor	0.9	0.4	Red	1.9	11	Н
1136	Trask	Unnamed trib, Mill Creek	Private Drive	439203	5028756	Circular	22	36	Fair	2.3	0.2	Red	1.8	11	Н
1402	Trask	Unnamed trib, S. F. Trask River	South Fork Trask Road	452161	5023649	Circular	45	48	Poor	6.2	none	Red	0.7	11	Н
1476	Trask	Headquarters Camp Creek	East Fork Road	457836	5022036	Open Arch	50	114	Fair	0.0	none	Green	1.6	11	N/A
1448	Trask	Bales Creek	East Fork Bypass	454053	5022706	Pipe Arch	47	150	Fair	1.2	0.3	Gray	1.0	10	M
952	Trask	Holden Creek	Miller Road	434445	5033277	Circular	95	66	Poor	unk	none	Gray	3.4	10	M
946	Trask	Holden Creek	Evergreen Road	435218	5033198	Box	39	96	Fair	2.4	0.3	Gray	2.9	10	M
947	Trask	Holden Creek	Marolf Loop Road	436344	5033372	Box	28	78	Fair	0.3	none	Gray	2.2	10	M
930	Trask	Holden Creek	McCormick Loop Rd.	437353	5033678	Circular	46	60	Poor	1.7	0.1	Red	1.5	10	M
1099	Trask	Unnamed trib, Bark Shanty Ck	Bark Shanty Road	458843	5029888	Circular	40	66	Fair	9.2	1.4	Red	0.6	10	M
1455	Trask	Unnamed trib, E.F. S.F. Trask R.	Headquarters Grade	462635	5022586	Circular	45	54	Fair	1.4	0.9	Red	0.5	10	M
955	Trask	Unnamed trib, Holden Creek	Private Drive	434496	5032993	Circular	30	36	Critical	-1.6	none	Red	1.1	10	M
918	Trask	Unnamed trib, Trask River	Trask River Road	446257	5033862	Circular	50	66	Poor	6.0	5.0	Red	0.7	10	M
915	Trask	Unnamed trib, Trask River	Trask River Road	450088	5033724	Pipe Arch	59	91	Fair	0.2	2.9	Red	0.8	10	M
864	Trask	Unnammed trib, N.F. Trask R.	N.F. Trask R. Road	463625	5034818	Circular	60	90	Fair	8.4	2.4	Red	0.6	10	M
1058	Trask	Unnamed trib, July Creek	Cruiser Creek Road	462266	5030364	Pipe Arch	78	126	Fair	3.0	none	Green	1.3	10	N/A
1095	Trask	Unnamed trib, Mill Creek	Private Drive	439674	5029747	Pipe Arch	44	126	Fair	0.1	none	Green	2.9	10	N/A
1447	Trask	East Fork South Fork Trask R.	Headquarters Grade	462642	5022621	Pipe Arch	40	138	Poor	-0.7	none	Green	0.8	10	N/A
1021	Trask	Harenkrat Creek	Chance Road	442541	5031175	Circular	35	36	Poor	22.0	2.5	Red	0.1	9	L
1516	Trask	Headquarters Camp Creek	East Fork Road	459354	5021000	Circular	33	48	Fair	2.2	1.2	Red	0.7	9	L
929	Trask	Holden Creek	Trask River Road	438068	5033726	Circular	34	36	Fair	2.9	none	Red	1.0	9	L
1059	Trask	July Creek	July Creek Road	461780	5030780	Circular	72	50	Fair	6.4	4.3	Red	0.7	9	L
	Trask	M.F. North Fork Trask R.	Flora Mainline	468438	5029260	Circular	105	64	Poor	7.0	1.5	Red	1.0	9	L
	Trask	Rock Creek	Headquarters Grade	461513		Circular	32	30	Poor	5.7	none	Red	1.0	9	L
	Trask	Unnamed trib, Bales Creek	East Fork Bypass	454482		Pipe Arch	79	120	Fair	1.9	none	Gray	0.1	9	L
	Trask	Unnamed trib, Boundary Creek	East Fork Trask	457106	5023017	Circular	41	36	Fair	3.9	2.3	Red	0.3	9	L
	Trask	Unnamed trib, Headquarters Camp Ck	East Fork Road	457721		Circular	50	54	Fair	2.3	2.3	Red	0.3	9	L

Table 7. Prioritization table for Trask Basin.

Crossing ID	Watershed	Stream Name	Road Name	Easting	Northing	Barrel Shape	Length (feet)	Width (inches)	Overall Condition	Culvert Slope (%)	Perch Height (feet)	Barrier Rating	Upstream Habitat (miles)	Prioritization Model Score	Priority
965	Trask	Unnamed trib, M.F. N.F. Trask R.	Unnamed	468598	5032837	Circular	60	36	Fair	5.0	6.0	Red	0.7	9	L
1378	Trask	Unnamed trib, S. F. Trask River	South Fork Trask Road	452218	5024301	Circular	61	56	Fair	5.9	1.6	Red	0.2	9	L
1027	Trask	Unnamed trib, Trask River	Long Prairie Road	439161	5031219	Circular	59	54	Poor	0.3	0.5	Red	0.6	9	L
999	Trask	Unnamed trib, Trask River	Trask River Road	441421	5032051	Circular	80	24	Poor	6.2	1.5	Red	0.3	9	L
907	Trask	Unnamed trib, Trask River	Trask River Road	448996	5033853	Circular	70	60	Poor	7.0	0.6	Red	0.6	9	L
889	Trask	Burton Creek	Trask River Road	447331	5034084	Circular	57	90	Critical	5.5	unk	Red	0.1	8	L
1520	Trask	Headquarters Camp Creek	Headquarters Grade	459744	5020580	Circular	90	98	Fair	3.7	2.0	Red	0.4	8	L
1487	Trask	Rock Creek	Unnamed private road	462517	5021876	Circular	55	30	Fair	5.0	1.3	Red	0.5	8	L
1499	Trask	South Fork Rock Creek	Headquarters Grade	460004	5021270	Circular	67	36	Poor	1.4	6.6	Red	0.1	8	L
1109	Trask	Unnamed trib, Cruiser Creek	Cruiser Creek Road	461704	5029778	Circular	44	48	Fair	4.6	none	Red	0.3	8	L
1146	Trask	Unnamed trib, Mill Creek	Brickyard Road	438824	5028627	Circular	46	36	Poor	1.2	none	Red	0.4	8	L
1156	Trask	Unnamed trib, Mill Creek	Brickyard Road	438728	5028449	Circular	43	30	Poor	0.7	0.3	Red	0.2	8	L
5001	Trask	Unnamed trib, S. F. Trask River	South Fork Trask Road	452240	5024299	Circular	61	55	Poor	9.9	2.7	Red	0.2	8	L
1039	Trask	Unnamed trib, Trask River	Chance Road	439686	5031041	Circular	40	54	Fair	2.5	0.6	Red	0.2	8	L
925	Trask	Unnamed trib, Trask River	Trask River Road	447854	5033645	Circular	70	36	Fair	7.5	2.6	Red	0.3	8	L
903	Trask	Unnamed trib, Trask River	Trask River Road	449111	5033866	Circular	56	36	Fair	4.9	1.9	Red	0.4	8	L
944	Trask	Unnamed trib, Trask River	Private Drive	450089	5033396	Circular	30	36	Good	4.0	3.0	Red	0.1	8	L
927	Trask	Unnamed trib, Trask River	Trask River Road	451247	5033597	Circular	44	36	Poor	9.2	0.6	Red	0.3	8	L
1010	Trask	Unnamed trib, Trask River	Trask River Road	452667	5031535	Circular	64	48	Critical	3.0	4.5	Red	0.1	8	L
962	Trask	Unnammed trib, N.F. Trask R.	Reiner Road	468476	5033151	Circular	57	30	Critical	6.4	9.5	Red	0.2	8	L
1112	Trask	Unnamed trib, M.F. N.F. Trask R.	Unnamed	468510	5029400	Circular	100	42	Poor	12.0	3.0	Red	0.1	7	L
1060	Trask	July Creek	Cruiser Creek Road	462101	5030429	Pipe Arch	51	120	Fair	7.3	none	Green	0.4	7	N/A
1068	Trask	Whirlwind Creek	Cruiser Creek Road	461662	5030154	Pipe Arch	43	120	Fair	3.1	none	Green	0.3	7	N/A

Table 8. Prioritization table for Wilson Basin.

Crossing ID	Watershed	Stream Name	Road Name	Easting	Northing	Barrel Shape	Length (feet)	Width (inches)	Overall Condition	Culvert Slope (%)	Perch Height (feet)	Barrier Rating	Upstream Habitat (miles)	Prioritization Model Score	Priority
	Wilson	Deyoe Creek	Unnamed	471310	5049236	Pipe Arch	50	76	Poor	0.6	0.6	Red	1.7	13	Н
	Wilson	Fox Creek	Highway 6	452405	5039358	Box	94	120	Poor	5.2	4.0	Red	2.0	13	H
	Wilson	Zig Zag Creek	Highway 6	447732	5038310	Box	150	126	Poor	8.0	13.0	Red	1.6	13	Н
	Wilson	Dog Creek	Highway 6	461602	5050380	Box	116	96	Fair	3.7	unk	Red	1.1	12	H
	Wilson	Elliot Creek	Univ. Falls Road	469275	5049565	Circular	80	76	Poor	1.0	1.5	Red	3.3	12	Н
	Wilson	Hughey Creek	Marvin Lane	440715	5033783	Pipe Arch	45	96	Fair	6.7	none	Red	1.8	12	Н
792	Wilson	Juno Creek	Boquest Road	433660	5036608	Circular	unk	48	Fair	6.0	unk	Red	2.3	11.5	Н
814	Wilson	Beaver Creek	Sollie Smith Road	437528	5036405	Circular	104	48	Fair	2.6	none	Gray	1.6	11	Н
202	Wilson	Lewis Creek	Scoggins Creek Road	472642	5050895	Pipe Arch	54	94	Good	1.8	none	Gray	0.8	11	Н
333	Wilson	Runyon Creek	Highway 6	457794	5048327	Circular	42	51	Poor	1.0	8.0	Red	0.9	11	Н
305	Wilson	Scotty Creek	Highway 6	458912	5048759	Circular	100	42	Poor	5.0	1.1	Red	0.5	11	Н
178	Wilson	Unnamed trib, Devils Lake Fork	Powerhouse Rd	473094	5050767	Circular	29	36	Poor	2.3	1.3	Red	0.6	11	Н
266	Wilson	Elliot Creek	Unnamed	470343	5049056	Pipe Arch	66	120	Poor	2.7	1.1	Red	1.0	10	M
775	Wilson	Hatchery Creek	Highway 6	444613	5036903	Box	75	60	Fair	5.0	unk	Red	0.8	10	M
901	Wilson	Hughey Creek	Hughey Lane	440230	5034296	Circular	70	72	Fair	3.5	none	Gray	2.3	10	M
760	Wilson	Jack Creek	Highway 6	446088	5037216	Box	97	60	Poor	7.0	unk	Red	1.0	10	M
405	Wilson	Luebke Creek	Highway 6	456036	5046768	Circular	51	54	Poor	10.8	1.1	Red	0.7	10	M
713	Wilson	Smith Creek	Highway 6	446846	5037955	Box	143	120	Poor	8.0	1.5	Red	0.6	10	M
584	Wilson	Stanley Creek	Highway 6	452383	5041793	Box	115	60	Poor	12.0	4.0	Red	0.8	10	M
176	Wilson	Unnamed trib, Devils Lake Fork	#7 Clyde's Trail	473526	5050908	Circular	34	48	Critical	8.3	none	Red	0.3	10	M
222	Wilson	Unnamed trib, Devils Lake Fork	Scoggins Creek Road	474112	5049754	Pipe Arch	50	108	Poor	-0.2	2.0	Red	0.5	10	M
5306	Wilson	Yankee Branch	Latimer Road	436467	5036370	Circular	87	36	Fair	-1.0	none	Gray	1.1	10	M
781	Wilson	Unnamed trib, Juno Creek	Latimer Road	434655	5036763	Circular	84	108	Fair	2.3	0.1	Green	1.6	10	N/A
877	Wilson	Donaldson Creek	Fairview Road	440491	5034773	Circular	69	36	Poor	4.4	2.1	Red	0.3	9	L
696	Wilson	Fern Creek	Highway 6	447331	5038383	Box	100	48	Poor	9.3	3.5	Red	0.5	9	L
447	Wilson	Hoskins Creek	Highway 6	455519	5045832	Circular	66	72	Fair	3.6	2.2	Red	0.1	9	L
755	Wilson	Juno Creek	Juno Hill Road	434841	5037351	Circular	50	42	Poor	3.2	0.1	Red	0.5	9	L
	Wilson	Moore Creek	East Ben Smith Road	460473	5049046	Pipe Arch	43	78	Poor	3.5	2.6	Red	0.2	9	L
	Wilson	Smith Creek	Smith Creek Road	446299	5038612	Circular	27	72	Fair	9.3	2.7	Red	0.3	9	L
150	Wilson	Unnamed trib, Devils Lake Fork	Powderhouse Loop Rd	472570	5051758	Pipe Arch	68	78	Good	4.7	2.4	Red	0.2	9	L
	Wilson	Unnamed trib, Jones Creek	Jones Creek Road	456150	5048626	Pipe Arch	45	100	Fair	1.8	1.0	Red	0.4	9	L
	Wilson	Unnamed trib, Juno Creek	Juno Hill Road	434906	5036782	Circular	29	30	Critical	6.1	0.8	Red	0.9	9	L
	Wilson	Unnamed trib, S.F. Wilson R.	Prison Camp Road	463422	5048729	Pipe Arch	43	94	Good	4.5	2.2	Red	0.2	9	L
	Wilson	Unnamed trib, Wilson River	Highway 6	460589	5049407	Circular	80	24	Poor	9.0	1.0	Red	0.6	9	L
	Wilson	Unnamed trib, Wilson River	Highway 6	460951		Circular	61	36	Fair	4.3	1.8	Red	0.2	9	L
	Wilson	Elliott Creek	Unnamed	470043		Pipe Arch	41	102	Good	2.6	0.2	Green	1.2	9	N/A
	Wilson	Donaldson Creek	Private Drive	440956	5034462	•	34	18	Fair	4.4	5.7	Red	0.1	8	L
	Wilson	Unnamed trib, Beaver Creek	Beaver Creek Road	437842	5037849	Circular	86	42	Poor	11.0	4.0	Red	0.1	8	L
	Wilson	Unnamed trib, Ben Smith Creek	Ben Smith Creek Road	459298	5047224	Pipe Arch	63	96	Good	6.3	none	Gray	0.3	8	L
	Wilson	Unnamed trib, Devils Lake Fork	Unnamed	473811	5049357	Circular	34	18	Poor	4.2	2.6	Red	0.1	8	L
	Wilson	Unnamed trib, S.F. Wilson R.	C-Line Road	465646	5048242	Pipe Arch	67	126	Fair	9.2	4.3	Red	0.3	8	L

Table 8. Prioritization table for Wilson Basin.

Crossing ID	Watershed	Stream Name	Road Name	Easting	Northing	Barrel Shape	Length (feet)	Width (inches)	Overall Condition	Culvert Slope (%)	Perch Height (feet)	Barrier Rating	Upstream Habitat (miles)	Prioritization Model Score	Priority
261	Wilson	Unnamed trib, S.F. Wilson R.	Stage Road	466347	5048623	Circular	67	57	Good	6.0	none	Red	0.1	8	L
803	Wilson	Unnamed trib, Wilson River	Sollie Smith Road	439248	5036338	Circular	60	36	Fair	14.0	0.2	Red	0.5	8	L
788	Wilson	Unnamed trib, Wilson River	Sollie Smith Road	439249	5036600	Circular	63	24	Poor	7.0	0.8	Red	0.3	8	L
722	Wilson	Unnamed trib, Wilson River	Highway 6	446487	5037891	Circular	50	24	Fair	4.8	none	Red	0.2	8	L
723	Wilson	Unnamed trib, Wilson River	Highway 6	450762	5037876	Box	39	60	Poor	3.5	0.2	Red	0.5	8	L
604	Wilson	Unnamed trib, Wilson River	Highway 6	451998	5041075	Circular	99	60	Good	7.3	0.1	Red	0.1	8	L
798	Wilson	Kansas Creek	Kansas Creek Road	449687	5036465	Pipe Arch	71	66	Fair	3.1	1.6	Red	0.4	7	L
822	Wilson	Kansas Creek	Kansas Creek Road	449858	5036361	Pipe Arch	56	55	Fair	9.9	1.4	Red	0.3	7	L
823	Wilson	Kansas Creek	Kansas Creek Road	449997	5036035	Circular	79	90	Poor	4.2	4.1	Red	0.1	7	L
762	Wilson	Unnamed trib, Kansas Creek	Kansas Creek Road	449522	5037009	Circular	39	30	Good	6.5	0.7	Red	0.1	7	L
799	Wilson	Unnamed trib, Kansas Creek	Kansas Creek Road	449598	5036566	Pipe Arch	69	156	Fair	1.6	0.4	Red	0.4	7	L
299	Wilson	Unnamed trib, Elliot Creek	Beaver Dam Road	469924	5048854	Pipe Arch	56	126	Fair	0.5	0.1	Green	0.5	7	N/A
465	Wilson	Unnamed trib, Little N.F. Wilson	Kilchis Lookout Road	450253	5045470	Pipe Arch	74	162	Good	2.4	none	Green	0.5	7	N/A
900	Wilson	Hughey Creek	Fairview Road	440177	5034672	Circular	unk	unk	unk	unk	unk	unk	2.6	?	?
898	Wilson	Hughey Creek	Highway 6	440083	5034989	Box	unk	unk	unk	unk	unk	unk	2.8	?	?

Table 9. Summary of replacement prioritization scores and miles of affected upstream habitats for fish culverts in the Tillamook Bay Watershed.

Basin		Total Miles of Affected Upstream					
2 Monii	High	Medium	Low	Unknown	Not Barriers	Habitat ¹	
Kilchis River Basin	10	4	6		4	12.4	
Miami River Basin	7	6	6		2	13.8	
Tillamook Bay Tributaries	13	13	9			13.8	
Tillamook River Basin	5	3	2		5	35.6	
Trask River Basin	17	11	30		6	35.8	
Wilson River Basin	12	10	28	2	4	30.9	
Totals	64	47	81	2	21	14405	

These values reflect the actual_amount of potentially suitable habitat affected by fish culverts surveyed for this study. On stream systems affected by multiple culverts, it includes only the total length of habitat upstream of the lower-most culvert in the system. For example, the Patterson Creek sub-basin (a Tillamook Bay tributary) includes nine fish culverts. The lower-most culvert in the system is located near the mouth of the creek and all other culverts in this system are along reaches included in the upstream habitat length reported for the lower-most culvert. The total value reported for the Tillamook Bay Tributaries in this table includes the 3.8 miles of potentially suitable habitat upstream of the lowest culvert. The habitat length values reported in the tables in Appendix 2 for the other eight culverts in this system are not included in the total reported in this table because they are already captured by including the lower culvert.

3.2. Road Ownership Patterns

Several governmental entities and private parties own/administer the roads on which the culverts identified in this report occur. Ownership patterns vary somewhat by basin (Table 10).

Table 10. Summary of road ownership for fish culverts in the Tillamook Bay Watershed.

Road Owner	Basin									
	Kilchis	Miami ¹	Till. Bay ²	Tillamook	Trask	Wilson				
City	0	0	10	0	4	0				
County	9	6	10	3	21	10				
ODOT	0	1	5	5	0	18				
ODF	11	9	4	3	25	26				
Private	4	4	8	4	14	2				

¹ Miami Basin culvert 138 is on a road segment with disputed ownership. It is not included in this table, because it is unclear who is responsible for this section of road.

A majority of fish culverts included in this report (64 percent) are on Tillamook County and ODF roads. These entities own culverts in all six analysis units (i.e., all five river basins and the Tillamook Bay

² Culvert 453/454 in the Tillamook Bay Tributaries Basin includes city, private, and ODOT ownership. This mixed ownership is reflected in the table.

tributaries) and, when combined, have majority ownership of fish culverts in the Kilchis (83 percent), Miami (72 percent), Trask (72 percent) and Wilson (64 percent) basins.

Culverts on private roads also occur in all six analysis units. Ownership of these culverts includes agricultural, industrial forest and residential landowners. The Trask Basin has the greatest number of private culverts surveyed for this report (14 culverts). These are located primarily in the lower portion of the basin and many are within the Mill Creek and Holden Creek sub-basins. Private road culverts account for over a quarter of the fish culverts we surveyed in the Tillamook Basin (27 percent). Land ownership within this basin is predominantly private and industrial forest and agricultural landowners account for a majority of the private holdings within the basin. It is important to note that we did not have permission to access a majority of the crossings on private roads within the Tillamook Basin. Many of these crossings were on lands owned by Stimson Lumber Company. This company has an active and ongoing culvert assessment and replacement program that is regulated by ODF under provisions set forth in the Oregon Forest Practices Act (OAR 629-625).

Oregon Department of Transportation (ODOT) culverts occur in four of the six analysis units. A high percentage of crossings we surveyed in the Tillamook (33 percent) and Wilson (32 percent) basins occur on ODOT roads. The greatest number of ODOT culverts is in the Wilson Basin (18 culverts). These primarily occur on Highway 6. Many of these Highway 6 culverts are fairly large box culverts that will likely be replaced with bridges or much larger box culverts, so costs for these replacement projects will be high. Many of these Highway 6 culverts also include trash racks that have dramatically and adversely affected the streams on which they occur (see culvert 697 as an example). This fact also will complicate replacement efforts for these crossings.

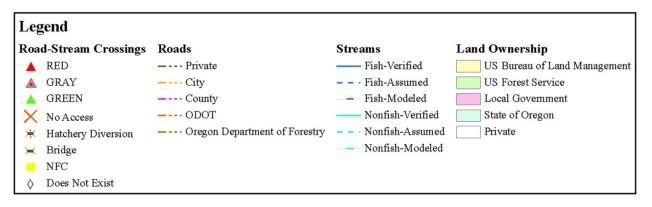
Several culverts in this report also occur on roads owned by one of several city governments. City-owned culverts occur in two of the six analysis units (Tillamook Bay Tributaries – City of Bay City and City of Garibaldi; Trask Basin – City of Tillamook). One third of the city-owned barrier culverts on streams that are direct tributaries to Tillamook Bay occur on a single stream, Patterson Creek. Salmonids continue to spawn on a portion of this stream despite the fact that eight barrier culverts occur along its length. Half of the barrier culverts on this stream (4 culverts), are on roads owned by the City of Bay City. The remaining barrier culverts on this stream are owned by ODOT, ODF, and Tillamook County.

3.3. Clustering

Earlier we noted that we prioritized culverts in this report basin-by-basin, in part to facilitate use of the document. In Appendix 2 below, we provide detailed information for each surveyed fish culvert (tabular information, photographs and maps). We present this information basin-by-basin (alphabetically). In addition, we have further refined our presentation based on geography and proximity. Specifically, the tables and maps for each basin begin with the lowermost culverts in the basin and end with culverts in the upper basin. The tables are further grouped by proximity – culverts in close proximity to one another (e.g., near one another along the same stream or road) are grouped and identified by headings. Each of these culvert groups or "clusters" are depicted on a single map and the map titles correspond to the headings that accompany the tables. We incorporated these refinements not only to make the document easier to use, but to facilitate project development, planning and implementation.

The information provided in Appendix 2 includes a matrix and a map for each culvert. The tables include detailed location information, characteristics of both the culvert and the stream channel, and the data used for the prioritization analysis. Each matrix also includes one or more photographs of the culvert and/or adjacent stream channel. Some also include additional notable information to further describe the culvert or adjacent stream conditions or clarify peculiarities in the tabular information. Appendix 2 also includes a table summarizing clusters for each basin.

The legend below is applicable for all maps in Appendix 2. Each map depicts crossings (symbology based on prioritization rating or other characteristics), roads (symbology based on ownership), streams (symbology based on O DF fish presence information), and land ownership (symbology based on ownership).



4.0. Literature Cited

- Bio-Surveys, LLC. 2005. Tillamook Bay Rapid Bio-Assessment. Unpublished report prepared for Tillamook Estuaries Partnership, Garibaldi, Oregon. 78 pp. plus electronic data sets. Available electronically at http://www.tbnep.org/images/stories/documents/resource_center_docs/salmonids/Tillamook%20RBA%20Final%202005.pdf
- Bio-Surveys, LLC. 2006. Tillamook Bay Rapid Bio-Assessment. Unpublished report prepared for Tillamook Estuaries Partnership, Garibaldi, Oregon. 84 pp. plus electronic data sets. Available electronically at http://www.tbnep.org/images/stories/documents/resource_center_docs/salmonids/Tillamook%20RBA%20Final%202006.pdf
- Bio-Surveys, LLC. 2007. Tillamook Bay Rapid Bio-Assessment. Unpublished report prepared for Tillamook Estuaries Partnership, Garibaldi, Oregon. 90 pp. plus electronic data sets. Available electronically at http://www.tbnep.org/images/stories/documents/resource_center_docs/salmonids/Tillamook%20RBA%20Final%202007.pdf
- Burnett, K., G. Reeves, D. Miller, S. Clarke, K. Christiansen, and K. Vance-Borland. 2003. A first step toward broad-scale identification of freshwater protected areas for Pacific salmon and trout in Oregon, USA. Pp. 144-154 *in* Beumer, J.P., A. Grant, and D.C. Smith, eds. Aquatic protected areas: what works best and how do we know? Proceedings of the World Congress on aquatic protected areas, Cairns, Australia, August 2002. Australian Society for Fish Biology. North Beach, WA, Australia.
- Burnett, K. M., Reeves, G. H., Miller, D. J., Clarke, S., Vance-Borland, K., & Christiansen, K. 2007. Distribution of salmon-habitat potential relative to landscape characteristics and implications for conservation. Ecological Applications, 17(1), 66-80. Available electronically at http://www.fsl.orst.edu/clams/download/pubs/2007EA burnett reeves.pdf
- Clarkin, K., A.Connor, M.J. Furniss, B. Gubernick, M. Love, K. Moynan, and S. Wilson-Musser. 2005. National inventory and assessment procedure for identifying barriers to aquatic organism passage at road-stream crossings. U.S. Department of Agriculture Forest Service, National Technology and Development Program, San Dimas, California. 29 pp. + appendices.
- Hoffman, R. 2006. Nestucca/Neskowin Watersheds: Culvert prioritization and action plan for fish passage. US Bureau of Land Management, Tillamook Resource Area publication. 98 pp. Available electronically at http://www.tbnep.org/images/stories/documents/resource_center_docs/fish_passage/Nestucca-Culvert-Prioritization.pdf
- Hunt, J.H., S.M. Zerges, B.C. Roberts, and B. Bergendahl. 2010. Culvert assessment and decision making procedures manual for federal lands highway. Publication No. FHWA-CFL/TD-10-005. Federal Highway Administration, Central Federal Lands Highway Division, Lakewood, Colorado. 80 pp. + appendices.
- Limburg K.E., and J.R. Waldman. 2009. Dramatic declines in North Atlantic diadromous fishes. BioScience 59: 955-965.

- Meehan, W.R. *ed.* 1991. Influences of forest and rangeland management on salmonid fishes and their habitats. American Fisheries Society, Special Publication 19. American Fisheries Society, Bethesda, Maryland. 622 pp.
- Oregon Department of Forestry. 2009. Physical Habitat Survey Training Manual. Unpublished training manual prepared by ODF, State Forests Division, Salem, Oregon. June 2009. 18 pp. + Appendices.

Appendix 1
Tillamook Bay Culvert Prioritization Field Data Sheet

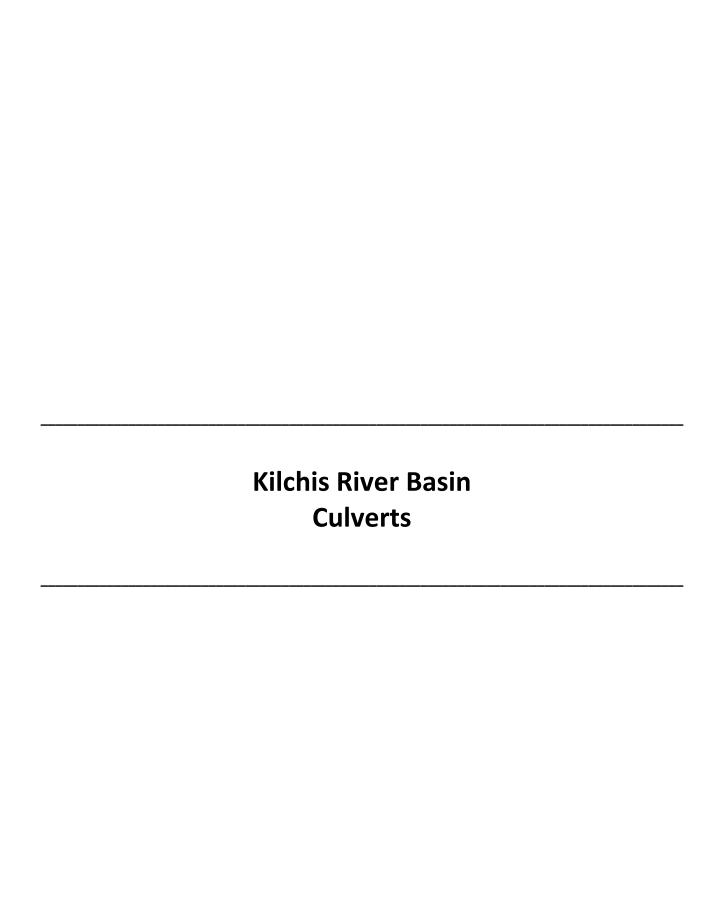
Date:	e: Crossing Assessment Form							rossi	ossing ID:						
SITE INFORMAT	ION												NFC	<u> </u>	
Watershed:						Stre	eam:								
Road :															
Mile Post:							•								
7.5-minute Quad:_						UTN	/ l: Zone: <u>ՙ</u>	10 East			North_			NA	ND 83
Legal Description:	: T	, R	,	Sec.		¼ of	f1⁄4	Surveyo	rs:						
CULVERT STRUC	TURE								Μι	ıltiple S	Structi	ıres at	Site:	yes	no
Barrel Shape	Corru	ugation	ıs	Culve	ert Condition		Long	itudinal Pr	ofile	Dist. (ft)	BS (+) HI	FS (-)	Elev. (ft)
Box		/3x1/2 i			all that apply	y)		ench Mark		N/A					100.0
Circular	☐3x1			Bent		_		dient Contro	ol Pt(P1)						
Open Bottom Arch Pipe-Arch	5x1	<u>ın.</u> P 6x2 ir			s plugging inl m worn thru	et	Inlet Inve	rface (P3)						-	
	□Sm				r under culve	rt	Outlet In	, ,							
Dimensions		OOUT			oding			ool Bottom ((P5)						
				Othe				urface at P5		ter dept	h to P5	elev.)			
(ft) Horizontal	Culve	t Mater	ial 💳	None		1		Control Po		·					
				Steel			Tallwater	Control C)IIII (I O)						
(ft) Vertical	□CM	1P	L,	steei	Spiral	ŀ									
(`,	(ii) Vertical Givii			Alum	□annular	r									
	□SS	P (Stee				Culvert Length (P2 Dist – P4 Dist)									
Inlet Blockage	□Pla					Culvert Slope*								%	
□ Not Blocked		ncrete		□Fair				* Ca	alculate:(P2	. – P4 elev	/ Culver	Length)	x100/		
□<10% Blockage	□Wc	od		□Poor			Inlet Ru	stline Heig	ht						1
□>10%Blockage	□Oth	ner	er			Road Su	ırface:								
			(lov fea	vest of all rature-see ba	ating assignments for ack)		Road File	II Index: op of inlet (ofte	en TRM)						
Inlet Type (circle):	project	ting	mitere		wingwall 10-	20°		wall 30-70°		dwall	apron	tro	shrack		Other
Comments (include of	outlet typ	e and a	any oth	er not	able condition	ns):									
Substrate Particle	Sizes (ı Bedr		3 in or Boul		contribution Cobble		substrate Fravel	e) Sand	Silt/0	Clav	Orga	nics	Aquatic	macı	ophytes
In Culvert	2541	-		uo.	0000.0			Jana		Jiay	o.ga				<u>- Ср. 1910</u>
Stream Channel															
Natural Substrate in	Culvert	(i.e., r	ock, w	ood,	etc.) 🗆 Non	е	□ C	ontinuous	☐ Disc	continuo	us (app	rox. %_)	
CHANNEL DESCR	RIPTION	ı													
Inlet Gradient: Calculate ((P1-P2 ele	ev) / (P1-	P2 dist)) * 100)			((_) / (_))*100	=			%
Channel Gradient:		Upstrea	am	((Up	per Elev		- Lower El	ev) / Dist)*	100 =				%
Beyond culvert influer	nce	Downst	ream	((Up	per Elev		- Lower El	ev) / Dist)*	100 =				%
Bankfull Width:		Upstrea	am	4\	2)		2)	A	١	E)		۸۱/	'G. =		
Beyond culvert influer	nce –	widths		1), 2)			, s)	, 4)	, 5)		_ Av	G. =		
(min. of 3 measurem	ents)	Downst widths	ream	1)	, 2)		, 3)	, 4)	, 5)		_ AV	'G. =		
Inlet Width to Bankf				_ft (Inle	et Width) /		ft (Av	g upstream	BFW)			→			
PHOTOGRAPHS (Take white	eboard p	hoto as f	first/las	t photos – recor	d nun	nber of pho	tos for each p	ohoto-point	t and orde	r taken-	- depict p	ooints on s	te dr	awing)
Inlet Photo Number								oto Numbe							
Upstream Photo Nu							Downstre	am Photo	Numbers	S:_					
Other Photo Numbe															

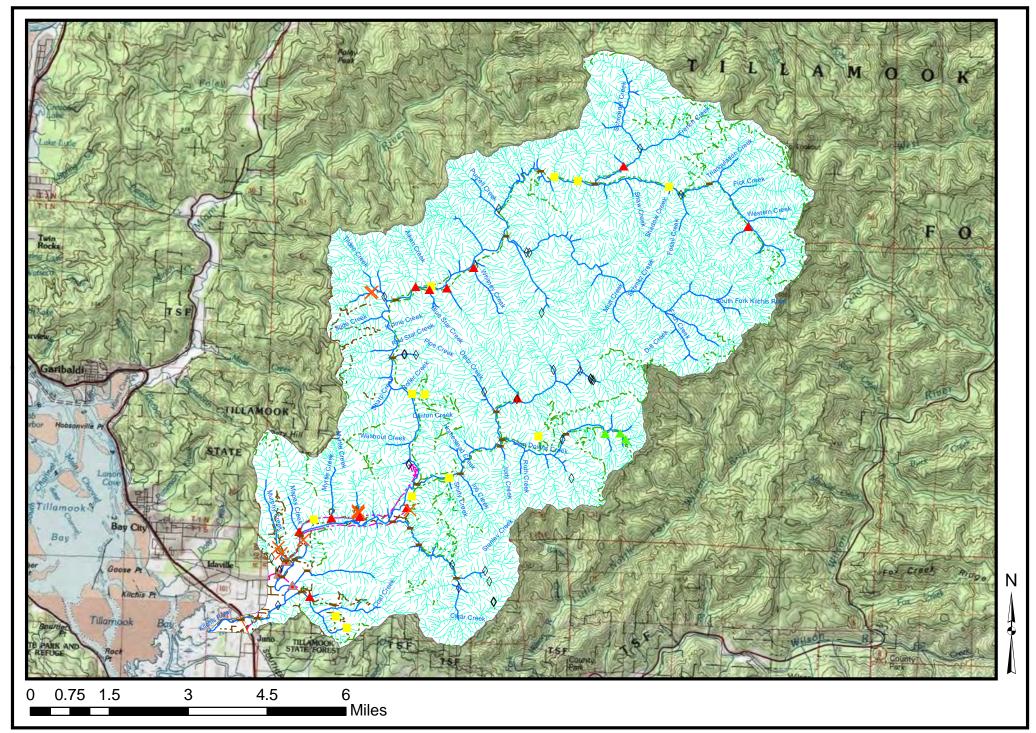
DRAWINGS Overall view from U	Jpstream of	f culvert to	Downstrea	am of culvert	
Include: P1-P6, Temporary Be					ow Stream flow direction
wingwalls/headwall, apron, deb					ow, caroain now an obtion,
	, , , , , , , , , , , , , , , , , , ,		,, ,		
ADDITIONAL COMMENTS					
	e one for e	ach appr	opriate cat	egory based on pipe ma	aterial - categories in FHWA Culvert
Assessment Guide)					
СМР				Concrete	
Corrosion (above Invert):	Good Fa	ir Poor	Critical	Cracking/Spalling:	Good Fair Poor Critical
Cross-section Deformation:	Good Fa	ir Poor	Critical	Cross-section Deform	nation: Good Fair Poor Critical
Invert Deterioration:	Good Fa	ir Poor	Critical	Invert Deterioration:	Good Fair Poor Critical
Joints and seams:	Good Fa	ir Poor	Critical	Joints:	Good Fair Poor Critical
Plastic Pipe				Appurtenances	3
Wall Condition:	Good Fa	air Poor	Critical	Headwall/Wingwall:	Good Fair Poor Critical
Cross-section Deformation:			Critical	Apron:	Good Fair Poor Critical
Invert Deterioration:	Good Fa		Critical	Pipe End:	Good Fair Poor Critical
Joints:	Good Fa		Critical	Scour Protection:	Good Fair Poor Critical
Jointo.	Occur i'd	. 1 001	Ontical	Coodi i Totection.	Cood I all I doi Official
HABITAT INFORMATION					
TIMESTIAL IIII GIAIII/ATIGIA		Upstre	am		Downstream
Number of Culverts (list)					
Number of Known Barriers (list)	<u> </u>				
Distance to Known Barriers					
Length of Upstream Habitat		1			
FISH PASSAGE EVALUATIO	N				
TIOTIT ACCAGE EVALUATIO	. 4				
COARSE SCREEN FILTER EVAI	LUATION:	G	REEN	GREY	RED

Appendix 2

Culvert tables and cluster maps for each basin in the Tillamook Bay Watershed

Legend			
Road-Stream Crossings	Roads	Streams	Land Ownership
▲ RED	Private	Fish-Verified	US Bureau of Land Management
▲ GRAY	City	· Fish-Assumed	US Forest Service
▲ GREEN	County	- Fish-Modeled	Local Government
X No Access	ODOT	Nonfish-Verified	State of Oregon
* Hatchery Diversion	Oregon Department of Forestry	Nonfish-Assumed	Private
→ Bridge		 Nonfish-Modeled 	
NFC			
O Does Not Exist			





Kilchis Basin Crossings

Kilchis River Basin Clusters

Cluster	Culvert Numbers	Priority	Stream	Upstream Habitat
	658	L	Vaughn Creek	1
	629	Н	Vaughn Creek	
V 1 C 1/II 1 C 1	621	Н	Vaughn Creek	1.7
Vaughn Creek/ Hathaway Slough	620	Н	Vaughn Creek	1.7
	608	Н	Vaughn Creek	
	673	L	Hathaway Slough	
				·
	674	M	Coal Creek	
Cool Chools/Mymhy Chools Ango	663	Н	Unnamed tributary	4.0
Coal Creek/Murphy Creek Area	649	Н	Murphy Creek	4.0
	640	Н	Murphy Creek	
Mape, Myrtle, Thomas, Tank	603	Н	Mapes Creek	
	591	Н	Myrtle Creek	2.3
Mape, Myrue, Thomas, Tank	589	L	Thomas Creek	2.3
	573	L	Tank Creek	
Little South Fork Kilchis	472	M	Unnamed tributary	0.6
	514	N/A	Unnamed tributary	
Sam Downs Creek	505	N/A	Sam Downs Creek	0.8
	510	N/A	Sam Downs Creek	
	292	L	Aiken Creek	
Tilden Bluffs Road Area	327	M	Blue Star Creek	2.2
Tildeli Diulis Koad Alea	329	L	White Star Creek	
	262	Н	Whitney Creek	
North Fork Kilchis Area	120	L	Unnamed tributary	0.8
North Fork Kilelis Alea	181	M	Unnamed tributary	0.0

VAUGHN CREEK AND HATHAWAY SLOUGH CULVERTS

	LOCATION INFO									
Watershed				Kilchis River						
Stream Name			Vaughn Creek							
Township-Range-Sec	tion-1/4		T1S, R10W, Sec. 1	1, SE¼ of SE¼						
UTM Easting/Northi	ng (Zone 10, NAI) 1983)	43	33158/5039725						
Road Name			Alderbro	ook Loop Road						
Road/Culvert Owner			Till	amook County						
Adjacent Landowners			G. Prince and Laviolette I	Holdings, LLC.						
CULVER	T INFO		CHANNEL INI	FO						
Shape		Box	Inlet Gradient (%)	3.2						
Material		Concrete	Upstream Gradient (%)	Unable to measure						
Length (ft)		35	Bankfull Width (ft)	6.0						
Width (in)		100	Bankfull:Culvert Ratio	1.4						
Height (in)		52								
Outlet Perch (ft)		0.2								
Slope (%)		0.5								
Rustline Height (in)		N/A								
Overall Condition		Fair								
	PRIO	RITIZATI	ON ANALYSIS							
Upstream Habitat Le	ngth (mi)	1.4	Habitat Points	3						
Habitat Quality		Poor(+)	Habitat Quality Points	1						
Fish Species		Anad.	Fish Points	3						
Barrier Type		Green	Barrier Points	1						
			Prioritization Total Points	8						



658

Culvert#

Priority

 \mathbf{L}



Notes: Upstream of this crossing Vaughn Creek passes through a golf course. Riparian and upland habitats are low-quality for fish and wildlife.

	L	OCATIO	N INFO		Culvert #	629
Watershed			K	ilchis River	QUAL VIEW	Le ex
Stream Name			Va			
Township-Range-Section-1/4			T1S, R10W, Sec. 1, SW	V1/4 of NE1/4	THE YEAR OF	
UTM Easting/Northing (Zone 10, NAD 1983)			43331	19/5040431		TOP
Road Name			Do	ughty Road	经 上的任意	A PAN
Road/Culvert Owner			Tillamo	ook County	t in the second	A PER
Adjacent Landowners			R. Rasmussen and	d R. Carver		第 34 人
CULVERT INFO			CHANNEL INFO)	Inlet -	
Shape		Circular	Inlet Gradient (%)	8.7(7.4)	MIT	
Material	(Concrete	Upstream Gradient (%)	1.0		
Length (ft)		35(31)	Bankfull Width (ft)	8.1		
Width (in)		29(29)	Bankfull:Culvert Ratio	0.6*		
Height (in)		29(29)				
Outlet Perch (ft)		0.1(0.2)				
Slope (%)		1.9(1.4)				
Rustline Height (in)		N/A				
Overall Condition		Poor				
	PRIORI	TIZATIO	ON ANALYSIS			
Upstream Habitat Le	ength (mi)	0.9	Habitat Points	2		
Habitat Quality		Fair(-)	Habitat Quality Points	2		
Fish Species		Anad.	Fish Points	3		64
Barrier Type		Red	Barrier Points	3	Outlet	
			Prioritization Total Points	10	And the state of	





Notes: Twin concrete pipes at this crossing. * bankful:culvert ratio based on combined pipe diameters. Water backed up at inlet and flowed over Doughty Road during most of the winter of 2011-12. This adversely affects road condition and water quality.

	L	OCATIO	N INFO						
Watershed			Kilchis River						
Stream Name			Vaughn Creek						
Township-Range-Sec	tion-1/4		T1S, R10W, Sec. 36, SV	V1/4 ofSE1/4					
UTM Easting/Northi	ng (Zone 10, NAD	1983)	433393	3/5040779					
Road Name			Private driveway off	Pike Road					
Road/Culvert Owner				J. Bender					
Adjacent Landowners J. Ben			der, M. & L. McClaskey, and R	& C. Watt					
CULVERT INFO			CHANNEL INFO						
Shape]	Pipe arch	Inlet Gradient (%)	5.0					
Material	Corrugated metal		Upstream Gradient (%)	2.0					
Length (ft)	23		Bankfull Width (ft)	7.4					
Width (in)		74	Bankfull:Culvert Ratio	0.9					
Height (in)		52							
Outlet Perch (ft)		0.4							
Slope (%)		1.7							
Rustline Height (in)		3							
Overall Condition		Fair							
	PRIOR	TIZATIO	ON ANALYSIS						
Upstream Habitat Le	ength (mi)	0.7	Habitat Points	2					
Habitat Quality		Fair(-)	Habitat Quality Points	2					
Fish Species		Anad.	Fish Points	3					
Barrier Type		Red	Barrier Points	3					



621

Priority

Н

Culvert #

10



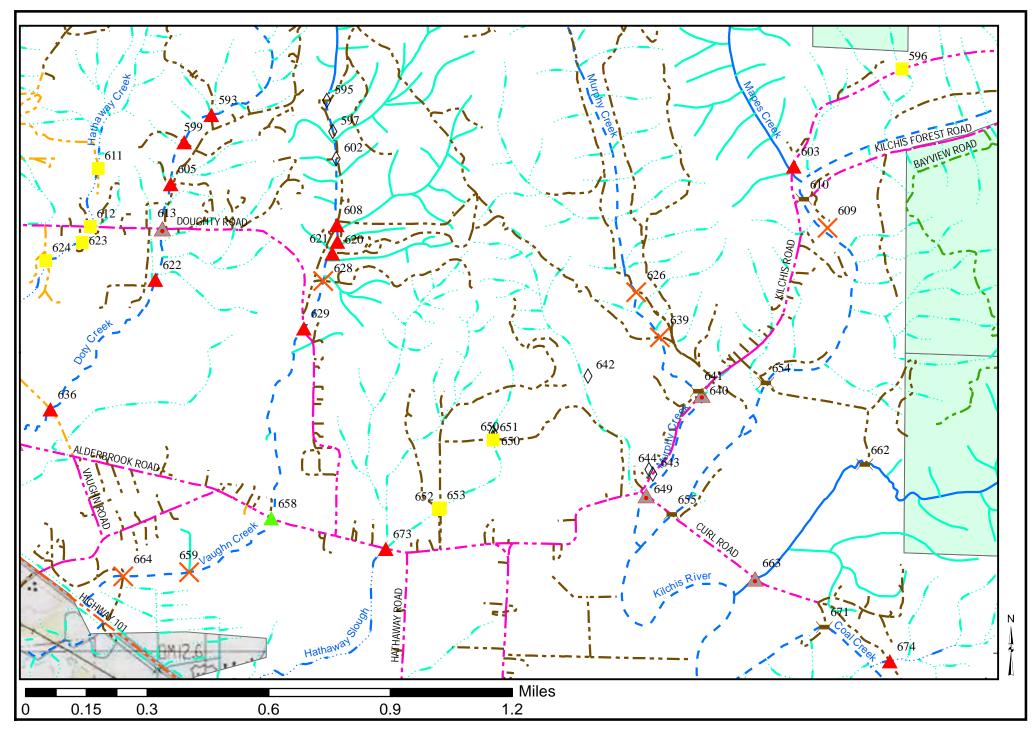
Prioritization Total Points Notes: Pipe 628 is between this pipe and 629. We did not have landowner permission to survey pipe 628, but it was likely a barrier culvert as well based on remote observation. The degree to which 628 may impede passage was unknown at the time of this report.

	LOCATION INFO							Н
Watershed			F	Kilchis River				el d
Stream Name			V	Halle y	30019	Server .		
Township-Range-Sec	tion-1/4		T1S, R10W, Sec. 36, S	W1/4 of SE1/4				
UTM Easting/Northin	1g (Zone 10, NA	D 1983)	4333	396/5040789				
Road Name			Private driveway o	ff Pike Road	450			
Road/Culvert Owner			I	R. & C. Watt			Y Const	
Adjacent Landowners			I	R. & C. Watt				
CULVERT INFO			CHANNEL INFO)		0 3		Technology.
Shape		Circular	Inlet Gradient (%)	11.5	Inlet	人数重		A.
Material	Corrugated metal		Upstream Gradient (%)	2.2			120	
Length (ft)	30		Bankfull Width (ft)	6.3				
Width (in)	48		Bankfull:Culvert Ratio	0.6				
Height (in)		48						
Outlet Perch (ft)		0.7		COLUMN TOWN			K-ba	
Slope (%)		1.9			28.2311 C		A STATE OF THE STA	
Rustline Height (in)		19						
Overall Condition		Fair						
	PRIOF	RITIZATI	ON ANALYSIS		and the same of th	X		
Upstream Habitat Le	ngth (mi)	0.7	Habitat Points	2		10.01		
Habitat Quality		Fair(-)	Habitat Quality Points	2		1	题 400	
Fish Species		Anad.	Fish Points	3		A		205
Barrier Type		Red	Barrier Points	3	Outlet			
			Prioritization Total Points	10		-		
Notes:								

	LOCATION INFO						Priority	Н
Watershed			Kil	chis River	A COLOR			1
Stream Name			Vau					
Township-Range-Sec	tion-1/4		T1S, R10W, Sec. 36, SW	163				
UTM Easting/Northin	ng (Zone 10, NAD	1983)	433409	433409/5040853				
Road Name				Pike Road	4/12		A Mark	
Road/Culvert Owner			Pri	vate Drive				45
Adjacent Landowner	S		R.	& C. Watt				
CULVERT INFO			CHANNEL INFO		Inlat	The state of		Ŕ.
Shape	Circular		Inlet Gradient (%)	12.7				
Material	Concrete		Upstream Gradient (%)	7.2	Sec. 3 / 188			3.7
Length (ft)	34		Bankfull Width (ft)	7.4				
Width (in)		48	Bankfull:Culvert Ratio	0.5				
Height (in)		48						
Outlet Perch (ft)		0.8			A SECTION AND A	To the		
Slope (%)		5.9						
Rustline Height (in)		N/A						48
Overall Condition		Fair					4 27	
-	PRIORI	TIZATIO	ON ANALYSIS					27
Upstream Habitat Le	ngth (mi)	0.6	Habitat Points	2			MILI	
Habitat Quality		Fair(-)	Habitat Quality Points	2			1 清	
Fish Species	Anad.		Fish Points	3				1
Barrier Type		Red	Barrier Points	3	Outlet			-
			Prioritization Total Points	10				- 2
Notes:			·					

	I	LOCATI	ON INFO		Culvert #	673	Priority	L
Watershed			Kilchis River		N N zdz	1	-	
Stream Name			Hatha		131		/ 音管	
Township-Range-Sec	tion-1/4		T1S, R10W, Sec. 12, N	W1/4 of NE1/4		1	人工工作	
UTM Easting/Northin	ng (Zone 10, NAD	1983)	4336		1	West !	2111	
Road Name			Alde	rbrook Road				
Road/Culvert Owner			Tillan	nook County				F 1
Adjacent Landowners		T. Gienger, S. & E. Vermilyea,	and J. Smith		1	A STATE OF THE STA		
CULVERT INFO		CHANNEL INFO)	A Sall Jak				
Shape	Circular		Inlet Gradient (%)	3.5		1		7 30 - 1
Material	Concrete		Upstream Gradient (%)	<1.0	11/11/11			
Length (ft)	38		Bankfull Width (ft)	6.1	1-4-5			
Width (in)		24	Bankfull:Culvert Ratio	full:Culvert Ratio 0.3			1800年	
Height (in)		24						
Outlet Perch (ft)		0.1			Carlo State			
Slope (%)		1.0				XI	X	
Rustline Height (in)		N/A			19/3			
Overall Condition		Poor						
	PRIOR	ITIZAT	ION ANALYSIS			Me 1	MAN N	
Upstream Habitat Le	ngth (mi)	0.3	Habitat Points	1	W. W.			
Habitat Quality		Poor	Habitat Quality Points	1		第三人		
Fish Species		Anad.	Fish Points	3				
Barrier Type		Red	Barrier Points	3	Out	let"		
Night and I land and a line of		11	Prioritization Total Points	8		JUNE 7	hat !	C

Notes: Upstream listed as nonfish. However, although low-quality habitat, technical reviewers suggested that a short segment of the upstream west channel remains suitable for fish use if access issues are addressed.



Vaughn Creek and Hathaway Slough Culverts, Kilchis River Basin

COAL CREEK AND MURPHY CREEK AREA CULVERTS

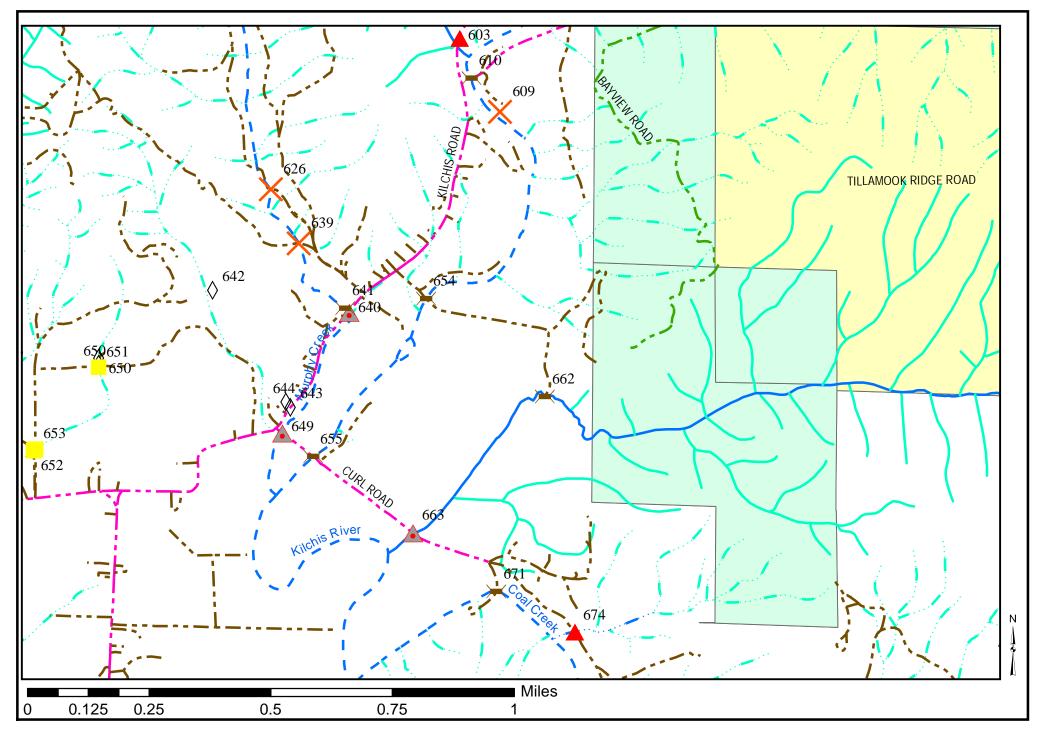
		LOCATI	ON INFO		Culvert #	674	Priority	M
Watershed				Kilchis River				
Stream Name	Stream Name		Unnamed tributary	of Coal Creek	是文义是			
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 8, N	NW1/4 of SW1/4				
UTM Easting/Northin	lg (Zone 10, NAD	1983)	43	5604/5039169			e e brong	
Road Name			Private road of	f of Curl Road		1	- 30	
Road/Culvert Owner			R	L. & K. Downs		ENE		1
Adjacent Landowners			R	L. & K. Downs	观点区域	尼 斯	75	
CULVERT INFO			CHANNEL INF	0	1847 J. P.	295	La .	3
Shape		Circular	Inlet Gradient (%)	2.3	Inlet		Section 1	
Material	Corrugated metal		Upstream Gradient (%)	1.0	1			
Length (ft)	40		Bankfull Width (ft)	5.3	Sale 2000			
Width (in)	30		Bankfull:Culvert Ratio	0.5		200		
Height (in)		30			Seller.	N. W.	31000	
Outlet Perch (ft)		4.5				W.	A MARIE	
Slope (%)		5.5						
Rustline Height (in)		24			AUT COM			
Overall Condition		Poor			The second		60 to	
	PRIO	RITIZATI	ION ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.2	Habitat Points	1	702		2	
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3				1
Barrier Type		Red	Barrier Points	arrier Points 3		Οι	ıtlet	
			Prioritization Total Points	9	0,000	12		1
Notes:								

	I	LOCATIO	N INFO		Culvert #	663	Priority	Н
Watershed			Ki	lchis River	The second of			Name of the
Stream Name			Unnamed tributary of Ki	lchis River	A STATE OF A		LE LES	A PAIN
Township-Range-Secti	on-1/4		T1S, R9W, Sec. 7, NW ¹ / ₄ of NE ¹ / ₄					The same
UTM Easting/Northing	Z (Zone 10, NAI	1983)	43508	A THE STATE OF				
Road Name				Curl Road		ALC: THE		42.7
Road/Culvert Owner			Tillamo	ook County	457			MI
Adjacent Landowners			C. Bosch and G.			A LONG THE		
CULVERT	T INFO		CHANNEL INFO	M .			- 0	
Shape		Circular	Inlet Gradient (%)	3.1		Inlet		
Material			Upstream Gradient (%)	3.1			1150	
Length (ft)		38	Bankfull Width (ft)	4.6				
Width (in)		48	Bankfull:Culvert Ratio	0.9				
Height (in)		48				1020		1
Outlet Perch (ft)		None	Two pipes at this location. Or				于例如这个	$\mathbf{k} + \mathbf{k}$
Slope (%)		1.4	overflow pipe that conveys wa	ater only		"\ 		X
Rustline Height (in)		34	during high water events.			\mathcal{X}^{\prime}	, A W	AT.
Overall Condition		Fair						
-	PRIOR	ITIZATIO	N ANALYSIS					6
Upstream Habitat Len	gth (mi)	1.8	Habitat Points	4				
Habitat Quality		Fair	Habitat Quality Points	2	500			
Fish Species		Anad.	Fish Points	3			Outlet	283
Barrier Type	Gray Gray		Barrier Points	2	1	ALC MAN		-
			Prioritization Total Points	11				
Notes: Barrel of concre	te pipe is a	approximate	ely 40 percent full of stream bed	d substrate.				

]	LOCATIO	N INFO		Culvert #	649	Priority	Н
Watershed			Ki	ilchis River		16000		
Stream Name			Mu	rphy Creek				
Township-Range-Secti	ion-1/4		T1S, R9W, Sec. 6, SE	21/4 of SW1/4			Maria de la companya della companya	
UTM Easting/Northing	g (Zone 10, NAI	1983)	43465					
Road Name			Curl Road					
Road/Culvert Owner			Tillamo	ook County		1 17	"MOSEMY"	
Adjacent Landowners			G.	& S. Petty			1. 14	
CULVERT	ΓINFO		CHANNEL INFO)			2.	1
Shape		Circular	Inlet Gradient (%)	4.75	1		Inlet	1
Material		Concrete	Upstream Gradient (%)	0.2	-		IIIICC	1 =
Length (ft)		40	Bankfull Width (ft)	6.0				
Width (in)		48	Bankfull:Culvert Ratio	0.7				
Height (in)		48			E .			- 1
Outlet Perch (ft)		None			ST. I Wash	美国		1
Slope (%)		-0.4						
Rustline Height (in)		n/a						
Overall Condition		Fair				-		
-	PRIOR	ITIZATIO	ON ANALYSIS			-		$/ \setminus$
Upstream Habitat Len	gth (mi)	2.0	Habitat Points	4		04		
Habitat Quality		Fair	Habitat Quality Points	2	With a -			
Fish Species		Anad.	Fish Points	3			Outlet	
Barrier Type		Gray	Barrier Points	2		3	3	1
			Prioritization Total Points	11				
Notes:								

]	LOCATIO	N INFO		Culvert #	640	Priority	Н
Watershed			Ki	lchis River	A STATE OF THE PARTY OF THE PAR	And the State of t		7
Stream Name				rphy Creek			The state of the	1
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 6, SE		E WA	7 77	7701	
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43487	1/5040218	17.7	-		
Road Name			Kilchis 1	River Road		6		*
Road/Culvert Owner			Tillamo	ook County			No.	-
Adjacent Landowners	3		E. &	K. Gomes				
CULVER	T INFO		CHANNEL INFO				No. 10	
Shape		Circular	Inlet Gradient (%)	3.7	- Inlet	wee A		
Material	Corruga	ated metal	Upstream Gradient (%)	2.1			2.5	100
Length (ft)		40	Bankfull Width (ft)	6.0				
Width (in)		66	Bankfull:Culvert Ratio	0.9				
Height (in)		66				知為		
Outlet Perch (ft)		None			No. 1		MA .	
Slope (%)		1.6						
Rustline Height (in)		n/a				-		9 Ni
Overall Condition		Fair			18/12/14		WWW TE	1
	PRIOR	ITIZATIO	N ANALYSIS					I SA
Upstream Habitat Lei	ngth (mi)	1.7	Habitat Points	4	May .	and the same	The state of the s	
Habitat Quality		Fair	Habitat Quality Points	2	and the bear		THE SA	Ashar T
Fish Species		Anad.	Fish Points	3	Outlet	7		
Barrier Type		Gray	Barrier Points	2	1			Stay &
N. d. D. d. C. i. i.		. 1. 50	Prioritization Total Points	11	. (41 :	1: . 1		

Notes: Barrel of pipe is approximately 50 percent filled with stream bed substrate. Crossing 641 immediately upstream of this crossing, is a livestock bridge.



Murphy Creek and Coal Creek Area Culverts, Kilchis River Basin

MAPES, MYRTLE AND THOMAS CREEKS CULVERTS

]	LOCATIO	N INFO		Culvert #	603	Priority	Н
Watershed			Ki	ilchis River	MICH STREET		Mar The Charles of the	In the second
Stream Name			M	apes Creek				A STATE OF
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 6, NW	/1/4 of NE1/4	THE RE			
UTM Easting/Northin	lg (Zone 10, NAI	1983)	43523			7	57	
Road Name			Kilchis	S. Carrier	100			
Road/Culvert Owner			Tillamo	1				
Adjacent Landowners	8				34.1			
CULVER	T INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	13.4	Inlet			-
Material	Corruga	ated metal	Upstream Gradient (%)	1.2			-	
Length (ft)		50	Bankfull Width (ft)	15.4				
Width (in)		54	Bankfull:Culvert Ratio	0.3				
Height (in)		54					12 1	統囚
Outlet Perch (ft)	Outlet s	ubmerged			And			
Slope (%)		2.5				41-1		
Rustline Height (in)	Entire p	ipe rusted						
Overall Condition		Poor			**	S. TEN	PERMIT	-
	PRIOR	ITIZATIO	ON ANALYSIS		Z TO DETA			
Upstream Habitat Lei	ngth (mi)	0.7	Habitat Points	2	700			-
Habitat Quality		Fair	Habitat Quality Points	2	To the second			-
Fish Species		Anad.	Fish Points	3	Outlet			-
Barrier Type		Red	Barrier Points	3				
			Prioritization Total Points	10				
Notes: Barrel of pipe is	s approxima	itely 60 per	cent filled with stream bed subs	strate.				

]	LOCATIO	N INFO		Culvert #	591	Priority	Н
Watershed			Ki	lchis River				100
Stream Name			M	yrtle Creek				
Township-Range-Sect	tion-1/4		T1N, R9W, Sec. 32, SE	1/4 of SW1/4	5 7 7			
UTM Easting/Northin	g (Zone 10, NAI) 1983)	436198/5041562			PA		* 4
Road Name			Kilchis 1	100				
Road/Culvert Owner			Tillamo				1	
Adjacent Landowners	S		P. & M. Zweifel, Christensen	All Control		A Carlo		
CULVER	T INFO		CHANNEL INFO					-
Shape		Circular	Inlet Gradient (%)	13.3	Inlet			
Material	Corruga	ated metal	Upstream Gradient (%)	3.5	Sola Villa	A STATE OF	X	1
Length (ft)		41	Bankfull Width (ft)	12.8				
Width (in)		66	Bankfull:Culvert Ratio	0.4				
Height (in)		66						1
Outlet Perch (ft)		3.7						
Slope (%)		3.3			***	2/15	A	
Rustline Height (in)	Entire p	ipe rusted				The state of		
Overall Condition		Poor				A .	1	S
	PRIOR	ITIZATIO	N ANALYSIS					
Upstream Habitat Lei	ngth (mi)	1.0	Habitat Points	2	1		Charles I	
Habitat Quality		Fair(-)	Habitat Quality Points	2	Outlet			
Fish Species		Anad.	Fish Points	3		O THE		
Barrier Type		Red	Barrier Points	3	2			
			Prioritization Total Points	10				
Notes:	·		-					

]	LOCATIO	N INFO		Culvert #
Watershed			Ki	lchis River	84K.6
Stream Name			Tho	omas Creek	
Township-Range-Sect	tion-1/4		T1N, R9W, Sec. 32, Sl	E1/4 of SE1/4	A STATE
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	43707		
Road Name			Kilchis I	River Road	U
Road/Culvert Owner			Tillamo	TO SERVICE AND	
Adjacent Landowners	S		R. & S. Del		
CULVER	T INFO		CHANNEL INFO		
Shape		Circular	Inlet Gradient (%)	24.0	Inlet
Material	Corruga	ated metal	Upstream Gradient (%)	8.1	
Length (ft)		43	Bankfull Width (ft)	12.6	
Width (in)		48	Bankfull:Culvert Ratio	0.6*	
Height (in)		48	Two pipes side-by-side at this crossin	g This	1006
Outlet Perch (ft)		3.4	section includes information on the le	ft pipe in	
Slope (%)		1.8	inlet photo. This pipe appears to carr	y most flows	
Rustline Height (in)	Entire p	ipe rusted	through this crossing. Both pipes are CMP and both are perched.	4 ft. circular	100
Overall Condition		Poor	Civil and both are perened.		
PRIORITIZA		ITIZATIO	ON ANALYSIS		
Upstream Habitat Length (mi) 0.5		0.5	Habitat Points	1	STATE OF
Habitat Quality Poor(+		Poor(+)	Habitat Quality Points	1	Name of Street,
Fish Species An		Anad.	Fish Points	3	
Barrier Type		Red	Barrier Points	3	
			Prioritization Total Points	8	



589

Priority

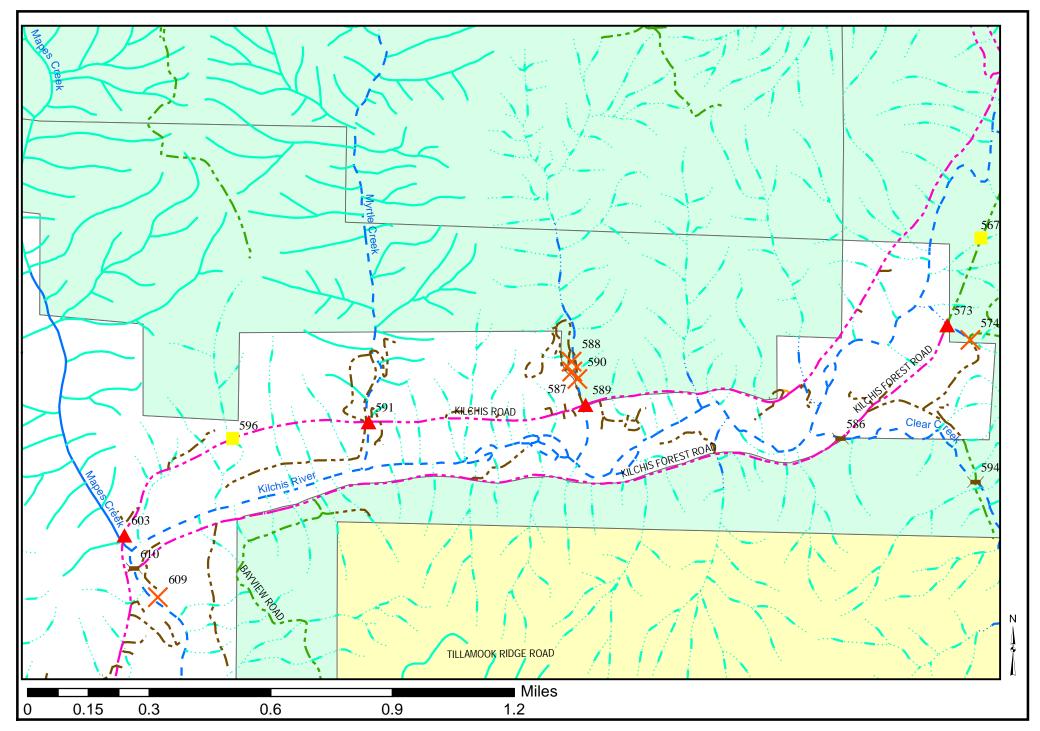
 \mathbf{L}



Prioritization Total Points 8

Notes: *used combined width of both pipes for this calculation. Right pipe appears to only flow periodically due to thalweg alignment and rocks blocking inlet.

]	LOCATIO	N INFO		Culvert #	573	Priority	L
Watershed			Ki	lchis River		1	12.11/20	1100
Stream Name				Γank Creek	150	7	100	
Township-Range-Sect	ion-1/4		T1N, R9W, Sec. 33, SW	11/4 of NE1/4			The second	1
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43850	9/5041958				10
Road Name			Kilchis F	A STATE OF THE STA			100	
Road/Culvert Owner			Oregon Department			40		
Adjacent Landowners			Tillamook Co. and T.				-	
CULVER'	T INFO		CHANNEL INFO					1
Shape		Circular	Inlet Gradient (%)	11.1	Inlet			1
Material		Concrete	Upstream Gradient (%)	12.3				
Length (ft)		69	Bankfull Width (ft)	7.3				
Width (in)		30	Bankfull:Culvert Ratio	0.3	O	ıtlet 🗸		
Height (in)		30				4		
Outlet Perch (ft)		3.1			1811			
Slope (%)		5.6			12/-1			
Rustline Height (in)		none			VVV			
Overall Condition		Fair				0		
	PRIOR	ITIZATIO	ON ANALYSIS			9/1/18		
Upstream Habitat Ler	igth (mi)	0.1	Habitat Points	1				
Habitat Quality	Poor		Habitat Quality Points	1		The state of the s	The second	
Fish Species			Fish Points	3				
Barrier Type	arrier Type Red		Barrier Points	3				
			Prioritization Total Points	8	60			
Notes:								



Mapes, Myrtle, Thomas and Tank creeks Culverts, Kilchis River Basin

LITTLE SOUTH FORK KILCHIS CULVERT

Priority

M

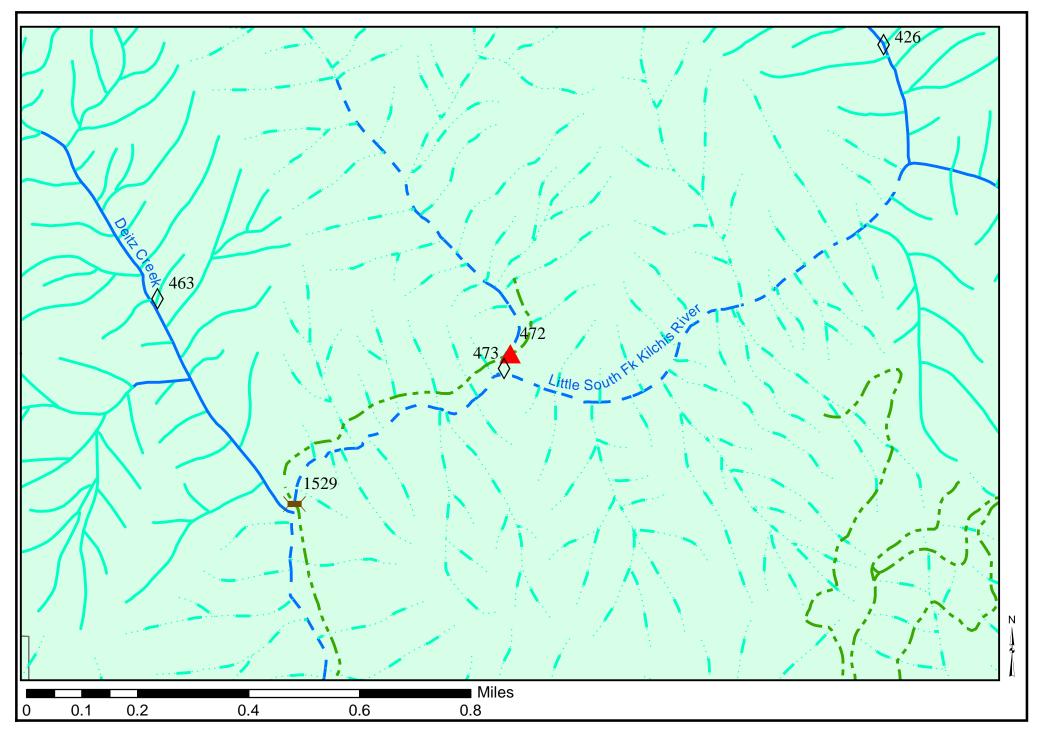
]	LOCATIO	N INFO		Culvert #	472
Watershed			Ki	ilchis River		1 /11
Stream Name		Unnamed	trib. to Little S. Fork Kilchis I			
Township-Range-Secti	ion-1/4		T1N, R9W, Sec. 14, S.	E¼ of SE¼		
UTM Easting/Northing	g (Zone 10, NAI	D 1983)	44178	32/5045388		1
Road Name			Unnamed F	Forest Road		Alla
Road/Culvert Owner			Oregon Department			
Adjacent Landowners			Oregon Department		1	
CULVERT	ΓINFO		CHANNEL INFO			
Shape		Pipe Arch	Inlet Gradient (%)	13.8	Inlet	
Material	Corruga	ated metal	Upstream Gradient (%)	13.5	A Company	
Length (ft)		60	Bankfull Width (ft)	12.6	-	
Width (in)		156	Bankfull:Culvert Ratio	1.0	70	
Height (in)		108				
Outlet Perch (ft)		7.1				1/2/1
Slope (%)		7.1				16
Rustline Height (in)		18				Nav
Overall Condition		Fair				1
-	PRIOR	RITIZATIO	N ANALYSIS			
Upstream Habitat Len	gth (mi)	0.6	Habitat Points	2	A.	
Habitat Quality		Poor	Habitat Quality Points	1		247
Fish Species		Anad.	Fish Points	3		
Barrier Type		Red	Barrier Points	3		1
			Prioritization Total Points	9		
Notes:						•

SAM DOWNS CREEK CULVERTS

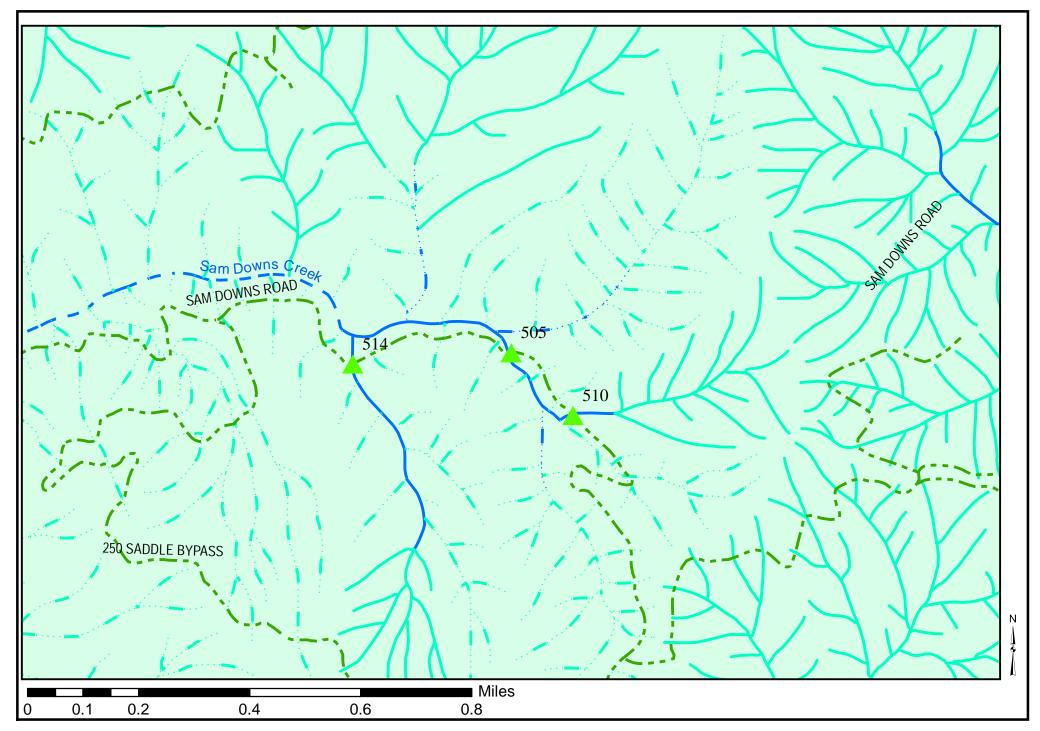
	LO	OCATIO	N INFO		Culvert #	514	Priority	NA
Watershed			Ki	lchis River		•		
Stream Name			Unnamed tributary to S	am Downs	all was de	417		4
Stream Name				Creek	ALC: N		The second second	3
Township-Range-Section	ion-1/4		T1N, R8W, Sec. 19, SW	V1/4 of SE1/4	A COLUMN			
UTM Easting/Northin	g (Zone 10, NAD	1983)	44447		Sec.		Sales and	
Road Name			Sam De		1	- A-1		
Road/Culvert Owner			Oregon Department		at la			
Adjacent Landowners			Oregon Department					
CULVERT	T INFO		CHANNEL INFO					
Shape	Pi	pe Arch	Inlet Gradient (%)	4.5			Inlet	1
Material	Corrugate	ed metal	Upstream Gradient (%)	3.6				-
Length (ft)		95	Bankfull Width (ft)	9.6			5. 5.000	
Width (in)		144	Bankfull:Culvert Ratio	1.25		1		
Height (in)		90			Outlet			1200
Outlet Perch (ft)		None						
Slope (%)		6.7					and the same of	
Rustline Height (in)		N/A				Ŧ		
Overall Condition		Good						1
	PRIORI	ΓΙΖΑΤΙC	ON ANALYSIS					15 1
Upstream Habitat Len	igth (mi)	0.4	Habitat Points	1			4.5	70.007
Habitat Quality		Fair	Habitat Quality Points	2		S. A. C.	10000	
Fish Species		Anad.	Fish Points	3				
Barrier Type		Green	Barrier Points	1		ALC: NO.		
			Prioritization Total Points	7				
Notes:								

	LOCATIO	N INFO		Culvert #	505	Priority	NA
Watershed		Ki	lchis River				
Stream Name		Sam Do	wns Creek		4		
Township-Range-Sect	tion-1/4	T1N, R8W, Sec. 19, SI	E1/4 of SE1/4		174.38		
UTM Easting/Northin	1g (Zone 10, NAD 1983)	44491	6/5044416		4.5%	通过原用的	
Road Name		Sam D	100		4		
Road/Culvert Owner		Oregon Department	of Forestry				
Adjacent Landowners	S	Oregon Department	of Forestry				ļ
CULVER	T INFO	CHANNEL INFO					
Shape	Pipe Arch	Inlet Gradient (%)	11.4				
Material	Corrugated metal	Upstream Gradient (%)	4.5	Y			
Length (ft)	82	Bankfull Width (ft)	10.3			lalat	
Width (in)	144	Bankfull:Culvert Ratio	1.5		1	Hillet >	
Height (in)	90						
Outlet Perch (ft)	None			N 1 - Shannel		and the knowledge	
Slope (%)	4.9			William Services		1	
Rustline Height (in)	N/A				10-		
Overall Condition	Fair			Section 1		SOUTH	
	PRIORITIZATIO	ON ANALYSIS		The state			
Upstream Habitat Lei (mi)	ngth 0.4	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2	1			
Fish Species	Anad.	Fish Points	3	Outlet			
Barrier Type	Green	Barrier Points	1				
		Prioritization Total Points	7				
Notes:							

	L	OCATIO	N INFO		Culvert #	510	Priority	NA
Watershed			Ki	lchis River	to the state of			
Stream Name			Sam Do	wns Creek	1110			
Township-Range-Sect	ion-1/4		T1N, R8W, Sec. 20, SW	ASSESSED AND THE		William Control		
UTM Easting/Northin	g (Zone 10, NAD	1983)	44512					
Road Name			Sam D	Sanda .	10	30 31 × 2		
Road/Culvert Owner			Oregon Department	25.	A STATE OF THE PARTY OF THE PAR			
Adjacent Landowners			Oregon Department		1/2 000	X X		
CULVER	ΓINFO		CHANNEL INFO		united			
Shape	P	ipe Arch	Inlet Gradient (%)	2.0			**************************************	
Material	Corrugat	ed metal	Upstream Gradient (%)	10.2			14.5	
Length (ft)		52	Bankfull Width (ft)	4.0	Inlet			
Width (in)		96	Bankfull:Culvert Ratio	2.0				
Height (in)		72						70.70.9
Outlet Perch (ft)		None				45		
Slope (%)		6.7					and the second	
Rustline Height (in)		6				100		
Overall Condition		Good				04		
-	PRIORI	TIZATIO	ON ANALYSIS		40.			34 , 9
Upstream Habitat Ler	ngth (mi)	0.1	Habitat Points	1			100	
Habitat Quality		Poor	Habitat Quality Points	1				138
Fish Species	h Species Anad.		Fish Points	3				
Barrier Type		Green	Barrier Points	1	Outlet	1		
			Prioritization Total Points	6				ALC: N
Notes:								



Little South Fork Kilchis River Area Culverts, Kilchis River Basin



Sam Downs Road Culverts, Kilchis River Basin

TILDEN BLUFFS ROAD AREA CULVERTS

]	LOCATIO	N INFO		Culvert #	292	Priority	L
Watershed			Ki	ilchis River				
Stream Name			A	iken Creek				20
Township-Range-Section	on-1/4		T1N, R9W, Sec. 16, SW1/4 of SE1/4					
UTM Easting/Northing	Zone 10, NAI	1983)	43857	74/5048715		4		
Road Name			Tilden E	Bluffs Road				
Road/Culvert Owner			Oregon Department	of Forestry	THE STATE OF			
Adjacent Landowners			Oregon Department	of Forestry			1	
CULVERT	INFO		CHANNEL INFO)			2 16	
Shape		Circular	Inlet Gradient (%)	18.2				200
Material	Corruga	ated metal	Upstream Gradient (%)	16.2	Inlet			
Length (ft)		54	Bankfull Width (ft)	9.7	1000			
Width (in)		66	Bankfull:Culvert Ratio	0.6				
Height (in)		66						
Outlet Perch (ft)		6.2			A Marie Wall			
Slope (%)		1.9				T. T.	-111	
Rustline Height (in)		42						
Overall Condition		Poor				1		
-	PRIOR	ITIZATIO	N ANALYSIS		O Comment			
Upstream Habitat Leng	gth (mi)	0.1	Habitat Points	1		A CANA	The second second	
Habitat Quality		Poor	Habitat Quality Points	1				1
Fish Species		Anad.	Fish Points	3	Outlet			
Barrier Class		Red	Barrier Points	3	odtiet			
N I 4 41/1 1 1 1			Prioritization Total Points	8	C.1	111	'. 11 C	

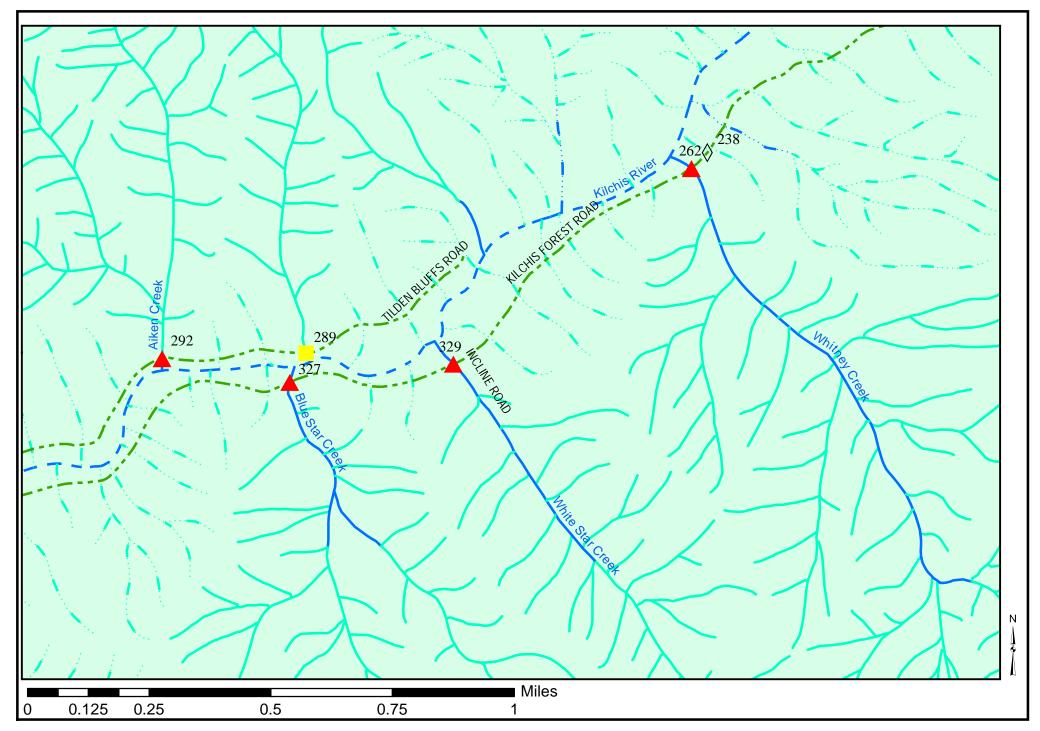
Notes: Although designated a nonfish stream, technical reviewers felt that a short reach of this stream would be suitable for fish use if passage were not prevented by this culvert.

]	LOCATIO	N INFO		Culvert #	327	Priority	M
Watershed			Ki	Ichis River				
Stream Name			Blue	Star Creek				
Township-Range-Section	on-1/4		T1N, R9W, Sec. 4, SI	E¼ of SE¼		CAC-VI		1
UTM Easting/Northing	Z (Zone 10, NAI) 1983)	438990/5048635				A STATE OF THE STA	The same of the sa
Road Name			Kilchis F	orest Road	*	5	Control of	
Road/Culvert Owner			Oregon Department				(a)	
Adjacent Landowners			Oregon Department of Forestry			To Take		
CULVERT	T INFO		CHANNEL INFO	1				
Shape		Circular	Inlet Gradient (%)	20.2	100 mg			
Material	Corruga	ated metal	Upstream Gradient (%)	13.3	Inlet			13
Length (ft)		100	Bankfull Width (ft)	10.3	Contract of the			
Width (in)		60	Bankfull:Culvert Ratio	0.5				
Height (in)		60				1		
Outlet Perch (ft)		2.5			45/114	25		
Slope (%)		4.0						1
Rustline Height (in)		42			110			
Overall Condition		Fair			THE REAL PROPERTY.			
	PRIOR	ITIZATIO	ON ANALYSIS			W III		
Upstream Habitat Len	gth (mi)	0.5	Habitat Points	1		-		
Habitat Quality		Fair	Habitat Quality Points	2	Outlet			
Fish Species			Fish Points	3	Outlet			
Barrier Type		Red	Barrier Points	3	The second			
			Prioritization Total Points	9				
Notes:								

]	LOCATIO	N INFO		Culvert #	329	Priority	L
Watershed			Ki	Ichis River				
Stream Name			White	Star Creek			the state of the s	4
Township-Range-Sect	tion-1/4		T1N, R9W, Sec. 3, SE ¹ / ₄ of SW ¹ / ₄			-		4
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43952	26/5048697	AT LAY		可以	
Road Name			Kilchis F	orest Road				H
Road/Culvert Owner			Oregon Department	1790				
Adjacent Landowners	•		Oregon Department			1		
CULVER	CULVERT INFO		CHANNEL INFO	6 250			DIE.	
Shape		Circular	Inlet Gradient (%)	15.1	Track.			-
Material	Corruga	ated metal	Upstream Gradient (%)	3.1	Inlet			
Length (ft)		65	Bankfull Width (ft)	10.0	Y			
Width (in)		66	Bankfull:Culvert Ratio	0.6				
Height (in)		66			15 16			
Outlet Perch (ft)		6.7					A A	
Slope (%)		3.2						
Rustline Height (in)		30				1		
Overall Condition		Fair				To the		
	PRIOR	ITIZATIO	ON ANALYSIS			200	1	
Upstream Habitat Lei	ngth (mi)	0.5	Habitat Points	1	-	1		
Habitat Quality		Poor	Habitat Quality Points	1	Outlet			a)
Fish Species		Anad.	Fish Points	3	Outlet		ach .	
Barrier Type		Red	Barrier Points	3	a transfer	COUNTY.	9) 46-2	1446
			Prioritization Total Points	8				
Notes:								

	J	LOCATIO	N INFO		Culvert #	262	Priority	Н
Watershed			Ki	lchis River				
Stream Name			Whi	tney Creek	金属管			9 0
Township-Range-Section	on-1/4		T1N, R9W, Sec. 4, SI	E1/4 of NE1/4		No.		
UTM Easting/Northing	(Zone 10, NAI) 1983)	44029	8/5049327		1		
Road Name			Kilchis F	orest Road		The same		
Road/Culvert Owner			Oregon Department					
Adjacent Landowners			Oregon Department	of Forestry				
CULVERT	INFO		CHANNEL INFO	CHANNEL INFO				
Shape		Circular	Inlet Gradient (%)	12.0				
Material	Corruga	ated metal	Upstream Gradient (%)	8.0	2	art to	Inlet	
Length (ft)		100	Bankfull Width (ft)	13.4			For Samuel 1 1 1 1	1
Width (in)		84	Bankfull:Culvert Ratio	0.5				
Height (in)		96						
Outlet Perch (ft)		4.5			TO THE REAL PROPERTY.			
Slope (%)		7.0	Outlet cascades onto bedrock.		1000			
Rustline Height (in)		36						
Overall Condition		Poor						The
_	PRIOR	ITIZATIO	N ANALYSIS		10000000000000000000000000000000000000			
Upstream Habitat Leng	gth (mi)	1.1	Habitat Points	3				
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3	Outlet			
Barrier Type		Red	Barrier Points	3		0.00	A VI	400
NI 4 XXI 4 4 1		1	Prioritization Total Points	11	1 1 1		mi: :	

Notes: Water entering through holes in side of pipe. 4-6" holes in invert. Water flows under and alongside pipe. This pipe appears to sit on bedrock and it is unclear whether an accessible crossing can be created without considerable earthwork. Closer inspection of this location is in order.

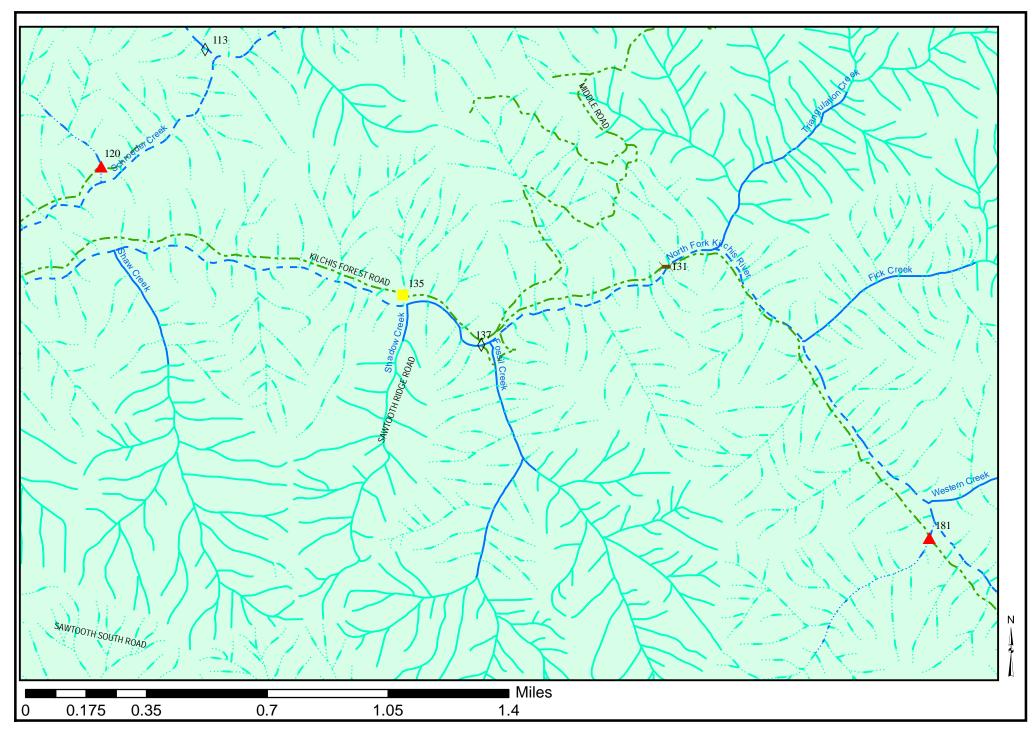


Tilden Bluffs Road Area Culverts, Kilchis River Basin

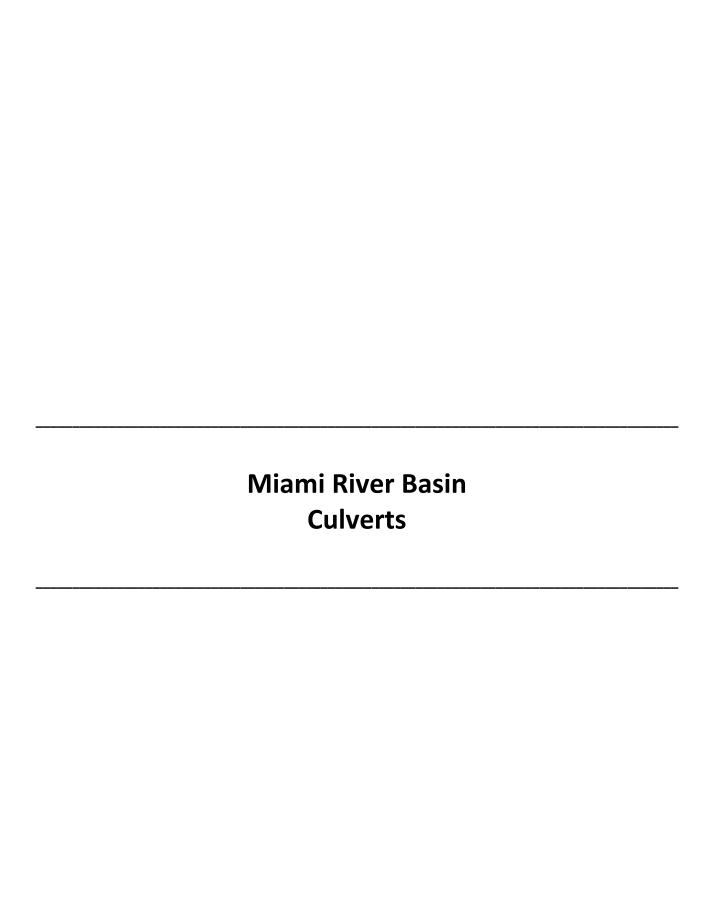
NORTH FORK KILCHIS AREA CULVERTS

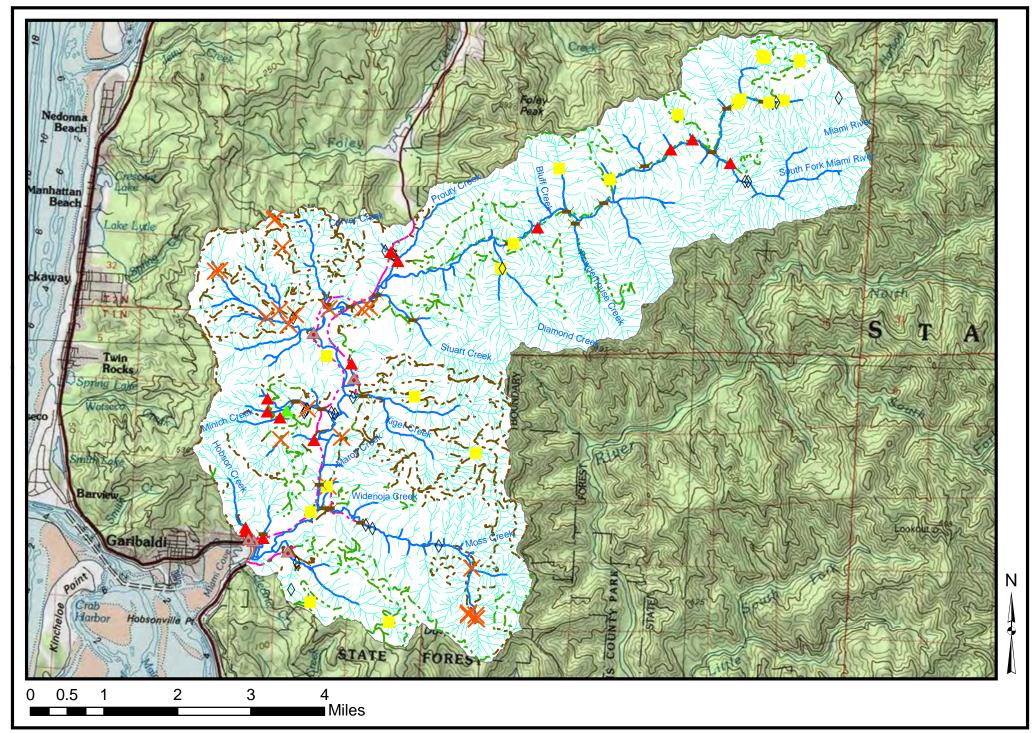
]	LOCATIO	N INFO		Culvert #	120	Priority	L
Watershed			Ki	lchis River				**
Stream Name			Tributary of Schro	eder Creek				
Township-Range-Sect	tion-1/4		T2N, R8W, Sec. 30, NV	V1/4 of SE1/4			48.2	
UTM Easting/Northin	1g (Zone 10, NAI	D 1983)	44473	1/5052521	TOWNS !	6-1-21		10
Road Name			Miami Divide Road					1
Road/Culvert Owner			Oregon Department	of Forestry				9 14
Adjacent Landowners	S		Oregon Department	of Forestry	Contract.		Mark Street	
CULVER	T INFO		CHANNEL INFO	1				
Shape		Circular	Inlet Gradient (%)	15.8	Inlet	10		
Material	Corruga	ited Metal	Upstream Gradient (%)	6.9	DESTRUCTION	Y		18
Length (ft)		46	Bankfull Width (ft)	4				
Width (in)		48	Bankfull:Culvert Ratio	1.0		No.		
Height (in)		48				W		
Outlet Perch (ft)		9.8			10		To the last	
Slope (%)		6.8						
Rustline Height (in)		16						
Overall Condition		Fair			1			
	PRIOR	ITIZATIO	ON ANALYSIS				100	
Upstream Habitat Lei	ngth (mi)	0.3	Habitat Points	1				
Habitat Quality		Poor	Habitat Quality Points	1			1	
Fish Species		Anad.	Fish Points	3		A STATE OF THE PARTY OF THE PAR		
Barrier Class		Red	Barrier Points	3		0	utlet	
			Prioritization Total Points	8	* 120	A/1		
Notes:					·			

]	LOCATIO	ON INFO		Culvert #	181	Priority	M
Watershed			Tilla	amook Bay				
Stream Name		1	Unnamed tributary of N. Fork Ki	ilchis River		S. San		
Township-Range-Sect	ion-1/4		T2N, R8W, Sec. 34, SW	11/4 of SW1/4				
UTM Easting/Northin	g (Zone 10, NAI	1983)		3/5050834				
Road Name			Kilchis F	Forest Road			7	
Road/Culvert Owner			Oregon Department	of Forestry		3		
Adjacent Landowners	}		Oregon Department	of Forestry	and the second			
CULVERT	ΓINFO		CHANNEL INFO			Electric Control	R	1
Shape		Circular	Inlet Gradient (%)	23.5				
Material	Corrugat	ed Metal	Upstream Gradient (%)	5.3			Inlet	
Length (ft)		51	Bankfull Width (ft)	8.2		HAY!		
Width (in)		66	Bankfull:Culvert Ratio	0.7				
Height (in)		66						100
Outlet Perch (ft)		0.1						
Slope (%)		7.1						1
Rustline Height (in)		18					1	
Overall Condition		Good				1 -	1	
	PRIOR	ITIZATI	ON ANALYSIS		EN ST		1.77	40
Upstream Habitat Lei	ngth (mi)	0.5	Habitat Points	1	Carlotte II Va		2000年	1
Habitat Quality		Fair	Habitat Quality Points	2	2000		1	1
Fish Species		Anad.	Fish Points	3		108	Outle	
Barrier Class		Red	Barrier Points	3			Outle	
			Prioritization Total Points	9				
Notes:								



North Fork Kilchis River Area Culverts, Kilchis River Basin





Miami Basin Crossings

Miami River Basin Clusters

	Culvert			
Cluster	Numbers	Priority	Stream	Upstream Habitat
	450	M	Hobson Creek	
	449	M	Hobson Creek	
Lower Miami River Area	448	Н	Hobson Creek	3.1
Lower Whalli River Area	432	Н	Hobson Creek	3.1
	444	M	Struby Creek	
	462	Н	Illingsworth Creek	
	352	Н	Waldron Creek	
	273	M	Unnamed tributary	
Waldron and Minich	279	L	Unnamed tributary	2.1
	278	M	Unnamed tributary	
	320	Н	Minich Creek	
New Miami River Road Area	230	L	Unnamed tributary	0.6
110W Milanii Rivel Rodu / Hed	225	L	Unnamed tributary	0.0
			T	
Peterson Creek	189	Н	Peterson Creek	6.2
	1			
Prouty and Carver Creeks	138	Н	Prouty Creek	1.1
Trouty and our or oreens	126	M	Carver Creek	1.1
	1			
	115	L	Unnamed tributary	
	93	N/A	Unnamed tributary	
Miami River Road	84	L	Unnamed tributary	0.7
	5101	L	Unnamed tributary	
	87	L	Unnamed tributary	

LOWER MIAMI RIVER AREA CULVERTS

]	LOCATIO	N INFO		Culvert #	450	Priority	M
Watershed			M	Iiami River				
Stream Name			Но	bson Creek	86.32	18.	主发生活/ 66	1
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 22, NW	/¼ of NE¼	Mary I			被 发
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	43041	7/5045916	从图》		经 以 联邦	
Road Name			Miami l		The said			
Road/Culvert Owner			Oregon Department of Tra				4	
Adjacent Landowners	S		TNC, Tillamook County, and I	冰 华、松丰				
CULVER	T INFO		CHANNEL INFO		N & C	12		1000
Shape		Pipe Arch	Inlet Gradient (%)	10.0			The same	
Material	Corruga	ated metal	Upstream Gradient (%)	6.5			Inlet	
Length (ft)		140	Bankfull Width (ft)	6.7				
Width (in)		78	Bankfull:Culvert Ratio	1.0				
Height (in)		54	Condition unknown due to being		1. 外天发之长			
Outlet Perch (ft)		None		Condition unknown due to being submerged and full, but we suspect that				
Slope (%)		4.2	the pipe is in poor condition b		Alle Alles			E
Rustline Height (in)		unknown	the condition of the inlet and of					3.41
Overall Condition		unknown						
	PRIOR	RITIZATIO	ON ANALYSIS					
Upstream Habitat Le	ngth (mi)	1.0	Habitat Points	2	L mark			-26
Habitat Quality	Fair		Habitat Quality Points	2				
Fish Species	ish Species Anad.		Fish Points	3			Outlet	
Barrier Class	rrier Class Gray		Barrier Points	2				
			Prioritization Total Points	9				
Notes: Culvert is almo	st entirely	submerged	under all flows. Beaver dams is	n the downst	ream wetland	are likel	v the primary	I

Notes: Culvert is almost entirely submerged under all flows. Beaver dams in the downstream wetland are likely the primary contributing factor. Upstream bankfull width impacted by adjacent land use which has largely constrained the channel.

]	LOCATIO	N INFO		Culvert #	449	Priority	M
Watershed			M	Iiami River				
Stream Name			Hol	bson Creek			A CONTRACTOR OF THE PARTY OF TH	22.0
Township-Range-Secti	ion-1/4		T1N, R10W, Sec. 22, NE 1/2	4 of NW 1/4				
UTM Easting/Northin	g (Zone 10, NAI	1983)	43030	08/5045955				70
Road Name			Pr	ivate Drive	Variety of	11		
Road/Culvert Owner			I	D. Schecter				
Adjacent Landowners			Tillamook County	and ODOT			1	
CULVER	T INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	10.0			3	100
Material		Concrete	Upstream Gradient (%)	1.8	M. Aug	1000	- Inlet	200
Length (ft)		26	Bankfull Width (ft)	6.1	No. of the last			
Width (in)		36	Bankfull:Culvert Ratio	0.5				
Height (in)		36				- TAN		1
Outlet Perch (ft)		None					The state of	TO STATE
Slope (%)		-1.0						للقويد
Rustline Height (in)		N/A			4			EMP.
Overall Condition		Poor						Stephen
	PRIOR	ITIZATIO	ON ANALYSIS					-
Upstream Habitat Len	igth (mi)	0.9	Habitat Points	2 2	19	PRO SE		
Habitat Quality		Fair	Habitat Quality Points		// Outlet			
Fish Species		Anad.	Fish Points	3	1	LA CAN	1111	3
Barrier Class		Gray	Barrier Points	2				-
			Prioritization Total Points	9				
Notes: Pipe is approximately	mately $1/3$	full of strea	m bed substrate.					

]	LOCATION	INFO		Culvert #	448	Priority	Н
Watershed			Mi	ami River				
Stream Name			Hob	son Creek				1
Township-Range-Secti	on-1/4	T1N, R10W, Sec. 15, SE 1/4 of SW 1/4		of SW 1/4	PERMIT			
UTM Easting/Northing	(Zone 10, NAD 1983)		430234	1/5046127				part .
Road Name			Hobson C	reek Road				No. of Street, or other Persons
Road/Culvert Owner			A. Hutchison				1/10/2	The state of the s
Adjacent Landowners			D. Schecter			NO		7
CULVER	CULVERT INFO		CHANNEL INFO		The same of	- 1		
Shape			Inlet Gradient (%)	45.0	Sales Sales	36	No.	
Material		Concrete	Upstream Gradient (%)	4.2			Inlet	Marin San
Length (ft)		27	Bankfull Width (ft)	8.0	A Book			
Width (in)		42	Bankfull:Culvert Ratio	0.4				
Height (in)		42				WATER TO		A Com
Outlet Perch (ft)		0.3			* 41.41			
Slope (%)		2.7			不多方式		To be	1
Rustline Height (in)		N/A						1
Overall Condition		Poor				W N		
	PRIOR	ITIZATIO	N ANALYSIS		West of	M	带 波	
Upstream Habitat Len	pstream Habitat Length (mi) 0.8		Habitat Points	2		T X		3-1
Habitat Quality	Fair		Habitat Quality Points	2			and the same of th	1.15
Fish Species			Fish Points	3				
Barrier Class	Red		Barrier Points	3				
			Prioritization Total Points	10				
Notes: Inlet approximat	tely1/2 blo	cked with do	ebris and sediment.			·		

	1	COCATIO	NI INIEO		C-1	422	D.:	тт
		LOCATIO			Culvert #	432	Priority	Н
Watershed				Iiami River				
Stream Name				bson Creek				
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 15, SE	1/4 of SW1/4			NOX.	17
UTM Easting/Northin	l g (Zone 10, NAI	1983)		5/5046264				A P
Road Name			Hobson (Creek Road				-
Road/Culvert Owner			A.	Hutchison				0)
Adjacent Landowners	S		TNC, Tillamook County, and I	D. Schecter				
CULVER	T INFO	•	CHANNEL INFO					
Shape		Pipe Arch	Inlet Gradient (%)	1.4			THE STATE OF THE S	
Material	Smo	oth metal	Upstream Gradient (%)	6.5	是一点的		Inlet	
Length (ft)		24	Bankfull Width (ft)	8.7	4 T		A STATE OF THE STA	
Width (in)		40	Bankfull:Culvert Ratio	0.38				
Height (in)		40			10			1 3
Outlet Perch (ft)		3.6					1	
Slope (%)		1.3						
Rustline Height (in)	Entire p	ipe rusted				FINAL		
Overall Condition		Poor						1
	PRIOR	ITIZATIO	ON ANALYSIS					10
Upstream Habitat Lei	ngth (mi)	0.7	Habitat Points	2				
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3	15 多量。		Outlet	
Barrier Class		Red	Barrier Points	3		in San	Butlet	
			Prioritization Total Points	10				
Notes:								

]	LOCATIO	N INFO		Culvert
Watershed			M	Iiami River	
Stream Name			St	ruby Creek	
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 22, NF		
UTM Easting/Northin	1 g (Zone 10, NA)	D 1983)	43054	12/5045965	
Road Name			Miami l	Foley Road	
Road/Culvert Owner			Tillamo	ook County	- 1
Adjacent Landowner	S		G. Merritt, L. Parks	s, and TNC	
CULVER	T INFO		CHANNEL INFO		The state of the s
Shape		Circular	Inlet Gradient (%)	11.0	
Material		Concrete	Upstream Gradient (%)	5.3	
Length (ft)		43	Bankfull Width (ft)	4.1	
Width (in)		24	Bankfull:Culvert Ratio	0.5	
Height (in)		24			
Outlet Perch (ft)		None			
Slope (%)		4.6			
Rustline Height (in)		N/A			
Overall Condition		Poor			
	PRIOR	RITIZATIO	ON ANALYSIS		
Upstream Habitat Le	ngth (mi)	0.5	Habitat Points	1	
Habitat Quality		Fair	Habitat Quality Points	2	
Fish Species		Anad.	Fish Points	3	1/4
Barrier Class		Red	Barrier Points	3	The state of
			Prioritization Total Points	0	

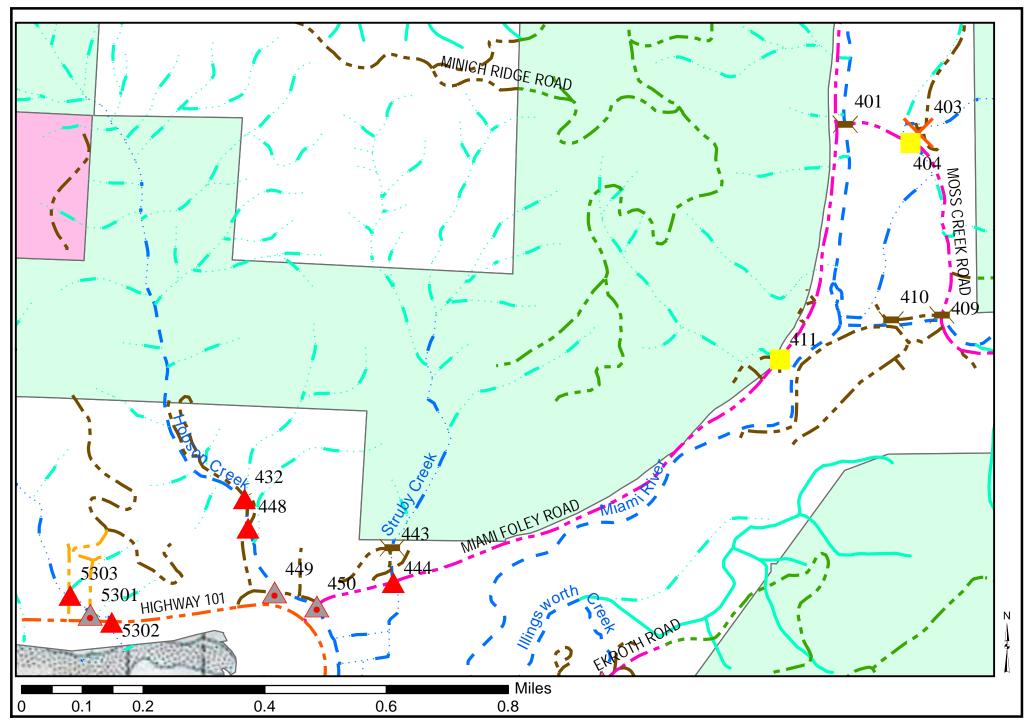


Priority

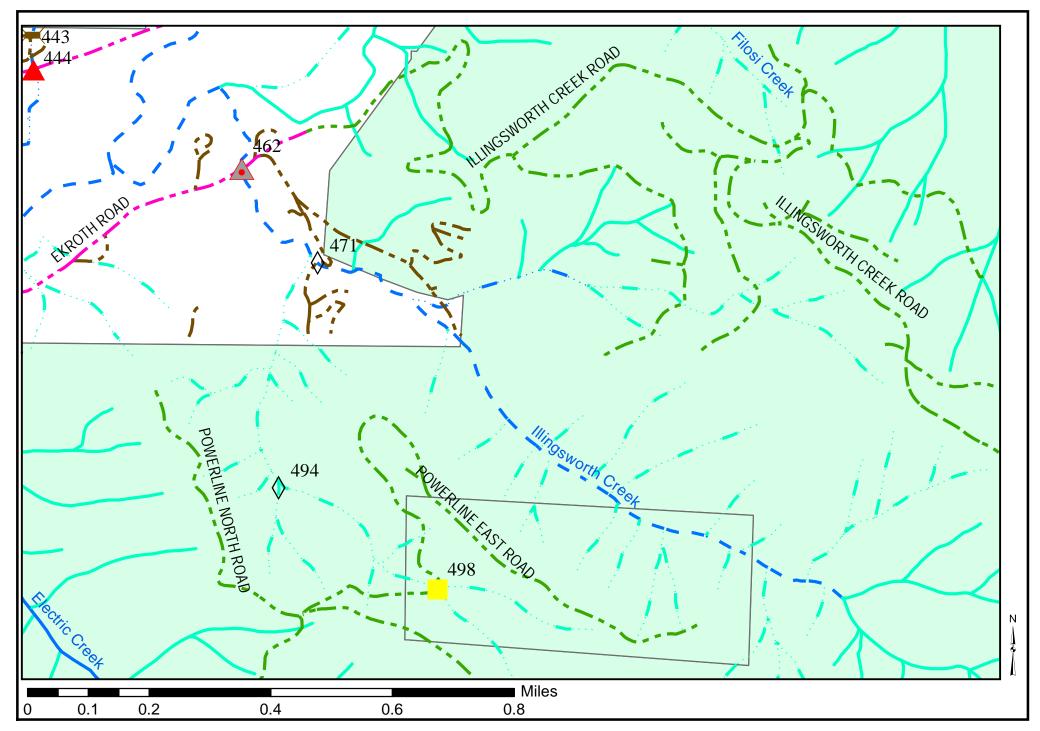


Notes: Culvert was segmented and had begun to separate. Water was flowing alongside the pipe and entering the pipe from one of the separations under the road bed.

	I	OCATIO	N INFO		Culvert #	462	Priority	Н
Watershed			M	Iiami River				
Stream Name			Illingsw	orth Creek		Vier C		SIL
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 23, NW	A STATE	NUM			
UTM Easting/Northin	g (Zone 10, NAD	1983)	43117	Man a	Y	THE RESERVE		
Road Name			Ekroth Road		1	TO THE	15/12	47
Road/Culvert Owner			Tillamo			Te Vic		
Adjacent Landowners			f Oregon, F. Underhill, and T. &				\bigwedge	
CULVER	CULVERT INFO		CHANNEL INFO	ı	1			10
Shape	I	Pipe Arch	Inlet Gradient (%)	7.0	The second			7 3
Material	Corruga	ted metal	Upstream Gradient (%)	0.6		Inlet	-	
Length (ft)		37	Bankfull Width (ft)	13.2				The same
Width (in)		72	Bankfull:Culvert Ratio	0.5				
Height (in)		50			THE THE		The Time	11
Outlet Perch (ft)		None			1000	AND I		
Slope (%)		0.1					A STATE OF THE PARTY OF THE PAR	15
Rustline Height (in)		22				1	18 16	1
Overall Condition		Fair					WIND IN	
	PRIOR	ITIZATIO	ON ANALYSIS		53			
Upstream Habitat Lei	ngth (mi)	1.6	Habitat Points	4			\$ "N	312
Habitat Quality		Good	Habitat Quality Points	3			7	
Fish Species		Anad.	Fish Points	3			Outlet	9/2
Barrier Class		Gray	Barrier Points	2	4 2	at a the	775	200
			Prioritization Total Points	12				
Notes:								



Hobson Creek and Struby Creek Culverts, Miami River Basin



Illingsworth Creek Culvert, Miami River Basin

WALDRON AND MINICH CREEK CULVERTS

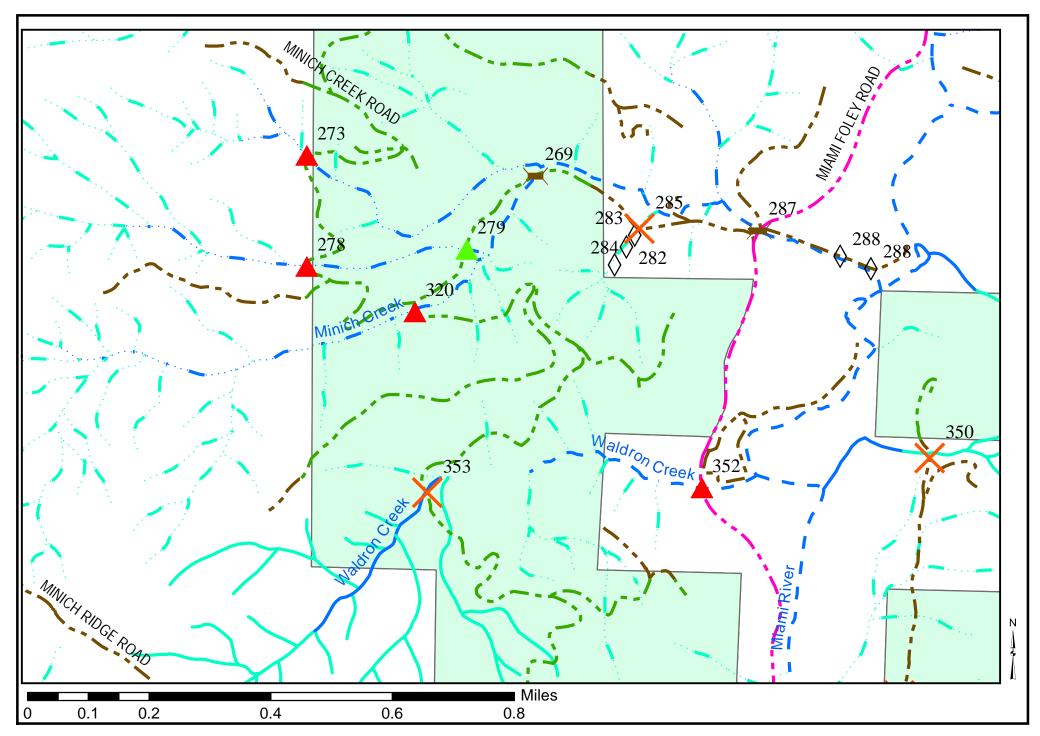
	I	OCATIO	N INFO		Culvert #	352	Priority	Н	
Watershed			M	Iiami River					
Stream Name			Wal	dron Creek					
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 11, SE	1/4 of NW1/4		· •	THE STATE OF THE S	4 -	
UTM Easting/Northin	g (Zone 10, NAD	1983)	43166				4.5		
Road Name			Miami l	Miami Foley Road					
Road/Culvert Owner			Tillamo	ook County					
Adjacent Landowners	S			E. Waldron					
CULVER	T INFO		CHANNEL INFO)					
Shape		Circular	Inlet Gradient (%)	8.7	7	MAX			
Material		Concrete	Upstream Gradient (%)	3.4			EK X	We S	
Length (ft)		52	Bankfull Width (ft)	8.5			1/2	200	
Width (in)		36	Bankfull:Culvert Ratio	0.4	400	MA .		A.	
Height (in)		36							
Outlet Perch (ft)		None				4		N. Carlotte	
Slope (%)		2.5			N C			#	
Rustline Height (in)		18			- Lan		The Harry		
Overall Condition		Fair				1	100	1	
	PRIOR	ITIZATIO	N ANALYSIS		Outlet		-3		
Upstream Habitat Lei	ngth (mi)	0.7	Habitat Points	2	Outlet				
Habitat Quality		Fair	Habitat Quality Points	2	100			*	
Fish Species		Anad.	Fish Points	3					
Barrier Class		Red	Barrier Points	3					
			Prioritization Total Points	10					
Notes:									

	L	OCATIO	N INFO		Culvert #	273	Priority	M	
Watershed			M	Iiami River					
Stream Name			Unnamed tributary of Mi	nich Creek		2000年		X	
Township-Range-Sect	ion-1/4		T1N, R10W, Sec. 10, NE	E1/4 of NE1/4	- Fac 10	100			
UTM Easting/Northin	g (Zone 10, NAD	1983)	43099	6/5048047	TR THE PARTY				
Road Name			Minich (Creek Road					
Road/Culvert Owner			Oregon Department		- W				
Adjacent Landowners	* · · · · · · · · · · · · · · · · · · ·		Stimson Lumber	r Company				18	
CULVER	T INFO	·	CHANNEL INFO						
Shape	Circular		Inlet Gradient (%)	7.0					
Material	Corrugat	ed metal	Upstream Gradient (%)	9.0	Inlet				
Length (ft)		61	Bankfull Width (ft)	9.6			A Section		
Width (in)		24	Bankfull:Culvert Ratio	0.2					
Height (in)		24			1				
Outlet Perch (ft)		1.8							
Slope (%)		7.0							
Rustline Height (in)		14						73	
Overall Condition		Fair						-37.1	
		TIZATIO	ON ANALYSIS				The same of		
Upstream Habitat Lei	ngth (mi)	0.2	Habitat Points	1		大学 作			
Habitat Quality		Fair	Habitat Quality Points	2	A CONTRACTOR OF THE PARTY OF TH	4 - 10 14	A Marine		
Fish Species	Anad.		Fish Points	3		(A)	Outlet	7	
Barrier Class		Red	Barrier Points	3	Ele-	11	美国教育		
			Prioritization Total Points	9					
Notes:									

	I	OCATIO	N INFO		Culvert #	279	Priority	L
Watershed			M.	Iiami River				
Stream Name			Unnamed tributary of Mi	inich Creek				7
Township-Range-Sect	tion-1/4		T1N, R11W, Sec. 10, NW					
UTM Easting/Northin	g (Zone 10, NAD	1983)	43118					
Road Name		Minich (Creek Road				t Ag	
Road/Culvert Owner	Road/Culvert Owner		Oregon Department	of Forestry		7 (4)		
Adjacent Landowners	·		Oregon Department	of Forestry				2
CULVER	T INFO		CHANNEL INFO)		1947		
Shape	Pipe arch		Inlet Gradient (%)	26.0				
Material	Corruga	ted metal	Upstream Gradient (%)	10.0	Inlet	A M	STATE OF	
Length (ft)		60	Bankfull Width (ft)	7.0		A PROPERTY OF		100
Width (in)		97	Bankfull:Culvert Ratio	1.16				
Height (in)		70			-			
Outlet Perch (ft)		None						
Slope (%)		2.0						
Rustline Height (in)		12						
Overall Condition		Fair			E. Carlo	2	O. T.	3 **
	PRIOR	ITIZATIO	ON ANALYSIS					M
Upstream Habitat Lei	ngth (mi)	0.6	Habitat Points	2			a 160 1	$\overline{}$
Habitat Quality		Fair	Habitat Quality Points	2	200			
Fish Species	h Species Anad.		Fish Points	3		No.	Outlet	
Barrier Class		Green	Barrier Points	1				12
			Prioritization Total Points	8				
Notes:								

	L	OCATIO	N INFO		Culvert #	278	Priority	M
Watershed			M	Iiami River				10
Stream Name			Unnamed tributary of Mi	nich Creek		34.4		
Township-Range-Sect	ion-1/4	T1N, R11W, Sec. 10, SW ¹ / ₄ of NE ¹ / ₄			STATE OF	经验收益	24%	
UTM Easting/Northin	g (Zone 10, NAD	1983)	43091	7/5048132			ale le	
Road Name			Minich (Creek Road				100
Road/Culvert Owner	nd/Culvert Owner		Oregon Department	of Forestry				
Adjacent Landowners		Oregon Department	of Forestry					
CULVER	CULVERT INFO		CHANNEL INFO					
Shape	F	Pipe arch	Inlet Gradient (%)	23.0		STAN	2. 大工作的	OF
Material	Corrugat	ed metal	Upstream Gradient (%)	7.0	Inlet	- CL		
Length (ft)		75	Bankfull Width (ft)	11.0	All Control of the Control			
Width (in)		60	Bankfull:Culvert Ratio	0.5				
Height (in)		36			The state of the s	1000		Charles .
Outlet Perch (ft)		3.0				1		
Slope (%)		4.0						View III
Rustline Height (in)		18						
Overall Condition		Poor			To the last of the	1		// 個際
	PRIORI	TIZATIO	ON ANALYSIS			4		
Upstream Habitat Lei	ngth (mi)	0.3	Habitat Points	1			AND STATE OF THE S	1
Habitat Quality		Fair	Habitat Quality Points	2		PARTITION OF THE PARTIT		783
Fish Species	Anad.		Fish Points	3	1		Outlet	1
Barrier Class		Red	Barrier Points	3				
			Prioritization Total Points	9				
Notes: Culvert barrel v	was very defe	ormed and	lits structural integrity appeared	d compromis	sed.			

	I	OCATIO	N INFO		Culvert #	320	Priority	Н
Watershed			M	Iiami River		Sammer .	THE PARTY OF THE P	4 4
Stream Name			Mi	nich Creek	4	W S		7/2
Township-Range-Sect	ion-1/4		T1N, R11W, Sec. 10, SE	E1/4 of NE1/4	TO THE PARTY OF			130
UTM Easting/Northin	Easting/Northing (Zone 10, NAD 1983)		43113	3/5048601	Jan 1	1	6	41
Road Name	d Name		Minich (Creek Road	人名言	A		
Road/Culvert Owner			Oregon Department	of Forestry				
Adjacent Landowners	S		Oregon Department	of Forestry				
CULVER	T INFO		CHANNEL INFO		S Ga Tons			1
Shape		Circular	Inlet Gradient (%)	2.0	Inlet			
Material	Corruga	ted metal	Upstream Gradient (%)	2.5				100
Length (ft)		68	Bankfull Width (ft)	6.6	Carlo V			
Width (in)		18	Bankfull:Culvert Ratio	0.2			Par 1 - 6 - 1/2 -	
Height (in)		18						
Outlet Perch (ft)		6.8						
Slope (%)		7.0						
Rustline Height (in)		N/A				A T		
Overall Condition		Poor				1 *4		
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.6	Habitat Points	2				
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3			Outlet	
Barrier Class		Red	Barrier Points	3	300	\wedge		
			Prioritization Total Points	10				
Notes:								

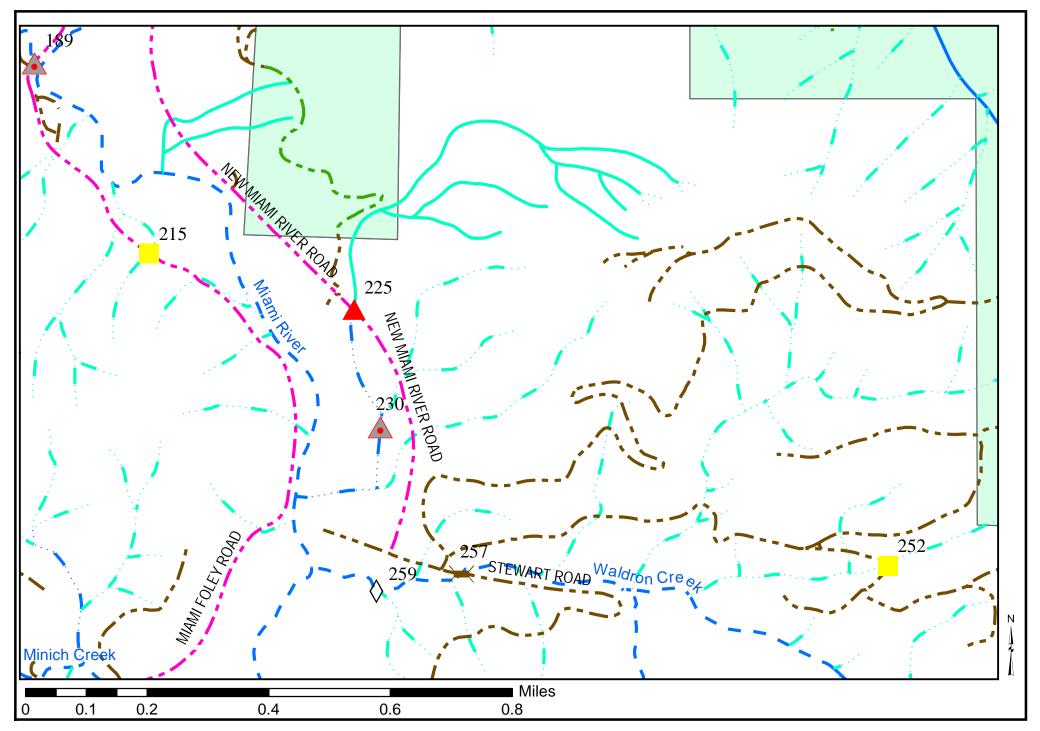


Waldron Creek and Minich Creek Culverts, Miami River Basin

NEW MIAMI RIVER ROAD AREA CULVERTS

		LOCATIO	N INFO		Culvert #	230	Priority	L
Watershed			M	Iiami River		10/2		
Stream Name			Unnamed tributary of M	Iiami River	I n	let-upst	ream	
Township-Range-Sect	ion-1/4		T1N, R10W, Sec. 2, NI	E¼ of SE¼		And the second		
UTM Easting/Northin	g (Zone 10, NA	AD 1983)	43250	06/5049559	7.3		TO THE	
Road Name		Pri	vate driveway off New Miami River Road					
Road/Culvert Owner			M.	-4		7.00		
Adjacent Landowners	3		М. с	& M. Faye	10.0			
CULVER	T INFO		CHANNEL INFO)		- 8	THE THE	
Shape			Inlet Gradient (%)	42.7			A STATE OF THE STA	
Material	Corrug	gated metal	Upstream Gradient (%)	0.1				
Length (ft)		20	Bankfull Width (ft)	4.3		法国教师		
Width (in)		36	Bankfull:Culvert Ratio	0.7				
Height (in)		36						
Outlet Perch (ft)		None				1457 TO		
Slope (%)		0.1						
Rustline Height (in)		24						
Overall Condition		Poor						
	PRIO	RITIZATIO	N ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.6	Habitat Points	2	9.1	Section 1		
Habitat Quality	Poor		Habitat Quality Points	1			The state of the s	
Fish Species	Anad.		Fish Points	3			A	
Barrier Class			Barrier Points	2	O	utlet	1	
			Prioritization Total Points	8		1/	1/2	
Notes:			<u> </u>		·			

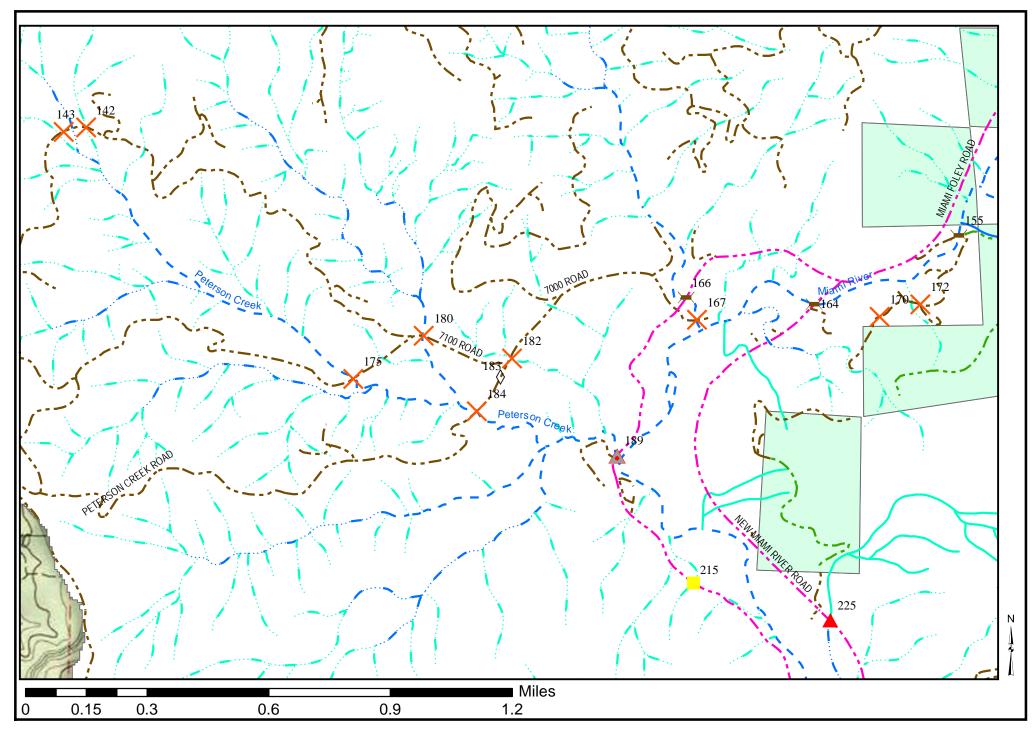
]	LOCATIO	N INFO		Culvert #	225	Priority	L	
Watershed			M	Iiami River					
Stream Name			Unnamed tributary of M	liami River	120			1	
Township-Range-Sect	ion-1/4		T1N, R10W, Sec. 2, SI	E1/4 of NE1/4	A PARTY	*			
UTM Easting/Northin	g (Zone 10, NAI) 1983)	43242	23/5049870					
Road Name			New Miami				1		
Road/Culvert Owner			Tillamo	ook County					
Adjacent Landowners	3		R. Wald,	, L. Wilcox					
CULVER	T INFO		CHANNEL INFO		1				
Shape		Circular	Inlet Gradient (%)	11.0					
Material	Corruga	ated metal	Upstream Gradient (%)	10.2			Inlet		
Length (ft)		93	Bankfull Width (ft)	9.0					
Width (in)		48	Bankfull:Culvert Ratio	0.4					
Height (in)		48				N.		4	
Outlet Perch (ft)		0.9							
Slope (%)		4.7				1	J. S. M. P.		
Rustline Height (in)		11			A A	K.		#	
Overall Condition		Poor			The state of	n	C D ? Toll		
	PRIOR	ITIZATIO	N ANALYSIS			-		*	
Upstream Habitat Lei	ngth (mi)	0.2	Habitat Points	1	Calaborat			3	
Habitat Quality		Poor	Habitat Quality Points	1	T BACK		-		
Fish Species		Anad.	Fish Points	3			Outlet		
Barrier Class		Red	Barrier Points	3	0	11/2 1/2	Garier	2.1	
			Prioritization Total Points	8					
Notes:									



New Miami River Road Area Culverts, Miami River Basin

PETERSON CREEK CULVERT

	LO	OCATIO	N INFO		Culvert #	189	Priority	Н		
Watershed			M	Iiami River						
Stream Name			Pete	rson Creek			Alexander			
Township-Range-Section	on-1/4		T1N, R10W, Sec. 2, NE	1/4 of NW1/4	36		1000	-		
UTM Easting/Northing	(Zone 10, NAD 1	983)	431586/5030520							
Road Name			Miami I	Foley Road						
Road/Culvert Owner			Tillamo	ook County						
Adjacent Landowners				A. Waldron						
CULVERT	INFO		CHANNEL INFO)						
Shape		Circular	Inlet Gradient (%)	4.1						
Material	Corrugated metal		Upstream Gradient (%)	1.4		Inlet				
Length (ft)		46	Bankfull Width (ft)	15.4						
Width (in)		96	Bankfull:Culvert Ratio	0.5						
Height (in)		96			4	1				
Outlet Perch (ft)		0.2*			40		The state of the s	de		
Slope (%)		1.0								
Rustline Height (in)		30					C. 对称 "学			
Overall Condition		Poor				A. C.				
	PRIORI	FIZATIO	ON ANALYSIS		M I W					
Upstream Habitat Leng			Habitat Points	4						
Habitat Quality	Good		Habitat Quality Points	3				-		
Fish Species	Anad.		Fish Points	3	The second second		Outlet			
Barrier Class		Gray	Barrier Points	2						
			Prioritization Total Points	12						
Notes: *Outlets into Mi	Notes: *Outlets into Miami River mainstem. Tailwater control point not measurable so perch height was estimated.									

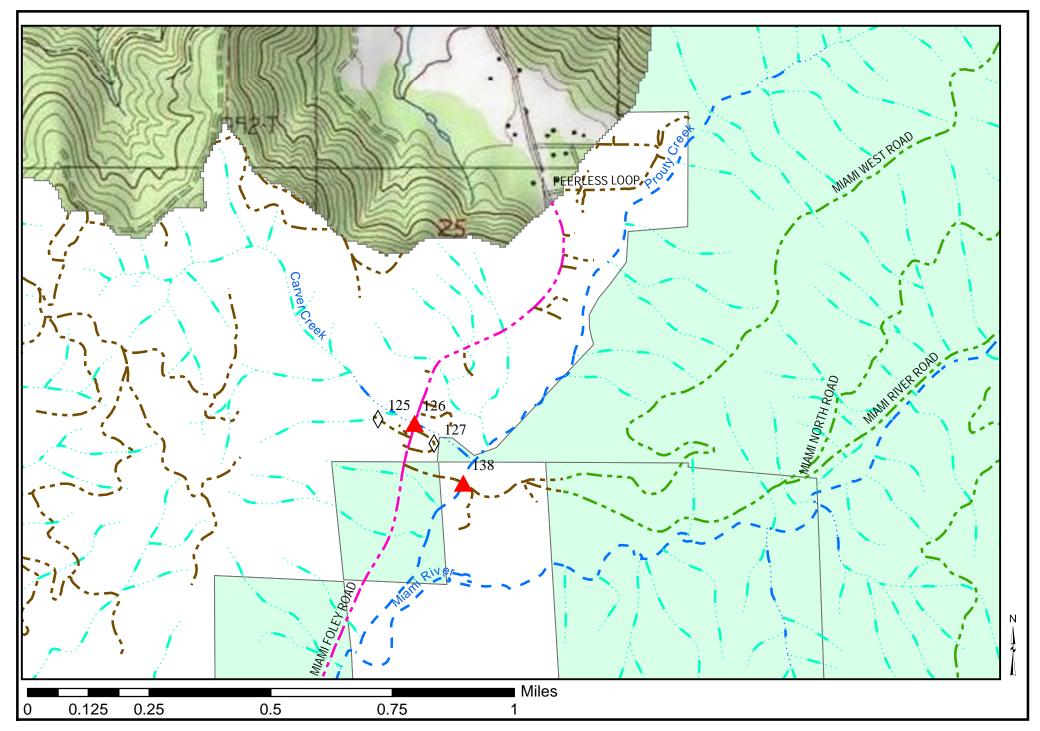


Peterson Creek Culverts, Miami River Basin

CARVER AND PROUTY CREEK CULVERTS

		LOCATIO	N INFO		Culvert #	138	Priority	Н		
Watershed			N	Iiami River		I.	J	.1		
Stream Name			Pr	outy Creek	TO THE SE			1		
Township-Range-Sect	tion-1/4		T2N, R10W, Sec. 36, NW	V1/4 of NE1/4		SHILLIN				
UTM Easting/Northin	lg (Zone 10, NA	D 1983)	43336	64/5032149		W. Company				
Road Name			Miami Forest	River Road	第二人					
Road/Culvert Owner]	Private Driv	e with Oregon Dept. of Forestry	y Easement	No.					
Adjacent Landowners	5		State of Oregon an	d E. Frantz						
CULVER	T INFO		CHANNEL INFO							
Shape		Pipe Arch	Inlet Gradient (%)	7.3				L.O.		
Material	Corrug	ated metal	Upstream Gradient (%)	1.8			Inlet	7.5		
Length (ft)		45	Bankfull Width (ft)	9.5	400	A M		E. B.		
Width (in)		110	Bankfull:Culvert Ratio	1.0						
Height (in)		82			The state of the s					
Outlet Perch (ft)		0.2			Sealing of					
Slope (%)		3.8			The state of the s	TOP S				
Rustline Height (in)		18			A STATE OF THE STA		Arm C	5		
Overall Condition		Fair			2	- 1	A STATE OF THE STA	16.30		
	PRIOF	RITIZATIO	ON ANALYSIS		The state of the s	-	AT .			
Upstream Habitat Lei	ngth (mi)	1.1	Habitat Points	3	Maria	La territoria	man,	* "		
Habitat Quality		Good	Habitat Quality Points	3		The same				
Fish Species		Anad.	Fish Points	3	3. 2		Outlet	300		
Barrier Class		Red	Barrier Points	3	1		Gutiet			
			Prioritization Total Points	12						
Notes:										

	I	OCATIO	N INFO		Culvert #	126	Priority	M		
Watershed			M	Iiami River						
Stream Name			Са	rver Creek	5.0					
Township-Range-Secti	ion-1/4		T2N, R10W, Sec. 25, SE	21/4 of SW1/4				VK		
UTM Easting/Northing	g (Zone 10, NAD	1983)	43322	24/5052341						
Road Name			Miami I	Foley Road	The state of the s			D-		
Road/Culvert Owner			Tillamo	ook County						
Adjacent Landowners			N. Carver, W. Scholerman,	W. Staben						
CULVERT	ΓINFO	-	CHANNEL INFO							
Shape		Circular	Inlet Gradient (%)	18.6				54.		
Material		Concrete	Upstream Gradient (%)	4.2	100		Inlet			
Length (ft)		91	Bankfull Width (ft)	7.4						
Width (in)		36	Bankfull:Culvert Ratio	0.4						
Height (in)		36				A Second		-		
Outlet Perch (ft)		2.2						F		
Slope (%)		3.1			THE DE		F-B-B-Wall	100		
Rustline Height (in)		N/A				A A	115	QL.		
Overall Condition		Poor				1-11				
	PRIOR	ITIZATIO	ON ANALYSIS				1			
Upstream Habitat Len	gth (mi)	0.2	Habitat Points	1						
Habitat Quality		Fair	Habitat Quality Points	2			A STATE			
Fish Species		Anad.	Fish Points	3		11. 10 M	Outlet	4		
Barrier Class		Red	Barrier Points	3	1999	and the second	Carrie	MATERIAL		
			Prioritization Total Points	9						
Notes:										

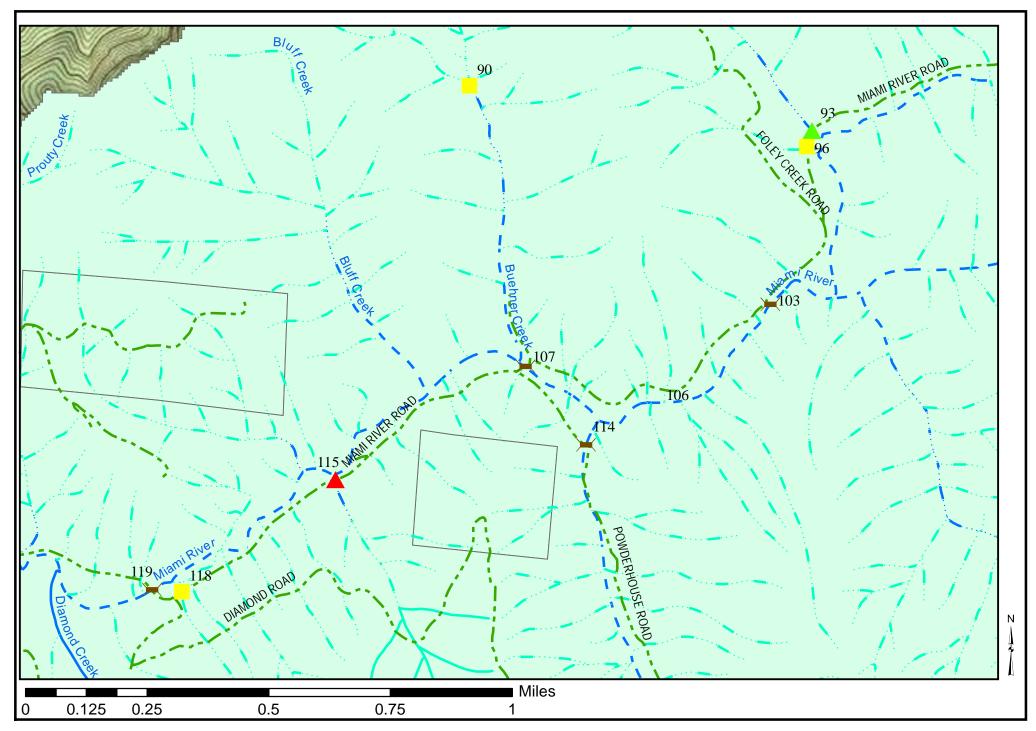


Prouty Creek and Carver Creek Culverts, Miami River Basin

MIAMI RIVER ROAD CULVERTS

]	LOCATIO	N INFO		Culvert #	115	Priority
Watershed			M	Iiami River		•	
Stream Name			Unnamed tributary of M	Iiami River	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	WILL E	
Township-Range-Sect	tion-1/4		T2N, R9W, Sec. 29, SE	1/4 of NW1/4		T. 100	1
UTM Easting/Northin	lg (Zone 10, NAI) 1983)		28/5052920		Same .	
Road Name			Miami Forest l	River Road			4 47
Road/Culvert Owner			Oregon Dept.	of Forestry			
Adjacent Landowners	8		Oregon Department	of Forestry			
CULVER	T INFO		CHANNEL INFO)			
Shape		Circular	Inlet Gradient (%)	9.2	7.5		
Material	Corruga	ated metal	Upstream Gradient (%)	6.9	Inlet		
Length (ft)		30	Bankfull Width (ft)	7.6		200	
Width (in)		36	Bankfull:Culvert Ratio	0.4			
Height (in)		36				13	-
Outlet Perch (ft)		1.6			Outlet		
Slope (%)		4.4			The state of	Vale of	No.
Rustline Height (in)		14				11 34	
Overall Condition		Fair					
	PRIOR	ITIZATIO	ON ANALYSIS			No. of the last of	
Upstream Habitat Le	ngth (mi)	0.1	Habitat Points	1			
Habitat Quality		Poor	Habitat Quality Points	1		TO 100	质量。
Fish Species	·	Anad.	Fish Points	3			STATE OF THE PARTY
Barrier Class		Red	Barrier Points	3			at the second
			Prioritization Total Points	8			
Notes:							

	L	OCATIO	N INFO		Culvert #	93	Priority	NA	
Watershed			M	liami River	STUDEN I/CIR	10 at 110 at 110 at	HELVE PER SAVAY	a 1/2 19	
Stream Name			Unnamed tributary to M	liami River					
Township-Range-Sect	ion-1/4		T2N, R9W, Sec. 21, NW	1/4 of SW1/4		自由在中国			
UTM Easting/Northin	g (Zone 10, NAD	1983)	43802	7/5054143					
Road Name			Miami Forest l	River Road					
Road/Culvert Owner			Oregon Dept.	of Forestry				N	
Adjacent Landowners			Oregon Department	of Forestry			7 .	2	
CULVER	CULVERT INFO		CHANNEL INFO		See A		The same of		
Shape	Pipe Arch		Inlet Gradient (%)	0.1					
Material	Corrugated metal		Upstream Gradient (%)	15.6	Inlet				
Length (ft)		55	Bankfull Width (ft)	9.4		A Party of the Par		The state of	
Width (in)		120	Bankfull:Culvert Ratio	1.3					
Height (in)		96				A Partie State	ANT TO S	To state the	
Outlet Perch (ft)		None			No.	47			
Slope (%)		4.5					2 3 2 2 3	是	
Rustline Height (in)		N/A							
Overall Condition		Good							
	PRIORI	TIZATIO	ON ANALYSIS						
Upstream Habitat Ler	ngth (mi)	0.2	Habitat Points	1		1000		P. P.	
Habitat Quality	Poor		Habitat Quality Points	1					
Fish Species	Anad.		Fish Points	3	Outlet				
Barrier Class	Green		Barrier Points	1	dipuls the same	2		A. C.	
			Prioritization Total Points	6					
Notes:									



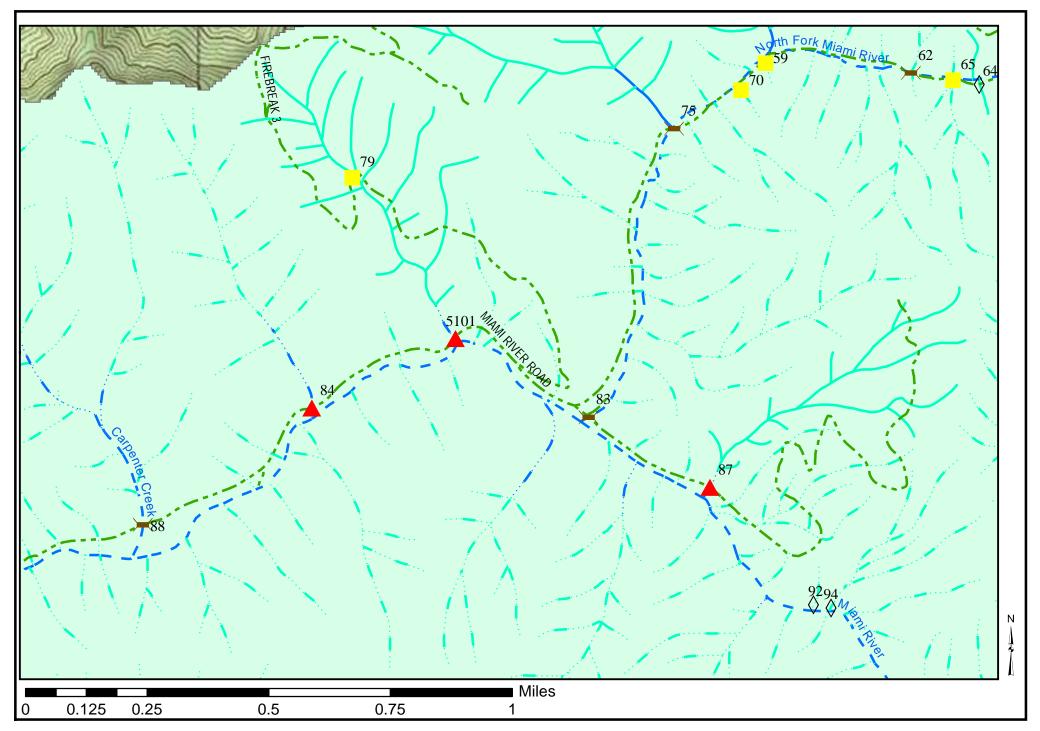
Middle Miami River Road Area Culverts, Miami River Basin

	L	OCATIO	N INFO		Culvert #	84	Priority	L
Watershed			M	Iiami River		PORWY THESA		AND SERVICE
Stream Name			Unnamed tributary to M	liami River				
Township-Range-Sect	ion-1/4		T2N, R9W, Sec. 21, NW			Control of the contro		
UTM Easting/Northin	g (Zone 10, NAD	1983)	43928			A	10.105	
Road Name			Miami Forest	The state of the s				
Road/Culvert Owner			Oregon Dept.					
Adjacent Landowners	1		Oregon Department	1			1	
CULVER'	T INFO		CHANNEL INFO	K SON			4	
Shape	P	ipe Arch	Inlet Gradient (%)	12.5		<	on H	100
Material	Corrugat	ted metal	Upstream Gradient (%)	10.1	Inlet			
Length (ft)		55	Bankfull Width (ft)	9.7	BOOK NO.		A STATE OF THE STA	
Width (in)		120	Bankfull:Culvert Ratio	1.2				
Height (in)		96			THE DESIGNATION OF THE PERSON	E STEPPEN		7
Outlet Perch (ft)		10.3*	Stream dry during summer 20	11 cita				
Slope (%)		3.6	visit.	11 Site	Carlo State			Alexander
Rustline Height (in)		N/A	VISIC.					
Overall Condition		Fair				3		133
-	PRIORI	TIZATIO	N ANALYSIS					
Upstream Habitat Ler			Habitat Points	1		21.3		
Habitat Quality			Habitat Quality Points 1		The second		C. A. S.	
Fish Species		Anad.	Fish Points	3	Outlet			
Barrier Class		Red	Barrier Points	3	272		1 10 10	
<u> </u>		<u>'</u>	Prioritization Total Points	8	and the price shape is \$10000	E. Professor	ALES AREA NO.	
Notes: *Stream cascad	as over stee	n houldors	and cobbles into the mainstem	Miomi Divo	r chartly after	arritina	this sulvert	

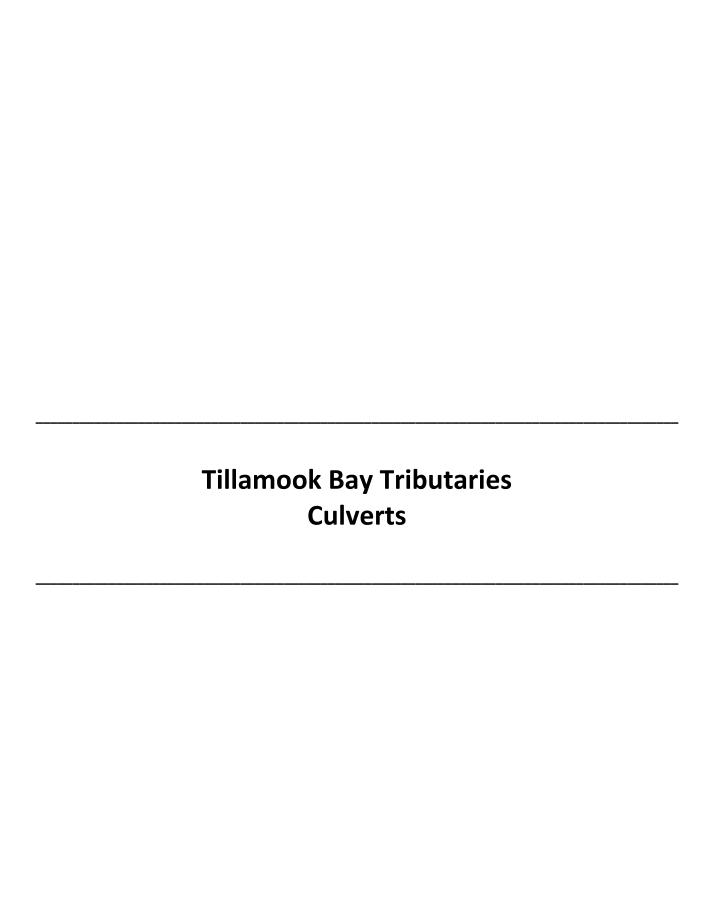
Notes: *Stream cascades over steep boulders and cobbles into the mainstem Miami River shortly after exiting this culvert. Barrier class and outlet perch based on this fact.

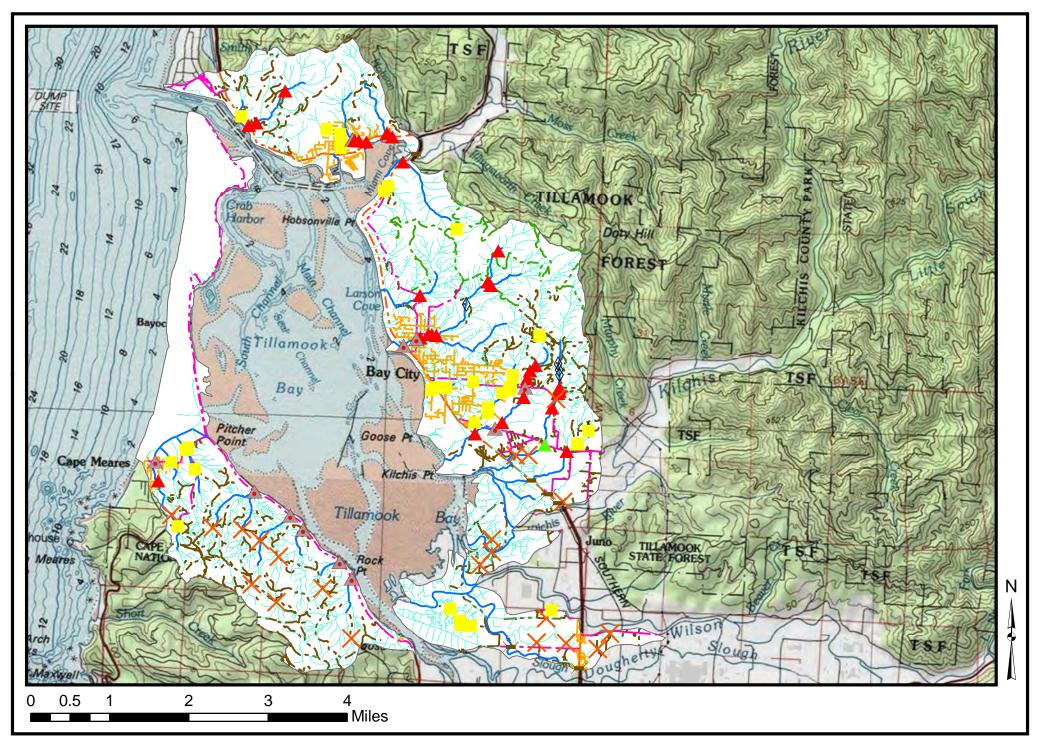
	L	OCATIO	N INFO		Culvert #	5101	Priority	L
Watershed			M	iami River	2 (2)	THE PARTY	大大大大	
Stream Name			Unnamed tributary to M	iami River	-	13. 01	的是是了其	
Township-Range-Sect	tion-1/4		T2N, R9W, Sec. 15, SE	1/4 of SW1/4			1328	
UTM Easting/Northin	g (Zone 10, NAD	1983)	439759/5054992				215	
Road Name			Miami Forest I			-		
Road/Culvert Owner			Oregon Dept. of Forestry			11		
Adjacent Landowners	S		Oregon Department of Forestry				200	
CULVER	T INFO		CHANNEL INFO	NNEL INFO				
Shape		Circular	Inlet Gradient (%)	12.5				
Material	Corrugat	ed metal	Upstream Gradient (%)	14.3				
Length (ft)		42	Bankfull Width (ft)	9.0	, II	nlet 🎇	V ATT	
Width (in)		60	Bankfull:Culvert Ratio	0.6	The New York		675.9Y	
Height (in)		60			100	4	ALTERNATION OF THE PROPERTY OF	
Outlet Perch (ft)		7.2						
Slope (%)		1.8						
Rustline Height (in)		24						
Overall Condition		Fair						
	PRIORI	TIZATIO	ON ANALYSIS				TO THE	
Upstream Habitat Lei	ngth (mi)	0.1	Habitat Points	1	1			
Habitat Quality	Poor		Habitat Quality Points	1				
Fish Species	Anad.		Fish Points	3	the s	P. Service	THE RES	
Barrier Class	Red		Barrier Points	3	Outlet			
			Prioritization Total Points	8				
Notes:								

	L	OCATIO	N INFO		Culvert #	87	Priority	L
Watershed			M	Iiami River		Na 1530	mai mai za i i i i	
Stream Name			Unnamed tributary to M	Iiami River				
Township-Range-Sect	ion-1/4		T2N, R9W, Sec. 21, NW ¹ / ₄ of SW ¹ / ₄				W.	
UTM Easting/Northin	g (Zone 10, NAD	1983)	440590/5054528				Mary.	
Road Name			Miami Forest River Road		1		DX Year	
Road/Culvert Owner			Oregon Dept. of Forestry					
Adjacent Landowners	S		Oregon Department of Forestry		主教		Y Men	
CULVER'	T INFO		CHANNEL INFO					
Shape	P	ipe Arch	Inlet Gradient (%)	34.1				
Material	Corrugat	ted metal	Upstream Gradient (%)	19.4				
Length (ft)		61	Bankfull Width (ft)	5.2	喜牌		在一个大型	
Width (in)		104	Bankfull:Culvert Ratio	1.7	Inle	=	ALC: NO	
Height (in)		66				T'CE		
Outlet Perch (ft)		0.4			3			1 46
Slope (%)		3.3			5100			100
Rustline Height (in)		4			1 1 1		7	27
Overall Condition		Good			No.		STATE OF THE PERSON.	24
	PRIORI	TIZATIO	ON ANALYSIS		8-1			
Upstream Habitat Lei	ngth (mi)	0.1	Habitat Points	1	110			
Habitat Quality		Poor	Habitat Quality Points	1	Out lat		W S Tellins	
Fish Species		Anad.	Fish Points	3	Outlet			
Barrier Class		Red	Barrier Points	3	-		STATE OF THE PARTY OF	No
			Prioritization Total Points	8	- 70	120A	Continue of	Part I
Notes:								



Upper Miami River Road Area Culverts, Miami River Basin

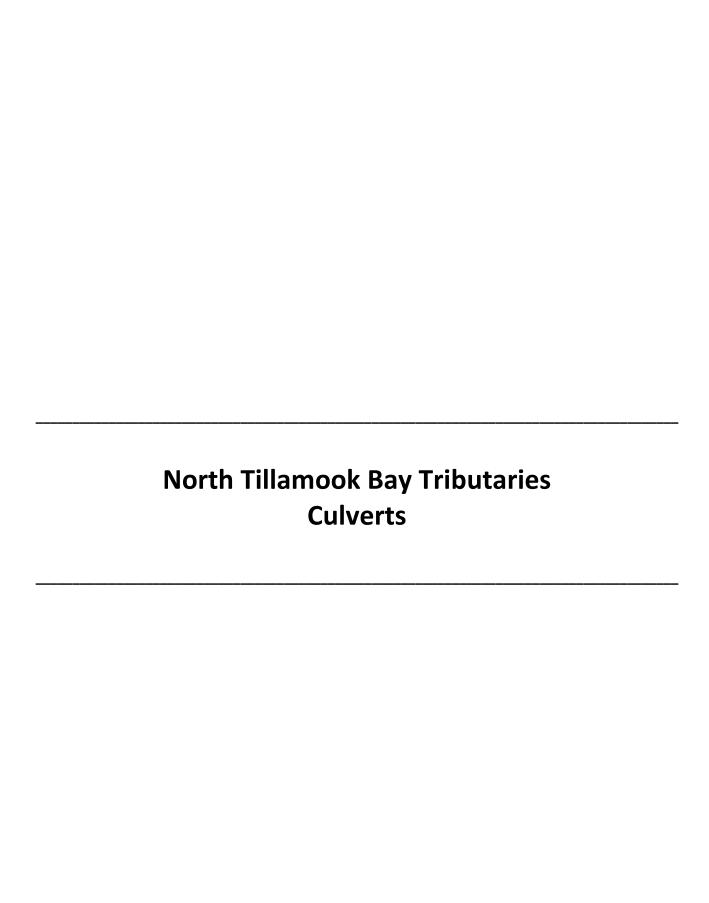




Tillamook Bay Tributaries Crossings

Tillamook Bay Tributaries Clusters

	Culvert	D • • •	g,	T
Cluster	Numbers	Priority	Stream	Upstream Habitat
0 11 0 1	441	H	Smith Creek	
Smith Creek	440	Н	Smith Creek	1.0
	413	M	Smith Creek	
	453/454	M	School Creek	
School Creek	5304	M	School Creek	0.9
School Creek				
	452	L	School Creek	
	5302	L	Whitney Creek	
Whitney Creek	5301	L	Whitney Creek Whitney Creek	0.5
Windley Creek	5303	L	Whitney Creek Whitney Creek	
	3303	L	Williney Creek	I
Electric Creek	476	L	Electric Creek	1.0
Larson Creek	559	M	Larson Creek	0.4
	581	Н	Patterson Creek	
	579	Н	Patterson Creek	
	578	Н	Patterson Creek	
	575	Н	Patterson Creek	
Patterson Creek	5555	Н	Patterson Creek	3.8
	572	Н	Patterson Creek	
	542	M	Patterson Creek	
	528	L	Patterson Creek	
	543	M	Unnamed tributary	
	647	Н	Doty Creek	
	637	Н	Doty Creek	
	636	Н	Doty Creek	
Date: Coals	622	Н	Doty Creek	1.7
Doty Creek	613	M	Doty Creek	1.7
	605	M	Doty Creek	
	599	M	Doty Creek	
	593	M	Doty Creek	
	778	L	Dick Creek	
	757	L	Unnamed tributary	
Bayocean Road	725	L	Unnamed tributary	3.5
	702	M	Unnamed tributary	
	689	Н	Flower Pot Creek	
		-		
Cape Meares Area	675	L	Coleman Creek	1.0
*	686	M	Coleman Creek	



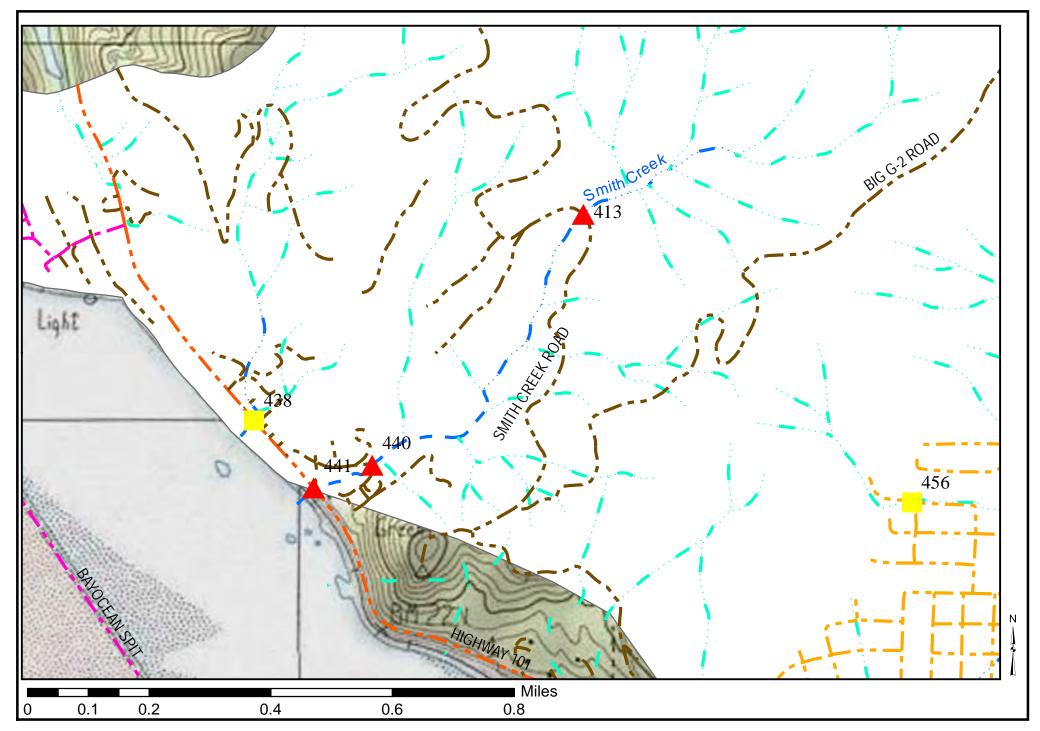
SMITH CREEK CULVERTS

]	LOCATIO	N INFO		Culvert #	441	Priority	Н
Watershed			Tilla	amook Bay			X	(Care)
Stream Name			S	mith Creek	J. Carlo			學心
Township-Range-Sect	ion-1/4		T1N, R10W, Sec. 20, NW ¹ / ₄ of NE ¹ / ₄		A SOLVE			
UTM Easting/Northin	orthing (Zone 10, NAD 1983)		42695	50/5046015		1		4 ×4
Road Name			Hi	ghway 101	The state of the s	1	1	
Road/Culvert Owner	Road/Culvert Owner		Oregon Department of Tra	nsportation	100	1	2	A. The
Adjacent Landowners	·		Compass Rose	Properties	A STATE OF THE STA	V		
CULVER	T INFO		CHANNEL INFO			6		
Shape		Box	Inlet Gradient (%)	8.1	44	A		
Material		Concrete	Upstream Gradient (%)	7.1	1/2/	11	Inlet	
Length (ft)		81	Bankfull Width (ft)	8.5				
Width (in)		48	Bankfull:Culvert Ratio	0.5		STA .		
Height (in)		48						
Outlet Perch (ft)		7.7				100	The same	
Slope (%)		1.0						
Rustline Height (in)		N/A					12 M	
Overall Condition		Poor				7		
	PRIOR	ITIZATIO	ON ANALYSIS					9
Upstream Habitat Len	igth (mi)	1.0	Habitat Points	2		C	被 送。	
Habitat Quality		Fair	Habitat Quality Points	2		Y		W
Fish Species		Anad.	Fish Points	3				200
Barrier Type	rrier Type Red		Barrier Points	3			Outlet	
			Prioritization Total Points	10	1 30 Sec. 15	A-L		63
Notes: Stream flows car	scade over	rip-rap into	Tillamook Bay. Fish can only	access culv	ert during ver	y high tio	le events.	

]	LOCATIO	N INFO		Culvert #	440	Priority	Н
Watershed			Tilla	amook Bay	That the latest		H AND	A series
Stream Name			S	mith Creek				-
Township-Range-Secti	ion-1/4		T1N, R10W, Sec. 20, NW	/1/4 of NE1/4				-
UTM Easting/Northing	g (Zone 10, NAI) 1983)	427105/5046081			The sale	1	
Road Name			Harbor \	View Drive	56			
Road/Culvert Owner	ner		Pr	ivate Drive	W Company			
Adjacent Landowners			B. & D. Hubbar	d, G. Howe			22 1/2	1.
CULVER	ΓINFO		CHANNEL INFO		Manage of the second			1
Shape		Box	Inlet Gradient (%)	13.4	Sec. 1		想到	and a
Material		Concrete	Upstream Gradient (%)	5.6			Inle	-
Length (ft)		52	Bankfull Width (ft)	8.8	the second	A Part of	THE WAY	
Width (in)		56	Bankfull:Culvert Ratio	0.5				
Height (in)		56						
Outlet Perch (ft)		1.9			3/830	A SE	N. Carrent	
Slope (%)		11.9						$\bigwedge F$
Rustline Height (in)		22						
Overall Condition		Critical				The same		
		ITIZATIO	ON ANALYSIS					CE
Upstream Habitat Len	gth (mi)	0.9	Habitat Points	2	到 表 為二		-Vita	
Habitat Quality		Fair	Habitat Quality Points	2	11071	1		
Fish Species			Fish Points	3				100
Barrier Type		Red	Barrier Points	3	Outlet			The state of
			Prioritization Total Points	10				
Notes: Large holes in in	vert, pipe	barrel is als	so deformed. Water running un	der pipe.				

]	LOCATION	INFO		Culvert #	413	Priority	M
Watershed			Til	lamook Bay			•	
Stream Name				Smith Creek	1	THE STATE OF THE S		
Township-Range-Sect	ion-1/4		T1N, R10W, Sec. 20, N	IE1/4 of SE1/4		A FILE		
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	427659/5046723					7
Road Name				Forest Road		37		NO.
Road/Culvert Owner			Private Drive – O		TO A		N M	
Adjacent Landowners			0	RM Timber		MATERIAL PROPERTY.	· The state of the	
CULVER	T INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	12.0(N/A)	11	To the second		
Material	Corrug	gated metal	Upstream Gradient (%)	1.1			A Promisi	1 2
Length (ft)		45(45)	Bankfull Width (ft)	10.1	1	M. C.	einlet	
Width (in)		36(36)	Bankfull:Culvert Ratio	0.6*		ACCUPATION SHOW THE		
Height (in)		36(36)	Two pipes at this location. The outlet					
Outlet Perch (ft)		7.5(0.8)	picture depicts pipe 2 in the			14		1
Slope (%)		3.0(N/A)	and the outfall of pipe 1 in t		A Saluta			
Rustline Height (in)		16(N/A)	background (upper right con	ner of				4
Overall Condition		Poor	photo).		a water	11	A LON	
	PRIOR	ITIZATIO	N ANALYSIS		W			
Upstream Habitat Ler	ngth (mi)	0.3	Habitat Points	1				
Habitat Quality		Fair	Habitat Quality Points	2				1-
Fish Species		Anad.	Fish Points	3				
Barrier Type		Red	Barrier Points	3		.74	Outlet	1
			Prioritization Total	9			March Control	
			Points	9				

Notes: *Bankfull:Culvert Ratio is based on both pipes. Both are 3 ft circular pipes and both were conveying flows during summer 2011 field visit. We were unable to locate the inlet for pipe 2 and it was unclear how flows were entering the pipe. Pipe 2 was perched 0.8 ft.



Smith Creek Culverts, Tillamook Bay Tributaries

SCHOOL CREEK CULVERTS

	LC	OCATION	INFO		Culvert #	453/454	Priority	?
Watershed			Tillamo	ook Bay	8 F			
Stream Name			Schoo	ol Creek				
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 21, SE ¹ / ₄	of NE¼	P-10-15		" A A	
UTM Easting/Northin	g (Zone 10, NAD	1983)	429205/504577	26		-		
Road Name			Several within Garibaldi Town	1				
Road/Culvert Owner			City of Garibaldi					
Adjacent Landowners			fumerous private properties in G	aribaldi				
CULVER	T INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	1.0				
Material (at inlet)	Corruga	ted Metal	Upstream Gradient (%)	1.0				
Length (ft)		~700*	Bankfull Width (ft)	5.0	12			
Width (in)		36	Bankfull:Culvert Ratio	0.6	681			
Height (in)		36	*Clans and langth actimated fr					-
Outlet Perch (ft)		None	*Slope and length estimated fr aerial photograph and GIS data					
Slope (%)		~2.0*	board across stream creates an		7 7 5			
Rustline Height (in)		20	step in stream ~5ft above inlet.					1
Overall Condition		unknown	step in stream - 51t above met	•			at A	
-	PRIORIT	FIZATION	NANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.9	Habitat Points	2		1		
Habitat Quality		Poor	Habitat Quality Points	1	*			
Fish Species		Anad.	Fish Points	3		1		
Barrier Type		Red	Barrier Points	3	***	Out	let	
Natara Oriainalla idant			Prioritization Total Points	9	452 1 (1		1 to our mine	

Notes: Originally identified as two crossings. Stream enters culvert at crossing location 453 and flows underground to crossing location 454, where it passes under Highway 101 before flowing into the bay. Pipe either passes under buildings or is not routed in a straight line (probably the latter, but unknown). The outlet end of this culvert is constructed entirely from treated timbers.

	I	LOCATIO	N INFO		Culvert #	5304	Priority	M
Watershed			Tilla	amook Bay				
Stream Name			Sc	hool Creek				1
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 20, SW	/1/4 of NE1/4		1		
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	429112/5045771					1
Road Name			Church Parking Lot			The state of the s		X
Road/Culvert Owner			Private Drive					
Adjacent Landowners	8		Garibaldi Faith Church				700	
CULVER	T INFO		CHANNEL INFO			XI		
Shape		Circular	Inlet Gradient (%) 7.0				N CONTRACTOR	8
Material	Corrugat	ed Metal	Upstream Gradient (%)	4.0			Inle	
Length (ft)		125	Bankfull Width (ft)			1		
Width (in)		36	Bankfull:Culvert Ratio	0.4				
Height (in)		36				400	A SHARE AND MAKES	
Outlet Perch (ft)		None						
Slope (%)		1.0	Natural substrate throughout p	pipe.	CHI CO			
Rustline Height (in)		18			S. Koza V.			
Overall Condition		Poor			MAN MAN			
	PRIOR	ITIZATIO	ON ANALYSIS		DDV 医			100
Upstream Habitat Le	ngth (mi)	0.7	Habitat Points 2			<i>>\</i> /		
Habitat Quality	Poor		Habitat Quality Points	1				
Fish Species	•		Fish Points	3				
Barrier Type		Red	Barrier Points	3			Outlet	110
			Prioritization Total Points	9				

Notes: Barrel of pipe is deformed. In addition, the outlet is wider (42 inch width) and a different shape than the inlet (it is a pipe arch). Two different pipes may have been joined to allow construction of the church parking lot. Barrier rating based on BFW:Culvert ratio, but during low flows (e.g., when we observed the pipe during summer 2012) it appears that juvenile fish could pass through the culvert.

		LOCATIO	N INFO		Culvert #	452	Priority	L
Watershed			Tilla	amook Bay		CHARLES AND AN	Ade Marie	=3(4)(4)
Stream Name			Sc	hool Creek			The second	
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 20, SW	11/4 of NE1/4	3	The Cart of	Ab S	S.Al
UTM Easting/Northin	lg (Zone 10, NA	AD 1983)	42906				A STATE OF	
Road Name			Driftwood Avenue		1.00			
Road/Culvert Owner			Pr	ivate Drive		1		16-
Adjacent Landowners	S	J.&D. Mc	Geever, B. Merrill, Garibaldi Faith Church				AZ	
CULVER	T INFO		CHANNEL INFO					
Shape		Pipe Arch	Inlet Gradient (%)	8.0		1 6	/ / *	
Material	Corruga	ated Metal	Upstream Gradient (%)	5.0			Inle	1/
Length (ft)		82	Bankfull Width (ft)	9.5			A CONTRACTOR OF THE PARTY OF TH	
Width (in)		96	Bankfull:Culvert Ratio	0.8				
Height (in)		48						12 ·
Outlet Perch (ft)		None				11 10 to		
Slope (%)		3.0	Natural substrate through entire	re pipe.				
Rustline Height (in)		6			5.40 L	A SAM		
Overall Condition		Fair					THE PARTY OF	
	PRIO	RITIZATIO	N ANALYSIS		STATE OF			
Upstream Habitat Le	ngth (mi)	0.7	Habitat Points	2				
Habitat Quality		Poor	Habitat Quality Points	1		1		
Fish Species		Anad.	Fish Points	3	1. 1			
Barrier Type		Gray	Barrier Points	2	Outlet			
			Prioritization Total Points	8		1 1900		100
Notes:		<u>'</u>				·		

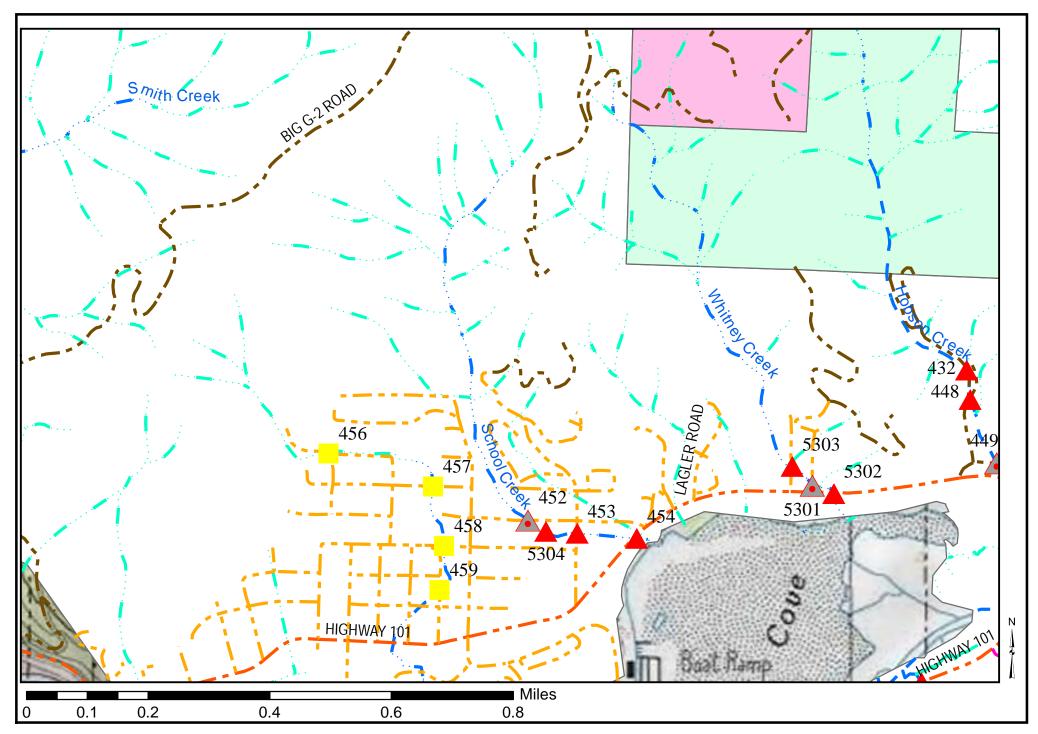
WHITNEY CREEK CULVERTS

	LOCATION	N INFO		Culvert #	5302	Priority	L
Watershed		Tillar	mook Bay		and the same of the same	THE PARTY AND A	VI. 100 CO.
Stream Name		White	ney Creek		A separate	The last	
Township-Range-Section-1/		T1N, R10W, Sec. 22, NE ¹ / ₂	4 of NW1/4			64/4	
UTM Easting/Northing (Zone)), NAD 1983)	429847	7/5045882			13/10/11	
Road Name		Hig	hway 101				
Road/Culvert Owner		Oregon Department of Tran					23
Adjacent Landowners		B. Merrill and L	. Godfrey				
CULVERT INF	0	CHANNEL INFO			-		-
Shape	Circular	Inlet Gradient (%)	17.0			-	
Material	Concrete	Upstream Gradient (%)	2.0		11000	Inlet	-
Length (ft)	55	Bankfull Width (ft)	7.2				1
Width (in)	36	Bankfull:Culvert Ratio	0.4				
Height (in)	36			9 IX	No. of the last		Sales Control
Outlet Perch (ft)	None			-	18081.30		469
Slope (%)	1.0			- Sept.			$\mathbf{A}^{\mathcal{A}}$
Rustline Height (in)	14			NA Y		La Contract of the Contract of	
Overall Condition	Poor				1		3年
PR	ORITIZATIO	N ANALYSIS		A Daniel S		***	1
Upstream Habitat Length (1		Habitat Points	1		1		
Habitat Quality	Poor	Habitat Quality Points	1		1		
Fish Species	Anad.	Fish Points	3		lot	X	
Barrier Type	Red	Barrier Points	3	Out	iet		
NI 4 TPI : 41 4	1 . 10 . 0	Prioritization Total Points	8	1 \ 1 \ 1			STAY

Notes: This pipe outlets approximately 10 ft upstream of another culvert (under railroad tracks) that is constructed entirely of treated timbers. The inlet dimensions of the timber pipe a 3 ft wide x 2 ft high. We did not have access to the outlet end of the timber pipe. In addition, there is yet another pipe downstream of the timber pipe, under a drive on private property. We did not have permission to enter the property, so we have no information on it.

	1	LOCATION	INFO		Culvert #	5301	Priority	L
Watershed			Tillaı	nook Bay		PB THE		
Stream Name			White	ney Creek			3 (1)	
Township-Range-Sect	ion-1/4		T1N, R10W, Sec. 22, NE ¹ / ₄ of NW ¹ / ₄					
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	429817	7/5045895	140			
Road Name	Road Name		Ari	zona Way			Bulli	
Road/Culvert Owner			City of	Garibaldi			4	
Adjacent Landowners	}		D. Calliau and L	. Godfrey	8-			
CULVER	T INFO		CHANNEL INFO					
Shape		Pipe arch	Inlet Gradient (%)	4.5	- 2			
Material	Corrug	gated metal	Upstream Gradient (%)	3.5	4		let	
Length (ft)		61	Bankfull Width (ft)	4.9		British Street		
Width (in)		42	Bankfull:Culvert Ratio	0.7				
Height (in)		30						
Outlet Perch (ft)		None			200	Alexander and		
Slope (%)		1.0			100			
Rustline Height (in)		9				35		
Overall Condition		Fair			1			
	PRIOR	ITIZATIO	N ANALYSIS					
Upstream Habitat Ler	ngth (mi)	0.4	Habitat Points	1	100	The same of the sa	1000	
Habitat Quality		Poor	Habitat Quality Points	1			3	
Fish Species			Fish Points	3			a la	
Barrier Type		Gray	Barrier Points	2	Out	let	1 1 m	
			Prioritization Total Points	7	Out		BI I	
Notes:						·		

	LOCATION INFO						Priority	L
Watershed			Tilla	amook Bay				
Stream Name			Whi					
Township-Range-Section	on-1/4		T1N, R10W, Sec. 22, NE					
UTM Easting/Northing	(Zone 10, NAI	D 1983)	42976					
Road Name			Martin S	Smith Lane				
Road/Culvert Owner				Private				
Adjacent Landowners			R. Perigo and T.	& C. North		* Y	SPAN	M
CULVERT INFO			CHANNEL INFO			T 400 E	95 13	tt
Shape		Circular	Inlet Gradient (%)	6.5	American Toleran	31	A STATE OF THE STA	
Material	Corruga	ated metal	Upstream Gradient (%)	4.5	经 条件		W. A. K.	
Length (ft)		55	Bankfull Width (ft)	5.2		A Train	San San	
Width (in)		36	Bankfull:Culvert Ratio	0.6		6 1/1/13	2	AT
Height (in)		36			The Table		50	
Outlet Perch (ft)		0.7				-		1
Slope (%)		3.5					Outlet	
Rustline Height (in)		18			1/2			
Overall Condition		Critical						
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Leng	gth (mi)	0.4	Habitat Points	1				
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3				
Barrier Type		Red	Barrier Points	3				
			Prioritization Total Points	8				
Notes: Bottom complete	ly worn th	nrough. Cul	vert in extremely poor condition	access inlet.				

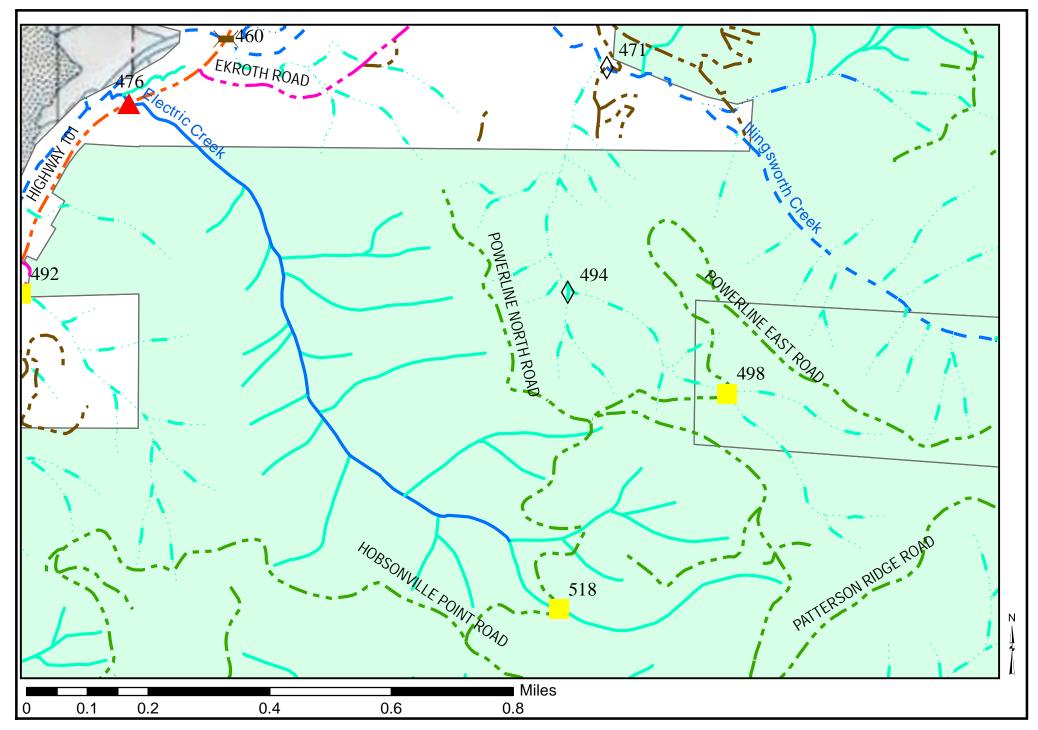


Garibaldi Town Limits Culverts, Tillamook Bay Tributaries

ELECTRIC CREEK CULVERT

	1	LOCATIO	ON INFO		Culvert #	476	Priority	M
Watershed			Tilla	amook Bay				
Stream Name			Ele	ctric Creek				
Township-Range-Sec	ction-1/4		T1N, R10W, Sec. 22, SW	/¼ of NE¼				
UTM Easting/Northi	UTM Easting/Northing (Zone 10, NAD 1983)		43018	86/5045387				
Road Name			Hi	ghway 101		Fig.	MA SER	
Road/Culvert Owner	•		Oregon Department of Tra					
Adjacent Landowner	rs		B. Green					100
CULVER	T INFO		CHANNEL INFO					3
Shape		Circular	Inlet Gradient (%)	1.1	Inlet			面 大
Material	Corrugat	ed metal	Upstream Gradient (%)	1.1	illet			
Length (ft)		~160	Bankfull Width (ft)	5.2				
Width (in)	48 (inlet) 60	0 (outlet)	Bankfull:Culvert Ratio	1.0				
Height (in)	48 (inlet) 60	0 (outlet)						144
Outlet Perch (ft)		None					## Make	
Slope (%)		Variable						(tra
Rustline Height (in)		30			The state of the s			PANA
Overall Condition		Critical			Carlot I	M	-	
	PRIOR	ITIZATI	ON ANALYSIS		WY MAN		-	
Upstream Habitat Lo	ength (mi)	1.0	Habitat Points	2	- The state of the	K		
Habitat Quality		Poor	Habitat Quality Points	1	500			
Fish Species		Anad.	Fish Points	3		1111		Y
Barrier Type		Red	Barrier Points	3		WINE	Juan 1	
			Prioritization Total Points	9			- 1	11/

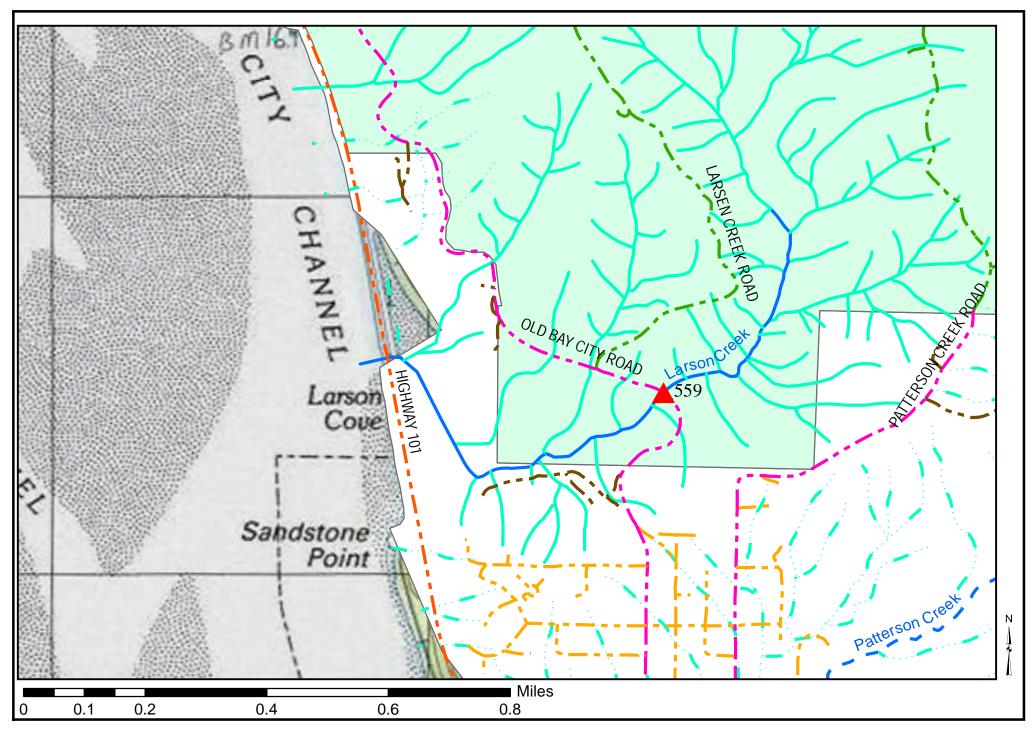
Notes: Inlet and outlet are corrugated metal, but a portion of the middle of the pipe is concrete. Corrugated sections are highly corroded and severe cross sectional deformation was noted for portions of the pipe. Unable to survey or use Abney level to obtain several pieces of data used to characterize culverts. Gradient of the inlet section of pipe was extremely steep (~20 %), outlet section was much less steep.



Electric Creek Culverts, Tillamook Bay Tributaries

LARSON CREEK CULVERT

	I	LOCATIO	N INFO		Culvert #	559	Priority	M
Watershed			Tilla	amook Bay	Marie College Street	と 日本	A ST	
Stream Name			Larson Creek		IS din	The second	1919	
Township-Range-Section			T1N, R10W, Sec. 34, NE ¹ / ₄ of NE ¹ / ₄			MAN	98	
UTM Easting/Northing			43054	6/5042675			-	1
Road Name	3 (· · · · · · · · · · · · · · · · · · ·		Old Bay	City Road		2	0.00	1
Road/Culvert Owner			Tillamo	ook County		1	night.	
Adjacent Landowners			Oregon Department	of Forestry	THE PARTY OF THE P			
CULVERT	INFO		CHANNEL INFO			1	- 1	
Shape		Circular	Inlet Gradient (%)	1.4	Inlet			
Material		Concrete	Upstream Gradient (%)	0.4				
Length (ft)		55	Bankfull Width (ft)	3.6				
Width (in)		36	Bankfull:Culvert Ratio	0.8				
Height (in)		36			W Jane Brand I			
Outlet Perch (ft)		1.5				MA	1 -	X
Slope (%)		1.8						_
Rustline Height (in)		N/A				7	T.	No.
Overall Condition		Poor			ME-113			
-	PRIOR	ITIZATIO	N ANALYSIS		4.0		/	
Upstream Habitat Leng	gth (mi)	0.4	Habitat Points	1		Organia de 122	CVV CONTRACTOR	
Habitat Quality		Fair	Habitat Quality Points	2	Outlet	110.00		
Fish Species		Anad.	Fish Points	3		- Market		
Barrier Type		Red	Barrier Points	3		7		
			Prioritization Total Points	9			30000000	
Notes:								



Larson Creek Culvert, Tillamook Bay Tributaries

PATTERSON CREEK CULVERTS

]	LOCATIO	N INFO		Culvert #
Watershed			Tilla	amook Bay	
Stream Name			Patte	E ir	
Township-Range-Secti	ion-1/4		T1N, R10W, Sec. 34, SV	A STATE OF	
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43024	12/5041650	The state of the s
Road Name			Hi	ghway 101	
Road/Culvert Owner			Oregon Department of Tra	nsportation	
Adjacent Landowners			ODOT, Port o	of Garibaldi	- 100
CULVER	ΓINFO		CHANNEL INFO		
Shape		Box	Inlet Gradient (%)	0.1	1
Material		Concrete	Upstream Gradient (%)	0.2	1 3 8/1
Length (ft)		105	Bankfull Width (ft)	22.0	Wall Control
Width (in)		96	Bankfull:Culvert Ratio	0.4	4.3
Height (in)		96			43.5
Outlet Perch (ft)		None			2000年
Slope (%)		0.2			7.00
Rustline Height (in)		48			
Overall Condition		Fair			· Ita
-	PRIOR	RITIZATIO	ON ANALYSIS		
Upstream Habitat Len	gth (mi)	3.8	Habitat Points	4	
Habitat Quality	Fair(-)		Habitat Quality Points	2	
Fish Species	·	Anad.	Fish Points	3	
Barrier Class	·	Gray	Barrier Points	2	Outl
			Prioritization Total Points	11	- A2 W
TAT 4 A 1/1 1 1 1 10	· 1 0	.1 1 1	. 1'1 1 6' 1 1	11	O1 'C' '



Priority



Notes: Although classified as Gray, this culvert likely passes fish under most conditions. Classification is based on BFW:Width Ratio, but because culvert is tidally influence and completely backwatered under most conditions, it seems likely that passage is rarely inhibited by this crossing. That being said, the culvert is undersized and almost certainly impairs tidal processes.

]	LOCATIO	ON INFO		Culvert #	579	Priority	Н
Watershed			Till	amook Bay		A J		247
Stream Name			Patte				3 1/4	
Township-Range-Secti	ion-1/4		T1N, R10W, Sec. 22, NW ¹ / ₄ of NW ¹ / ₄		A PART	ST. INDIAN	三為	
UTM Easting/Northin	g (Zone 10, NAI	1983)	43048	34/5041795		课 。	A VIVE	The same
Road Name				4 th Street			1/1	
Road/Culvert Owner			City	of Bay City				
Adjacent Landowners	1		City of Bay City, B.	&C. Scovel			4	201
CULVERT	INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	7.6	Inlet			
Material	Corrugat	ed Metal	Upstream Gradient (%)	1.9			PAGE TO THE	1
Length (ft)		97	Bankfull Width (ft)	11.4				
Width (in)		72	Bankfull:Culvert Ratio	0.5			File Park	
Height (in)		72			10	No.		
Outlet Perch (ft)		None						
Slope (%)		1.6						
Rustline Height (in)		33					* New York	
Overall Condition		Fair			The state of the s	-	J. W.	
	PRIOR	ITIZATI	ON ANALYSIS			The second	老师	
Upstream Habitat Len	igth (mi)	3.7	Habitat Points	4				
Habitat Quality		Fair(-)	Habitat Quality Points	2	1	259		
Fish Species		Anad.	Fish Points	3	W		THE SALE	
Barrier Class		Gray	Barrier Points	2	Out	tlet	Carlo Carlo	
		·	Prioritization Total Points	11				
Notes:								

]	LOCATIO	N INFO		Culvert #	578	Priority	Н
Watershed			Tilla	amook Bay	Mean	J- 71(29)	REALES	
Stream Name			Patte		1	企图/图		
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 35, SE		1 300			
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)		43056	8/5041806		5		
Road Name				5 th Street				
Road/Culvert Owner		City o	of Bay City					
Adjacent Landowners	Adjacent Landowners		A & E. Troyer, A. Harri	is, J. Fullan		A STATE OF THE PARTY OF THE PAR		
CULVERT INFO			CHANNEL INFO		May 1 .	20		
Shape		Box	Inlet Gradient (%)	4.2	3	No.		
Material		Concrete	Upstream Gradient (%)	10	732		-	
Length (ft)		71	Bankfull Width (ft)	15.0	Inl	et		
Width (in)		96	Bankfull:Culvert Ratio	0.5				
Height (in)		72					10000	
Outlet Perch (ft)		1.8				100	A KENDY	
Slope (%)		0.5			7			
Rustline Height (in)		24			4			
Overall Condition		Fair			-			
	PRIOR	ATIZATIO	N ANALYSIS		272	Marie Comment	AV	
Upstream Habitat Lei	ngth (mi)	3.6	Habitat Points	4	A COLUMN	A Sharen	Name of the last o	
Habitat Quality		Fair(-)	Habitat Quality Points	2		A contract	HALTER	
Fish Species		Anad.	Fish Points	3		A STATE OF	15	
Barrier Class		Red	Barrier Points	3	Out	let -		
	`		Prioritization Total Points	12		-	N. Carrie	
Notes:			<u> </u>		<u> </u>			

		LOCATION	ON INFO		Culvert #	575	Priority	Н
Watershed			7	Гillamook Bay			in the	Ş
Stream Name			Patterson Creek			MAG	1	
Township-Range-Section	ion-1/4		T1N, R10W, Sec. 35,	SE1/4 of NW1/4	A STATE OF			
UTM Easting/Northing			43	0727/5041881	AL SILVE	V.E.D		
Road Name			Unnamed drive	off Main Ave.				
Road/Culvert Owner	ier		Ci	ty of Bay City		Delta		
Adjacent Landowners			D. Buxton, R	. & S. Blodget	40 50 AV	12		
CULVERT	INFO		CHANNEL INF	0	2000			
Shape		Circular	Inlet Gradient (%)	2.8		7		
Material	Corrugat	ed metal	Upstream Gradient (%)	2.2	711		The same of	i
Length (ft)		36	Bankfull Width (ft)	11.6	23 A	1		
Width (in)		60	Bankfull:Culvert Ratio	0.4		VIII Z	Inlat	
Height (in)		60				The state of the s	Inlet	
Outlet Perch (ft)		0.8			M W	7. 1		C. Ton
Slope (%)		3.4						
Rustline Height (in)		18			C. T.			
Overall Condition		Critical						12.15
-	PRIOF	RITIZATI	ON ANALYSIS				THE SE	Mary 4 M
Upstream Habitat Len	gth (mi)	2.3	Habitat Points	4	X V N X			
Habitat Quality		Fair(-)	Habitat Quality Points	2		M 3		2000
Fish Species		Anad.	Fish Points	3	Outlet	The same of		THAN W
Barrier Type		Red	Barrier Points	3	Outlet			1
			Prioritization Total Points	12		-	B. Black	
Notes: Bottom and side	of culvert	completely	worn through.					

	L	OCATIO	N INFO		Culvert #	5555	Priority	Н
Watershed			Tilla	amook Bay				
Stream Name			Patterson Creek					
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 35, SE			W A		
UTM Easting/Northin	FM Easting/Northing (Zone 10, NAD 1983)		43079	9/5041890				
Road Name				8 th Street				
Road/Culvert Owner			City o	of Bay City				
Adjacent Landowner	Adjacent Landowners		D. & C. McBride and	C. & N. Ek				
CULVERT INFO			CHANNEL INFO)				
Shape		Circular	Inlet Gradient (%)	12.9			Inlet	
Material		CMP	Upstream Gradient (%)	8.5			line	
Length (ft)		41	Bankfull Width (ft)	11.2				
Width (in)		56	Bankfull:Culvert Ratio	0.4				
Height (in)		56						A land
Outlet Perch (ft)		None						VE
Slope (%)		-0.2						
Rustline Height (in)		30						
Overall Condition		Critical			March 18	1	1 / F	
	PRIORI	ITIZATIO	N ANALYSIS					1
Upstream Habitat Le	ngth (mi)	2.3	Habitat Points	4				1
Habitat Quality		Fair(-)	Habitat Quality Points	2				1
Fish Species		Anad.	Fish Points	3			X .	1
Barrier Class		Red	Barrier Points	3	Outlet			
			Prioritization Total Points	12				
Notes: Bottom worn the entire invert)	rough at inl	et and outl	et and probably along much of	the length of	f the pipe (sub	ostrate obs	cure view of	•

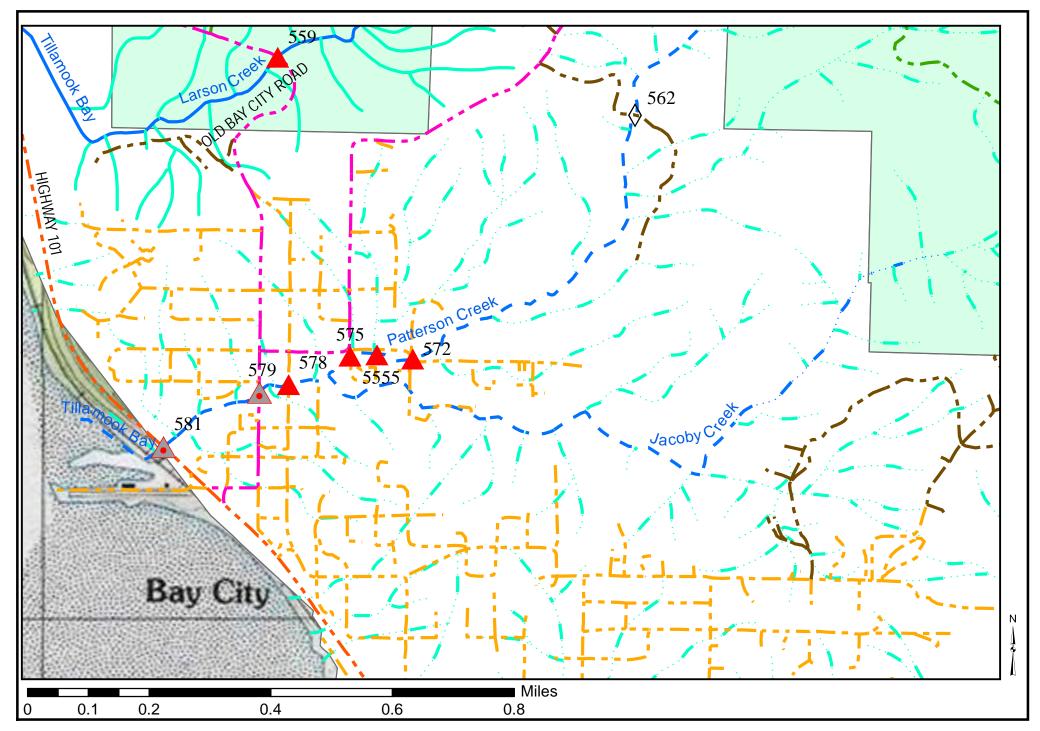
	I	LOCATIO	N INFO		Culvert #	572	Priority	Н
Watershed			Tilla	amook Bay		And the said		14000
Stream Name			Patte	rson Creek	1			
Township-Range-Section	on-1/4		T1N, R10W, Sec. 35, SE				The same	
UTM Easting/Northing	JTM Easting/Northing (Zone 10, NAD 1983)		43090	1/5041865		an		
Road Name	lame			9 th Street				
Road/Culvert Owner				of Bay City	Value State			
Adjacent Landowners			C. Bosch and G.	& S. Petty			THE RESERVE	1
CULVERT	INFO		CHANNEL INFO					
Shape	Pipe arch		Inlet Gradient (%)	15.3	A STATE			
Material	Corruga	nted metal	Upstream Gradient (%)	4.6	A Marine	4		
Length (ft)		42	Bankfull Width (ft)	6.0				
Width (in)		48	Bankfull:Culvert Ratio	0.7				
Height (in)		48	·			And the same	200	
Outlet Perch (ft)	•	Unknown	Couldn't access downstream e	end of				
Slope (%)		Unknown	pipe. Area is fenced and inclu	ides a fish				No.
Rustline Height (in)		17	ladder.					
Overall Condition		Fair			× + **			
	PRIOR	ITIZATIO	ON ANALYSIS		不够多	4		
Upstream Habitat Leng	gth (mi)	2.2	Habitat Points	4			TO THE PARTY	1
Habitat Quality	Fair		Habitat Quality Points	2	A ARRANGE			100
Fish Species		Anad.	Fish Points	3	1 375			
Barrier Type		Red	Barrier Points	3	A Date 4	4 19		
			Prioritization Total Points	12	12			
Notes: Fish ladder at do	wnstream	end of pipe	2.					

]	LOCATIO	N INFO		Culvert #	542	Priority	M
Watershed			Tilla	amook Bay		0.44		
Stream Name			Patte		A V	in the second		
Township-Range-Sect	ion-1/4		T1N, R10W, Sec. 26, SE		100		1	
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)		43189	1/5042999				Mir
Road Name			Unnamed F	orest Road				
Road/Culvert Owner	Road/Culvert Owner		Oregon Department	of Forestry				A. S.
Adjacent Landowners		Oregon Department	of Forestry	1			Y.	
CULVERT INFO			CHANNEL INFO		4,2	2 × 11		
Shape		Circular	Inlet Gradient (%)	28.8	Inlet			
Material	Corruga	ated metal	Upstream Gradient (%)	3.6	the w	1		TO THE
Length (ft)		43	Bankfull Width (ft)	8.7				
Width (in)		36	Bankfull:Culvert Ratio	0.3				
Height (in)		36				S. 18	The Air	从 图像
Outlet Perch (ft)		1.6				M		Tar Tar
Slope (%)		5.0			ZZY ZZ			M
Rustline Height (in)		7			THE NAME OF THE PARTY OF THE PA			
Overall Condition		Poor						11
	PRIOR	ITIZATIO	ON ANALYSIS		1/			1
Upstream Habitat Ler	igth (mi)	0.5	Habitat Points	1			建七光。 *	
Habitat Quality		Fair	Habitat Quality Points	2				-
Fish Species		Anad.	Fish Points	3			Outle	
Barrier Type		Red	Barrier Points	3				7
			Prioritization Total Points	9				
Notes: Large amount of	f sediment	and debris	in inlet. Water overflowing pip	e inlet durin	g early summe	er survey	visit.	

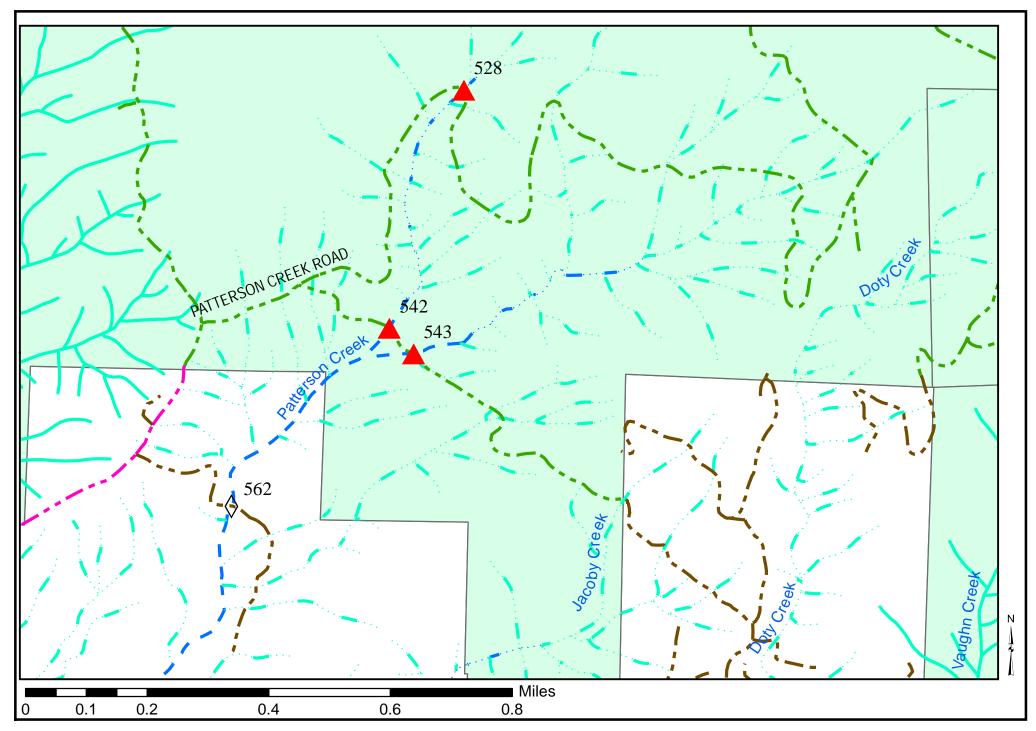
	LOCATION INFO							L
Watershed			Tilla	amook Bay				2000
Stream Name			Patte	11/1/2	The same of the sa		100	
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 26, NV					
UTM Easting/Northing (Zone 10, NAD 1983)		43210	1/5043624					
Road Name			Patterson (Creek Road		TE E	1 V	
Road/Culvert Owner			Oregon Department	of Forestry			1 1	\Rightarrow
Adjacent Landowners	S		Oregon Department	of Forestry				VZ
CULVERT INFO			CHANNEL INFO		34			2/
Shape		Circular	Inlet Gradient (%)	4.0	Inlet			4
Material	Corruga	ated metal	Upstream Gradient (%)	3.5		-		
Length (ft)		74	Bankfull Width (ft)	6.9				
Width (in)		36	Bankfull:Culvert Ratio	0.4				
Height (in)		36				7.2	1 1 1 May	G S
Outlet Perch (ft)		2.2			10 to 16			4
Slope (%)		2.0						40
Rustline Height (in)		16				1		
Overall Condition		Poor				44		
	PRIOR	ITIZATIO	ON ANALYSIS			She was		- 3
Upstream Habitat Lei	ngth (mi)	0.1	Habitat Points	1	1000	1		341.8
Habitat Quality		Poor	Habitat Quality Points	1		200	The second second	
Fish Species		Anad.	Fish Points	3	Outlet			
Barrier Type		Red	Barrier Points 3					
			Prioritization Total Points	8				
Notes:								

]	LOCATIO	N INFO		Culvert #	543
Watershed			Tilla	amook Bay		
Stream Name			Unnamed tributary to Patte	rson Creek		
Township-Range-Sect	tion-1/4		T1N, R10W, Sec. 25, NV	V1/4 of SE1/4	NA /	
UTM Easting/Northin	lg (Zone 10, NAI	1983)	43197	79/5042920	7	
Road Name			Unnamed F	orest Road	A A	
Road/Culvert Owner			Oregon Department			-
Adjacent Landowners	S		Oregon Department	of Forestry		1
CULVER	T INFO		CHANNEL INFO)		
Shape		Circular	Inlet Gradient (%)	66.3	Inlate	1
Material	Corruga	ated metal	Upstream Gradient (%)	7.3		
Length (ft)		41	Bankfull Width (ft)	5.7		
Width (in)		42	Bankfull:Culvert Ratio	0.6	2000	AND THE RESERVE
Height (in)		42				THE STATE
Outlet Perch (ft)		3.1			I VIII	
Slope (%)		4.2				1
Rustline Height (in)		23				
Overall Condition		Poor				
	PRIOR	ITIZATIO	ON ANALYSIS		100	
Upstream Habitat Le	ngth (mi)	0.4	Habitat Points	1	1000	The same of
Habitat Quality		Fair	Habitat Quality Points	2	100	77.
Fish Species	ies Ana		Fish Points	3	- 4	
Barrier Type	-		Barrier Points	3		Ou
		<u>'</u>	Prioritization Total Points	9	Bur M	38 4
Notes: Large amount o	f debris in i	nlet.				

Priority



Lower Patterson Creek Culverts, Tillamook Bay Tributaries



Upper Patterson Creek Culverts, Tillamook Bay Tributaries

DOTY CREEK CULVERTS

]	LOCATIO	N INFO		Culvert #	647	Priority	Н
Watershed			Ki	lchis River				
Stream Name			I	Doty Creek	科性		100	20/
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 2, SV	V1/4 of SE1/4			79	1/2
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	43172					
Road Name			Hi	ghway 101				
Road/Culvert Owner			Oregon Department of Tra	nsportation	216	XX		1
Adjacent Landowners	Adjacent Landowners		M. Farrington, F. &	L. Adkins				
CULVERT INFO			CHANNEL INFO		t			The second
Shape		Pipe Arch	Inlet Gradient (%)	2.7	Intet	NO.		
Material	Corruga	ated metal	Upstream Gradient (%)	13.2				
Length (ft)		75	Bankfull Width (ft)	5.8				
Width (in)		66	Bankfull:Culvert Ratio	0.9				
Height (in)		36						
Outlet Perch (ft)		0.5				A CONTRACT OF THE PARTY OF THE	4. 1	102
Slope (%)		0.7					表表	
Rustline Height (in)		10			***************************************		No.	
Overall Condition		Fair					N. A.	Ela.
	PRIOR	RITIZATIO	ON ANALYSIS			Marie Marie Control		19
Upstream Habitat Lei	ngth (mi)	1.7	Habitat Points	4				
Habitat Quality		Fair	Habitat Quality Points	2		1972		
Fish Species		Anad.	Fish Points	3	Outlet			
Barrier Type		Red	Barrier Points	3			-	
	<u>'</u>		Prioritization Total Points	12			2 3 6 3 6 6	
Notes: Integrated apror	n on outlet.				<u> </u>			

		LOCATIO	N INFO		Culvert #	637	Priority	Н
Watershed			Ki	lchis River	F MANAGE TO THE STATE OF THE ST	SVII		
Stream Name			I	Doty Creek	15		三	
Township-Range-Sect	ion-1/4		T1S, R10W, Sec. 2, S1	E¼ of SE¼	的意识			
UTM Easting/Northin	g (Zone 10, NA	D 1983)	43214	7/5040015	THE VENT	EAN.		2000
Road Name	0.000 1 1000000		Alderbrook	Loop Road				
Road/Culvert Owner			ook County					
Adjacent Landowners	1	L.&	C. Oswald, D.&C. Phillips, and	J. Johnson				
CULVER	CULVERT INFO		CHANNEL INFO)				
Shape		Circular	Inlet Gradient (%)	13.6	Inlet	A. A.		
Material		Concrete	Upstream Gradient (%)	0.15				
Length (ft)		41	Bankfull Width (ft)	6.8				
Width (in)		36	Bankfull:Culvert Ratio	0.4				
Height (in)		36						
Outlet Perch (ft)		0.1					Outlet	
Slope (%)		0.1			Service Control			2019
Rustline Height (in)		N/A				J- JUM	7 7 MAY 1	
Overall Condition		Fair				M	1 / THE	
	PRIOF	RITIZATIO	ON ANALYSIS			X.	1000	V
Upstream Habitat Len	igth (mi)	1.4	Habitat Points	3		-		
Habitat Quality		Fair	Habitat Quality Points	2		71		
Fish Species		Anad.	Fish Points	3		1/2		
Barrier Type		Gray	Barrier Points	2	0.1			
			Prioritization Total Points	10				* *
Notes:								

]	LOCATIO	N INFO		Culvert #	636	Priority	Н	
Watershed			Tilla	amook Bay	S - LASISE	TSI AT SH	PART FOR	Marin .	
Stream Name]	Doty Creek		SAN E	100	1	
Township-Range-Sect	ion-1/4		T1S, R10W, Sec. 2, N1	E¼ of SE¼	The second				
UTM Easting/Northin	JTM Easting/Northing (Zone 10, NAD 1983)		43228	35/5040153		1			
Road Name			Vau	ıghan Road		1			
Road/Culvert Owner		City o	of Bay City	XXX		VV	1		
Adjacent Landowners			J. Johnson, M. Smith, J.&	J. Keppner		100	1		
CULVER	CULVERT INFO		CHANNEL INFO)	dalet		3-	P. Land	
Shape		Circular	Inlet Gradient (%)	2.9				50-10	
Material	Corruga	ated metal	Upstream Gradient (%)	1.2					
Length (ft)		37	Bankfull Width (ft)	6.8					
Width (in)		36	Bankfull:Culvert Ratio	0.4					
Height (in)		36				Toward S	Carlo Carlo	10	
Outlet Perch (ft)		0.1							
Slope (%)		0.3			A STATE OF THE STA	and an	THE WAY		
Rustline Height (in)		16			4	VA			
Overall Condition		Fair			1417		Z X		
	PRIOR	RITIZATIO	ON ANALYSIS		A 15 15 15 15 15 15 15 15 15 15 15 15 15				
Upstream Habitat Len	igth (mi)	1.2	Habitat Points	3		-			
Habitat Quality		Fair	Habitat Quality Points	2			Outlet	1	
Fish Species		Anad.	Fish Points	3					
Barrier Type		Red	Barrier Points	3	1				
			Prioritization Total Points	11					
Notes: Entire culvert ru	ısty.								

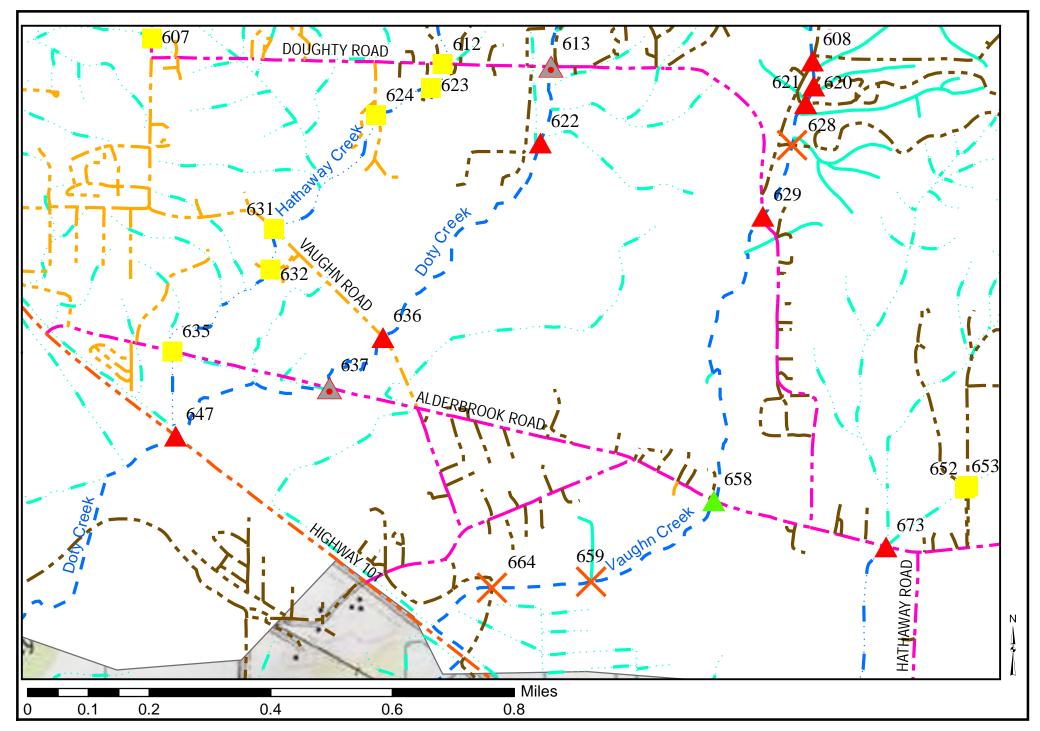
	I	LOCATIO	N INFO		Culvert #	622	Priority	Н		
Watershed			Tilla	amook Bay				Tin .		
Stream Name				Ooty Creek		CONTRACTOR OF THE PARTY OF THE				
Township-Range-Section	on-1/4		T1S, R10W, Sec. 1, SW	1/4 of NW1/4			40/13/			
UTM Easting/Northing	ζ (Zone 10, NAΓ	1983)		432654/5040550						
Road Name			Private Drive off Dou	ighty Road						
Road/Culvert Owner			Oldenkamp				XF			
Adjacent Landowners		R. Rasmussen, J.	&T. Jepson				2			
CULVERT INFO		CHANNEL INFO			E 10.5	The state of the s				
Shape		Circular	Inlet Gradient (%)	11.8		148	Inlet			
Material	Corruga	nted metal	Upstream Gradient (%)	1.2	1/7	190	The Car	1		
Length (ft)		19	Bankfull Width (ft)	8.6		- 1				
Width (in)		45	Bankfull:Culvert Ratio	0.4						
Height (in)		45								
Outlet Perch (ft)		0.6					0.15			
Slope (%)		8.0				N. S.	No.			
Rustline Height (in)		18								
Overall Condition		Poor			No. of the last		1			
		ITIZATIO	ON ANALYSIS							
Upstream Habitat Leng	gth (mi)	0.8	Habitat Points	2	100	100 m				
Habitat Quality		Fair	Habitat Quality Points	2	47	A STATE OF				
Fish Species		Anad.	Fish Points	3						
Barrier Type		Red	Barrier Points	3	Outl	et	-07			
			Prioritization Total Points	10	- 4	College Al				
Notes: Cascade into inle	Notes: Cascade into inlet and bottom worn through on outlet.									

		LOCATIO	N INFO		Culvert #	613	Priority	M
Watershed			Tilla	amook Bay	MANUAL PROPERTY.		200	
Stream Name			I	Doty Creek	2			
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 1, NW	1/4 of NW1/4	100	124	1	
UTM Easting/Northin	lg (Zone 10, N	NAD 1983)	43272	9/5040868	8	HAE!		
Road Name			Dou	ighty Road	4	A NA		
Road/Culvert Owner	•		Tillamo	ook County		These		
Adjacent Landowners	¥		mussen, Alderbrook Hills, W.&	D. Collum		(1)	T.	
CULVER	CULVERT INFO		CHANNEL INFO	1			W. 3	
Shape	Circular		Inlet Gradient (%)	10.8				
Material	Corru	gated metal	Upstream Gradient (%)	3.5	In	let 🍜		
Length (ft)		36	Bankfull Width (ft)	6.5				
Width (in)		46	Bankfull:Culvert Ratio	0.6				
Height (in)		46				12.00	ala Sala	
Outlet Perch (ft)		None			95.7			
Slope (%)		-1.1			100 Miles		(2)	
Rustline Height (in)		17						
Overall Condition		Fair				The same of the sa		
			ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)		Habitat Points	2				
Habitat Quality		Fair	Habitat Quality Points	2	100	1		
Fish Species		Anad.	Fish Points	3	=	1	0	
Barrier Type		Gray	Barrier Points	2	Ou	utlet	A CONTRACTOR OF THE PARTY OF TH	
			Prioritization Total Points	9	35	-		
Notes:								

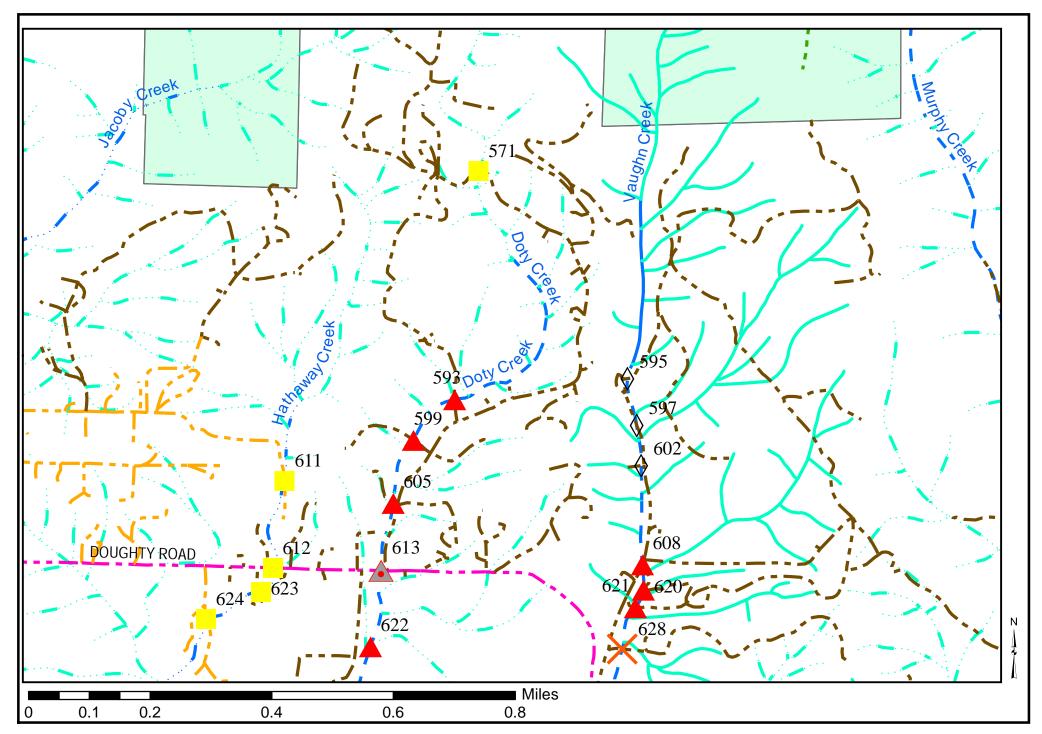
]	LOCATIO	N INFO		Culvert #	605	Priority	M		
Watershed			Till	amook Bay				CA		
Stream Name				Doty Creek		*				
Township-Range-Secti	ion-1/4		T1N, R10W, Sec. 36, SE	E1/4 of SW1/4		T.				
UTM Easting/Northing	g (Zone 10, NAI	D 1983)	432768/5041048							
Road Name			Private Drive off Do	ughty Road						
Road/Culvert Owner		Oregon Department	of Forestry			SALE				
Adjacent Landowners		Oregon Department	of Forestry	W						
CULVERT INFO			CHANNEL INFO)						
Shape		Circular	Inlet Gradient (%)	12.0	Inlet					
Material	Corruga	ated metal	Upstream Gradient (%)	0.58				Equity 1		
Length (ft)		31	Bankfull Width (ft)	7.6						
Width (in)		48	Bankfull:Culvert Ratio	0.5						
Height (in)		48								
Outlet Perch (ft)		None					The state of			
Slope (%)		3.4					\ \			
Rustline Height (in)		20.4					V 2	-		
Overall Condition		Fair						A LA		
-	PRIOR	ITIZATIO	N ANALYSIS			1305				
Upstream Habitat Len	gth (mi)	0.5	Habitat Points	1						
Habitat Quality		Fair	Habitat Quality Points	2	March 1	1	1	4 - :		
Fish Species		Anad.	Fish Points	3	Outlet					
Barrier Type		Red	Barrier Points	3	es Same			1		
			Prioritization Total Points	9						
Notes:										

]	LOCATIO	N INFO		Culvert #	599	Priority	M
Watershed			Tilla	amook Bay			Sucre a sur	
Stream Name			I	Doty Creek				
Township-Range-Sect	ion-1/4		T1N, R10W, Sec. 36, SE	1/4 of SW1/4				
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43283	3/5041204		1		
Road Name		Timbe	rline Drive		W/ +	TO SERVE		
Road/Culvert Owner		J	.&S. Smith					
Adjacent Landowners	Adjacent Landowners		J.&S. Smith a	nd P. Early				
CULVER'	T INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	18.1				
Material	Corruga	ated metal	Upstream Gradient (%)	3.1	1	100	Inlet	
Length (ft)		40	Bankfull Width (ft)	9.0	6	3		
Width (in)		48	Bankfull:Culvert Ratio	0.4	NATRY.			
Height (in)		48				36		
Outlet Perch (ft)		0.9				1	NA.	
Slope (%)		1.2					120	
Rustline Height (in)		18			13 T			
Overall Condition		Good				- STATE		
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.4	Habitat Points	1				
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3	426	And the second		
Barrier Type		Red	Barrier Points	3	Ou	tlet		
			Prioritization Total Points	9				
Notes:								

	1	LOCATIO	N INFO		Culvert #	593	Priority				
Watershed			Tilla	amook Bay							
Stream Name]	Doty Creek							
Township-Range-Secti	ion-1/4		T1N, R10W, Sec. 36, SE	1/4 of NW1/4	1/1/2						
UTM Easting/Northing	g (Zone 10, NAI	D 1983)	43291	No		7					
Road Name			Private drive off Willowb	rook Drive							
Road/Culvert Owner			Alderbrook Hills Road & M	Iaintenance							
Adjacent Landowners			E.&K. Heuberger, B	B. Germond							
CULVERT	CULVERT INFO		CHANNEL INFO)	1						
Shape		Circular	Inlet Gradient (%)	5.6							
Material	Corruga	ated metal	Upstream Gradient (%)	1.9	In	let					
Length (ft)		44	Bankfull Width (ft)	5.2							
Width (in)		24	Bankfull:Culvert Ratio	0.4							
Height (in)		24						1			
Outlet Perch (ft)		4.2			Mensoy						
Slope (%)		6.3				HILLAN		1			
Rustline Height (in)		unknown				A Dr.		6			
Overall Condition		Fair			233311			$\mathcal{N}^{\mathbb{Z}}$			
	PRIOR	ITIZATIC	ON ANALYSIS			Mentan					
Upstream Habitat Len	gth (mi)	0.3	Habitat Points	1	SKADILAVA						
Habitat Quality	Fair		Habitat Quality Points	2							
Fish Species		Anad.	Fish Points	3	Outlet	100					
Barrier Type		Red	Barrier Points	3	More		The state of the s				
			Prioritization Total Points	9							
Notes: Small PVC "apro	on" on out	let	Notes: Small PVC "apron" on outlet								



Lower Doty Creek Culverts, Tillamook Bay Tributaries



Upper Doty Creek Culverts, Tillamook Bay Tributaries

South Tillamook Bay Tributaries and

Cape Meares Area
Culverts

BAYOCEAN ROAD CULVERTS

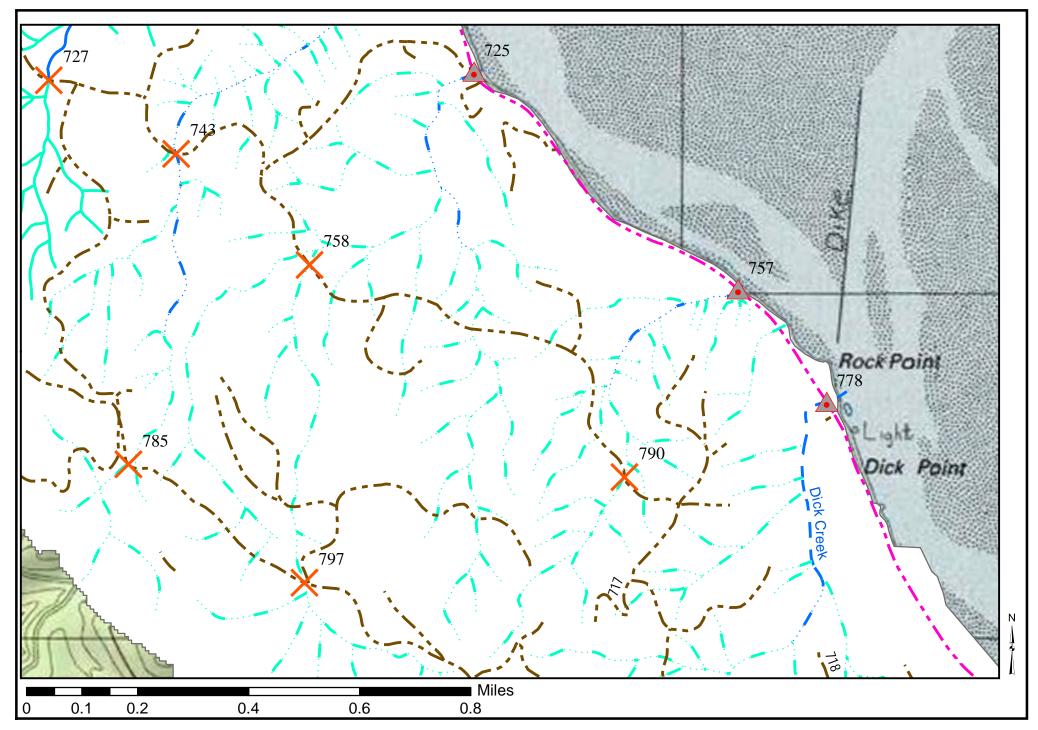
]	LOCATIO	N INFO		Culvert #	778	Priority	L
Watershed			Tilla	amook Bay		- XV-		
Stream Name]	Dick Creek	5 34			
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 15, NW ¹ / ₄ of SW ¹ / ₄				10	
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)		42933	30/5036881				
Road Name			Bayo	ocean Road		71		
Road/Culvert Owner			Tillamo	ook County				
Adjacent Landowners	S			J. Winter.	-	2.67		
CULVERT INFO		CHANNEL INFO)		1	1000		
Shape		Pipe Arch	Inlet Gradient (%)	1.5		1.0		
Material	Corruga	ated metal	Upstream Gradient (%)	3.8	10.2		lation	
Length (ft)		44	Bankfull Width (ft)	11.4	300		intlet	
Width (in)		72	Bankfull:Culvert Ratio	0.5				
Height (in)		42						
Outlet Perch (ft)	Not m	neasurable				Par Ch		
Slope (%)		2.1					TO MAN	
Rustline Height (in)		6					3	
Overall Condition		Poor						
		ITIZATIO	ON ANALYSIS		A			
Upstream Habitat Lei	ngth (mi)	0.5	Habitat Points	1				
Habitat Quality			Habitat Quality Points	2	4			
Fish Species			Fish Points	3				
Barrier Type		Gray	Barrier Points	2	Ot	itlet		
			Prioritization Total Points	8			H2 (4)	
Notes: Outlets directly	into bay.							

]	LOCATIO	N INFO		Culvert #	757	Priority	L
Watershed			Tilla	amook Bay				
Stream Name			Unnamed Tributary near	Bock Point	(家)	R. Fare		
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 16, SE	E1/4 of NE1/4			1000	
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)		42906	8/5037210	100			
Road Name		Bayo	ocean Road					
Road/Culvert Owner		Tillamo	ook County					
Adjacent Landowners	S		Stimson L	umber Co.	4.0			
CULVER	CULVERT INFO		CHANNEL INFO	1				
Shape		Circular	Inlet Gradient (%)	15.3	泛		En	
Material		Concrete	Upstream Gradient (%)	1.1		A North		
Length (ft)		59	Bankfull Width (ft)	5.8	lol	et 🕌		
Width (in)		36	Bankfull:Culvert Ratio	0.5		The second second		
Height (in)		36						
Outlet Perch (ft)	Not m	neasurable			\cdot \cdot \cdot	-		
Slope (%)		0.0			43			
Rustline Height (in)		12						
Overall Condition		Fair				17/	-	
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.3	Habitat Points	1				
Habitat Quality		Fair	Habitat Quality Points	2		1000		
Fish Species		Anad.	Fish Points	3			J17 600	
Barrier Type		Gray	Barrier Points	2	Out	et		
			Prioritization Total Points	8				
Notes: Outlets directly	into bay.							

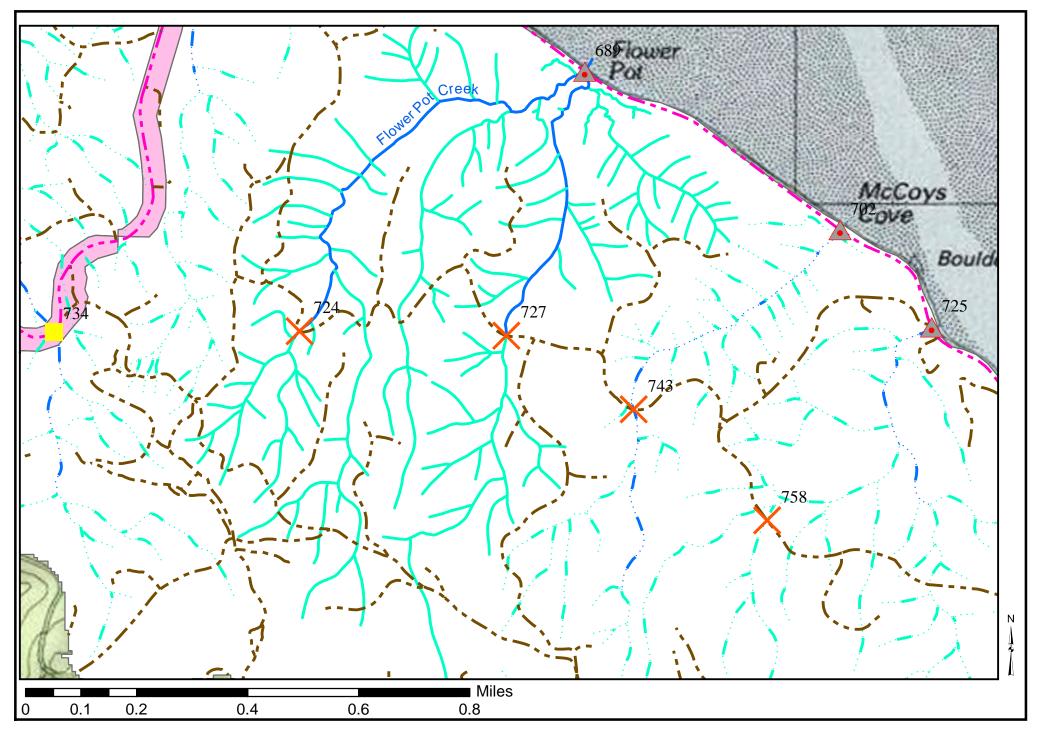
]	LOCATIO	N INFO		Culvert #	725	Priority	L	
Watershed			Tilla	amook Bay		•			
Stream Name			Unnamed Tributary at Bo	ulder Point			THE STATE OF THE S	明	
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 16, NE	1/4 of NW1/4				- France	
UTM Easting/Northin	g (Zone 10, NAI) 1983)	428308/5037848					1916	
Road Name			Bayo	ocean Road	property of the second				
Road/Culvert Owner			Tillamo	ook County				1	
Adjacent Landowners			J	A. Johnson			Cha 3	Miss	
CULVER	T INFO		CHANNEL INFO)				AR.	
Shape		Circular	Inlet Gradient (%)	1.8	NAME OF TAXABLE PARTY.			4352Y	
Material	Corruga	ated metal	Upstream Gradient (%)	3.7	Outlet			1/2	
Length (ft)		52	Bankfull Width (ft)	6.7			1111	+	
Width (in)		72	Bankfull:Culvert Ratio	0.9					
Height (in)		72			A C		P4470		
Outlet Perch (ft)	Not m	neasurable					The Second	3	
Slope (%)		2.8				No. 27			
Rustline Height (in)		30			36/36	A di			
Overall Condition		Poor				The last	_ 100	100 B	
	PRIOR	ITIZATIO	ON ANALYSIS				47	1	
Upstream Habitat Lei	ngth (mi)	0.4	Habitat Points	1					
Habitat Quality		Fair	Habitat Quality Points	2					
Fish Species		Anad.	Fish Points	3	Outlet.	downstr	3		
Barrier Class		Gray	Barrier Points	2			14	7 4	
			Prioritization Total Points	8					
Notes: Outlets directly	into bay.								

]	LOCATIO	N INFO		Culvert #	702	Priority	M
Watershed			Tilla	amook Bay				
Stream Name			Unnamed tributary at M	cCoy Cove		September 1		
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 9, SE	21/4 of SW1/4	No.			
UTM Easting/Northin	lg (Zone 10, NAI	1983)	42804		-			
Road Name			Bayo					
Road/Culvert Owner			Tillamo	要 一定				
Adjacent Landowners	S		J					
CULVER	T INFO		CHANNEL INFO			(1) (1) (1)	1	
Shape		Circular	Inlet Gradient (%)	1.0		1	中 智慧 建	
Material		Concrete	Upstream Gradient (%)	0.5	The second second		Inlet	1
Length (ft)		48	Bankfull Width (ft)	9.3			100	
Width (in)		48	Bankfull:Culvert Ratio	0.4				
Height (in)		48						
Outlet Perch (ft)	Not m	easurable					The property of	
Slope (%)		0.2					U LA STATE	
Rustline Height (in)		34			A CONTRACTOR			
Overall Condition		Fair			ST.	-	经 標準	
	PRIOR	ITIZATIO	ON ANALYSIS		6		1	
Upstream Habitat Le	ngth (mi)	0.9	Habitat Points	2 2		107	- Carlo	
Habitat Quality		Fair	Habitat Quality Points		111	1		
Fish Species		Anad.	Fish Points	3			Outle	5 †
Barrier Class		Gray	Barrier Points	2			Outre	
			Prioritization Total Points	9				
Notes: Outlets directly	into bay.							

	LOCATIO	ON INFO		Culvert #	689	Priority	Н
Watershed		Till	amook Bay				
Stream Name		Flowe	r Pot Creek				
Township-Range-Section-1	/4	T1S, R10W, Sec. 8, SV	V1/4 of SE1/4		alless and	and an inches	
UTM Easting/Northing (Zon	e 10, NAD 1983)	42730	STORE SERVER	A Like to		MARK	
Road Name		Bayo					
Road/Culvert Owner		Tillamook County					
Adjacent Landowners		Tillamook County					
CULVERT IN	FO	CHANNEL INFO		1		-	
Shape	Circular	Inlet Gradient (%)	0.2	Inlet			
Material	Concrete	Upstream Gradient (%)	0.5	mice		2	
Length (ft)	56	Bankfull Width (ft)	12.7				
Width (in)	48	Bankfull:Culvert Ratio	0.3				
Height (in)	48	_			× 100 000		No.
Outlet Perch (ft)	Not measurable	_		DEN DE			
Slope (%)	0.7	<u></u>		The state of the s	K W	THE REAL PROPERTY.	
Rustline Height (in)	36	<u></u>		-	73		- C. C.
Overall Condition	Fair					30000000000000000000000000000000000000	The same
P.	RIORITIZATI	ON ANALYSIS					13.0
Upstream Habitat Length		Habitat Points	3	The second			
Habitat Quality	Fair	Habitat Quality Points	2		Total I	医	
Fish Species	Anad.	Fish Points	3	Outlet			The state of the s
Barrier Class	Gray	Barrier Points	2	是是这种意思			-
		Prioritization Total Points	10			SOLD FLORE SIN	
Notes: Outlets directly into	bay.						



Southeast Bayocean Road Culverts, Tillamook Bay Tributaries

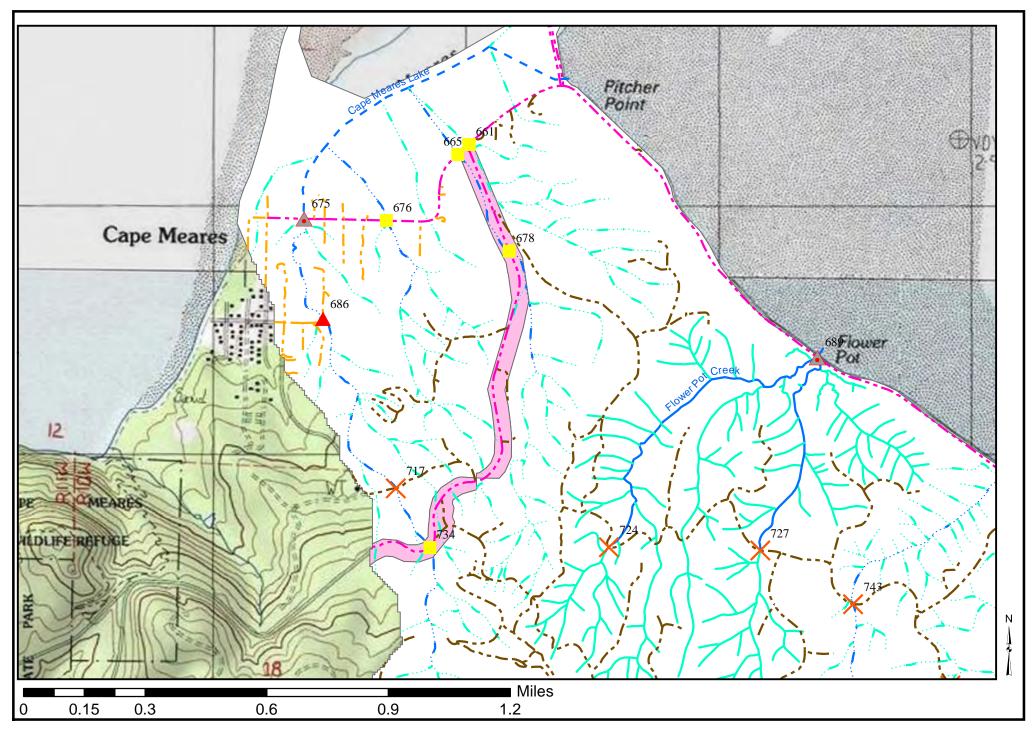


Northwest Bayocean Road Culverts, Tillamook Bay Tributaries

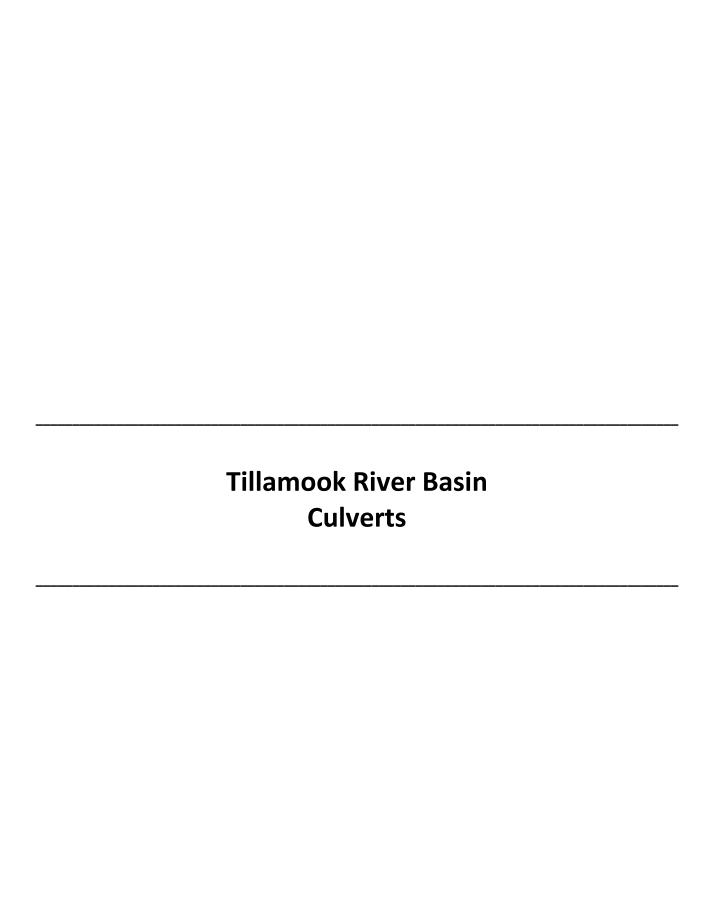
CAPE MEARES AREA CULVERTS

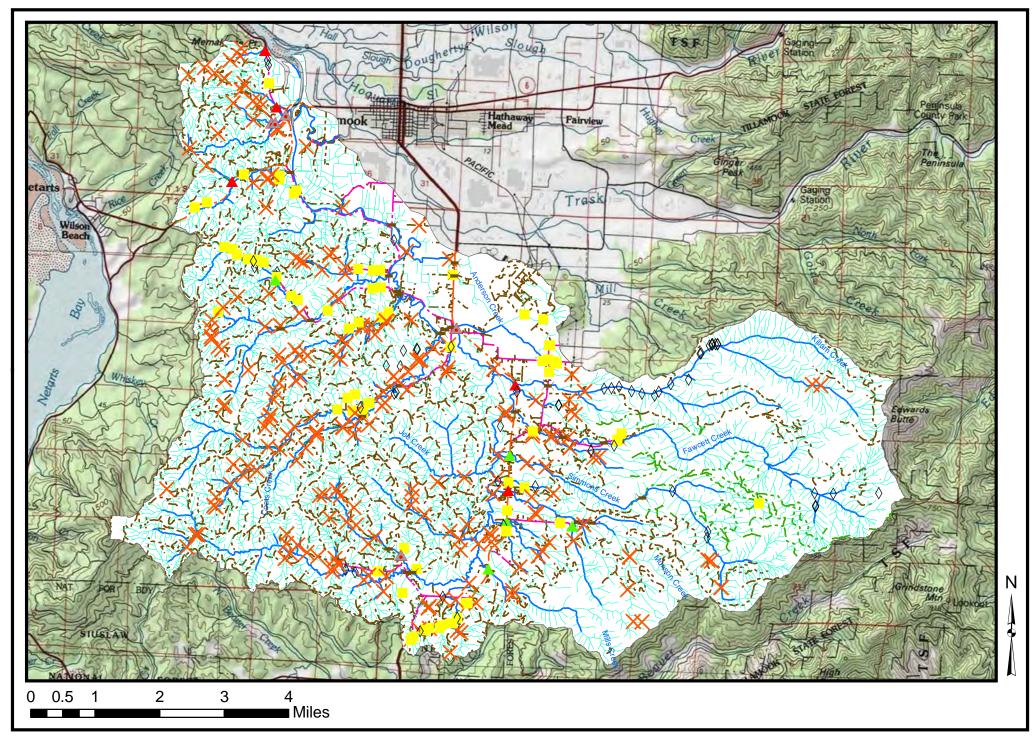
]	LOCATIO	N INFO		Culvert #	675	Priority	L
Watershed			Tilla	amook Bay				
Stream Name			Cole	man Creek		and the same of th	PRINCIPAL SA	
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 7, SE	1/4 of NW1/4	3	A COMPANY		
UTM Easting/Northin	g (Zone 10, NA	D 1983)	42526	57/5039131		7	100	
Road Name				5 th Street		36 to 50		
Road/Culvert Owner			Tillamo	ook County	100	AND A STATE OF	PERIOD N	
Adjacent Landowners	S		Tillamo	ook County	400	in the state of		
CULVER	T INFO		CHANNEL INFO		to the second	0	46.0	
Shape		Circular	Inlet Gradient (%)					
Material		Plastic	Upstream Gradient (%)					
Length (ft)		50	Bankfull Width (ft)		Inlet-upstream		tream	
Width (in)		42	Bankfull:Culvert Ratio		BLOGGE COM			
Height (in)		42			1	-		
Outlet Perch (ft)	Not n	neasurable			7/21/2017	William S		
Slope (%)		6.1	= Not Measurable		W 97.			
Rustline Height (in)		Unknown			1000		The state of the s	
Overall Condition		Fair			1/10			
	PRIOR	RITIZATIO	N ANALYSIS				W 634 PM	
Upstream Habitat Lei	ngth (mi)	1.0	Habitat Points	2		The same of	THE RESERVE AND ADDRESS OF THE PERSON OF THE	
Habitat Quality		Fair	Habitat Quality Points	2			100	
Fish Species		Resident	Fish Points	2		100		
Barrier Class		Gray	Barrier Points	2	0	utlet-d	lownstream •	
			Prioritization Total Points 8		12 300		上 不管。在台	
Notes: Outlets directly	into Cape	Meares Lak	ce.					

]	LOCATIO	N INFO		Culvert #	686	Priority	M
Watershed			Tilla	amook Bay				
Stream Name			Cole	man Creek				
Township-Range-Secti	ion-1/4		T1S, R10W, Sec. 7, NV			() ()		
UTM Easting/Northing	g (Zone 10, NAI	D 1983)	42531	2/5038726	150		L.L.	
Road Name			Paci	fic Avenue	3			
Road/Culvert Owner			Ca	ape Meares	The second			
Adjacent Landowners	ı		C.&S. Overstreet and C	. Friedman	19:40	100		
CULVER	ΓINFO		CHANNEL INFO	W. Committee				
Shape		Circular	Inlet Gradient (%)	14.1		300	**	
Material		Concrete	Upstream Gradient (%)	7.3	34.			
Length (ft)		39	Bankfull Width (ft)	6.4	In	et		
Width (in)		36	Bankfull:Culvert Ratio	0.5	Charles and Charle			
Height (in)		36			1		台灣	
Outlet Perch (ft)		2.1			1			
Slope (%)		3.1			N. S.	1	1	
Rustline Height (in)		6					A SECOND	
Overall Condition		Fair			16/3			
	PRIOR	ITIZATIC	ON ANALYSIS			NE		
Upstream Habitat Len	igth (mi)	0.7	Habitat Points	2			777	
Habitat Quality	•		Habitat Quality Points	2				
Fish Species			Fish Points	2			21	
Barrier Class		Red	Barrier Points	3	OL	utlet	Alexander of the second	
			Prioritization Total Points	9				
Notes:								



Cape Meares Area Culverts, Tillamook Bay Tributaries





Tillamook Basin Crossings

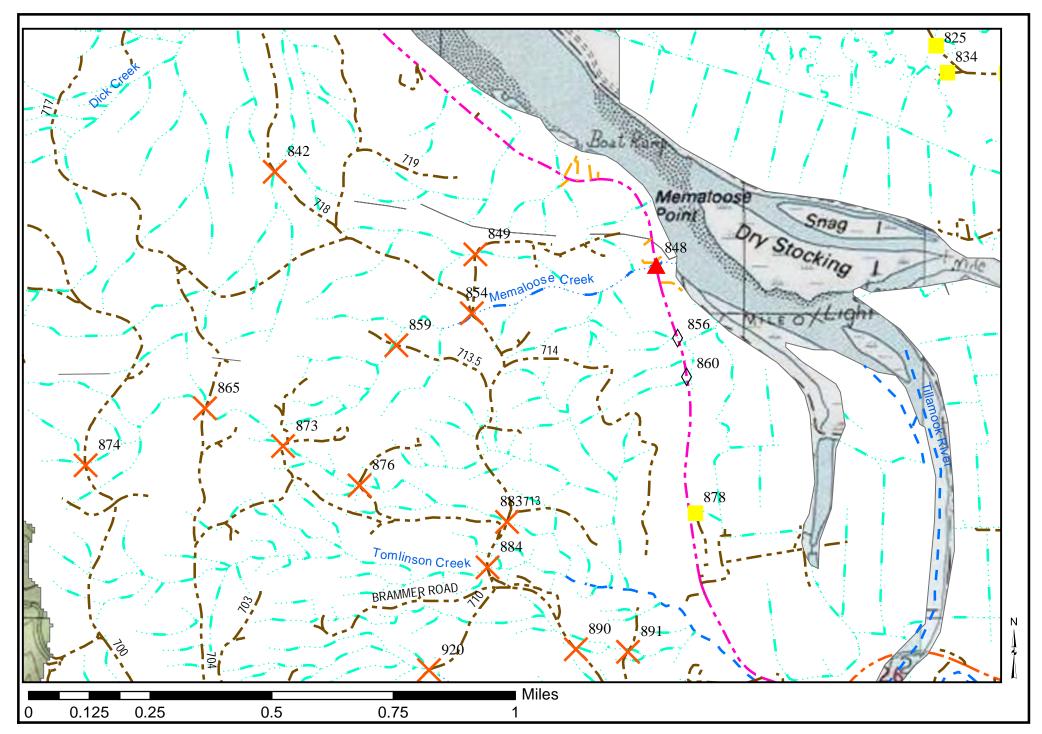
Tillamook River Basin Clusters

Cluster	Culvert Numbers	Priority	Stream	Upstream Habitat
Memaloose Creek	848	L	Memaloose Creek	0.5
	908	Н	Tomlinson/Esther Creek	
Tomlinson and Esther Creeks	893	Н	Tomlinson Creek	3.0
Tommison and Estner Creeks	931	Н	Esther Creek	3.9
	932	Н	Unnamed tributary	
Fagan Creek	985	L	Fagan Creek	0.3
Beaver Creek	1102	N/A	Beaver Creek	1.9
Hung 101 near Dort of Tillemook	6666	Н	Unnamed tributary	12.4
Hwy. 101 near Port of Tillamook	1234	Н	Killam Creek	12.4
	1330	N/A	Simmons Creek	
Munson and Simmons	1381	Н	Munson Creek	11.0
Mulison and Simmons	1404	Н	Munson Creek	11.9
	1401	N/A	Pleasant Valley Creek	
			•	•
Linnan Watarahad	1457	N/A	Mills Creek	4.7
Upper Watershed	1438	Н	Unnamed tributary	4.7

MEMALOOSE CREEK CULVERT

I	LOCATIO	N INFO		Culvert #	848	Priority	L
Watershed		Tillar	nook River				利斯
Stream Name		Memal	oose Creek	1000000		A The second	丰加
Township-Range-Section-1/4		T1S, R10W, Sec. 22, N					
UTM Easting/Northing (Zone 10, NAI	1983)	43062				M.T.	
Road Name		j.	ocean Road			1	No.
Road/Culvert Owner			ook County				
Adjacent Landowners		H. Hinck, T. Holgate, ar	nd R. Biggs	A STATE OF THE STA	35	100	4
CULVERT INFO		CHANNEL INFO					
Shape Pipe arch	n and Box	Inlet Gradient (%)	1.8	Inlet	A		100
Material Corrugated metal &	Concrete	Upstream Gradient (%)	5.4	HIGE			
Length (ft)	48	Bankfull Width (ft)	6.3		I PROPERTY OF	A Property of the Parket	
Width (in)	66	Culvert:Bankfull Ratio	0.9				
Height (in)	42			O MINN TARABLE		AN IN COLUMN I THE	98750
Outlet Perch (ft)	0.3			3013 400		Value 1997	- n
Slope (%)	1.2				1000	X A	
Rustline Height (in)	18			A PAGE W	My //		
Overall Condition	Poor				* '	17/1	
PRIOR	ITIZATIO	ON ANALYSIS		不管的	-		Z
Upstream Habitat Length (mi)	0.5	Habitat Points	1				A SALE
Habitat Quality	Fair	Habitat Quality Points	2				The second
Fish Species	Anad.	Fish Points	3			N. M. A.	
Barrier Class	Red	Barrier Points	3			Outle	1
		Prioritization Total Points	9			Outle	

Notes: Mixed construction crossing: inlet and outlet were corrugated metal pipe arches and central portion of crossing was a concrete box. Dimensions above are for the pipe arch portions.



Memaloose Creek Culverts, Tillamook River Basin

TOMLINSON AND ESTHER CREEKS CULVERTS

]	LOCATIO	N INFO		Culvert #	908	Priority	Н
Watershed			Tillar	nook River				
Stream Name			Tomlinson/Es	sther Creek				N.
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 26, NE	1/4 of SW1/4				$\sqrt{2}$
UTM Easting/Northin	lg (Zone 10, NAI) 1983)	43119	431197/5033781			13	
Road Name			Hi	Highway 131				
Road/Culvert Owner			Oregon Department of Transportation			THE STATE OF THE S		
Adjacent Landowners	5		P. &		SAME TO SERVICE STATE OF THE S			
CULVER	T INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	1.5	Inlet			
Material	Corruga	ated metal	Upstream Gradient (%)	1.5	iiiiet			
Length (ft)		155	Bankfull Width (ft)	17.1				
Width (in)		66	Culvert:Bankfull Ratio	0.3				
Height (in)		78	Seam separation and culvert barre			· · · · · · · · · · · · · · · · · · ·		
Outlet Perch (ft)		None	deformation noted. Also, there wa		4			the of
Slope (%)		1.0	and system of tidegates that was i					
Rustline Height (in)	Entir	ely rusted	surveyed as part of this study app	roximately				43
Overall Condition		Poor	100 m upstream of this culvert.				Ma) X No Well Hall	SYL
	PRIOR	ITIZATIO	ON ANALYSIS		10 2 200			
Upstream Habitat Le	ngth (mi)	3.9	Habitat Points	4				
Habitat Quality	·	Good	Habitat Quality Points	3				
Fish Species		Anad.	Fish Points	3				-37
Barrier Class		Gray	Barrier Points	2	Outlet			-
			Prioritization Total Points	12	Outlet		-	

Notes: Classification is based on BFW:Width Ratio. Because culvert is tidally influenced and completely backwatered under most conditions, it seems likely that passage is rarely inhibited by this crossing. However, the culvert is undersized and almost certainly impairs tidal processes.

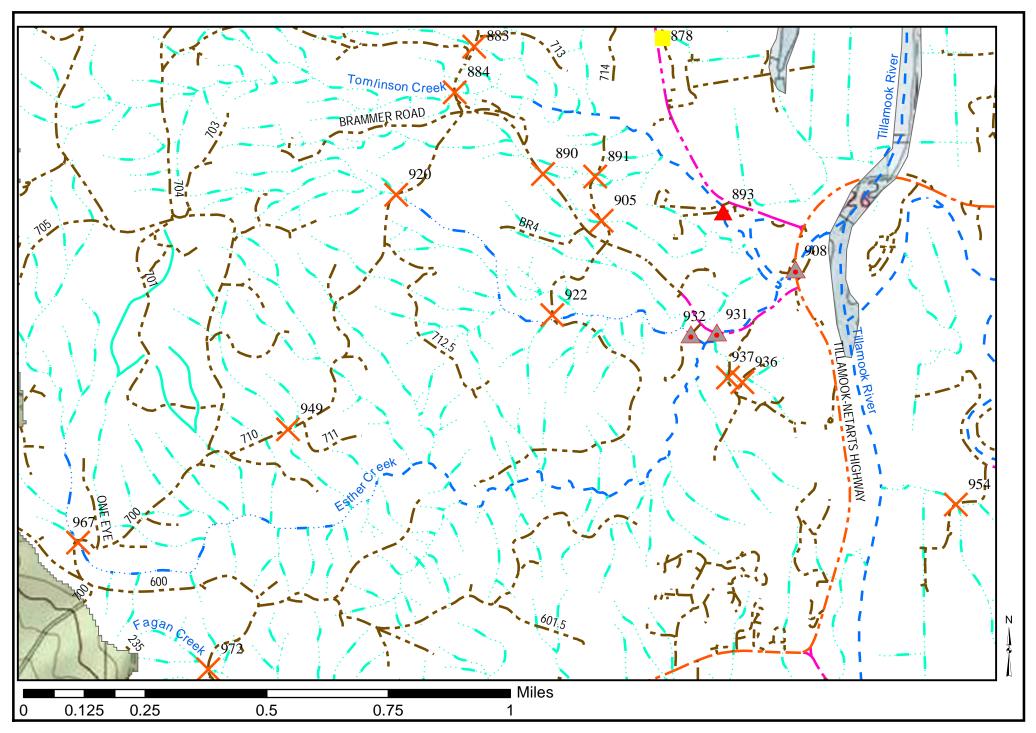
]	LOCATIO	N INFO		Culvert #	893	Priority	Н
Watershed			Tillar	nook River	X	100		
Stream Name			Tomli	nson Creek			No.	
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 26, NW	1/4 of SW1/4				
UTM Easting/Northin	g (Zone 10, NAI	1983)	430943/5033987			1	and a	A STATE OF
Road Name			Private Drive off Bayo	ocean Road		ALL ALL	ALL DESIGNATION OF THE PARTY OF	WAY!
Road/Culvert Owner			D.	& D. Mast	E		T MANA	NO C
Adjacent Landowners	S		D. & D. Mast, and M.	& L. Blair		1	med Billion Sales	1
CULVER	T INFO		CHANNEL INFO			No. of Street, or other Persons and the Person	San Park	1
Shape		Circular	Inlet Gradient (%)	=	Inlet	The state of		
Material	Corruga	ated metal	Upstream Gradient (%)	4.6		5/	The same	
Length (ft)		19	Bankfull Width (ft)	8.9				
Width (in)		60	Culvert:Bankfull Ratio	0.6				
Height (in)		48*	*Logs placed on top of pipe on inlet and					2000
Outlet Perch (ft)		0.4	outlet. Top of pipe bent down					
Slope (%)		-1.2	accommodate logs (hence the					Sept.
Rustline Height (in)		30	vertical dimension). Invert wa		A THE RESERVE		45	
Overall Condition		Critical	corroded and in critical condit	ion.	ANN			2/4
	PRIOR	ITIZATIO	N ANALYSIS					The party
Upstream Habitat Lei	ngth (mi)	0.5	Habitat Points	1			The same	
Habitat Quality		Good	Habitat Quality Points	3		5/4	-	
Fish Species		Anad.	Fish Points	3	2 4	A STATE	2	
Barrier Class		Red	Barrier Points	3	Outlet		W.	
			Prioritization Total Points	10		12		e ca

Notes: Based on review of RBA data, it appears that a second pipe also occurs along this stream that we were unable to survey. That report indicates that that pipe was perched >1.0 ft and impassable for juvenile fish.

]	LOCATIO	N INFO		Culvert #	931	Priority	Н
Watershed			Tillar	nook River				- A74
Stream Name			E	sther Creek		1		1/
Township-Range-Sect	tion-1/4		T1S, R10W, Sec. 26, SW	1/4 of SW1/4				M
UTM Easting/Northin	lg (Zone 10, NAI) 1983)		928/503563		Est.		
Road Name			Toml	The second			1	
Road/Culvert Owner			Tillamo		1			
Adjacent Landowners	S						The state of the s	
CULVER	T INFO		CHANNEL INFO	1. 1. 41				
Shape		Circular	Inlet Gradient (%)*	1.0				
Material	Corruga	ated metal	Upstream Gradient (%)*	1.0	Indiat			
Length (ft)		25	Bankfull Width (ft)*	6.0	Inlet -upstream			
Width (in)		60	Culvert:Bankfull Ratio*	0.8				
Height (in)		60	*Unable to access area upstrea				A months	
Outlet Perch (ft)		0.1	culvert for these measurement				1797	56.7
Slope (%)		1.2	Measurements used to report to				Jan Fan	1
Rustline Height (in)		48	were visual estimates.	inese fields			20 00	
Overall Condition		Poor	Wore visual estimates.					
	PRIOR	ITIZATIO	ON ANALYSIS			*	34 10/45	
Upstream Habitat Lei	am Habitat Length (mi) 2.9		Habitat Points	4	13	1616	A A	
Habitat Quality	lity Good		Habitat Quality Points	3		A SH	不是一个人	1
Fish Species	Anad.		Fish Points	3				
Barrier Class	Gray		Barrier Points	2	SCORE AND ADDRESS OF THE PROPERTY OF THE PROPE			
			Prioritization Total Points	12	AND ASSESSED OF THE PARTY OF TH	etol:	7	
Notes. A substantial no	ortion of this	s stream flo	ows through pastures and has hi	ahly impaire	d rinarian hab	vitate Ne	rvertheless t	his

Notes: A substantial portion of this stream flows through pastures and has highly impaired riparian habitats. Nervertheless, this system is well-used by juvenile salmonids.

]	LOCATIO	N INFO		Culvert #	932	Priority	Н
Watershed			Tillar	nook River			WALLEY EN	
Stream Name			Unnamed tributary of Es	sther Creek	N. C.			S 74 P
Township-Range-Sect	ion-1/4		T1S, R10W, Sec. 26, NW ¹ / ₄ of SW ¹ / ₄					
UTM Easting/Northin	g (Zone 10, NAI	1983)		15/5033558	MACH ST			
Road Name			Private Drive off Toml	inson Road		*		A. C.
Road/Culvert Owner			Tillamo	ook County				
Adjacent Landowners	s			R. Peterson		1000		
CULVER'	T INFO		CHANNEL INFO)	No. 2			Also,
Shape		Circular	Inlet Gradient (%)	8.8	7.6			
Material		Concrete	Upstream Gradient (%)	4.6	Inlet		3	
Length (ft)		34	Bankfull Width (ft)	4.5	The Ave Table			
Width (in)		30	Culvert:Bankfull Ratio	0.6				
Height (in)		30						
Outlet Perch (ft)		None			the terms of		少型品质	
Slope (%)		-0.4						V 5
Rustline Height (in)		12			1			
Overall Condition		Fair			新沙海 一类	AL A		
	PRIOR	ITIZATIO	ON ANALYSIS					$\sum_{i} z_i$
Upstream Habitat Lei	ngth (mi)	0.8	Habitat Points	2			1	
Habitat Quality		Good	Habitat Quality Points	3	多江南			
Fish Species		Anad.	Fish Points	3	Mr. Wall			A.
Barrier Class		Gray	Barrier Points	2	Outle			
			Prioritization Total Points	10	3/1 + (X) (B)			The state of
Notes: A portion of this	s stream flo	ws through	pastures and has highly impair	ed riparian h	nabitats.			

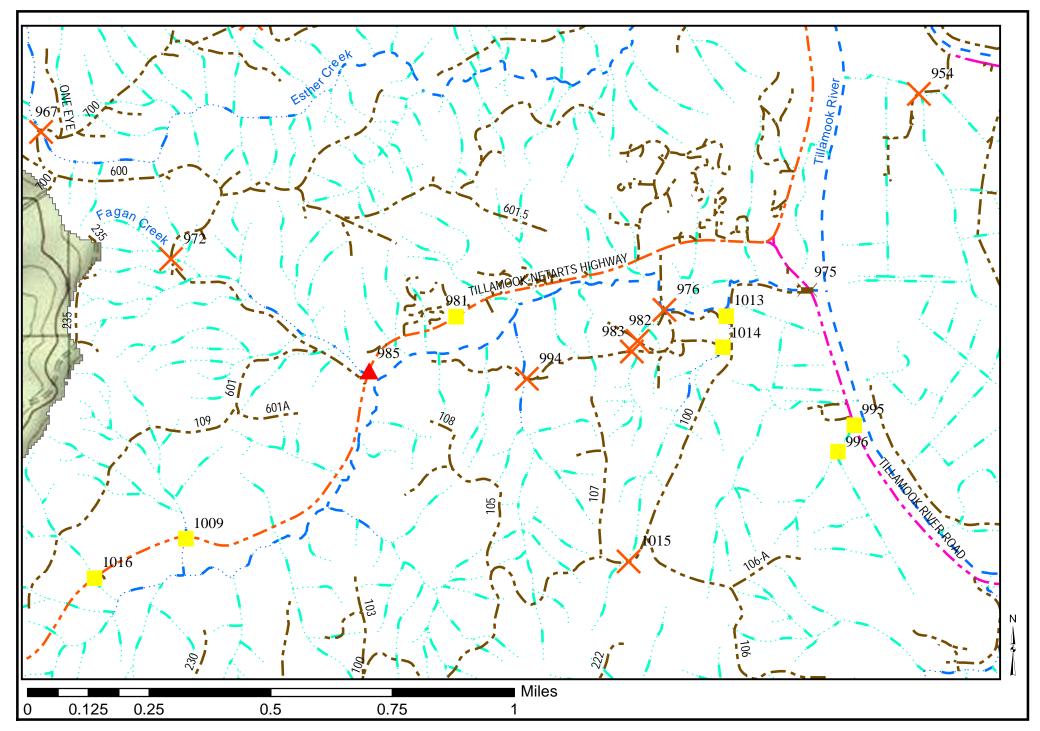


Tomlinson Creek and Esther Creek Culverts, Tillamook River Basin

FAGAN CREEK CULVERTS

		L	OCATIO	N INFO		Culvert #	985	Priority	L
Watershed				Tillar	nook River	ABL GRADING	and a		
Stream Name			Uı	nnamed tributary of Fagan Cree	k (Trib. A)	A STATE OF			
Township-Ra	nge-Sect	ion-1/4		T1S, R10W, Sec. 34, NE	21/4 of SW1/4	XXX	A AND		
UTM Easting	/Northin	g (Zone 10, NAD	1983)	42988		VI			
Road Name				Highway 131 (Netarts		4			
Road/Culvert	Owner			Oregon Department of Tra			, 對於	20	
Adjacent Lan	at Landowners			K. & M. Oleman and D. &			AA W	1	
C	CULVERT INFO			CHANNEL INFO				1	
Shape			Circular	Inlet Gradient (%)	0.5			Inlet	
Material	Concre	ete/Corrugat	ted Metal	Upstream Gradient (%)	4.5	100	6年70天	Huet	1 6
Length (ft)			104	Bankfull Width (ft)	4.7			DAST-12-13-15	3
Width (in)			48	Culvert:Bankfull Ratio	0.9				
Height (in)			48			A CALLANDER	· **		12/0
Outlet Perch	(ft)		0.3				Outle	t - downstrea	im
Slope (%)			3.9			Mary			4
Rustline Heig			48					Har	
Overall Cond	lition		Fair					Silve-	1
		PRIOR	ITIZATIO	ON ANALYSIS				(P)	- 10
Upstream Ha	bitat Ler	ngth (mi)	0.3	Habitat Points	1				
Habitat Qual	ity		Fair	Habitat Quality Points	2	100			53.3
Fish Species			Anad.	Fish Points	3				NY X
Barrier Class	}		Red	Barrier Points	3			TANK A	
				Prioritization Total Points	9				in T

Notes: Inlet is a circular metal pipe that is approximately 75% blocked by sediment. Outlet was mostly submerged and concrete. The pipes appear to connect at a manhole near the intersection of Hwy 131 and a private drive. These two pipes appear to run approximately perpendicular to one another. Length of pipe estimated. In May 2012, we observed spawning Western Brook Lamprey immediately above this culvert.

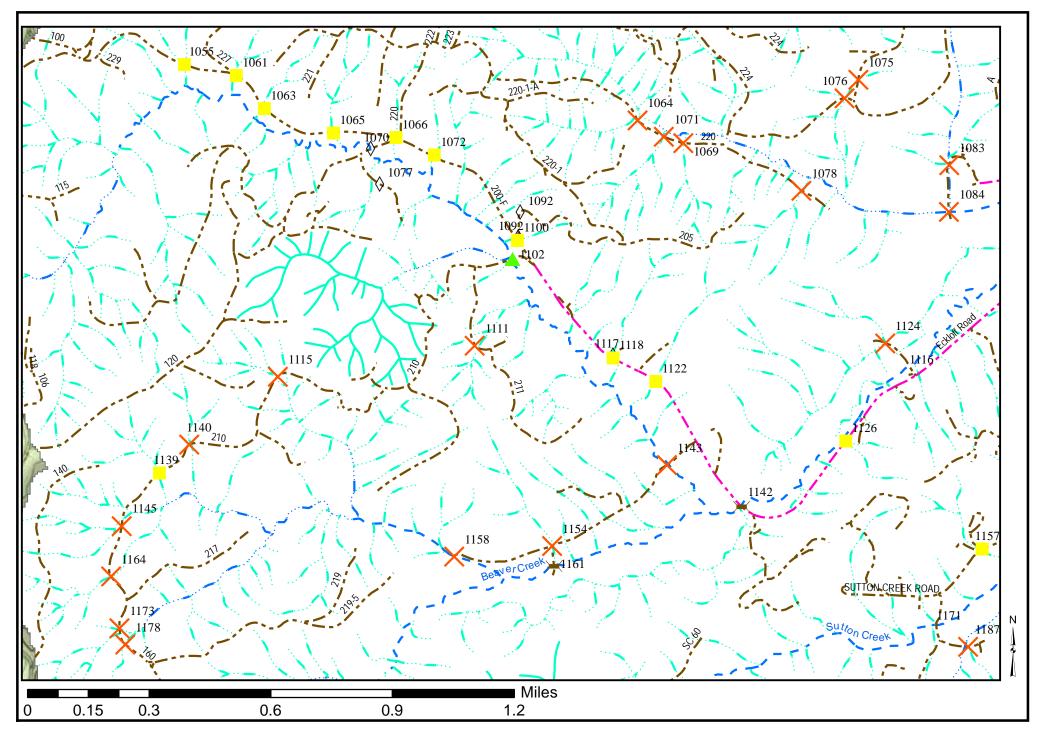


Fagan Creek Area Culverts, Tillamook River Basin

BEAVER CREEK CULVERTS

]	LOCATIO	N INFO		Culvert #	1102	Priority	NA
Watershed			Tillan	nook River		1000		1999
Stream Name		Uni	named tributary to Beaver Cree	k (Trib. C)	1			
Township-Range-Sec	tion-1/4		T2S, R10W, Sec. 11, NW!	/4 of NW1/4	Ma.	1		
UTM Easting/Northin	ng (Zone 10, NA	AD 1983)		0/5029663	No.			
Road Name			Private Drive off Ec	kloff Road	1	7		
Road/Culvert Owner			I	F. Johnston	/ 1000			
Adjacent Landowner	S		I				1 Jina	
CULVER	T INFO		CHANNEL INFO			THE THE		
Shape		Circular	Inlet Gradient (%)	9.8	Inlet		The same	
Material	Corruga	ated metal	Upstream Gradient (%)	1.0				X
Length (ft)		40	Bankfull Width (ft)	4.5				
Width (in)		90	Culvert:Bankfull Ratio	1.7				
Height (in)		90						100000000000000000000000000000000000000
Outlet Perch (ft)		None			4 100			1
Slope (%)		-1.2						
Rustline Height (in)		42			77		The state of the s	A STORY
Overall Condition		Poor				1		
	PRIOR	RITIZATIO	ON ANALYSIS		States	/		
Upstream Habitat Le	ngth (mi)	1.9	Habitat Points	4	Man			
Habitat Quality		Fair(+)	Habitat Quality Points	2				1
Fish Species		Anad.	Fish Points	3				
Barrier Class		Green	Barrier Points	1		1/		
			Prioritization Total Points	10			Outle	Cod Sec

Notes: Although, based on most factors, this culvert does not appear to be a barrier; it is included here due to its poor condition assessment which indicates it should be replaced in the near future.



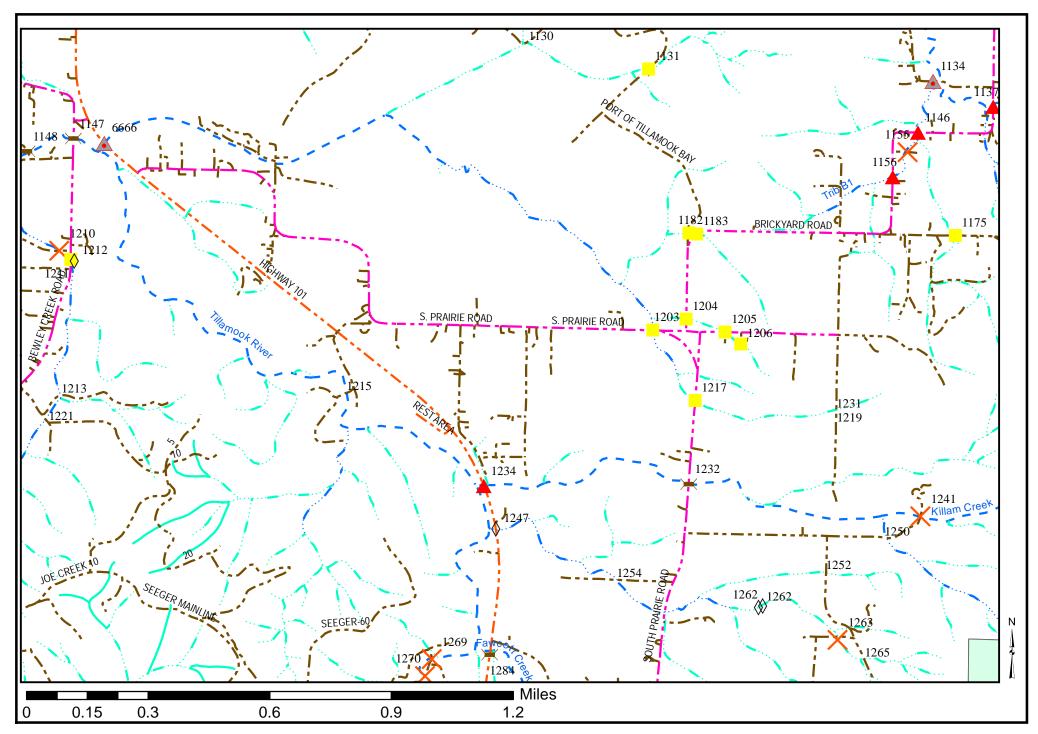
Beaver Creek Area Culverts, Tillamook River Basin

HIGHWAY 101 NEAR PORT OF TILLAMOOK

	LOCATION INFO					6666	Priority	Н
Watershed			Tillar	nook River				
Stream Name			Unnamed tributary to Tillar	ned tributary to Tillamook River			7 7 4	
Township-Range-Sect	tion-1/4		T2S, R9W, Sec. 16, NW	1/4 of SW1/4				
UTM Easting/Northin	ng (Zone 10, NAD	1983)	43558	37/5028596				
Road Name				ghway 101	A LAND	9 34		
Road/Culvert Owner			Oregon Department of Tra	nsportation	No.	A	G 77	71
Adjacent Landowner	S		Oregon Department of Tra	nsportation		11 /		
CULVER	T INFO		CHANNEL INFO)	The same			
Shape		Circular	Inlet Gradient (%)	unknown	MARKET WAR		A	
Material	Corrugat	ed metal	Upstream Gradient (%)	unknown	Inlet			1
Length (ft)		109	Bankfull Width (ft)	~15.0 *		800 /		Tall
Width (in)		56	Culvert:Bankfull Ratio	0.3				
Height (in)	56				The state of the s		200	MACL
Outlet Perch (ft)	Not	perched	*Unable to access upstream.	REW			THE WAY	
Slope (%)		3.5	based on visual estimate.	DI W				
Rustline Height (in)		30	based on visual estimate.		1/1	41) 1		
Overall Condition		Fair			78/11/14	4		
	PRIORI	TIZATIO	N ANALYSIS					The state of the s
Upstream Habitat Length (mi)		1.6	Habitat Points	4			XW XX	
Habitat Quality	Fish Species		Habitat Quality Points	1			· (W W)	TIE
Fish Species			Fish Points	3	of Carlo		The state of the s	
Barrier Class		Gray	Barrier Points	2			Outlet \	-
			Prioritization Total Points	10	The state of the s	. I.		
Notes:								

	\mathbf{L}	OCATIO	N INFO		Culvert #	1234	Priority	Н
Watershed			Tillar	nook River	No. 10 Telephone	CHINA SECURE	esta esta esta esta esta esta esta esta	23.00
Stream Name			Ki	llam Creek		and the same	Grand M	
Township-Range-Sect	tion-1/4		T2S, R9W, Sec. 16, NW	1/4 of SW1/4	TO STATE OF THE ST	101		103
UTM Easting/Northin	1g (Zone 10, NAD	1983)	43714	2/5022712		XXX 自编器	align.	700
Road Name				ghway 101		J. WILLIAM	- 111	
Road/Culvert Owner			Oregon Department of Tra		MEXING	H	V 1778	400
Adjacent Landowner	S		G. Stevens and Stimson I	Lumber Co.	Sin Charles		三\(/ / / / / / / / / / / / / / / / / / /	18
CULVER	T INFO		CHANNEL INFO					144
Shape		Box	Inlet Gradient (%)	2.4	W Islan	100		
Material		Concrete	Upstream Gradient (%)	2.8	Inlet			
Length (ft)		109	Bankfull Width (ft)	11.2	STEAL	SI COLUMN PART COSTS	N. Control Street, Married Woman,	
Width (in)		96	Culvert:Bankfull Ratio	0.7	7	K	Ma	
Height (in)		96	Three ~1ft baffles inside pipe		X	YXX		
Outlet Perch (ft)		4.4	includes a fish ladder where c			IVN	Vale -	
Slope (%)		0.4	outlets into Tillamook River		12/0		The same	
Rustline Height (in)		36	Ladder has two ~3ft sills. An				M.	
Overall Condition		Fair	-	s required to clear each sill and enter		Y		
			the culvert.		100		1	
			ON ANALYSIS	Γ			N	
Upstream Habitat Le	ngth (mi)	10.8	Habitat Points	4				
Habitat Quality		Good	Habitat Quality Points	3				
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	X	\ C	outlet	
			Prioritization Total Points	13				

Notes: Perch based on elevation difference between outlet invert and outlet pool tailwater control point below fish ladder. Fish surveys indicate that adults are able to pass this culvert, but the ladder is clearly a barrier to juvenile passage.



Highway 101 Near Port of Tillamook Bay Culverts, Tillamook River Basin

MUNSON AND SIMMONS CREEKS AREA CULVERTS

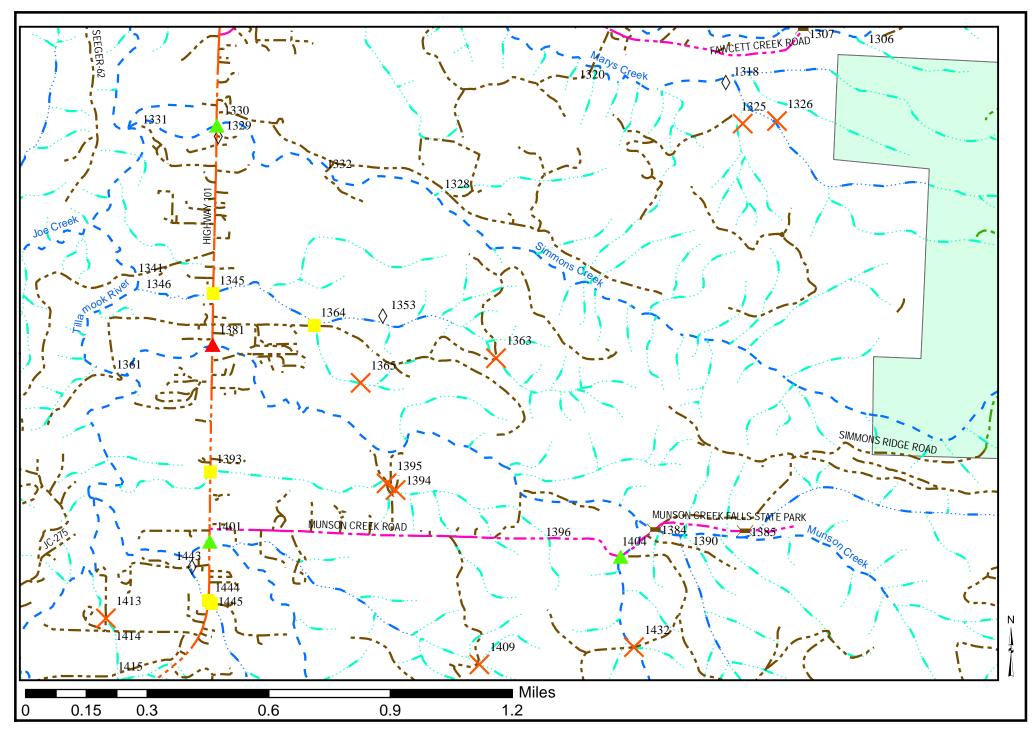
Tillamook River		LOCATION INFO						Priority	NA
Township-Range-Section-1/4	Watershed			Tillan	nook River				
UTM Easting/Northing (Zone 10, NAD 1983)	Stream Name			Simn	nons Creek		4	The second	200
Road Name Highway 101 Road/Culvert Owner Oregon Department of Transportation Adjacent Landowners P. & M. Hankins and R. & D. Maddox CULVERT INFO CHANNEL INFO Shape Open Bottom Arch Inlet Gradient (%) 8.9 Material Corrugated metal Upstream Gradient (%) 2.6 Length (ft) 113 Bankfull Width (ft) 18.6 Width (in) 240 Culvert:Bankfull Ratio 1.1 Height (in) 108 Outlet Perch (ft) 0.2 Slope (%) 0.4 0.4 Rustline Height (in) 6 Overall Condition Fair PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	Township-Range-Sec	tion-1/4		T2S, R9W, Sec. 21, SW	1/4 of SW1/4	La!		The 18	100
Road/Culvert Owner	UTM Easting/Northin	ng (Zone 10, NAD	1983)	43704	3/5025427			N. A. S.	W.E
Adjacent Landowners P. & M. Hankins and R. & D. Maddox CULVERT INFO CHANNEL INFO Shape Open Bottom Arch Inlet Gradient (%) Material Corrugated metal Upstream Gradient (%) Length (ft) 113 Bankfull Width (ft) 18.6 Width (in) 108 Outlet Perch (ft) Outlet Perch (ft) 0.2 Slope (%) Rustline Height (in) Overall Condition Fair PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Quality Good Habitat Quality Points 3	Road Name			Hi	ghway 101		1		A STATE OF THE PARTY OF THE PAR
CULVERT INFO CHANNEL INFO Shape Open Bottom Arch Inlet Gradient (%) 8.9 Material Corrugated metal Upstream Gradient (%) 2.6 Length (ft) 113 Bankfull Width (ft) 18.6 Width (in) 240 Culvert:Bankfull Ratio 1.1 Height (in) 0.2 Slope (%) 0.4 Rustline Height (in) 6 Overall Condition Fair PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	Road/Culvert Owner			Oregon Department of Trai	nsportation				CHICA
Shape Open Bottom Arch Inlet Gradient (%) 8.9 Material Corrugated metal Upstream Gradient (%) 2.6 Length (ft) 113 Bankfull Width (ft) 18.6 Width (in) 240 Culvert:Bankfull Ratio 1.1 Height (in) 108 Outlet Perch (ft) 0.2 Slope (%) 0.4 Rustline Height (in) 6 Overall Condition Fair PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	Adjacent Landowner	S		P. & M. Hankins and R. & I	D. Maddox			· Ha	May 10
Material Corrugated metal Upstream Gradient (%) 2.6 Length (ft) 113 Bankfull Width (ft) 18.6 Width (in) 240 Culvert:Bankfull Ratio 1.1 Height (in) 108 0.2 Slope (%) 0.4 0.4 Rustline Height (in) 6 0.2 Overall Condition Fair PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	CULVER	T INFO		CHANNEL INFO)	1000		41	- Similar
Length (ft)	Shape	Open Bott	om Arch	Inlet Gradient (%)	8.9				200
Length (ft)	Material	Corrugat	ted metal	Upstream Gradient (%)	2.6	Inlet			A
Height (in)	Length (ft)		113	Bankfull Width (ft)	18.6		and the same	The stands	J.
Outlet Perch (ft) 0.2 Slope (%) 0.4 Rustline Height (in) 6 Overall Condition Fair PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	Width (in)		240	Culvert:Bankfull Ratio	1.1]			
Slope (%) 0.4	Height (in)		108						
Rustline Height (in) 6 Overall Condition Fair PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	Outlet Perch (ft)		0.2						341.64
Overall Condition Fair PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	Slope (%)		0.4					4	A24
PRIORITIZATION ANALYSIS Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	Rustline Height (in)		6			100		, ,	1
Upstream Habitat Length (mi) 6.5 Habitat Points 4 Habitat Quality Good Habitat Quality Points 3	Overall Condition		Fair				1	The second	1
Habitat Quality Good Habitat Quality Points 3		PRIORI	TIZATIO	N ANALYSIS		C 1 32 - 7	1/6		27.00
	Upstream Habitat Length (mi) 6.		6.5	Habitat Points	4	1777	11/2/	-	
	Habitat Quality Good		Habitat Quality Points	3	-	and in			
Fish Species Anad. Fish Points 3	Fish Species Anad.		Fish Points	3		1 7			
Barrier Class Green Barrier Points 1	Barrier Class		Green	Barrier Points	1			Outle	4
Prioritization Total				Prioritization Total	11				
Points Points 11 Notes: Dipa harral is not straight. It hands in the middle, but it is unclear whether it was constructed this way or has become									

Notes: Pipe barrel is not straight. It bends in the middle, but it is unclear whether it was constructed this way or has become deformed over time.

	L	OCATIO	N INFO		Culvert #	1381	Priority	Н
Watershed			Tillar	nook River				1.5
Stream Name			Mu	nson Creek	S = 47600 \$38	Weight State	MENERAL AND AND	ALL D
Township-Range-Sect	ion-1/4		T2S, R9W, Sec. 28, SW	1/4 of NW1/4	NXXV	// Y Y	THE WAY SE	
UTM Easting/Northin	g (Zone 10, NAD	1983)	43700	08/5024593		Z'ar		
Road Name			Hi	ghway 101				F140
Road/Culvert Owner			Oregon Department of Tra	nsportation				100
Adjacent Landowners	}		J. & J. Sheldon and T. &	& S. Marlin				Section
CULVER	T INFO		CHANNEL INFO)	10	1	The state of	
Shape		Box	Inlet Gradient (%)	1.4	. Inlet	-		
Material		Concrete	Upstream Gradient (%)	2.4	***	ALC: N	-	1
Length (ft)		69	Bankfull Width (ft)	14.1		456		
Width (in)		144	Culvert:Bankfull Ratio	0.9				
Height (in)		72			rex market of	46		and w
Outlet Perch (ft)		1.0						1
Slope (%)		0.1			462			S
Rustline Height (in)		21						
Overall Condition		Fair					Fleir S	
	PRIORITIZATIO				- 2			44
Upstream Habitat Lei	ngth (mi)	4.3	Habitat Points	4	San Li	All the second	A STATE OF THE STA	
Habitat Quality		Good	Habitat Quality Points	3		100	7	
Fish Species		Anad.	Fish Points	3	A SEC	12	(2)	
Barrier Class		Red	Barrier Points	3	Outlet -	17		A
			Prioritization Total Points	13		1. 72		1XI
Notes: Rating based on	perch and 1	aminar flo	ws across pipe invert (no natur	al substrate	on culvert inv	ert).		

	L	OCATIO	N INFO		Culvert #	1404	Priority	Н
Watershed			Tillar	nook River	247			
Stream Name			Mu	nson Creek			No.	- 10
Township-Range-Sect	tion-1/4		T2S, R9W, Sec. 27, SW	11/4 of SW1/4				100
UTM Easting/Northin	g (Zone 10, NAD	1983)	43861	1/5023756	THE WAR			20
Road Name			Munson (Creek Road	100	4		6
Road/Culvert Owner			Tillamo	ook County				-1/4/3
Adjacent Landowners	S		Stimson I	Lumber Co.		1		
CULVER	T INFO		CHANNEL INFO)				4
Shape	Open bot	tom arch	Inlet Gradient (%)	19.3				1
Material		Concrete	Upstream Gradient (%)	7.8	Inlet			1
Length (ft)		61	Bankfull Width (ft)	11.4			the bad	W. C.
Width (in)		156	Culvert:Bankfull Ratio	1.2				
Height (in)		90				LANCE CO.	- DEFEND	1000000
Outlet Perch (ft)		0.2				AUG	C. Miles	
Slope (%)		4.2			Contract of the last		1	177
Rustline Height (in)		12						1
Overall Condition		Fair			A Royal	1	1 7	
-	PRIORI	TIZATIO	N ANALYSIS			4	-	4
Upstream Habitat Length (mi) 1		1.4	Habitat Points	3			A	
Habitat Quality	Good		Habitat Quality Points	3	A STATE OF			
Fish Species Anad.		Anad.	Fish Points	3				
Barrier Class	Barrier Class Green		Barrier Points	1		- United	Outle	
			Prioritization Total Points	10				
Notes: A crossing we v	vere unable	to access to	o survey was located approxim	ately ¼ mile	upstream of	this crossi	ng.	

	L	OCATIO	N INFO		Culvert #	1401	Priority	NA
Watershed			Tillan	nook River				5 /0 -
Stream Name			Pleasant Va	alley Creek	Inlet			
Township-Range-Section	on-1/4		T2S, R9W, Sec. 28, SW	1/4 of SW1/4				
UTM Easting/Northing	(Zone 10, NAD	1983)	43701	3/5023817	100000			A STATE OF THE STA
Road Name			Hi	ghway 101			Æ	9
Road/Culvert Owner			Oregon Department of Trai	nsportation		-		
Adjacent Landowners			M. Upshaw an	d P. Myers			6	
CULVERT	INFO		CHANNEL INFO				1	Carried States
Shape		Box	Inlet Gradient (%)	7.4	A GIX	The same	1	
Material		Concrete	Upstream Gradient (%)			100	A The	1
Length (ft)		80	Bankfull Width (ft)	~8.0				
Width (in)		96	Culvert:Bankfull Ratio	1.0				
Height (in)		60						10 1000
Outlet Perch (ft)	0.3		No upstream access. Upstream	n gradient	Ou	Outlet	1	
Slope (%)		0.5	and bankfull width not measu	-				X
Rustline Height (in)		21	and bankrun width not meast	naoic.				
Overall Condition		Fair			T^{I}	A VA	N. See Marie	
•	PRIORI	TIZATIO	N ANALYSIS		1	4 /2		7
Upstream Habitat Leng	Habitat Length (mi) 1.1		Habitat Points	3		1	- N	
Habitat Quality	Good Anad. Green		Habitat Quality Points	3				
Fish Species			Fish Points	3			AT I	
Barrier Class			Barrier Points	1		1		17
			Prioritization Total Points	10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N A		1.
Notes: A crossing we we	ere unable	to access t	o survey was located approxin	nately ¼ mil	e upstream of	this cross	sing.	

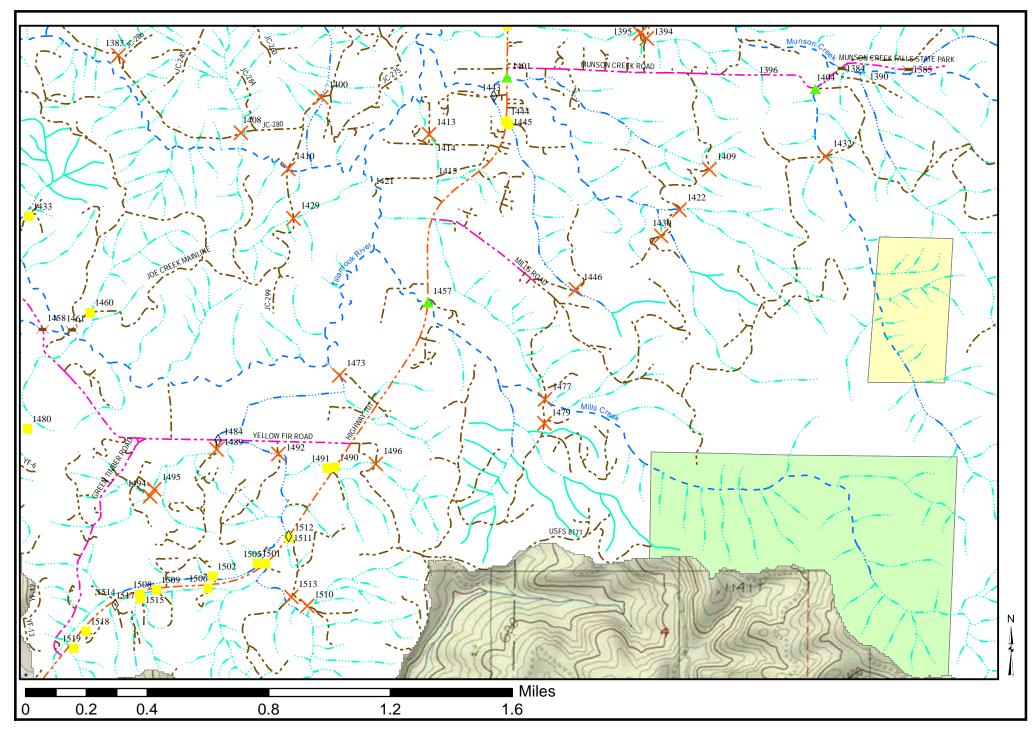


Munson Creek and Simmons Creek Area Culverts, Tillamook River Basin

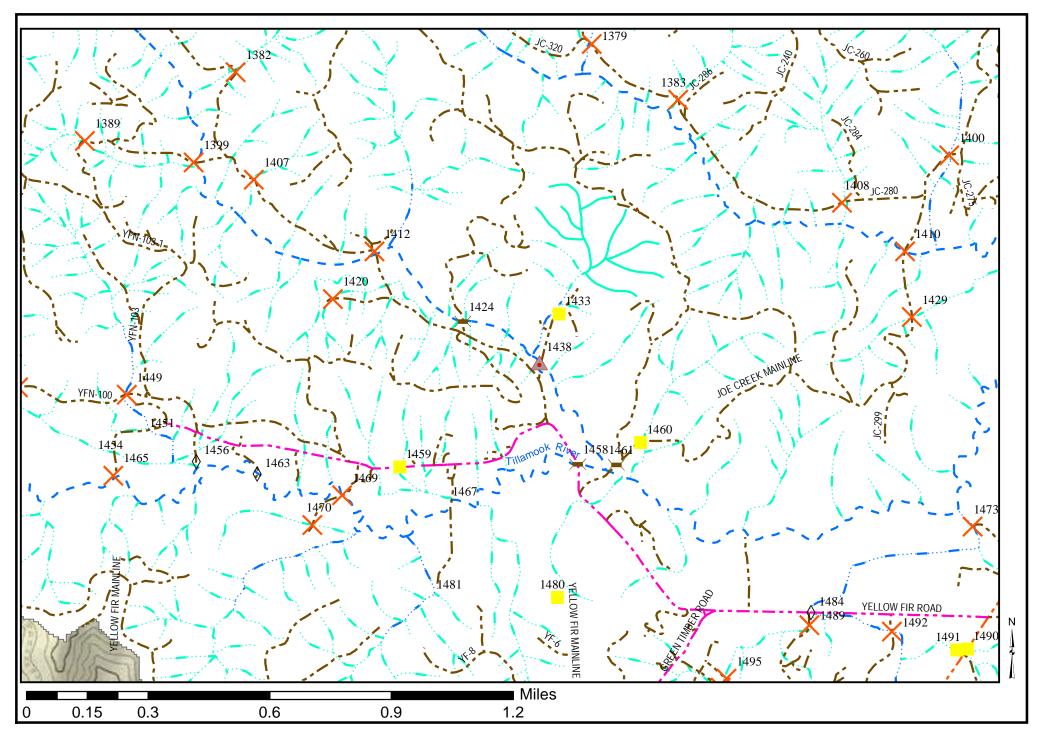
UPPER TILLAMOOK RIVER WATERSHED CULVERTS

	L	OCATIO	N INFO		Culvert #	1457	Priority	NA
Watershed			Tillan	nook River	er			NS9 (FE)
Stream Name			N	Aills Creek				
Township-Range-Sect	tion-1/4		T2S, R9W, Sec. 28, SW	1/4 of SW1/4				
UTM Easting/Northin	g (Zone 10, NAD	1983)	43658	1/5022611				洲。
Road Name			Hi	ghway 101				
Road/Culvert Owner			Oregon Department of Trai	nsportation			AND.	
Adjacent Landowners	S		M. Upshaw an	d P. Myers		A M	THE STATE OF THE S	
CULVER	T INFO		CHANNEL INFO)	M V	#	N X	
Shape		Box	Inlet Gradient (%)	8.2	1	#		
Material	(Concrete	Upstream Gradient (%)	0.8	Inlet		1 King	2
Length (ft)		134	Bankfull Width (ft)	9.1		\		
Width (in)		120	Culvert:Bankfull Ratio	1.1				
Height (in)		48			79.20	C 01 1 1 1 1 1 1 1	- 11 E	
Outlet Perch (ft)		None			1			
Slope (%)		0.2						
Rustline Height (in)		12			The same	KIL	1/1/4	
Overall Condition		Fair				X	A LA	- /
	PRIORI	TIZATIO	N ANALYSIS			MANA		
Upstream Habitat Lei	ngth (mi)	2.3	Habitat Points	4		REM		
Habitat Quality		Good	Habitat Quality Points	3	TO INTE			
Fish Species		Anad.	Fish Points	3		A A ST	是接近东	
Barrier Class		Green	Barrier Points	1	THE WAY		Outle	
			Prioritization Total Points	11			12	
Notes:								

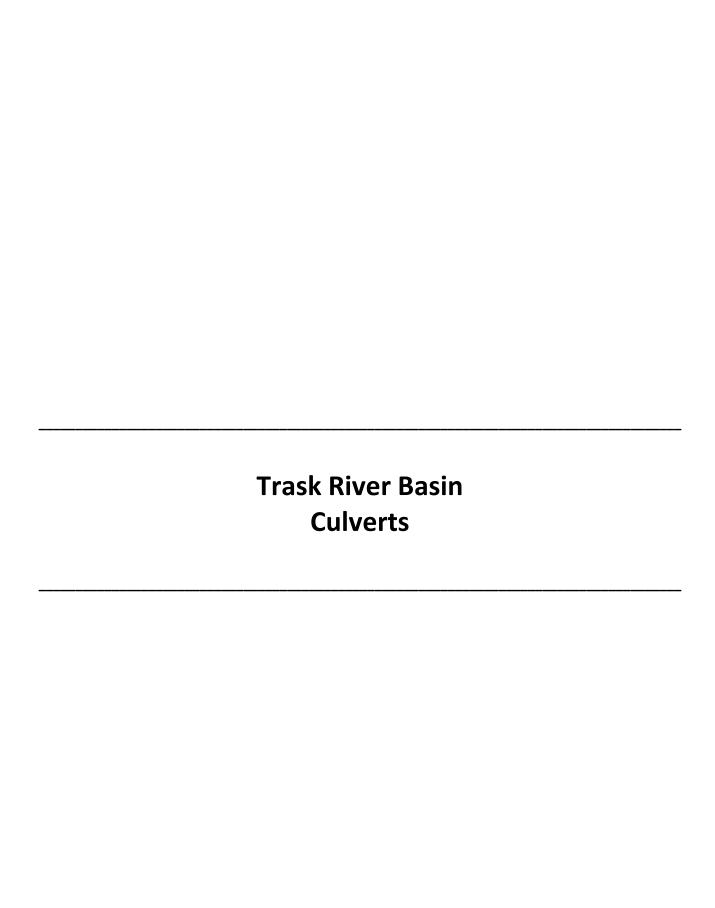
LOCATION INFO C					Culvert #	1438	Priority	Н
Watershed			Tillar	nook River	-			
Stream Name		Unnan	med tributary of Tillamook River (Trib. E)		A Company	Y	W.	1
Township-Range-Sect	tion-1/4		T2S, R9W, Sec. 31, SE	1/4 of NW1/4	and for		RAN	1) 1
UTM Easting/Northin	lg (Zone 10, NA	D 1983)	43439	05/5022847	A A	1		
Road Name			Private Drive off Yello	w Fir Road			MIX	TY
Road/Culvert Owner			Tillamo	ook County				
Adjacent Landowner	S			M. Walker		1	-1	
CULVER	T INFO		CHANNEL INFO)	V	1		12
Shape		Circular	Inlet Gradient (%)	-3.2	Inlat	1 1		
Material	Corrug	ated metal	Upstream Gradient (%)	1.8		4		
Length (ft)		17	Bankfull Width (ft)	8.9				4
Width (in)		60	Culvert:Bankfull Ratio	0.6				
Height (in)		60				- TK		2-11 10 12
Outlet Perch (ft)		None					~_/ ~ _/	4
Slope (%)		1.6					17/16	
Rustline Height (in)		48						
Overall Condition		Critical						1
	PRIOR	RITIZATIO	N ANALYSIS			TA LA		
Upstream Habitat Length (mi) 2.4		Habitat Points	4		240	V/V/V		
Habitat Quality	Good		Habitat Quality Points	3	A STATE			
Fish Species			Fish Points	3				TV V
Barrier Class	Gray		Barrier Points	2			Outle	718
			Prioritization Total Points	12			KA-LA	XX
Notes: Invert and sides	very corro	ded. Numer	rous holes in pipe noted.					

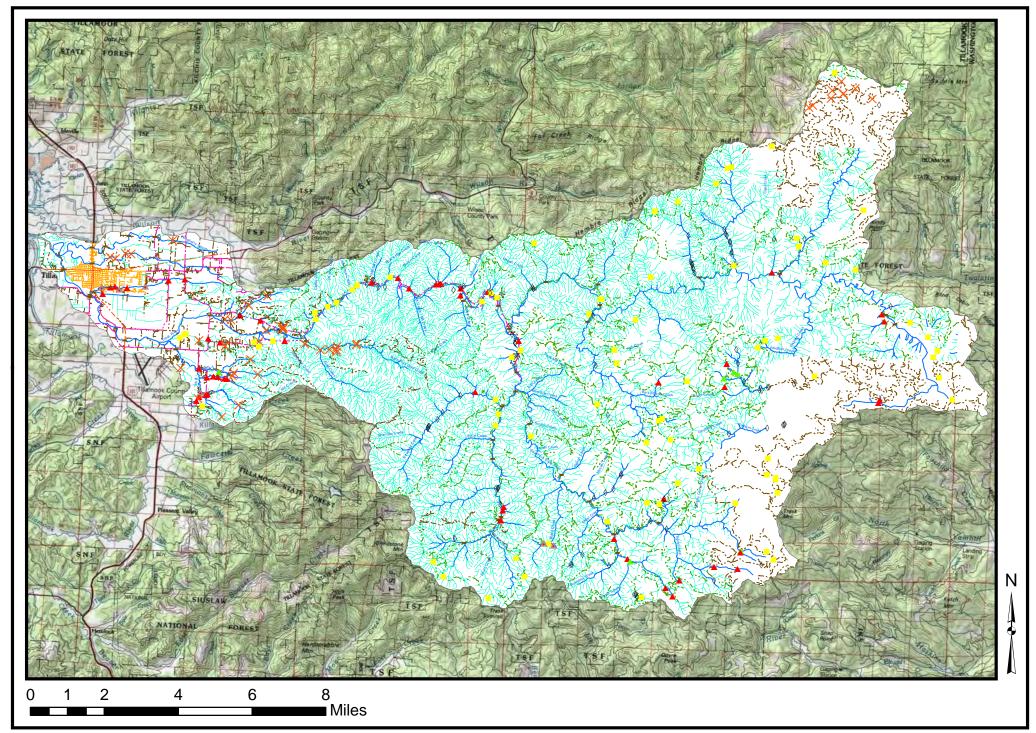


Upper Tillamook River Watershed Culverts, Tillamook River Basin



Upper Yellow Fir Road Area Culverts, Tillamook River Basin





Trask Basin Crossings

Trask River Basin Clusters

Cluster	Culvert Numbers	Priority	Stream	Upstream Habitat
	955	M	Unnamed tributary	_
	952	M	Holden Creek	
	942	Н	Holden Creek	
	945	Н	Holden Creek	
Holden Creek	946	M	Holden Creek	4.5
	948	Н	Holden Creek	
	947	M	Holden Creek	
	930	M	Holden Creek	
	929	L	Holden Creek	
	1094	Н	Unnamed tributary A	
	1095	N/A	Unnamed tributary A	
	1106	Н	Mill Creek	
	1107	H	Mill Creek	
	1105	H	Mill Creek	
	1128	Н	Mill Creek	
	1127	Н	Mill Creek	
Mill Creek	1134	Н	Unnamed tributary B	9.7
	1137	H	Unnamed tributary B	
	1136	H	Unnamed tributary B	
	1146	L	Unnamed tributary B1	
	1156	L	Unnamed tributary B1	
	1130		Cimanica trioutary B1	
	1027	L	Unnamed tributary	
Chance Road Area	1039	L	Unnamed tributary	0.7
	1021	L	Hanenkrat Creek	
	T			
Lower Trask River Road Area	987	Н	Green Creek	2.0
Zower Husk River Road Theu	999	L	Unnamed tributary	2.0
	918	M	Hatchery Creek	
Peninsula Area	889	L	Burton Creek	1.1
	925	L	Unnamed tributary	
		<u> </u>		- I
	907	L	Unnamed tributary	
	903	L	Unnamed tributary	
	902	H	Samson Creek	
Samson and Johnson creeks Area	915	Н	Johnson Creek	3.5
	944	L	Unnamed tributary	
	927	L	Unnamed tributary	
	141	ப	Ciliumea tributary	
Lower South Fork Trask R. Area	1010	L	Unnamed tributary	0.1
Lower South For Hask N. Aica	1010	ப	_ Children tributally	1 0.1

Edwards Creek Area	1120	Н	Unnamed tributary	0.8
	5001	L	Unnamed tributary	
Upper S.F. Trask River Area	1378	L	Unnamed tributary	1.1
	1402	Н	Unnamed tributary	
	1	1		
Bales Creek Area	1448	M	Bales Creek	1.1
Buies creek riicu	1453	L	S.F. Bales Creek	
	1.421	L	I I are a good to ilay tage.	
	1431		Unnamed tributary	2.2
Boundary Creek and HQ Camp	1472	L	Unnamed tributary	2.2
	1476	N/A	Headquarters Camp Creek	
	1516	L	Headquarters Camp Creek	
Upper HQ Camp Creek Area	1520	L	Headquarters Camp Creek	0.8
opporting cump creek riteu	1499	L	S.F. Rock Creek	0.0
	1477	L	S.I. ROCK CICCK	
	1483	L	Rock Creek	
	1487	L	Rock Creek	
E.F. Trask and Rock Creek Area	1447	N/A	E.F.S.F. Trask River	2.3
	1455	Н	Unnamed tributary	
	I	I.		
Pothole Creek	1342	Н	Pothole Creek	0.4
	T	ı		
Bark Shanty Creek Area	1099	Н	Unnamed tributary	0.6
	1050	37/4	TT 1.11	
	1058	N/A	Unnamed tributary	
~ . ~	1060	N/A	July Creek	
Cruiser Creek Area	1059	L	July Creek	2.3
	1068	N/A	Whirlwind Creek	
	1109	L	Unnamed tributary	
Upper N.F. Trask Area	864	M	Unnamed tributary	0.6
Opper N.F. Hask Area	004	IVI	Omanieu moutary	0.0
	962	L	Unnamed tributary	
Upper M.F.N.F. Trask Area	965	L	Unnamed tributary	0.9
* *				
	703			
Flora Mainline Road Area	1113	L	M.F.N.F. Trask River	1.1

HOLDEN CREEK CULVERTS

]	LOCATIO		Culvert #	955	Priority	M	
Watershed			7	Trask River				1 m
Stream Name			Unnamed tributary of Ho		1			
Township-Range-Sect	ion-1/4		T1S, R9W, Sec. 31, NW	POTA			The second	
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43449	6/5032993	S Deve of			
Road Name			Private farm road off Mil	ler Avenue	A	100	(2) The state of t	
Road/Culvert Owner			C	. & P. Tohl				
Adjacent Landowners	3		School Dist. #9 and C	. & P. Tohl	194326音		- And	We a
CULVER	T INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	-3.4	THE PARTY			TW.
Material	Corruga	ated metal	Upstream Gradient (%)	1.4	1986年代		Inle	et
Length (ft)		30	Bankfull Width (ft)	15.0	STATE STATE OF THE	10		200
Width (in)		36	Bankfull:Culvert Ratio	0.4*				
Height (in)		36			HOME PER STATE OF			700
Outlet Perch (ft)		None					The state	
Slope (%)		-1.6	Both pipes were identical.					AND THE REAL PROPERTY.
Rustline Height (in)	Entir	ely rusted			444			-
Overall Condition		Critical					7.7	
	PRIOR	ITIZATIO	ON ANALYSIS			COMPU.		45
Upstream Habitat Lei	ngth (mi)	1.1	Habitat Points	3				
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3	Lexiste "			
Barrier Class		Red	Barrier Points				Out	let
			Prioritization Total Points	10	10			iet
Notes: Dual pipes at the	is location	. *Based on	combined inlet widths. Water	quality in ch	annel appeare	d very po	oor.	

]	LOCATIO	N INFO		Culvert #	952	Priority	M
Watershed			7	rask River				See Miles
Stream Name			Но					
Township-Range-Sect	ion-1/4		T1S, R9W, Sec. 30, SV					
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43444	5/5035277				
Road Name				Iiller Road		9 14 4 5		1
Road/Culvert Owner				Tillamook		CALLS HEAD		
Adjacent Landowners	 	School Dist	t. #9, Hampton Lumber, City of	Tillamook		160 160	Yes	
CULVER	ΓINFO		CHANNEL INFO			1	- 19	7
Shape		Circular	Inlet Gradient (%)	6.1	Inlet	-		1
Material	Corruga	ated metal	Upstream Gradient (%)	3.6				
Length (ft)		95	Bankfull Width (ft)	8.7				- 1000
Width (in)		66	Bankfull:Culvert Ratio	1.26**				
Height (in)		66*	Both pipes were identical. Pipe inverts have 1.5 to			~ /	1. (4) 127 11	
Outlet Perch (ft)		None	2 ft sediment and so neither pipe was capable of			70		4
Slope (%)		unknown	conveying their designed volume. *W			AL ST		97
Rustline Height (in)		52	unable to measure the full vertical din either pipe inlet (probably due to sedi					
Overall Condition		Poor	11 4 7			-		
		RITIZATIO	DN ANALYSIS		()	1		100
Upstream Habitat Len	ngth (mi)	3.4	Habitat Points	4				Ve-
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3			1200	
Barrier Class	Gray		Barrier Points 2		Outlet	Charles .		
			Prioritization Total Points 10			8 -		1
			ets submerged and not accessible e pipes. **Based on combined in		ing outlet inve	ert elevat	ion. As a rest	ılt,

]	LOCATIO	N INFO			
Watershed				Trask River		
Stream Name			Но	olden Creek		
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 30, SV	V1/4 of SE1/4		
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	43483	37/5033295		
Road Name			Hampton Lumber Mill in	nternal road		
Road/Culvert Owner			Hampton I	Lumber Co.		
Adjacent Landowners	S		Hampton I	Lumber Co.		
CULVER	T INFO		CHANNEL INFO			
Shape		Circular	· /			
Material	Corruga	ated metal	al Upstream Gradient (%)			
Length (ft)		~199	Bankfull Width (ft)	12.9		
Width (in)		78	Bankfull:Culvert Ratio	1.1**		
Height (in)		78*	*			
Outlet Perch (ft)		Jnknown*	Pipe length approximate becar	usa nina		
Slope (%)	J	Jnknown*	barrel bends under roadway.	use pipe		
Rustline Height (in)	Entir	ely rusted	barrer bends under roadway.			
Overall Condition		Poor				
	PRIOR	RITIZATIO	ON ANALYSIS			
Upstream Habitat Lei	ngth (mi)	3.2	Habitat Points	4		
Habitat Quality		Poor	Habitat Quality Points	1		
Fish Species		Anad.	Fish Points	3		
Barrier Class		Red	Barrier Points	3		
			Prioritization Total Points	11		



942

Priority

Н

Culvert #



Priority

Н

Notes: Dual pipes at this location. * Heavy sedimentation in pipes, unable to find inverts on either end. **Based on combined inlet widths.

]	LOCATIO	N INFO		Culvert #	945
Watershed				Γrask River	M. W.	
Stream Name			Нс	2		
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 30, SV	- 40 - 40		
UTM Easting/Northin	1g (Zone 10, NAI	D 1983)	43501			
Road Name			Hampton Lumber Mill in	nternal road	37	
Road/Culvert Owner			Hampton I	Lumber Co.		1934
Adjacent Landowners	S		Hampton I	Lumber Co.	AL STATE	
CULVER	T INFO		CHANNEL INFO)		1
Shape		Circular	Inlet Gradient (%)	3.0	\$ N = 1	為影響
Material	Corruga	ated metal	Upstream Gradient (%)	2.0	Inlet	
Length (ft)		41	Bankfull Width (ft)	12.5		
Width (in)		60(48)	Bankfull:Culvert Ratio	0.7*		
Height (in)		60 (48)			- Manager	T AND AN
Outlet Perch (ft)	(0.6 (none)				NEW YEAR
Slope (%)		1.5(0.1)				1
Rustline Height (in)	entir	ely rusted				
Overall Condition		Critical				
		RITIZATIO	ON ANALYSIS		A. K.	187
Upstream Habitat Lei	ngth (mi)	3.1	Habitat Points	4	-	200
Habitat Quality	y F		Habitat Quality Points	1	195	4.5
Fish Species		Anad.	Fish Points	3	Outlet	-
Barrier Class		Red	Barrier Points	3	1	175
			Prioritization Total Points	11		
Notes: Dual pipes at the	nis location	. *Based on	combined inlet widths. Both ir	ılets very daı	maged.	

]	LOCATIO	N INFO		Culvert #	946	Priority	M
Watershed			7	Trask River	(10) 51			
Stream Name			Но	lden Creek				Oct Management
Township-Range-Secti	on-1/4		T1S, R9W, Sec. 30, SV	V¼ of SE¼				
UTM Easting/Northing	g (Zone 10, NAI	D 1983)	43521	8/5033198		Account to the		
Road Name				green Road				
Road/Culvert Owner				Tillamook	V. F	1		
Adjacent Landowners		Five	Rivers Assisted Living and R. &	& H. Obrist	A A	-	4	Tra !
CULVERT	T INFO		CHANNEL INFO)		0 1	\Rightarrow	100
Shape		Box	Inlet Gradient (%)	6.7			Inle	t
Material		Concrete	Upstream Gradient (%)	1.2	VALUE OF THE PARTY	12/2	The state of	No
Length (ft)		39	Bankfull Width (ft)	8.3	NAMES AND ASSESSMENT OF THE PARTY OF THE PAR	WAL	No. of Street	69 (1)
Width (in)		96	Bankfull:Culvert Ratio	1.0				
Height (in)		72			40		arr vi	411
Outlet Perch (ft)		0.3					4-1	
Slope (%)		2.4				1	A STATE OF THE PARTY OF THE PAR	5-70
Rustline Height (in)		18			-			
Overall Condition		Fair			The desired	02		
	PRIOR	ITIZATIO	ON ANALYSIS					4219
Upstream Habitat Len	gth (mi)	2.9	Habitat Points	4		The same		(IN)
Habitat Quality		Poor	Habitat Quality Points	1		and the same	A TOP A STATE OF THE PARTY OF T	1
Fish Species		Anad.	Fish Points	3			The state of	
Barrier Class		Gray	Barrier Points	2	Outlet			
			Prioritization Total Points	10		MINISTER A		The History
Notes: Continuous strea	ım substrat	te through c	eulvert.					

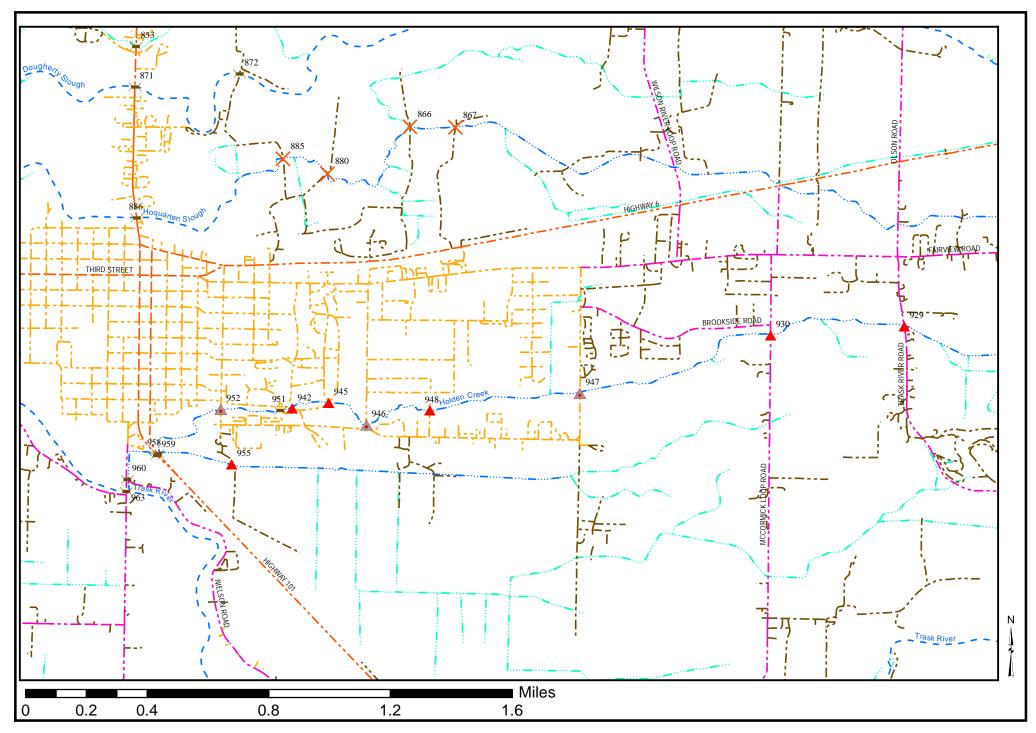
]	LOCATIO	N INFO		Culvert #	948	Priority	Н
Watershed			7	Trask River				17.02.0
Stream Name			Но					
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 29, SW					
UTM Easting/Northin	l g (Zone 10, NAI	D 1983)	43555	0/5033273		100		
Road Name			M	lurray Way			3	
Road/Culvert Owner			City of	Tillamook		T	To the second	
Adjacent Landowners	J. He	rcher, L. Be	eyer, D. & C. Brown, and D. &	P. Helmick		5.	W. Carlot	THE STREET
CULVERT INFO			CHANNEL INFO	1			1	
Shape		Circular	Inlet Gradient (%)	1.9(1.3)		T E F		
Material	Corruga	ated metal	Upstream Gradient (%)	0.9	Inlet -	pstream	the live	
Length (ft)		20	Bankfull Width (ft)	10.0	DE ASE	12.3		04
Width (in)		48(48)	Bankfull:Culvert Ratio	0.8*				
Height (in)		48(48)			14	10		100
Outlet Perch (ft)		None						
Slope (%)		5.8(4.6)						
Rustline Height (in)	entir	ely rusted				100	250	mark
Overall Condition		Poor			WELL STORY			April .
	PRIOR	RITIZATIO	ON ANALYSIS		11111	78 E.S.	The pass	
Upstream Habitat Lei	ngth (mi)	2.7	Habitat Points	4				
Habitat Quality		Poor	Habitat Quality Points	1			The state of the s	
Fish Species		Anad.	Fish Points	3	- Maria			
Barrier Class		Red	arrier Points 3		1 / Land	0	Outle	20
			Prioritization Total Points	11				
Notes: Dual pipes at the	nis location	. *Based on	combined inlet widths.					

]	LOCATIO	N INFO		Culvert #	947	Priority	M
Watershed			7	Trask River		A	26 H.M.S. (A. 1977 W.	CARROLL CO.
Stream Name			Holden Creek		Salar Andrews			Same !
Township-Range-Sect	ion-1/4		T1S, R9W, Sec. 29, SE	1/4 of SW1/4			THE PERSON NAMED IN	3
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43634	14/5033372	9 4 1	1	1	人首
Road Name				Loop Road		200-		307
Road/Culvert Owner				Tillamook				
Adjacent Landowners	W. & .	J. Krake, A	oG Church, K. Dillenburg, and	K. Haltiner	A. S. S.		2	
CULVER	ΓINFO		CHANNEL INFO					
Shape		Box	Inlet Gradient (%)	21.7				127
Material		Concrete	Upstream Gradient (%)	0.4	/ Inlet			245
Length (ft)		28	Bankfull Width (ft)	8.9				
Width (in)		78	Bankfull:Culvert Ratio	0.7				
Height (in)		54			45.0	Nue 36	112/02/	300
Outlet Perch (ft)		None				-	A PARTY	ker st
Slope (%)		0.3					The same of	F 18
Rustline Height (in)		N/A			A		A STREET	
Overall Condition		Fair					The state of	The second
	PRIOR	RITIZATIO	ON ANALYSIS					P
Upstream Habitat Ler	igth (mi)	2.2	Habitat Points	4		Ī	1	5
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3	Outlet			
Barrier Class		Gray	Barrier Points	2	1000		No. VA	
			Prioritization Total Points	10				
Notes: Continuous stre	am substra	ite through	culvert.					

]	LOCATIO	N INFO		Culvert #	930	Priority	M
Watershed			7	Trask River				
Stream Name			Но					
Township-Range-Sect	ion-1/4		T1S, R9W, Sec. 28, NW	1/4 of SW1/4				
UTM Easting/Northin	l g (Zone 10, NAI	D 1983)		3/5033678				
Road Name			McCormick				-	
Road/Culvert Owner				ook County	1		100	
9			T. & M. Jacob, and R. Montgo	mery-Boge			130	SA
CULVER'	T INFO		CHANNEL INFO				- Wat a	M
Shape		Circular	Inlet Gradient (%)	6.3		A		
Material	Corruga	ated metal	Upstream Gradient (%)	2.1	Inlet		业人	7
Length (ft)		46	Bankfull Width (ft)	11.4	REFERENCE			7
Width (in)		60	Bankfull:Culvert Ratio	0.4				
Height (in)		48*			741 JUL 10	-	4	
Outlet Perch (ft)		0.1				WELL TO	The Laboratory	
Slope (%)		1.7	*substrate covering invert					THE REAL PROPERTY.
Rustline Height (in)		23						
Overall Condition		Poor					-	3
		ITIZATIO	ON ANALYSIS				-402	12.00
Upstream Habitat Lei	ngth (mi)	1.5	Habitat Points	3				3
Habitat Quality		Poor	Habitat Quality Points	1			MASS	
Fish Species		Anad.	Fish Points	3		A Comment		1/3
Barrier Class		Red	Barrier Points	3		Outlet	6	A CONTRACTOR OF THE PARTY OF TH
			Prioritization Total Points	10				
Notes:			·					

]	LOCATION	INFO		Culvert #	929	Priority	L
Watershed			Т	rask River				
Stream Name			Но	lden Creek				
Township-Range-Section	n-1/4		T1S, R9W, Sec. 28, NW				50	
UTM Easting/Northing	(Zone 10, NAI	1983)	43806	8/5033726		11		
Road Name			Trask I	River Road				
Road/Culvert Owner			Tillamo	ok County			* XXX	
Adjacent Landowners		Fai	rview Acres Dairy and R. & J.	Penberthy		X		
CULVERT	INFO		CHANNEL INFO			No.		
Shape		Circular	Inlet Gradient (%)	10.0	Inlet	V		
Material Concrete	e (Corrug	gated metal)	Upstream Gradient (%)	0.7				
Length (ft)		34	Bankfull Width (ft)	8.3				
Width (in)		36(42)	Bankfull:Culvert Ratio	0.8*				
Height (in)		36(42)			INTERNATIONAL PROPERTY.	AC INC. I NO.	THE PROPERTY OF	
Outlet Perch (ft)		None						
Slope (%)		2.9(1.6)					133	353
Rustline Height (in)		N/A(20)						\mathbb{Z}_{2}
Overall Condition		Fair(Poor)			A 1 3		Maria	118/2
		RITIZATION	NANALYSIS		A CIMINA		VALUE OF	
Upstream Habitat Leng	th (mi)	1.0	Habitat Points	2	八 三人	NATION AND		K.
Habitat Quality	Poor		Habitat Quality Points	1	11.31			
Fish Species	Anad.		Fish Points	3				
Barrier Class		Red	Barrier Points	3	Outlet	downstre	TOTAL STREET	
			Prioritization Total Points	9	outlet-	downstre	alli /	et.

Notes: Dual pipes at this crossing. *Bankfull:Culvert Ratio based on combined width of pipes. Channel was dry during summer 2011 site visit.



Holden Creek Culverts, Trask River Basin

MILL CREEK CULVERTS

	I	LOCATIO	N INFO		Culvert #	1094	Priority	Н
Watershed			7	Trask River	No.		1 6-1	
Stream Name		Ţ	Jnnamed tributary of Mill Cree	AVE				
Township-Range-Sect	Section-1/4		T2S, R9W, Sec. 3, SW	1/4 of SW1/4	3/40	20		
UTM Easting/Northin	lg (Zone 10, NAI) 1983)	43877	1/5029891	260	OF		
Road Name			Brick	kyard Road			A STATE OF	
Road/Culvert Owner			Tillamo	ook County		A APA		
Adjacent Landowners	S		Tillamook County and W	V. Hancock		A A		
CULVER	T INFO		CHANNEL INFO)				
Shape		Circular	Inlet Gradient (%)	40.0	1			
Material	Corruga	ted metal	Upstream Gradient (%)	4.9	1	The state of the s		
Length (ft)		67	Bankfull Width (ft)	4.6	Inlet			
Width (in)		48	Bankfull:Culvert Ratio	0.9	The state of the s			
Height (in)		48			0字。	K A		
Outlet Perch (ft)		0.5			All			
Slope (%)		0.9				HUN TO	12 -0 F	
Rustline Height (in)	entir	ely rusted						
Overall Condition		Poor				1		
	PRIOR	ITIZATIO	N ANALYSIS			100		
Upstream Habitat Lei	ngth (mi)	3.5	Habitat Points	4			days	
Habitat Quality		Fair	Habitat Quality Points	2	Fred			
Fish Species		Anad.	Fish Points	ints 3		The Park	100	
Barrier Class		Red	Barrier Points	3			To Carlot	
			Prioritization Total Points	12		ıtlet	the of	
Notes: Pipe is in very	poor condit	ion. Invert	worn through along a considera	able portion	of the pipe.		- 	

]	LOCATIO	N INFO		Culvert #	1095	Priority	NA
Watershed			Т	rask River				
Stream Name		J	Innamed tributary of Mill Cree		9597			
Township-Range-Sect	tion-1/4		T2S, R9W, Sec. 10, NW	11/4 of NE1/4		A STATE OF THE PARTY OF THE PAR	- TOTAL STREET	
UTM Easting/Northin	lg (Zone 10, NA	.D 1983)		439674/5029747				
Road Name			Private Drive off Mill C	Creek Road				
Road/Culvert Owner				R. Coppini				
Adjacent					300	(5° -	The state of the s	
Landowners				R. Coppini			THE REAL PROPERTY.	
CULVER'	T INFO		CHANNEL INFO				THE REAL PROPERTY.	
Shape]	Pipe Arch	Inlet Gradient (%)	6.8	3			
Material	Corruga	ated metal	Upstream Gradient (%)	2.9	Varia			
Length (ft)		44	Bankfull Width (ft)	8.1	Inle	at		
Width (in)		126	Bankfull:Culvert Ratio	1.3		- 115 - 14 - Color		
Height (in)		84					120	
Outlet Perch (ft)		None						
Slope (%)		0.1			230	-10	250	
Rustline Height (in)		21			995		and the second	
Overall Condition		Good					- Aceta	
	PRIOR	ITIZATIO	ON ANALYSIS				200	
Upstream Habitat Lei	ngth	2.9	Habitat Points	4			Date In Man	
(mi)							-	
Habitat Quality		Fair	Habitat Quality Points	2			46	
Fish Species		Anad.	Fish Points	3				
Barrier Class		Green	Barrier Points	1	200	100	utiet	
			Prioritization Total Points	10				
Notes:								

	I	LOCATIO	ON INFO		Culvert #	1106	Priority	Н			
Watershed			7	Γrask River	La transition	TA DATE		X			
Stream Name				Mill Creek		\mathbf{v}_{i}		Ve I			
Township-Range-Sect	ion-1/4		T2S, R9W, Sec. 10, NE	1/4 of NW1/4			76 (8)				
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43914	15/5029501							
Road Name			Brick	Brickyard Road				2 -10			
Road/Culvert Owner				Tillamook County			1				
Adjacent Landowners	3		J. & B. Schriber and E. & K.	McMurphy							
CULVER	ΓINFO		CHANNEL INFO				Car 15				
Shape		Circular	Inlet Gradient (%)	11.6		1					
Material	(Concrete	Upstream Gradient (%)	7.8							
Length (ft)		56	Bankfull Width (ft)	7.1							
Width (in)		32	Bankfull:Culvert Ratio	0.4	<u> </u>						
Height (in)		32									
Outlet Perch (ft)	Uı	nknown*	*Unable to survey tailwater co	entral paint		- 10	The state of the s				
Slope (%)		1.1	due to lack of private land acce								
Rustline Height (in)		15	due to lack of private land acco	CSS.	The state of	-		1			
Overall Condition		Poor			(E31751)	100					
	PRIOR	ITIZATI	ON ANALYSIS								
Upstream Habitat Lei	ngth (mi)	2.4	Habitat Points	4			1				
Habitat Quality	Fair(+)		Habitat Quality Points	2	14						
Fish Species	Anad.		Fish Points	3							
Barrier Class		Red	Barrier Points	3	Outlet						
			Prioritization Total Points	12	outiet			Same of			
Notes: Segments are se	eparating ca	ausing cul	vert barrel to be deformed.	Notes: Segments are separating causing culvert barrel to be deformed.							

]	LOCATIO	ON INFO		Culvert #	1107	Priority	Н
Watershed			7	Trask River		Garage Contract		
Stream Name				Mill Creek		100	100	
Township-Range-Sec	tion-1/4		T2S, R9W, Sec. 10, NE	1/4 of NW1/4	V	100		
UTM Easting/Northin	1g (Zone 10, NA	D 1983)	43943	To the second	714			
Road Name			Private drive off Mill (Creek Road				
Road/Culvert Owner			P. &	R. Carlson	-			
Adjacent Landowner	S	R.	Smith, P. & R. Carlson, and R.	& G. Smith			1	
CULVER	CULVERT INFO		CHANNEL INFO		E		1. 10. (11)	
Shape		Circular	Inlet Gradient (%)	1.4				
Material	Corruga	ted metal	Upstream Gradient (%)	5.2	100			
Length (ft)		26	Bankfull Width (ft)	6.5	In	The state of		
Width (in)		48	Bankfull:Culvert Ratio	0.6		A 15 No. 11	200	
Height (in)		48						
Outlet Perch (ft)		1.2			3			
Slope (%)		0.1			27	1	4	
Rustline Height (in)		17				N. F.		
Overall Condition		Poor			3/			
	PRIOR	ITIZATI	ON ANALYSIS		100			
Upstream Habitat Le	ngth (mi)	2.2	Habitat Points	4	- 1			
Habitat Quality		Fair(+)	Habitat Quality Points	2		A BOOK		
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3			utlet	
			Prioritization Total Points	12			atiet	
Notes:								

	1	LOCATIO	ON INFO		Culvert #	11
Watershed			7	Trask River	1190	1
Stream Name				Mill Creek		TO S
Township-Range-Secti	on-1/4		T2S, R9W, Sec. 10, NE	1/4 of NW1/4		
UTM Easting/Northing	Z (Zone 10, NAI	D 1983)	43963	6/5029535	- Sh	13
Road Name			Private drive off Mill (Creek Road		
Road/Culvert Owner				R. Coppini	1	
Adjacent Landowners			G. & A. Petersen and D. &	M. Sexton		9
CULVERT	INFO		CHANNEL INFO			15
Shape		Circular	Inlet Gradient (%)	10.6		1
Material	Corrugat	ted metal	Upstream Gradient (%)	2.4	1000	
Length (ft)		27	Bankfull Width (ft)	6.4	4	
Width (in)		29(29)	Bankfull:Culvert Ratio	0.8*	Stage of the	7
Height (in)		29(29)			Inle	
Outlet Perch (ft)		0.4(0.4)	*Bankfull:Culvert Ratio based			
Slope (%)		1.0(1.1)		on		V
Rustline Height (in)		13(17)	combined width of both pipes.		1	
Overall Condition		Poor				
	PRIOR	ITIZATI	ON ANALYSIS			
Upstream Habitat Len	gth (mi)	2.1	Habitat Points	4		5
Habitat Quality	Fair(+)		Habitat Quality Points	2		300
Fish Species	Anad.		Fish Points	3		1
Barrier Class	•	Red	Barrier Points	3	A STATE OF THE STA	1
			Prioritization Total Points	12	No.	
Notes: Two pipes at thi	s location.					

Priority

Н

	I	LOCATIO	ON INFO		Culvert #	1128	Priority	Н
Watershed				Trask River		NA PARK		
Stream Name				Mill Creek	A			
Township-Range-Sect	ion-1/4		T2S, R9W, Sec. 10, SW	/1/4 of NE1/4				
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43992	29/5029449				
Road Name			Private drive off Mill (ate drive off Mill Creek Road				
Road/Culvert Owner				R. Coppini	i			
Adjacent Landowners	S		G. & A. Petersen and D. &	M. Sexton				
CULVERT	ΓINFO		CHANNEL INFO		1	The state of the s	99	
Shape		Circular	Inlet Gradient (%)	13.6	7	Haw to	7.1	
Material	Corrugat	ted metal	Upstream Gradient (%)	5.3	10			
Length (ft)		27	Bankfull Width (ft)	6.3	In	let	7	
Width (in)		37	Bankfull:Culvert Ratio	0.5		NEW ALL		
Height (in)		37			a de	A Section	0.0	
Outlet Perch (ft)		0.8			199	通边含	DECEMBER OF THE PERSON OF THE	
Slope (%)		2.4			400		20 Em	
Rustline Height (in)		23				战 別		
Overall Condition		Poor					1	
	PRIOR	ITIZATI	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	1.9	Habitat Points	4			1000	
Habitat Quality		Fair(+)	Habitat Quality Points	2			-	
Fish Species		Anad.	Fish Points	3		- A		
Barrier Class		Red	Barrier Points	3			FILE	
			Prioritization Total Points	12	O	utlet		

Notes: Two pipes at this location. The second was a 19 in dia. CMP that was located ~4 ft to one side of the main pipe and ~2ft higher elevation. Because this pipe likely only conveys flows during very high flows, it was not used for the Bankfull:Culvert ratio.

	I	OCATIO	ON INFO		Culvert #	1127	Priority	Н
Watershed			7	Trask River			10	
Stream Name				Mill Creek	and the second			
Township-Range-Section	n-1/4		T2S, R9W, Sec. 10, SW	/½ of NE¾	1	Miles		
UTM Easting/Northing	Zone 10, NAI	1983)	44001	6/5029440			and the	
Road Name			Private Drive off Mill (Creek Road				
Road/Culvert Owner			P. & C	C. Betlinski		1 De .	1000	
Adjacent Landowners	*		P. & C	C. Betlinski			1	
CULVERT I	NFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	17.6		(a)		
Material			Upstream Gradient (%)	4.7	(TUE)			
Length (ft)	22		Bankfull Width (ft)	9.9	Inlet			
Width (in)	42		Bankfull:Culvert Ratio	0.4				
Height (in)		42						
Outlet Perch (ft)		0.7						
Slope (%)		1.5						
Rustline Height (in)		21						
Overall Condition		Poor						
-	PRIOR	ITIZATI	ON ANALYSIS				W. Salar	
Upstream Habitat Lengt	gth (mi) 1.8		Habitat Points	4				
Habitat Quality		Good	Habitat Quality Points	3	100	The same of the sa	TO THE STATE OF TH	
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3		1		
			Prioritization Total Points	13	Ol	utlet		
Notes: Segments of pipe are separating, causing deformation of the culvert barrel.								

	I	LOCATIO	ON INFO		Culvert #	1134	Priority	Н
Watershed			7	Trask River		A COLUMN		
Stream Name			Unnamed tributary of Mill Cree	k (Trib. B)			工业 模	
Township-Range-Sect	tion-1/4		T2S, R9W, Sec. 10, NE	1/4 of SW1/4	F. 18		- A - 3	
UTM Easting/Northin	l g (Zone 10, NA)	D 1983)	43889	438891/5028837				
Road Name			Magnolia Drive					
Road/Culvert Owner			Pr	5	THE STATE OF THE S			
Adjacent Landowners	S		N. & M. Paladeeni and	C. Winder				
CULVER	CULVERT INFO		CHANNEL INFO			4/1	Wall.	
Shape]	Pipe arch	Inlet Gradient (%)	3.1	ALIX	The state of		
Material	Corrugat	ted metal	Upstream Gradient (%)	3.5				
Length (ft)		37	Bankfull Width (ft)	13.3	l n	200		
Width (in)		144	Bankfull:Culvert Ratio	0.9				
Height (in)		96						
Outlet Perch (ft)		0.3			Section 1			
Slope (%)		0.3				8		
Rustline Height (in)		28						
Overall Condition		Fair				第二 数		
	PRIOR	ITIZATI	ON ANALYSIS			6 24 A	1250	
Upstream Habitat Lei	ngth (mi)	3.8	Habitat Points	4	THE		1/1/2	
Habitat Quality		Fair(-)	Habitat Quality Points	2	The same	1 200	135	
Fish Species			Fish Points	3	1	SA A		
Barrier Class		Gray	Barrier Points	2				
			Prioritization Total Points	11	20 U	tiet	1	
Notes:			·					

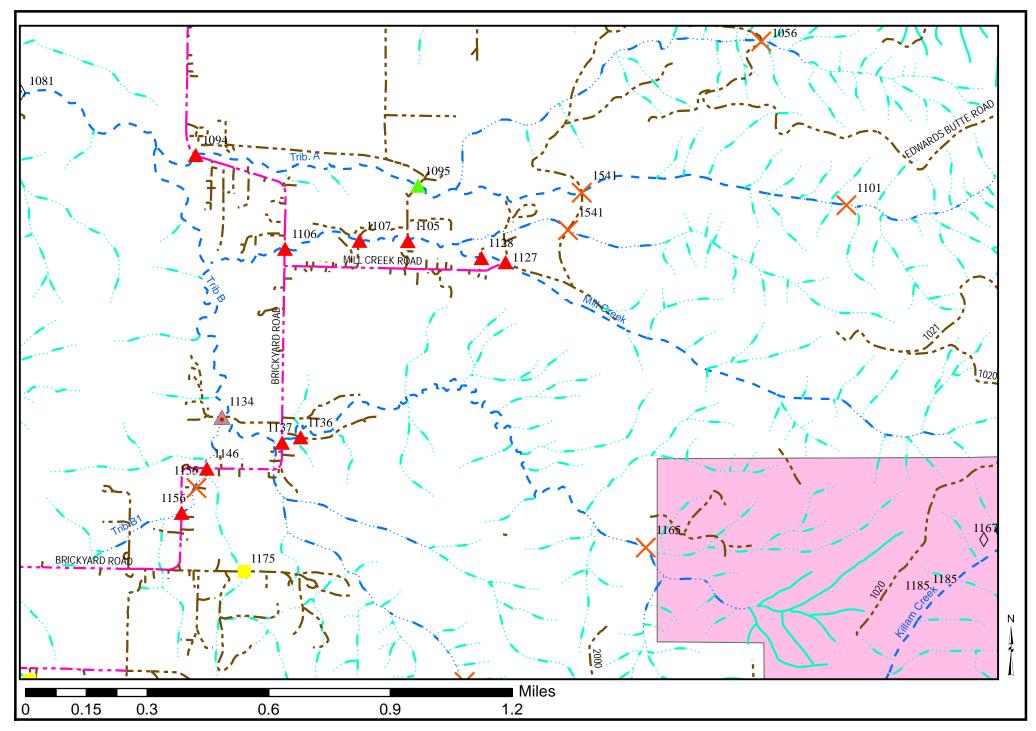
	I	LOCATIO	ON INFO		Culvert #	1137	Priority	Н
Watershed			7	Trask River				
Stream Name			Unnamed tributary of Mill Cree	ek (Trib. B)				
Township-Range-Secti	ion-1/4		T2S, R9W, Sec. 10, NE	1/4 of SW1/4		11 11		经市场
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43912	27/5028736				
Road Name			Brick	Brickyard Road				
Road/Culvert Owner		Tillamo	ook County		M SONT	LIMA	FA	
Adjacent Landowners	Adjacent Landowners M. & V. Gabel,		G. & M. Kominoth, M. Barber,	and R. & J.	1	2 - 7	LANGE	
Aujacent Landowners				Christie		14/-		
CULVERT	CULVERT INFO		CHANNEL INFO		And the second		No. of the last of	ŞΛ.
Shape		Circular	Inlet Gradient (%)	7.8(6.1)	Inlet			
Material	(Concrete	Upstream Gradient (%)	14.5			-	11
Length (ft)		43	Bankfull Width (ft)	14.6				
Width (in)		36(36)	Bankfull:Culvert Ratio	0.4*				
Height (in)		36(36)				/	A THE REAL PROPERTY.	1
Outlet Perch (ft)		0.4(0.1)	*Bankfull:Culvert ratio based	on				4
Slope (%)		0.9(1.3)	combined width of both pipes.			1		3
Rustline Height (in)		N/A	comonica width of both pipes.		F		-020	
Overall Condition		Fair			A STATE OF	1	No. of the last of	
		ITIZATI	ON ANALYSIS				in.	+8
Upstream Habitat Len	gth (mi)	1.9	Habitat Points	4	7		A	
Habitat Quality			Habitat Quality Points	1		CEY !	1 to	
Fish Species			Fish Points	3			Outle	at.
Barrier Class		Red	Barrier Points	3			Outre	·U
			Prioritization Total Points	11		A STATE OF THE STA	The state of the s	
Notes: Dual pipes at thi	otes: Dual pipes at this location. Trash rack at inlet had not been maintained and ha						debris built	up.

	I	OCATIO	ON INFO		Culvert #	1136	Priority	Н
Watershed			П	rask River		The same		
Stream Name			Unnamed tributary of Mill Cree	k (Trib. B)	11		14.5	
Township-Range-Section	n-1/4		T2S, R9W, Sec. 10, NE	1/4 of SW1/4		de la	A PARTY	
UTM Easting/Northing (Zone 10, NAD 1983)			3/5028756					
Road Name		Private Drive off Brick			外會		W.	
Road/Culvert Owner	oad/Culvert Owner			J. Christie	San February	年 强		1
Adjacent Landowners		M. Barber and R. &	J. Christie				X	
CULVERT INFO		CHANNEL INFO			32, 1		1	
Shape			Inlet Gradient (%)	1.2(4.6)			CAS TO S	是为
Material	Plastic		Upstream Gradient (%)	1.6	Inlet			119
Length (ft)	22		Bankfull Width (ft)	10.0		200	4	
Width (in)		36(36)	Bankfull:Culvert Ratio	0.6*				
Height (in)		36(36)				CAN THE REPORT OF THE PARTY OF THE PARTY.		
Outlet Perch (ft)		0.2(1.0)	*Bankfull:Culvert ratio based (on.		3.11571		
Slope (%)		2.3(0.4)	combined width of both pipes.	011	7 - 3 - 17 ×	學的發		- 13
Rustline Height (in)		N/A	comonica with or both pipes.		A. V			1 miles
Overall Condition		Fair			3011			
	PRIOR	ITIZATI	ON ANALYSIS					7
Upstream Habitat Leng	ngth (mi) 1.8		Habitat Points	4				3/1
Habitat Quality	Poor		Habitat Quality Points	1		ALLS X	Contract of the second	
Fish Species		Anad.	Fish Points	3	1	TO STEE	May 1 hours	W. C.
Barrier Class		Red	Barrier Points	3			Outle	T
			Prioritization Total Points	11	N/A	A SMALA		

Notes: Dual pipes at this location. RBA data indicates numerous beaver impoundments, low flows and limited anadromous potential above this crossing. Culverts were not conveying water during summer 2011 field visit.

		LOCATIO	ON INFO		Culvert #	1146	Priority	L
Watershed			7	Trask River	40 64		1000	Sur S
Stream Name			Unnamed tributary of Mill Cree	k (Trib. B)	XALL AND	A.	Now have	
Township-Range-Sect	ion-1/4	•	T2S, R9W, Sec. 10, NE	21/4 of SW1/4	4			
UTM Easting/Northin	g (Zone 10,	NAD 1983)	43882	24/5028627	第 4条()			
Road Name	Road Name		Brich	Brickyard Road				
Road/Culvert Owner		Tillamo	ook County		W			
Adjacent Landowners	9		leman, H.U.D., and Petersen Ve	entures Inc.				
CULVERT	ΓINFO		CHANNEL INFO			A FE		
Shape		Circular	Inlet Gradient (%)	7.4				V-
Material		Concrete	Upstream Gradient (%)	2.5	Inlet	1		5
Length (ft)		46	Bankfull Width (ft)	4.9	X		1	
Width (in)		36	Bankfull:Culvert Ratio	0.6	1			
Height (in)		36						
Outlet Perch (ft)	Outlet Perch (ft)							
Slope (%)		1.2				-		1
Rustline Height (in)		N/A			11/4	K		1
Overall Condition		Poor			MA /			1 1
	PRIC	RITIZATI	ON ANALYSIS		E Prof			
Upstream Habitat Lei	ngth (mi	0.4	Habitat Points	1	M.		1	I.
Habitat Quality		Poor	Habitat Quality Points	1			25.7	
Fish Species		Anad.	Fish Points	3	4.1			1
Barrier Class		Red	Barrier Points	3			tle	et
			Prioritization Total Points	8			7	420
Notes: Water quality ap	peared v	ery poor dur	ring summer 2011 site visit.	- 				

	I	OCATIO	ON INFO		Culvert #	1156	Priority	L
Watershed			7	Trask River	101000			•
Stream Name		J	Innamed tributary of Mill Creek	(Trib. B1)		力型。		
Township-Range-Sect	ion-1/4		T2S, R9W, Sec. 10, NE	21/4 of SW1/4	P. P. Carlo		STANK Y	
UTM Easting/Northin	g (Zone 10, NAI	1983)	43872	28/5028449		图验》		
Road Name			Brick	\$ 14 V	林 正 生	Tay In		
Road/Culvert Owner			ook County		分属性	ALCE TO B.		
Adjacent Landowners		M. Barber and R. &	J. Christie					
CULVERT	T INFO		CHANNEL INFO		A. C.	-47	第一大学	
Shape		Circular	Inlet Gradient (%)	50.5				
Material	(Concrete	Upstream Gradient (%)	12.1		第 推了		
Length (ft)		43	Bankfull Width (ft)	3.3		XX		
Width (in)		30	Bankfull:Culvert Ratio	0.8	Inlet - upstream			
Height (in)		30				- upstrea		
Outlet Perch (ft)		0.3			A STATE OF THE STA			
Slope (%)		0.7						Vo.
Rustline Height (in)		N/A						
Overall Condition		Poor					RIVE STATE	
	PRIOR	ITIZATI	ON ANALYSIS			M		
Upstream Habitat Ler	ngth (mi)	0.2	Habitat Points	1		1		/ /
Habitat Quality		Poor	Habitat Quality Points	1		XX		1
Fish Species		Anad.	Fish Points	3		XX		
Barrier Class		Red	Barrier Points	3	01/2	11/2		
			Prioritization Total Points	8	San Andrews	1	Outle	et
Notes:								



Mill Creek Culverts, Trask River Basin

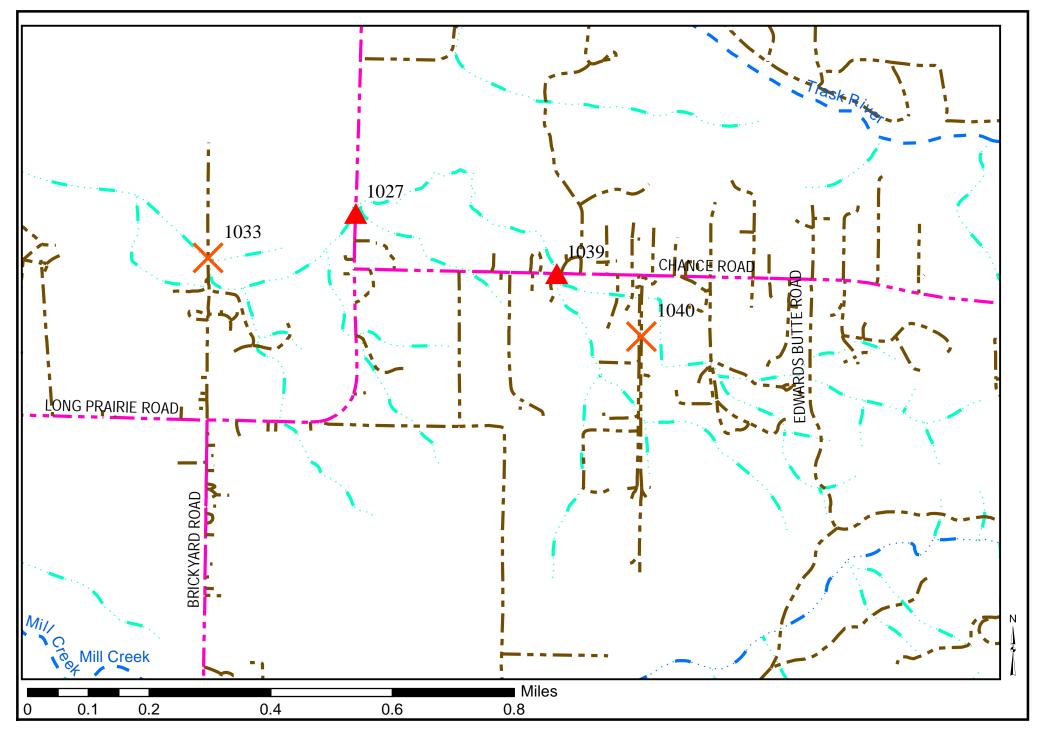
CHANCE ROAD AREA CULVERTS

	I	LOCATIO	ON INFO		Culvert #	1027	Priority	L
Watershed			7	Trask River	PERMAN	- 31 1		A SHE
Stream Name			Unnamed tributary of T	Trask River				
Township-Range-Sect	tion-1/4		T2S, R9W, Sec. 3, NW	1/4 of NW1/4	100			
UTM Easting/Northin	M Easting/Northing (Zone 10, NAD 1983)		43916		A PART			
Road Name		Long P	The state of the s	1/1/2		F		
Road/Culvert Owner		Tillamo	ook County		A FE	1	1	
Adjacent Landowners	5	R.&W.	Landolt, S.&J. Lourenzo, and B.	. Knowlton			A X	2
CULVERT INFO		CHANNEL INFO						
Shape		Circular	Inlet Gradient (%)	-4.0				
Material	Corrugat	ted metal	Upstream Gradient (%)	1.2		Inlet		
Length (ft)		59	Bankfull Width (ft)	9.2			1. 50.11	
Width (in)		54	Bankfull:Culvert Ratio	0.5				
Height (in)		54			CONTRACTOR OF THE PROPERTY OF			REPORTED IN
Outlet Perch (ft)		0.5			1/2	4	THE REAL PROPERTY.	1
Slope (%)		0.3					美国人	NT.
Rustline Height (in)		48			T- TO BEST			
Overall Condition		Poor						
	PRIOR	ITIZATI	ON ANALYSIS			***		
Upstream Habitat Lei	ngth (mi)	0.6	Habitat Points	2			The CMS	
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3	9	1600		X
Barrier Class		Red	Barrier Points	3			Outlet	
NI 4 Ct 1' 4 1	N. C. 1	1111	Prioritization Total Points	9				

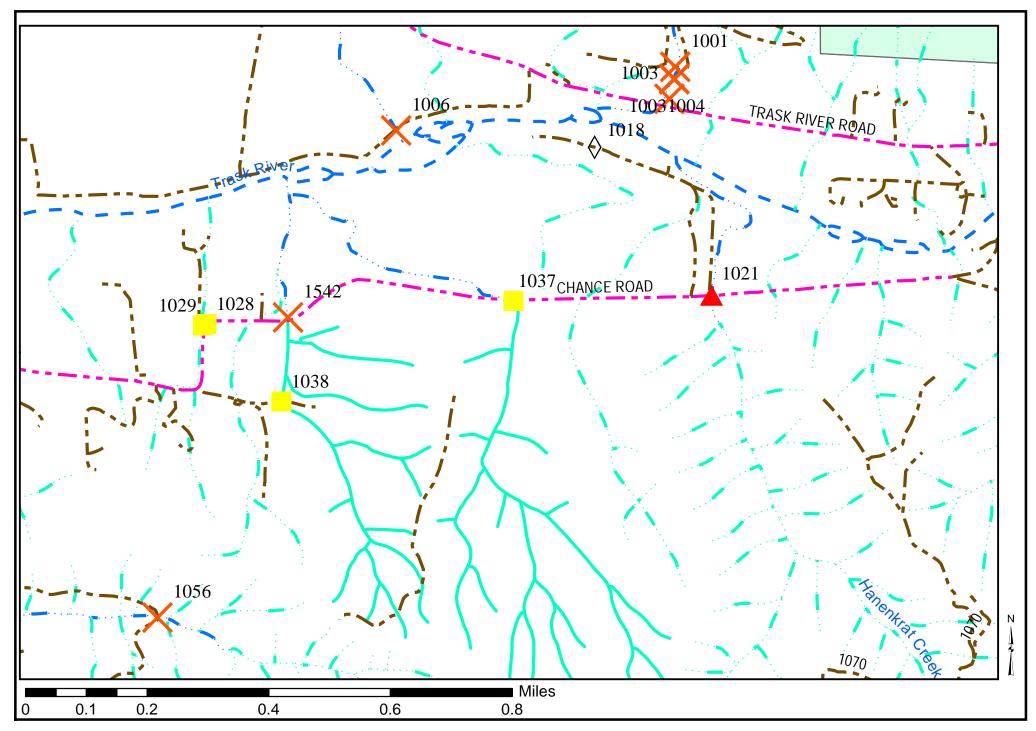
Notes: Stream listed as Nonfish-modeled. However, a member of our advisory team has observed juvenile salmon in this stream above culvert 1039. As a result, we considered this stream as suitable habitat for salmonids up to a short distance above culvert 1039.

	I	LOCATIO	ON INFO		Culvert #	1039	Priority	L
Watershed			П	rask River				
Stream Name			Unnamed tributary of T	rask River				
Township-Range-Section	on-1/4		T2S, R9W, Sec. 3, NW	11/4 of NE1/4				
UTM Easting/Northing	Z (Zone 10, NAI	1983)	43968					
Road Name		Cł	A COLUMN					
Road/Culvert Owner		Tillamo	ook County		A SE		3	
Adjacent Landowners			L. Vogt, P. Wirfs, and C	C. McClure			Fo	35
CULVERT	INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	~7.0	S. Jane	-	~~	1
Material	(Concrete	Downstream Gradient (%)	3.3				14
Length (ft)	40		Bankfull Width (ft)	3.1		-		
Width (in)		54	Bankfull:Culvert Ratio	1.5				
Height (in)		54				7	The state of the s	
Outlet Perch (ft)		0.6	Inlet inaccessible due to dense					100
Slope (%)		2.5	blackberry plants and a fence					-
Rustline Height (in)		N/A	blackberry plants and a fence					
Overall Condition		Fair			e y		Outlet	
	PRIOR	ITIZATI	ON ANALYSIS		《 《 (10000	1
Upstream Habitat Leng	gth (mi)	0.2	Habitat Points	1	100			
Habitat Quality	Poor		Habitat Quality Points	1				No.
Fish Species	Anad.		Fish Points	3	a de la		1. 生产	
Barrier Class	Red		Barrier Points	3		E CONTRACTOR OF THE PARTY OF TH		意
		-	Prioritization Total Points	8				
Notes:				<u></u>			·	

		OCATIO	N INFO		Culvert #	1021	Priority	L
Watershed			7	Trask River				
Stream Name			Haner	nkrat Creek				
Township-Range-Secti	on-1/4		T2S, R9W, Sec. 1, NE	1/4 of NW1/4	-1-	A STATE OF		
UTM Easting/Northing	Z (Zone 10, NA	D 1983)	44254	1/5031175				
Road Name				nance Road		W.	Term !	
Road/Culvert Owner			Tillamo	ook County			- Airii	
Adjacent Landowners J. & D. Hanen			rat, R. & R. Kneeland and Stimson	Lumber Co.		A CONTRACTOR		
CULVERT INFO			CHANNEL INFO				6.070.1	
Shape		Circular	Inlet Gradient (%)	11.5				
Material		Concrete	Upstream Gradient (%)	13.0		The state of	41110	
Length (ft)		35	Bankfull Width (ft)	7.1			Inlet	
Width (in)		36	Bankfull:Culvert Ratio	0.4	S. A.	1	Triict	
Height (in)		36						
Outlet Perch (ft)		2.5	Topography precluded use of s	surveying				
Slope (%)		22.0	equipment to gather longituding	al profile				
Rustline Height (in)		N/A	data.					
Overall Condition		Poor						
	PRIOR	ITIZATI	ON ANALYSIS					
Upstream Habitat Len	gth (mi)	0.1	Habitat Points	1	100		4	
Habitat Quality		Fair	Habitat Quality Points	2			/ Ni	
Fish Species		Anad.	Fish Points	3		100		
Barrier Class		Red	Barrier Points	3				
			Prioritization Total Points	9	Out	let:		
Notes:								



West Chance Road Culverts, Trask River Basin



East Chance Road Culverts, Trask River Basin

LOWER TRASK RIVER ROAD AREA CULVERTS

	L	OCATIO	ON INFO		Culvert #	987	Priority	Н
Watershed			7	Trask River			Seal Plane	
Stream Name			G	reen Creek	1	102		
Township-Range-Sect	ion-1/4		T1S, R9W, Sec. 35, SW	1/4 of NW1/4	1			
UTM Easting/Northin	g (Zone 10, NAD	1983)		7/5032236				
Road Name			Trask I	River Road	1 A/- 1			
Road/Culvert Owner				ook County		X HILL		
Adjacent Landowners	<u> </u>		S-C Paving, Inc. and R.&k	K. Huffman	Y 70			
CULVERT	CULVERT INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	1.0				
Material	Corrugate	d metal	Upstream Gradient (%)	5.6		Total		
Length (ft)		50	Bankfull Width (ft)	7.7	Alm	let		
Width (in)		53	Bankfull:Culvert Ratio	0.6			No.	
Height (in)		53			88	The second second	The second second	
Outlet Perch (ft)		1.0			NO.			
Slope (%)		5.6			See Land	See K		
Rustline Height (in)		35			1000000	3	7	
Overall Condition		Poor						
	PRIORI	TIZATI	ON ANALYSIS		1			
Upstream Habitat Ler	igth (mi)	1.7	Habitat Points	4			- 4	
Habitat Quality		Fair	Habitat Quality Points	2	23/1	7	The state of the s	
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	Outlot			
			Prioritization Total Points	12		tiet	-	
Notes: Configuration of culvert inlet apron and substrate created turbulent flows at inlet. One crossing occurred below this								

LOCATION INFO Culvert# L **Priority** Watershed Trask River Unnamed tributary of Trask River Stream Name T1S, R9W, Sec. 35, SW¹/₄ of NE¹/₄ Township-Range-Section-1/4 441421/5032051 UTM Easting/Northing (Zone 10, NAD 1983) Trask River Road Road Name Road/Culvert Owner Tillamook County C. & S. Katen and J. Deswart **Adjacent Landowners CULVERT INFO CHANNEL INFO** Inlet Gradient (%) Circular 3.8 Shape Material Concrete **Upstream Gradient (%)** 13.1 Length (ft) 80 Bankfull Width (ft) 4.6 24 **Bankfull:Culvert Ratio** 0.4 Width (in) 24 Height (in) 1.5 Outlet Perch (ft) 6.2 Slope (%) Rustline Height (in) N/A

3

culvert. We were unable to access this crossing to complete an assessment.

Poor PRIORITIZATION ANALYSIS

0.3

Anad.

Red

Notes: Pipe barrel was not straight – its trajectory changed direction under the road bed.

Habitat Points Fair Habitat Quality Points

Barrier Points

Prioritization Total Points

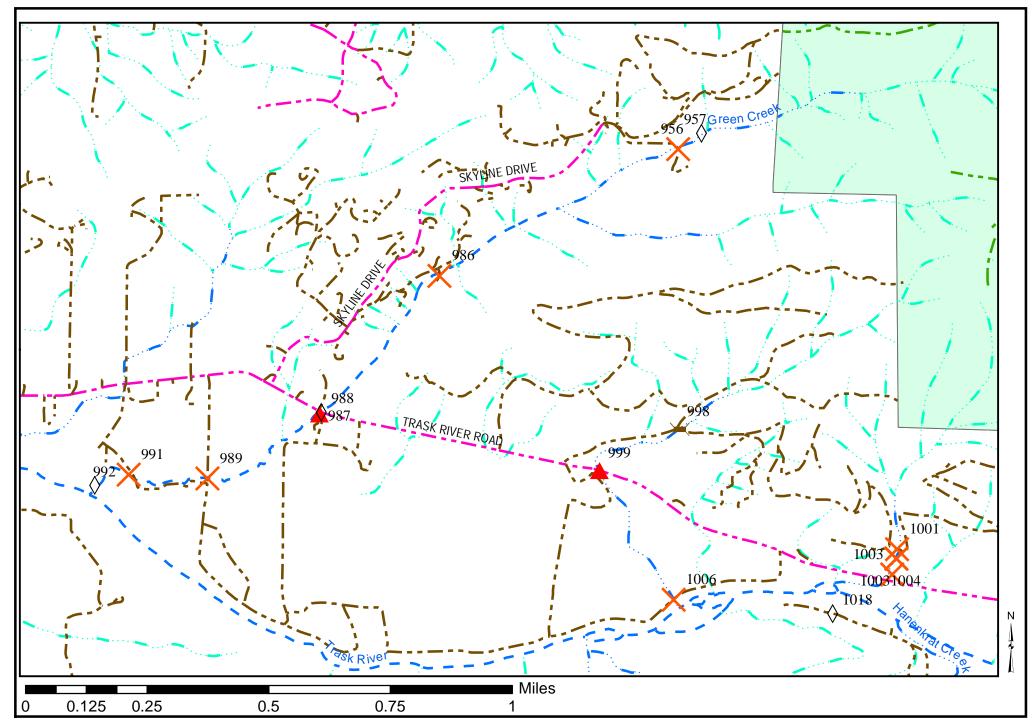
Fish Points

Overall Condition

Habitat Quality Fish Species

Barrier Class

Upstream Habitat Length (mi)



Lower Trask River Road Culverts, Trask River Basin

PENINSULA AREA CULVERTS

	L	OCATIO	ON INFO		Culvert #	918	Priority	M
Watershed			7	Trask River		10000000000000000000000000000000000000		
Stream Name			Hatc	hery Creek	13		The same of the sa	
Township-Range-Sect	tion-1/4		T1S, R8W, Sec. 29, NW	/1/4 of NE1/4				
UTM Easting/Northin	g (Zone 10, NAD	1983)	44625	7/5033862			North Control	
Road Name			Trask	River Road			Miles and	
Road/Culvert Owner	oad/Culvert Owner		Tillamo	ook County				
Adjacent Landowners	cent Landowners		D. Wilks and C	. Ballenger	Complete Complete			
CULVERT INFO		·	CHANNEL INFO					
Shape	(Circular	Inlet Gradient (%)	9.0				
Material	Corrugate	d metal	Upstream Gradient (%)	12.0			to lot	
Length (ft)		50	Bankfull Width (ft)	6.2			milet	
Width (in)		66	Bankfull:Culvert Ratio	0.9			# 1 m	
Height (in)		66			Sin Sin		The state of the s	
Outlet Perch (ft)		~5.0				123	10/23/11	
Slope (%)		6.0						
Rustline Height (in)		12			1			
Overall Condition		Poor					* 17	
		TIZATI	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.7	Habitat Points	2	1		-	
Habitat Quality	Fair(-)		Habitat Quality Points	2	1		7	
Fish Species	Anad.		Fish Points	3				
Barrier Class		Red	Barrier Points	3	100	Hot		
			Prioritization Total Points	10	Ou	tlet -do	wnstream	
Notes: Unable to acces	Notes: Unable to access the downstream side of the pipe. Perch height is approximate.							

		LOCATIO	N INFO		Culvert #	892	Priority	NA
Watershed				Trask River			73345	
Stream Name			Blue	Ridge Creek				
Township-Range-Sec	tion-1/4		T1S, R8W, Sec. 21, S	W1/4 of SW1/4				
UTM Easting/Northin	1 g (Zone 10, NA	.D 1983)	4470	004/5034087				
Road Name			Trasl	k River Road				
Road/Culvert Owner	Road/Culvert Owner		Tillar	nook County				
Adjacent Landowner	Adjacent Landowners		Oregon Departmer	nt of Forestry			The same	
CULVER	CULVERT INFO		CHANNEL INF	О			THE STATE OF THE S	
Shape		Circular	Inlet Gradient (%)	Not collected			e de	
Material	Corrug	ated metal	Upstream Gradient (%)	Not collected	3			
Length (ft)	No	t collected	Bankfull Width (ft)	Not collected	(0)	itlet		
Width (in)	No	t collected	Bankfull:Culvert Ratio	Not collected			artio Safetale	
Height (in)	No	t collected	Several other crossings along the	nis reach of				
Outlet Perch (ft)	No	t collected	the Trask River are similarly si					
Slope (%)	No	t collected	including 924, 941, 980, 7777,					
Rustline Height (in)	No	t collected	map). We also designated these NFC, but do not provide simila					
Overall Condition		Good	information for these crossings.					
	PRIO	RITIZATIO	ON ANALYSIS				Service Control	
Upstream Habitat Le	ngth (mi)	0.5	Habitat Points			101/2		
Habitat Quality			Habitat Quality Points					
Fish Species		Resident	Fish Points					
Barrier Class		Red	Barrier Points		Out	let -dow	nstream	
			Prioritization Total Points		- N			

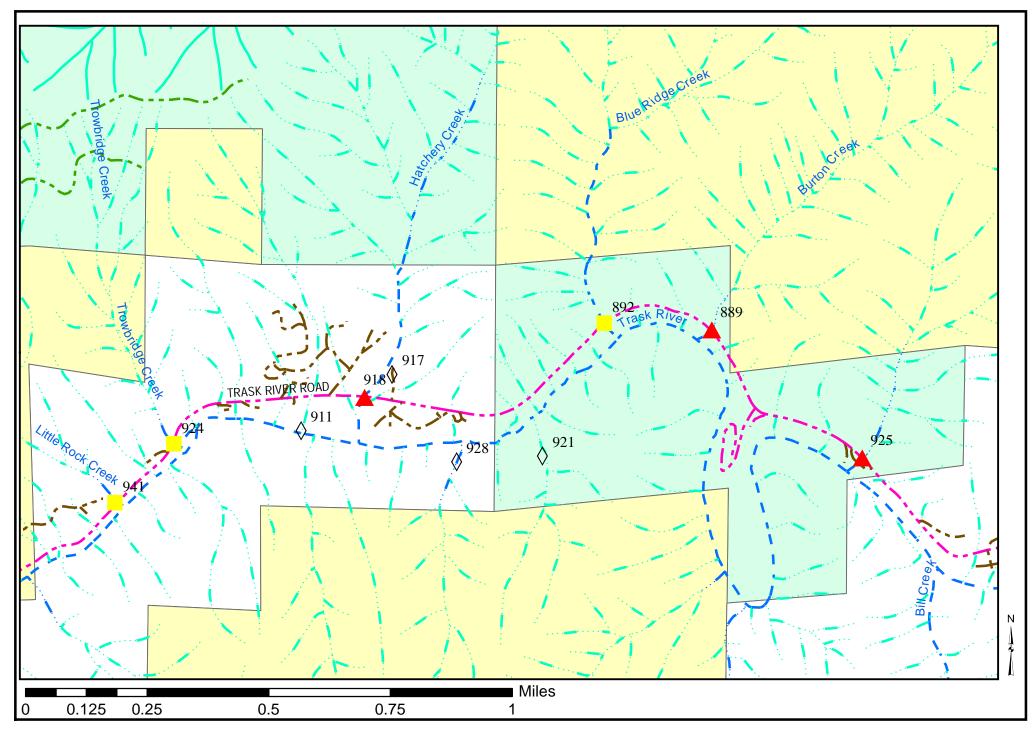
Notes: Pipe classified as NFC. Although it occurs on a designated fish stream, it was constructed on a natural bedrock waterfall that, historically, was almost certainly a barrier to anadromous fish passage. As a result, we did not consider this culvert as a barrier to fish passage, but elected to include it in this document to answer the inevitable questions that would arise in the minds of careful reviewers.

	L	OCATIO	ON INFO		Culvert #	889	Priori	
Watershed				Trask River		l e libra		
Stream Name			Ві	ırton Creek			Sec.	
Township-Range-Sect	ion-1/4		T1S, R8W, Sec. 21, SE	1/4 of SW1/4			1 5	
UTM Easting/Northin	g (Zone 10, NAD	1983)	44733	31/5034084	-			
Road Name			Trask	River Road				
Road/Culvert Owner	•		Tillamo	ook County				
Adjacent Landowners		Oregon Department	of Forestry					
CULVERT			CHANNEL INFO			23.44		
Shape		Circular	Inlet Gradient (%)	26.5		4		
Material	Corrugate	ed metal	Upstream Gradient (%)	4.1			Inlat	
Length (ft)		57	Bankfull Width (ft)	12.2				
Width (in)		90	Bankfull:Culvert Ratio	0.6				
Height (in)		90				No.		
Outlet Perch (ft)	U	nknown			1/4			
Slope (%)		5.5						
Rustline Height (in)		26				7		
Overall Condition		Critical					1502 by	
	PRIORI	TIZATI	ON ANALYSIS					
Upstream Habitat Ler	ngth (mi)	0.1	Habitat Points	1		100		
Habitat Quality			Habitat Quality Points	1	C. W		4	
Fish Species		Anad.	Fish Points	3		SAF#		
Barrier Class		Red	Barrier Points	3	A STREET			
			Prioritization Total Points	8	Out	ICT -down	stream	

 \mathbf{L}

Notes: Pipe in extremely poor condition. Invert worn through nearly continuously from inlet to outlet, a seam was coming apart (resulting in deformation of barrel), and fill on outlet side badly eroding. Debris jamb on upstream side of culvert. Severity of fill erosion, prevented field crew from obtaining downstream channel measurements. As a result, we were unable to calculate perch height. However, the culvert did not appear to have a perched outlet. field crew observed small salmonids upstream of pipe.

	L	OCATIO	ON INFO		Culvert #	925	Priority	L
Watershed			7	Trask River				
Stream Name			Unnamed tributary of T	Trask River	No.	1		
Township-Range-Section	on-1/4		T1S, R8W, Sec. 28, NF	T1S, R8W, Sec. 28, NE ¹ / ₄ of NE ¹ / ₄			000	
UTM Easting/Northing	Z (Zone 10, NAD	1983)	44785	54/5033645			Towns of the same	
Road Name			Trask 1	River Road				
Road/Culvert Owner	oad/Culvert Owner		Tillamo	ook County	* * * * * * * * * * * * * * * * * * * *			
Adjacent Landowners			Oregon Department	of Forestry	1000			
CULVERT INFO			CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	19.2	in the second			
Material	(Concrete	Upstream Gradient (%)	8.2				
Length (ft)		70	Bankfull Width (ft)	6.6	-Uni	let		
Width (in)		36	Bankfull:Culvert Ratio	0.5				
Height (in)		36						
Outlet Perch (ft)		2.6				A BANG		
Slope (%)		7.5						
Rustline Height (in)		N/A			4	(- No.)		
Overall Condition		Fair						
	PRIORI	TIZATI	ON ANALYSIS		20			
Upstream Habitat Leng	gth (mi)	0.3	Habitat Points	1				
Habitat Quality	Poor		Habitat Quality Points	1				
Fish Species	Anad.		Fish Points	3				
Barrier Class			Barrier Points	3		Oil	tlet	
			Prioritization Total Points	8				
Notes:								



Peninsula Area Culverts, Trask River Basin

SAMSON CREEK AND JOHNSON CREEK AREA CULVERTS

	L	OCATIO	ON INFO		Culvert #	907	Priority	L	
Watershed			7	Trask River					
Stream Name			Unnamed tributary of T	Trask River					
Township-Range-Secti	ion-1/4		T1S, R8W, Sec. 27, NE	1/4 of NW1/4					
UTM Easting/Northing	g (Zone 10, NAD	1983)	44899	06/5033853					
Road Name			Trask 1	River Road					
Road/Culvert Owner			Tillamo	ook County				2 (1)	
Adjacent Landowners			J. & D. Bedford	and L. Chu					
CULVERT INFO			CHANNEL INFO		0	V.		3	
Shape	(Circular	Inlet Gradient (%)	11.0		077		11.10	
Material	Corrugate	d metal	Downstream Gradient (%)	8.0	A Marian	7	-E		
Length (ft)	70		Bankfull Width (ft)	8.4	100		- 17	4	
Width (in)		60	Bankfull:Culvert Ratio	0.6					
Height (in)		60			PA SHEET				
Outlet Perch (ft)		~0.6*	*Topography and vegetation p	recluded					
Slope (%)		7.0	use of survey equipment to obt	tain	1	4		1	
Rustline Height (in)		29	longitudinal profile data.		000				
Overall Condition		Poor			1	X		4	
•	PRIORI	TIZATI	ON ANALYSIS					A	
Upstream Habitat Len	gth (mi)	0.6	Habitat Points	2		1	HAK!	1	
Habitat Quality		Poor	Habitat Quality Points	1	Outlet		A L	1	
Fish Species		Anad.	Fish Points	3	Outlet				
Barrier Class		Red	Barrier Points	3					
			Prioritization Total Points	9					
Notes: Multiple seams s									

	LO	OCATIO	ON INFO		Culvert #	903	Priority	L
Watershed				Trask River				_
Stream Name			Unnamed tributary of T	Trask River		O VA		
Township-Range-Sectio	n-1/4		T1S, R8W, Sec. 27, NW	/1/4 of NE1/4				
UTM Easting/Northing	ing (Zone 10, NAD 1983)		44911	1/5033866				
Road Name			Trask	River Road				
Road/Culvert Owner				ook County				
Adjacent Landowners		J	. & D. Bedford, D. Stout and J.	& S. Smith				
CULVERT I	CULVERT INFO		CHANNEL INFO				2/3/1	
Shape	(Circular	Inlet Gradient (%)	13.8				
Material	C	oncrete	Upstream Gradient (%)	8.4	1			
Length (ft)		56	Bankfull Width (ft)	7.8	Inle		14-4	
Width (in)		36	Bankfull:Culvert Ratio	0.4			Allenan	
Height (in)		36						
Outlet Perch (ft)		1.9				1	11/1	
Slope (%)		4.9			3	1		
Rustline Height (in)		N/A					FIGURE	
Overall Condition		Fair			BELLEY			
	PRIORIT	FIZATI	ON ANALYSIS		3 (44.87)		700	
Upstream Habitat Leng			Habitat Points	1				
Habitat Quality			Habitat Quality Points	1	1	14		
Fish Species		Anad.	Fish Points	3	Aug 1		The state of the s	
Barrier Class		Red	Barrier Points	3	Ou	tlet	A	
			Prioritization Total Points	8	7			

Notes: Another culvert is located several feet lateral to this pipe. It appears that that metal pipe was abandoned in place, because it looks to have been deliberately plugged and the upstream channel course appears to have been re-directed into the concrete culvert reported above.

	I	LOCATIO	ON INFO		Culvert #	902	Priority	Н
Watershed			-	Trask River		,	1770	
Stream Name			Sar	nson Creek			1	
Township-Range-Sec	tion-1/4		T1S, R8W, Sec. 27, NW	/¼ of NE¼			E STATE	
UTM Easting/Northin	I Easting/Northing (Zone 10, NAD 1983)		44922			1 2		
Road Name			Trask	River Road		ZL/		
Road/Culvert Owner			Tillamo	ook County				
Adjacent Landowner	S		D. & E. Kujak and	H. Johnson				
CULVER	CULVERT INFO		CHANNEL INFO		Ayr A	A STATE OF	Vinda A	
Shape		Circular	Inlet Gradient (%)	8.5			100	
Material	Corrugat	ted metal	Upstream Gradient (%)	4.3				
Length (ft)		46	Bankfull Width (ft)	10.8	I n	et		
Width (in)		84	Bankfull:Culvert Ratio	0.7				
Height (in)		84				The state of		
Outlet Perch (ft)		1.1					100	
Slope (%)		5.5			142			
Rustline Height (in)		37					1	
Overall Condition		Poor					4 -	
	PRIOR	ITIZATI	ON ANALYSIS					
Upstream Habitat Le	ngth (mi)	1.5	Habitat Points	3				
Habitat Quality	ality Good		Habitat Quality Points	3				
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3			Outlet	
			Prioritization Total Points	12		THE REAL PROPERTY.	1000	

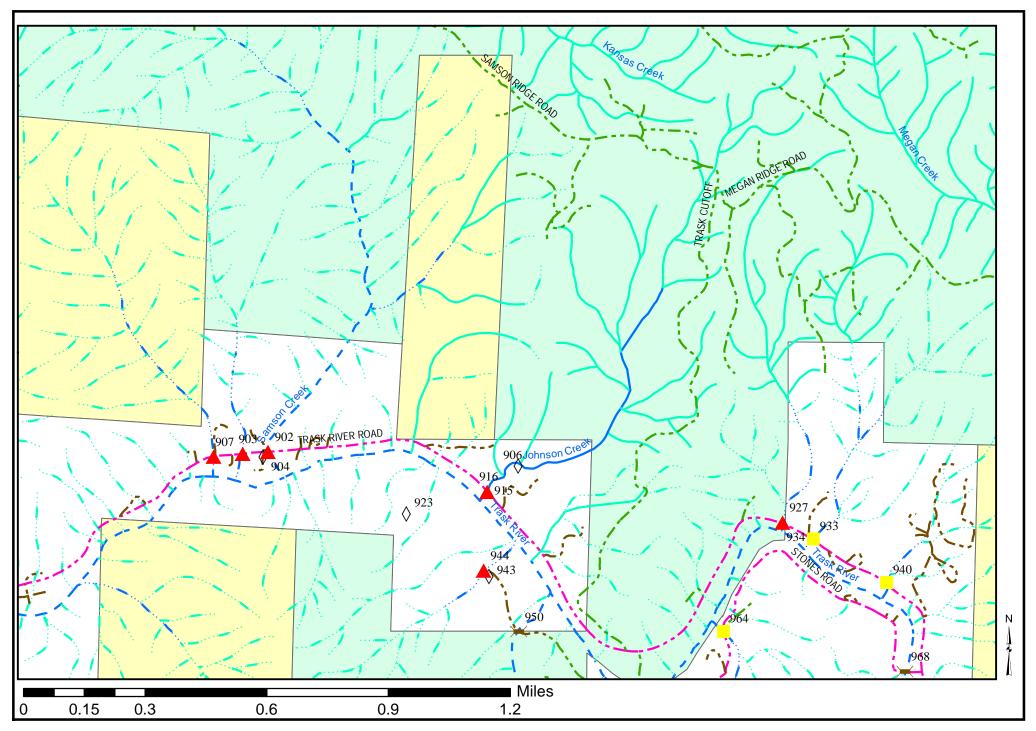
Notes: Several seams beginning to separate. One has separated across the invert and has resulted in an approximately 6 inch step within the barrel of the pipe.

	I	LOCATIO	ON INFO		Culvert #	915	Priority	Н
Watershed			7	Trask River	and the same	Rink		
Stream Name			John	nson Creek				
Township-Range-Sect	tion-1/4		T1S, R8W, Sec. 26, NE	1/4 of NW1/4				
UTM Easting/Northin	1g (Zone 10, NAI) 1983)	45008	88/5033724				
Road Name			Trask 1	River Road				
Road/Culvert Owner	Road/Culvert Owner		Tillamo	ook County	AMARIA		The same	
Adjacent Landowner	S		Oregon Department	of Forestry				
CULVER	T INFO		CHANNEL INFO		Prom		74	
Shape		Pipe arch	Inlet Gradient (%)	5.2	***			
Material	Corrugat	ed metal	Upstream Gradient (%)	3.0	18////			
Length (ft)		59	Bankfull Width (ft)	5.0				
Width (in)		91	Bankfull:Culvert Ratio	1.5	11:111	M In	let	
Height (in)		68						
Outlet Perch (ft)		2.9			111111111111111111111111111111111111111			
Slope (%)		0.2						
Rustline Height (in)		6						
Overall Condition		Fair						
	PRIOR	ITIZATI	ON ANALYSIS))))]]
Upstream Habitat Le	ngth (mi)	0.8	Habitat Points	2		F		
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	Outlet	/==		
			Prioritization Total Points	10	outlet	/		

Notes: One seam separating, but repaired with a rubber strip. field crew noted that the strip appeared to seal the seam, but looked as if it "won't last long." Cascade over boulders at outlet. Culvert is appropriately sized, but apparently wasn't sufficiently countersunk.

	LO	OCATIO	ON INFO		Culvert #	944	Priority	L
Watershed			7	Trask River				
Stream Name			Unnamed tributary of T	Trask River		31		
Township-Range-Section	on-1/4		T1S, R8W, Sec. 26, NE	1/4 of NW1/4				
UTM Easting/Northing	(Zone 10, NAD 1	1983)	45008	39/5033396		1 - Ez		
Road Name			Pr	ivate Drive			1000	
Road/Culvert Owner	oad/Culvert Owner		Lincol	n Trust Co.		THE RESERVE		
Adjacent Landowners	ners		Lincol	n Trust Co.				The second
CULVERT INFO		-	CHANNEL INFO		Account of			
Shape	(Circular	Inlet Gradient (%)	4.0				19.
Material			Upstream Gradient (%)	11.0				
Length (ft)	30		Bankfull Width (ft)	2.5	A A	Inl	et.	
Width (in)		36	Bankfull:Culvert Ratio	1.2				ALC: N
Height (in)		36			CONTROL AND ADDRESS	Marketon Asso		40.00
Outlet Perch (ft)		~3.0*	*Topography precluded use of	Cauracina	The same			100
Slope (%)		4.0	level to obtain longitudinal pro	, .	A MA	14		A STATE
Rustline Height (in)		N/A	lever to obtain longitudinar pro	ome data.	1	art 1		
Overall Condition		Good			Seale	TO THE OWNER OF		
•	PRIORI	TIZATI	ON ANALYSIS				·)	1
Upstream Habitat Leng	gth (mi)	0.1	Habitat Points	1		A Second		- Par
Habitat Quality			Habitat Quality Points	1		SO THE		
Fish Species			Fish Points	3				1
Barrier Class		Red	Barrier Points	3			Outlet	1/-
			Prioritization Total Points	8			Outlet	1
Notes: Inlet perched at lo	ow flows. P							

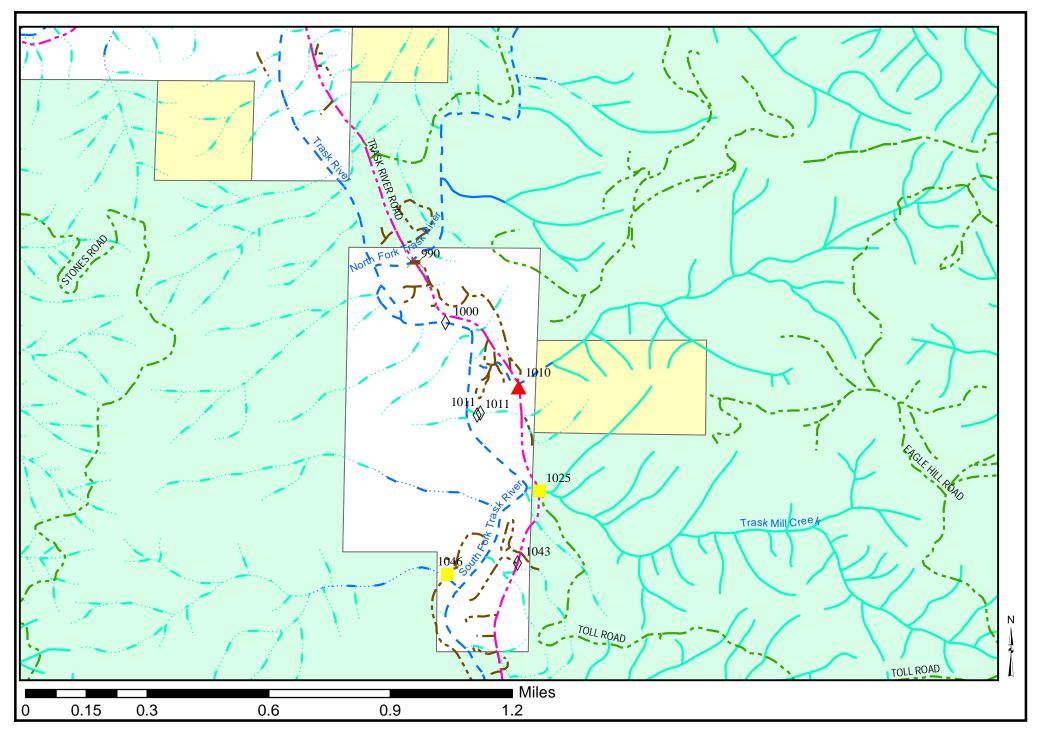
	Culvert #	927	Priority	L				
Watershed			Trask River					
Stream Name			Unnamed tributary of T		5	100		
Township-Range-Secti	Township-Range-Section-1/4			T1S, R8W, Sec. 26, NE ¹ / ₄ of NE ¹ / ₄				
UTM Easting/Northing	g (Zone 10, NAD	1983)	45124			16		
Road Name			Trask 1					
Road/Culvert Owner			Tillamo	ook County		- (-)		
Adjacent Landowners				W.H. Bess			34	
CULVERT	INFO		CHANNEL INFO	20		LA COMPANY		
Shape		Circular	Inlet Gradient (%)	21.1	1		U	
Material	Concrete		Upstream Gradient (%)	4.7				
Length (ft)	44		Bankfull Width (ft)	4.5		Inlet	1	
Width (in)	36		Bankfull:Culvert Ratio	0.7				
Height (in)	36							
Outlet Perch (ft)	0.6							
Slope (%)	9.2							
Rustline Height (in)		n/a				-		
Overall Condition		Poor						
·	PRIORI	TIZATI	ON ANALYSIS		-			
Upstream Habitat Len	Upstream Habitat Length (mi)		Habitat Points	1		3		
Habitat Quality Poor		Poor	Habitat Quality Points	1				
Fish Species Anad.		Anad.	Fish Points	3			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Barrier Class Red		Red	Barrier Points	3	5 A	Nitle+		
		-	Prioritization Total Points	8		Julien		
Notes:	lotes:							



Samson Creek and Johnson Creek Area Culverts, Trask River Basin

LOWER SOUTH FORK TRASK RIVER AREA CULVERT

	Culvert #	1010	Priority	L				
Watershed			П	64	7	The Control of the Co	•	
Stream Name			Unnamed tributary of S. Fork T			Control of the second		
Township-Range-Section	on-1/4		T1S, R8W, Sec. 36, SE					
UTM Easting/Northing	Z (Zone 10, NAD 19	983)	45266			1		
Road Name			Trask 1			S. XXXXX		
Road/Culvert Owner			Tillamo	ook County				
Adjacent Landowners			B. Green a	and E. Nice		40		
CULVERT	INFO		CHANNEL INFO	11.00	A STATE OF			
Shape	C	ircular	Inlet Gradient (%)	1.8	100			
Material	Corrugated metal		Upstream Gradient (%)	12.5				
Length (ft)	64		Bankfull Width (ft)	9.0	Inlet			
Width (in)	48		Bankfull:Culvert Ratio	0.5	17/6/04			
Height (in)	48						Mile and	
Outlet Perch (ft)		4.5				ATE		
Slope (%)		3.0						
Rustline Height (in)		22			lles			
Overall Condition	(Critical						
	PRIORIT	IZATI	ON ANALYSIS					
Upstream Habitat Length (mi) 0.1		Habitat Points	1		3			
Habitat Quality	Poor		Habitat Quality Points	1	1		-	
Fish Species Anad.		Fish Points 3			1	*		
Barrier Class Red		Barrier Points	3					
			Prioritization Total Points	8				
Notes: Invert almost entirely rusted through from inlet to outlet. Remainder of pipe also very corroded and unstable.								

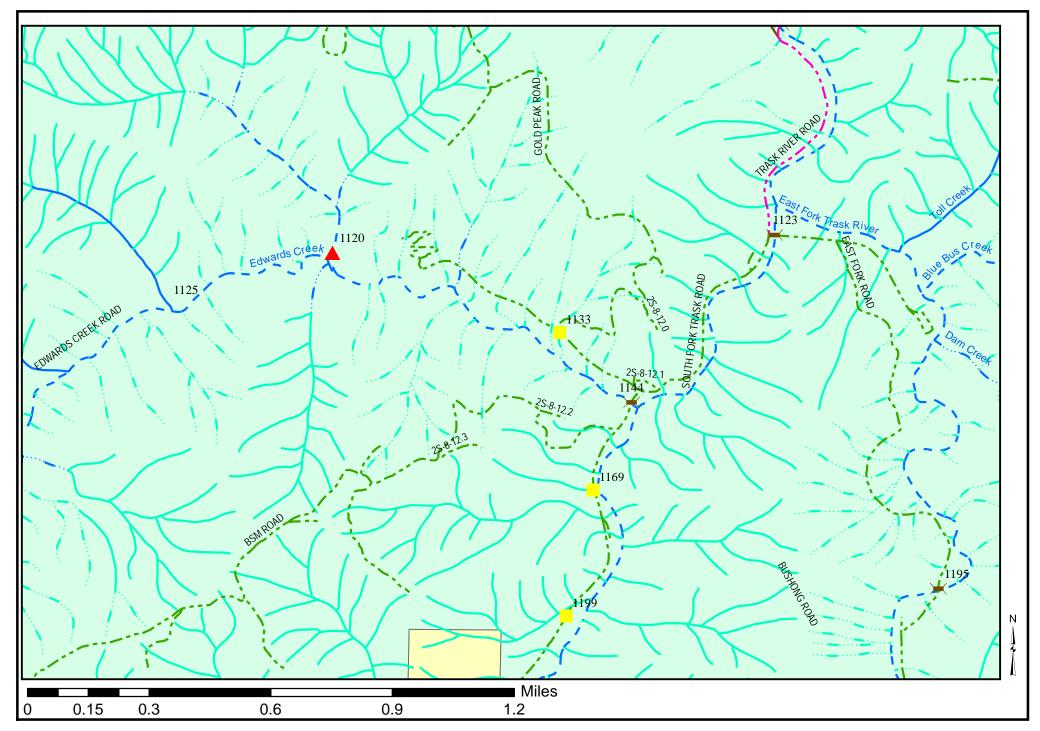


Lower South Fork Trask River Area Culverts, Trask River Basin

EDWARDS CREEK AREA CULVERT

	Culvert #	1120	Priority	Н				
Watershed			Trask River				100	
Stream Name			Unnamed tributary of Ed	The same of				
Township-Range-Sect	tion-1/4		T1S, R8W, Sec. 11, N	Mark.	-41			
UTM Easting/Northing (Zone 10, NAD 1983)			450	857/5029214		-		
Road Name			Edwards Creek Road				7	
Road/Culvert Owner			Oregon Departmen	nt of Forestry		A MAR		•
Adjacent Landowners	S		Oregon Departmen	nt of Forestry		7. //		
CULVERT	INFO	<u>-</u>	CHANNEL INFO		11/			
Shape	Pi	pe arch	Inlet Gradient (%)	10.4			A Thile S	
Material	Corrugated metal		Upstream Gradient (%)	8.9				1
Length (ft)	45		Bankfull Width (ft)	10.9			STATE OF THE STATE	
Width (in)		96	Bankfull:Culvert Ratio	0.7				
Height (in)		72					1111	
Outlet Perch (ft)		3.8		70				
Slope (%)		0.1				Virginia -		
Rustline Height (in)		24			* D	19	74/	
Overall Condition		Fair				100		
	PRIOR	ITIZAT	ION ANALYSIS			TWO TO	WWW T	
Upstream Habitat Length (mi)		0.8	Habitat Points	2	100	130		
Habitat Quality		Good	Habitat Quality Points	3		- LAN	The same of the sa	
1		Anad.	Fish Points	3		Sinty.	The State of State of	
Barrier Class		Red	Barrier Points	3	Out	let		
			Prioritization Total Points	11	Gat	ict		
Notes Inlet was partiall	v blooked by	lorgo log	during summer 2011. It is our und	aratandina that (ODE intende to	blook this	road and raple	

Notes: Inlet was partially blocked by large log during summer 2011. It is our understanding that ODF intends to block this road and replace this culvert with a small bridge to facilitate foot and motorcycle traffic.



Edwards Creek Area Culverts, Trask River Basin

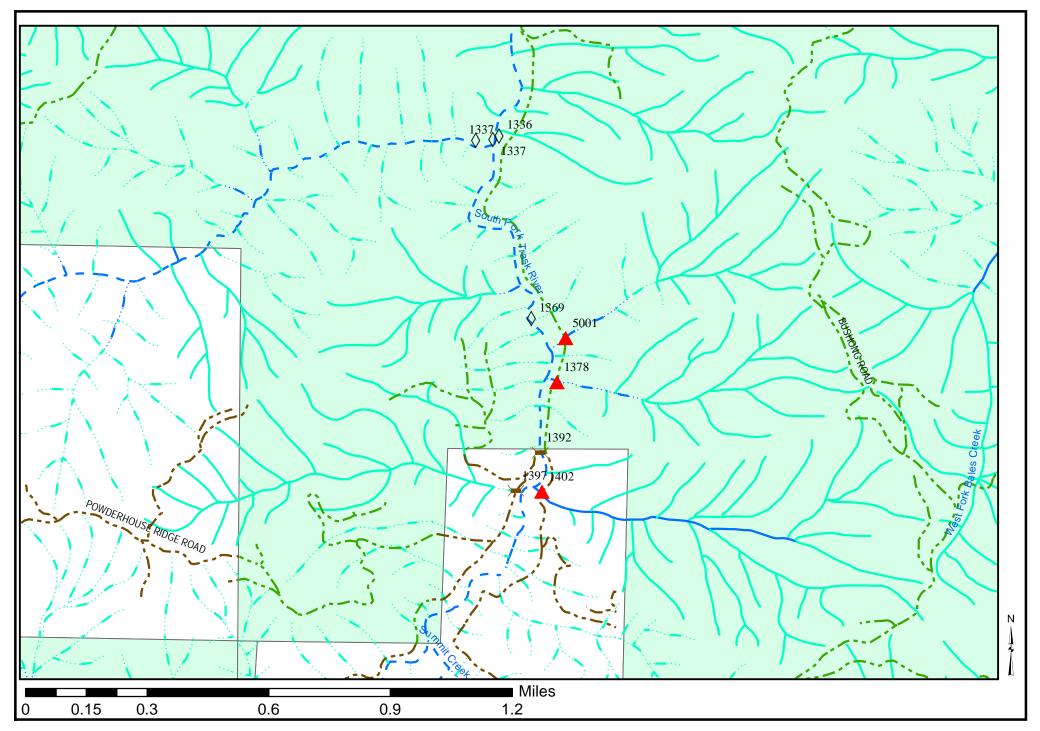
UPPER SOUTH FORK TRASK RIVER AREA CULVERTS

LOCATION INFO							5001	Priority	L
Watershed			Γ			7411111			
Stream Name	e		Uni	named tributary of South Fork T		全个个条	10000000000000000000000000000000000000		
Township-Ra	Township-Range-Section-1/4			T2S, R8W, Sec. 25, NE					
UTM Easting/Northing (Zone 10, NAD 1983)			45224		T				
Road Name				South Fork 7	- * * * * * * * * * * * * * * * * * * *		dis	4	
Road/Culvert	Owner			Oregon Department	of Forestry		Will state of the		
Adjacent Lan	downer	S		Oregon Department	of Forestry	The state of the s		判别 证。	
CI	CULVERT INFO			CHANNEL INFO					
Shape		Circular		Inlet Gradient (%)	14.7				1
Material	Cor	rugated metal (SSP)		Upstream Gradient (%)	4.4	Inlet			
Length (ft)		61		Bankfull Width (ft)	5.9				
Width (in)		55	Bankfull:Culvert Ratio 0.8						
Height (in)			64		The Contract of the Contract o	VA TOTAL	学 人及连		
Outlet Perch	(ft)		2.7		CV7-5E	E VENEZ	4		
Slope (%)			9.9						
Rustline Heig	ht (in)		18					THE SECOND	
Overall Cond	lition		Poor	r					
		PRIOR	ITIZATI	ON ANALYSIS		* 7 7 1			
Upstream Habitat Length (mi)		0.2	Habitat Points	1		No. of the last			
Habitat Quality		Poor	Habitat Quality Points	1			10000		
Fish Species		Anad.	Fish Points	3					
Barrier Class	Barrier Class		Red	Barrier Points	3		No.	Outlet	V
				Prioritization Total Points	8		A THE STATE OF THE	ALC: N	17
NIadam A C					1 11 .	-44	1	C A 1	41

Notes: A few seams were separating causing cross-sectional deformation of pipe and allowing water to move along outside of pipe. Also the top of the portion of the pipe under the road bed was "sagging"

LOCATION INFO						1378	Priority	L
Watershed								
Stream Name		Un	named tributary of South Fork			Type State Line		
Township-Range-Section-1/4			T2S, R8W, Sec. 25, SI	4 ME 3	17/	有数学。		
UTM Easting/Northin	1g (Zone 10, NAD	1983)	45221			200		
Road Name			South Fork			A STATE OF		
Road/Culvert Owner			Oregon Department	of Forestry				15
Adjacent Landowners	S		Oregon Department	of Forestry	1			
CULVER	ΓINFO		CHANNEL INFO		Part Control	art Sala		
Shape	Circular		Inlet Gradient (%)	10.3	NE PLEASE			
Material	Corrugated metal		Upstream Gradient (%)	5.9		The state of		
Length (ft)	61		Bankfull Width (ft)	7.1	lnlet.			
Width (in)	56		Bankfull:Culvert Ratio	0.7				
Height (in)		56					V-1	
Outlet Perch (ft)		1.6			Outlet			
Slope (%)		5.9			建型法区		TO THE STATE OF	
Rustline Height (in)		11				1		
Overall Condition		Fair				Carry Law	- A	
	PRIORI	TIZATI	ON ANALYSIS					
Upstream Habitat Length (mi) 0.2		0.2	Habitat Points	1			Z	
Habitat Quality	Fair		Habitat Quality Points	2				顶
Fish Species Anad.		Fish Points	3			Kara e		
Barrier Class Red		Barrier Points	3				1	
			Prioritization Total Points	9		3 d 6		
Notes:								

	L	OCATIO	ON INFO		Culvert #	1402	Priority	Н
Watershed			_	rask River				
Stream Name		Un	named tributary of South Fork T	rask River				113
Township-Range-Sect	tion-1/4		T2S, R8W, Sec. 25, NI	E1/4 of SE1/4	一种人			
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)		45216	1/5023649	September 1		*	3/3/4
Road Name			South Fork 7	Trask Road	0 88			Sing!
Road/Culvert Owner		Stimson L	umber Co.					
Adjacent Landowners			Stimson L	umber Co.			THE WAY	SIF
CULVERT INFO			CHANNEL INFO		Carrier Tarres	美产		
Shape		Circular	Inlet Gradient (%)	21.3				
Material	Corrugate	ed metal	Upstream Gradient (%)	4.1			Inlet	2/
Length (ft)		45	Bankfull Width (ft)	8.0		Y THE	THE L	X
Width (in)		48	Bankfull:Culvert Ratio	0.5				
Height (in)		48						
Outlet Perch (ft)		None				RATE OF		
Slope (%)		6.2						
Rustline Height (in)		16			1 March			
Overall Condition		Poor						
	PRIORI	TIZATI	ON ANALYSIS					100
Upstream Habitat Le	ngth (mi)	0.7	Habitat Points	2				
Habitat Quality		Good	Habitat Quality Points	3				
Fish Species		Anad.	Fish Points	3	A CONTRACTOR	T. F.		
Barrier Class		Red	Barrier Points	3	Outlet	4.沙尔兰		100
			Prioritization Total Points	11		The Association		1
Notes:								



Upper South Fork Trask River Area Culverts, Trask River Basin

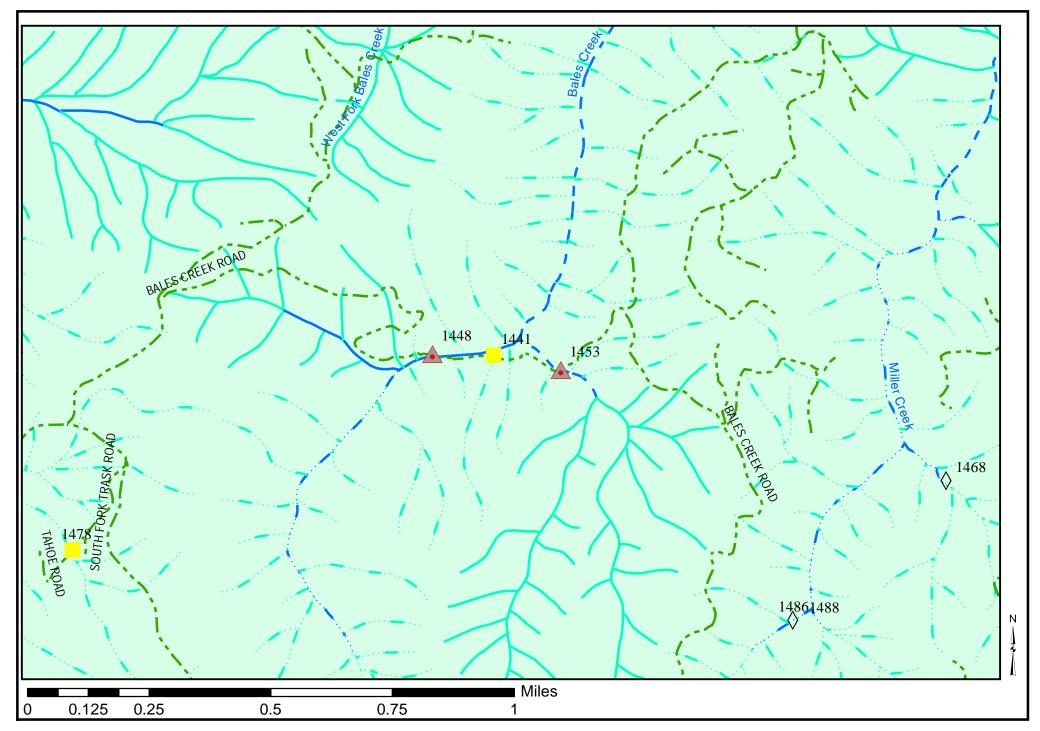
BALES CREEK AREA CULVERTS

	L	OCATIO	ON INFO		Culvert #	1448	Priority	M
Watershed			-	Trask River				II Con
Stream Name			Bales Creek			A		Lx
Township-Range-Sect	tion-1/4		T2S, R7W, Sec. 31, NE ¹ / ₄ of NE ¹ / ₄					
UTM Easting/Northin	lg (Zone 10, NAD	1983)	45405	53/5022706	1		A V	1
Road Name			East Fork B	ypass Road				4
Road/Culvert Owner	Road/Culvert Owner		Oregon Department	of Forestry				14 M
Adjacent Landowners		Oregon Department	of Forestry					
CULVERT INFO			CHANNEL INFO)			As an all	300
Shape	P	ipe arch	Inlet Gradient (%)	2.5				
Material	Corrugate	ed metal	Upstream Gradient (%)	9.1		/	Inlet	
Length (ft)		47	Bankfull Width (ft)	8.2	***			
Width (in)		150	Bankfull:Culvert Ratio	1.5				
Height (in)		102			Statute of the second	.Na.	1866	- 92
Outlet Perch (ft)		0.3						TAY
Slope (%)		1.2			adm .		Da.	
Rustline Height (in)		4						
Overall Condition		Fair						
	PRIORI	TIZATI	ON ANALYSIS					M
Upstream Habitat Le	Habitat Length (mi) 1.0		Habitat Points	2	CHILL ST.	7		Site
Habitat Quality	ty Good		Habitat Quality Points	3				1
Fish Species		Anad.	Fish Points	3				3
Barrier Class		Gray	Barrier Points	2			entle	
N			Prioritization Total Points	10			A A S	

Notes: Water flowing under inlet invert. Culvert is appropriately sized, but apparently wasn't sufficiently countersunk when initially installed (which allows a portion of stream flow to run under pipe. Boulders at inlet also appear to have ability to impede passage.

	L	OCATIO	ON INFO		Culvert #	1453	Priority	L
Watershed			7	Trask River				
Stream Name			South Fork Bales Creek			A Section		2 2
Township-Range-Section	n-1/4		T2S, R7W, Sec. 32, SE ¹ / ₄ of NW ¹ / ₄					E COL
UTM Easting/Northing	I Easting/Northing (Zone 10, NAD 1983)		45448	32/5022650	X	- key		
Road Name			Bales (Creek Road	X	一製作	The same of the sa	Ang.
Road/Culvert Owner			Oregon Department	of Forestry		t t		
Adjacent Landowners			Oregon Department	of Forestry	A. C. C.		Since	
CULVERT INFO			CHANNEL INFO		4		- Justin	
Shape	P	ipe arch	Inlet Gradient (%)	11.8			all control	
Material	Corrugate	ed metal	Upstream Gradient (%)	5.8		Inle	The same	
Length (ft)		79	Bankfull Width (ft)	8.3				3
Width (in)		120	Bankfull:Culvert Ratio	1.2				
Height (in)		91						
Outlet Perch (ft)		None						
Slope (%)		1.9						
Rustline Height (in)		6						
Overall Condition		Fair						
	PRIORI	TIZATI	ON ANALYSIS		SAN			
Upstream Habitat Leng	th (mi)	0.1	Habitat Points	1				S. 6
Habitat Quality		Good	Habitat Quality Points	3				No.
Fish Species		Anad.	Fish Points	3				
Barrier Class		Gray	Barrier Points	2	Z		Outle	X
			Prioritization Total Points	9		A men		
Notes: Inlet substantially		-	and boulders. Outlet end becomi	ng undercut.	Culvert is ap	propriatel	y sized, but	

apparently wasn't sufficiently countersunk when initially installed.



Bales Creek Area Culverts, Trask River Basin

BOUNDARY CREEK AND LOWER HEADQUARTERS CAMP CREEK AREA CULVERTS

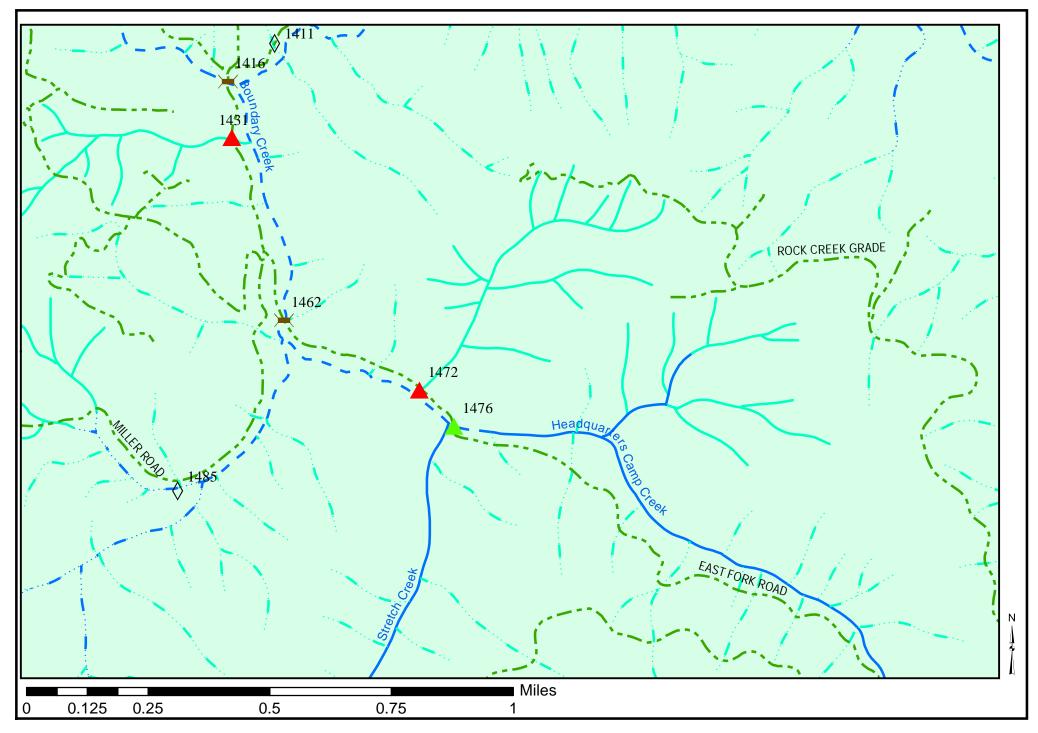
	L	OCATIO	ON INFO		Culvert #	1431	Priority	L
Watershed			7	Trask River	V Steel West			A STATE OF THE STA
Stream Name			Unnamed tributary of Boundary Creek				1.11	15
Township-Range-Sect	tion-1/4		T2S, R7W, Sec. 33, NF	E1/4 of NE1/4			18.	52,11
UTM Easting/Northin	g (Zone 10, NAD	1983)	45710	06/5023017			1 /4 /2 3	211
Road Name			East	Fork Road		State of the state		
Road/Culvert Owner			Oregon Department	of Forestry		-		122
Adjacent Landowners	S		Oregon Department	of Forestry		E. Carrie		
CULVERT INFO			CHANNEL INFO		A TOP OF THE PARTY		生 多於	
Shape		Circular	Inlet Gradient (%)	21.0				1
Material	Corrugate	ed metal	Upstream Gradient (%)	0.8		THE REAL PROPERTY.	Inlet	
Length (ft)		41	Bankfull Width (ft)	3.9	7 7			
Width (in)		36	Bankfull:Culvert Ratio	0.8				
Height (in)		36			1031	Mark San Land		
Outlet Perch (ft)		2.3					The St	
Slope (%)		3.9			1		the water	474
Rustline Height (in)		12						
Overall Condition		Fair			1-1-	11/1/1/19	建立一个	1
	PRIORI	TIZATI	ON ANALYSIS		5		TE LO	
Upstream Habitat Lei	ength (mi) 0.3		Habitat Points	1			一种人类	
Habitat Quality		Fair	Habitat Quality Points	2	25 7 6 1		أوطوالا	
Fish Species		Anad.	Fish Points	3			And the second	
Barrier Class		Red	Barrier Points	3	(17.2)		Outle	
			Prioritization Total Points	9	Asia .			進入政策

Notes: Stream listed as Nonfish. However, field crew thought it looked suitable, it is low-gradient, and it is a tributary to a good-quality stream so we elected to include this pipe in our assessment.

	L	OCATIO	ON INFO		Culvert #	1472	Priority	L
Watershed			-	Γrask River		A 170-20		
Stream Name		Unna	med tributary of Headquarters Camp Creek		1			
Township-Range-Sect	Township-Range-Section-1/4		T2S, R7W, Sec. 34, NE					
UTM Easting/Northin	lg (Zone 10, NAD	1983)	45772	21/5022175			1	
Road Name			East	Fork Road				
Road/Culvert Owner			Oregon Department	of Forestry	(A)		70	
Adjacent Landowners	S		Oregon Department	of Forestry	E		ALC: NO.	
CULVERT INFO			CHANNEL INFO	1		17.		
Shape	(Circular	Inlet Gradient (%)	1.3				
Material	Corrugate	d metal	Upstream Gradient (%)	3.6	25		Inlet	
Length (ft)		50	Bankfull Width (ft)	4.9	1/43			
Width (in)		54	Bankfull:Culvert Ratio	0.9				
Height (in)		54				One T		647
Outlet Perch (ft)		2.3			691			1
Slope (%)		2.3					da	
Rustline Height (in)		12				X		1
Overall Condition		Fair						No.
	PRIORI	TIZATI	ON ANALYSIS		X / /		X	
Upstream Habitat Lei	ngth (mi)	0.3	Habitat Points	1		() V		1
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3	EX V		2	100
Barrier Class		Red	Barrier Points	3	Outlet			
N. C. I' . 1	N. C 1 H		Prioritization Total Points	9				

Notes: Stream listed as Nonfish. However, field crew thought it looked suitable, it is low-gradient, it has a moderate intrinsic potential rating, and it is a tributary to a good-quality stream so we elected to include this pipe in our assessment.

	L	OCATIO	ON INFO		Culvert #	1476	Priority	NA
Watershed			Γ	rask River				
Stream Name			Headquarters Camp Creek		A Chi	HOT A		
Township-Range-Secti	ion-1/4		T2S, R7W, Sec. 34, NE	1/4 of NW1/4	All Sections			
UTM Easting/Northing	g (Zone 10, NAD	1983)	45783	6/5022036		To face		
Road Name			East	Fork Road		Carlot Control		
Road/Culvert Owner			Oregon Department	of Forestry		The same of the sa		The second
Adjacent Landowners			Oregon Department	of Forestry	The same		Village St.	1
CULVERT INFO			CHANNEL INFO		1	A Security		- 1
Shape C	Open bottomed arch		Inlet Gradient (%)	27.2				3
Material	Corrugate	ed metal	Upstream Gradient (%)	5.5			Inlet	
Length (ft)		50	Bankfull Width (ft)	9.1		1	IIIICL	
Width (in)		114	Bankfull:Culvert Ratio	1.0				
Height (in)		48			TO THE REAL PROPERTY.			* 3
Outlet Perch (ft)		None						A Marie III
Slope (%)		0				A.		
Rustline Height (in)		30				WY V	V	
Overall Condition		Fair			A CONTRACTOR			124
		TIZATI	ON ANALYSIS			3-1		
Upstream Habitat Len	gth (mi)	1.6	Habitat Points	4				
Habitat Quality	Good		Habitat Quality Points	3	Contract of the		132	
Fish Species			Fish Points	3	Half of the State			13.40
Barrier Class		Green	Barrier Points	1			Outle	1
			Prioritization Total Points	11				V. One
Notes: Extensive pooling	ng on both	side of pi	pe.					



Boundary Creek and Lower Headquarters Camp Creek Area Culverts, Trask River Basin

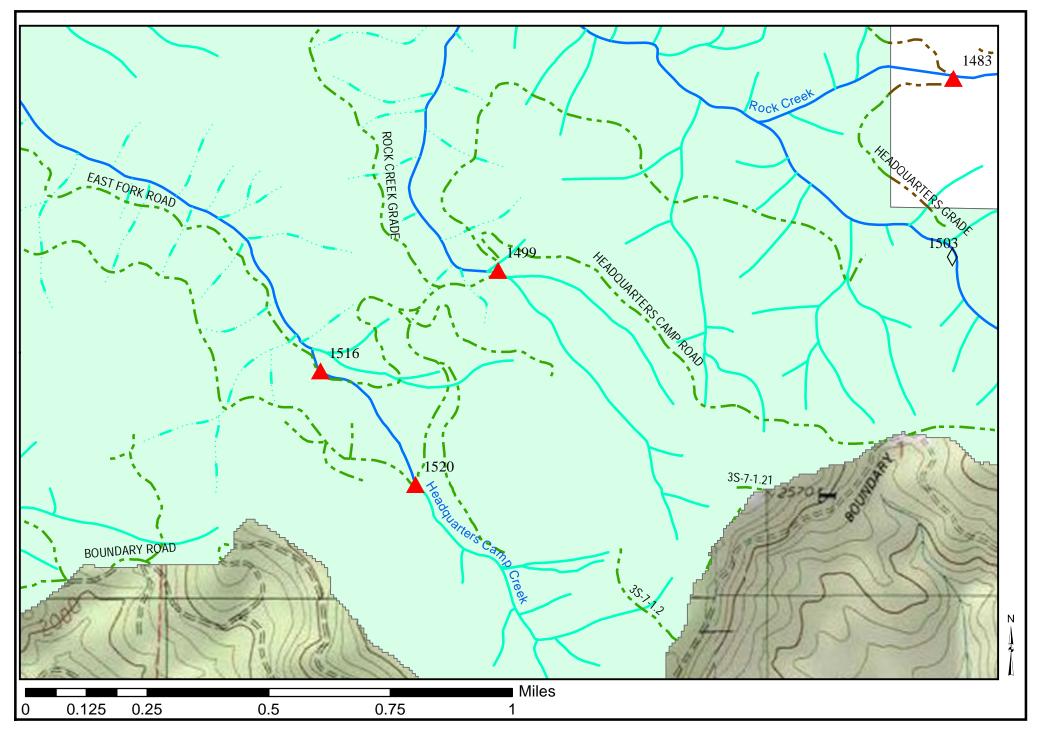
UPPER HEADQUARTERS CAMP CREEK AREA CULVERTS

	L	OCATIO	ON INFO		Culvert #	1516	Priority	L
Watershed				Trask River				
Stream Name			Headquarters Camp Creek					三 赤
Township-Range-Se	ction-1/4	on-1/4 T3S, R7W, Sec. 2, SE ¹ / ₄ of NW ¹ / ₄						
UTM Easting/North	ng (Zone 10, NAD	1983)	45935	54/5021000				
Road Name			East	Fork Road		1		
Road/Culvert Owner	•		Oregon Department	of Forestry			-	
Adjacent Landowne	rs		Oregon Department	of Forestry		49-74		
CULVERT INFO			CHANNEL INFO			7		
Shape	(Circular	Inlet Gradient (%)	21.1				X
Material	Corrugate	ed metal	Upstream Gradient (%)	10.4			Inlet	
Length (ft)		33	Bankfull Width (ft)	7.6		Source .		
Width (in)		48	Bankfull:Culvert Ratio	0.5				
Height (in)		48						
Outlet Perch (ft)		1.2				"		
Slope (%)		2.2						
Rustline Height (in)		24				7	AK	
Overall Condition		Fair			AL BOY		A CONTRACTOR OF THE PARTY OF TH	
	PRIORI	TIZATI	ON ANALYSIS		73		17	
Upstream Habitat L	ength (mi)	0.7	Habitat Points	2	5	A BUT		
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3		New Street		
Barrier Class		Red	Barrier Points	3		M.	Outle	t 🔻
			Prioritization Total Points	9	XC AX		Pan St.	
Notes:								

		I	LOCATIO	ON INFO		Culvert #	1520	Priority	L
Watershed				-	Trask River				
Stream Name				Headquarters Camp Creek					
Township-Rang	Township-Range-Section-1/4			T3S, R7W, Sec. 2, NV					
UTM Easting/N	orthin	g (Zone 10, NAI) 1983)	45974	14/5020580		-		
Road Name				Headqua	rters Grade				
Road/Culvert O	wner			Oregon Department	of Forestry	What is a			7711 113
Adjacent Lando	wners			Oregon Department	of Forestry				
CUL	VERT	INFO		CHANNEL INFO		HEREN Y			
Shape			Circular	Inlet Gradient (%)	50.0	Harman Jane			
Material		Corrugat	ed metal	Upstream Gradient (%)	6.2	MICHINA		Inlet	
Length (ft)			90	Bankfull Width (ft)	3.8				
Width (in)			78	Bankfull:Culvert Ratio	1.7				
Height (in)			78			CAL NOOL			* 1 %
Outlet Perch (ft))		2.0						
Slope (%)			3.7						
Rustline Height	(in)		12						19.00
Overall Condition	on		Fair						
		PRIOR	ITIZATI	ON ANALYSIS					
Upstream Habit	tat Ler	ngth (mi)	0.4	Habitat Points	1		Z		
Habitat Quality			Poor	Habitat Quality Points	1			Mark .	
Fish Species			Anad.	Fish Points	3				
Barrier Class	Barrier Class Red		Red	Barrier Points	3		Outle	et - downstrea	ım
				Prioritization Total Points	8		rocks a	terms but the	-
	Notes: Above this culvert stream listed as Nonfish. However, field crew thought it looked suitable, the stream has suitable gradient for fish use and it is mapped as suitable for coho spawning. As a result, we included this pipe in our assessment.								

		I	OCATIO	ON INFO		Culvert #	1499	Priority	L
Watershed					Trask River			1	× 17
Stream Name				South Fork Rock Creek					
Township-Range	e-Secti	ion-1/4		T3S, R7W, Sec. 2, NW	/½ of NE¾				•
UTM Easting/No	orthing	g (Zone 10, NAI	1983)	46000	04/5021270			AND	
Road Name				Headqua	rters Grade				
Road/Culvert O	wner			Oregon Department	of Forestry		1	MATERIA	
Adjacent Lando	wners			Oregon Department	of Forestry	Specific 1			
CUL	CULVERT INFO			CHANNEL INFO			4		1
Shape			Circular	Inlet Gradient (%)	7.5	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	1
Material		Corrugat	ed metal	Upstream Gradient (%)	0.5	Inlet			1
Length (ft)			67	Bankfull Width (ft)	4.9	0.782177			A Common
Width (in)			36	Bankfull:Culvert Ratio	0.6	180			
Height (in)			36			Bio 11		The second	
Outlet Perch (ft))		6.6				T. W	29	
Slope (%)			1.4					y Park I	
Rustline Height	(in)		20					The Party	
Overall Condition	on		Poor			100		The second	
		PRIOR	ITIZATI	ON ANALYSIS		3.00		0 000	
Upstream Habit	at Len	gth (mi)	0.1	Habitat Points	1				
Habitat Quality			Poor	Habitat Quality Points	1			3	
Fish Species			Anad.	Fish Points	3	7			
Barrier Class			Red	Barrier Points	3		ıtlet	A Contract	
		·		Prioritization Total Points	8		itiet		
NI . 4 4 la 4 la	1	1	istad os M	antich Harrier field arous the		4 من والمامة نبيمال	1. a C a 1 J a	مامممسمماله امس	:_

Notes: Above this culvert stream listed as Nonfish. However, field crew thought it looked suitable in the field and the reach is low-gradient. As a result, we included this pipe in our assessment.



Upper Headquarters Camp Creek Area Culverts, Trask River Basin

EAST FORK TRASK RIVER AND ROCK CREEK AREA CULVERTS

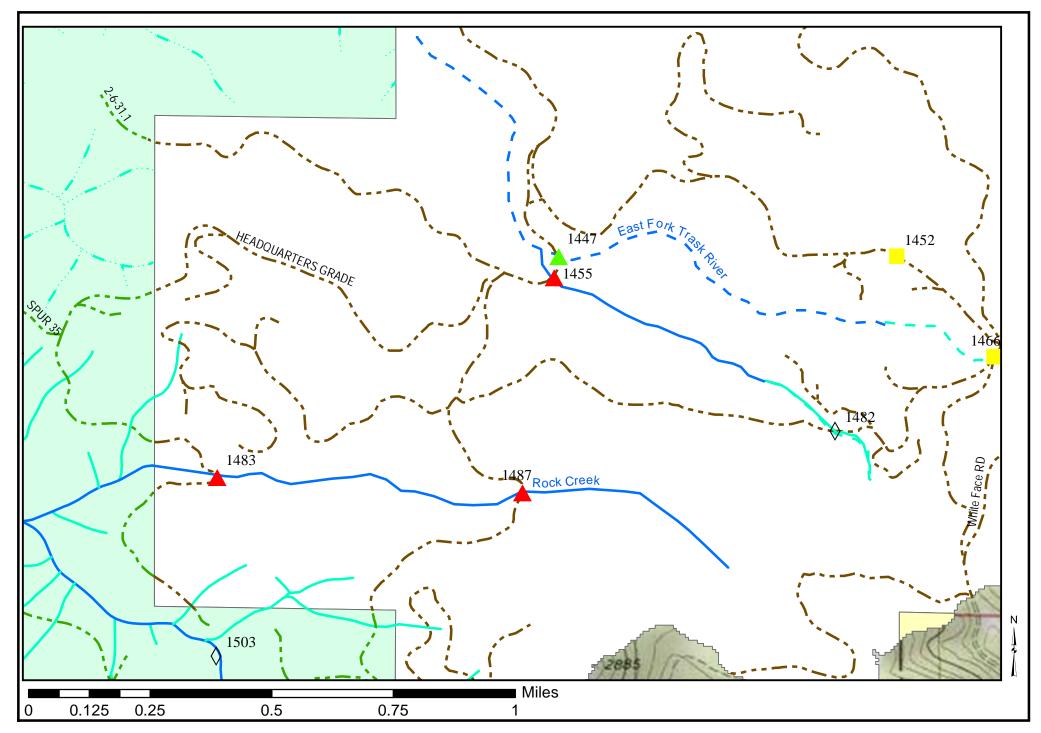
	L	OCATIO	ON INFO		Culvert #	1483	Priority	L
Watershed			Т	Trask River		10/9	14	4
Stream Name			Rock Creek					
Township-Range-Sect	ownship-Range-Section-1/4		T2S, R7W, Sec. 36, NW	V1/4 of SE1/4				
UTM Easting/Northin	ng (Zone 10, NAD	1983)	46151	3/5021915				
Road Name			Headqua	rters Grade				
Road/Culvert Owner			Weyerhaeuse	r Company				
Adjacent Landowner	S		Weyerhaeuse	r Company		1.	6	
CULVER	T INFO	_	CHANNEL INFO		Sala Bala	到人员		4
Shape		Circular	Inlet Gradient (%)	21.9	的自然是		State of the last	1
Material	Corrugate	ed metal	Upstream Gradient (%)	3.4	Inlet			
Length (ft)		32	Bankfull Width (ft)	8.5		SCHOOL STATE OF	The same of the same	
Width (in)		30	Bankfull:Culvert Ratio	0.3				
Height (in)		30						
Outlet Perch (ft)		None						
Slope (%)		5.7			1.22	No to k		
Rustline Height (in)	entire	y rusted						
Overall Condition		Poor						
	PRIORI	TIZATIO	ON ANALYSIS			J. J		State A
Upstream Habitat Le	Upstream Habitat Length (mi) 1.0		Habitat Points	2				
Habitat Quality	Habitat Quality Poor(+)		Habitat Quality Points	1	100	A THE	The same of the sa	- 4
Fish Species Anad.		Fish Points	3		AL CONTRACTOR			
Barrier Class		Red	Barrier Points	3		-	-	
			Prioritization Total Points	9	2		Outle	et
Notes:						BON !	Maria Control	

	LO	OCATIO	ON INFO		Culvert #	1487	Priority	L
Watershed				Trask River	March 1		The same	300
Stream Name			Rock Creek		1,0			1
Township-Range-Sect	ction-1/4		T2S, R6W, Sec. 31, NE	1/4 of SW1/4			No.	
UTM Easting/Northin	l g (Zone 10, NAD 1	1983)	46251	7/5021876		464		16
Road Name			Unnamed p	rivate road		PO VER	FAT	
Road/Culvert Owner			Weyerhaeuse	r Company		1		
Adjacent Landowners	S		Weyerhaeuse	r Company		1		
CULVER			CHANNEL INFO		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TO THE REAL PROPERTY.		77
Shape	(Circular	Inlet Gradient (%)	4.0	1 44		Inlet	
Material	Corrugate	d metal	Upstream Gradient (%)	12.5				
Length (ft)		55	Bankfull Width (ft)	3.4			The State of	
Width (in)		30	Bankfull:Culvert Ratio	0.9	The second second			
Height (in)		30			11/2	1		
Outlet Perch (ft)	1.0	0 to 1.5	Topography and obstructions precluded				1	
Slope (%)		5.0	the use of surveying equipmen	t to obtain	1/4	1		
Rustline Height (in)		13	longitudinal profile data.		10			
Overall Condition		Fair			A.	43		
	PRIORI'	FIZATI	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.5	Habitat Points	1				
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3		The		
Barrier Class		Red	Barrier Points	3		utlet	W	
			Prioritization Total Points	8	C	utiet	A PARTY OF	

Notes: At outlet, an \sim 3' section of pipe was detached from the pipe barrel at the top but remained attached at the invert. This segment was angled down towards the stream channel. Water cascaded approximately 6". from the outlet of this segment onto an \sim 12' long chute constructed of half-round corrugated pipe. Water flowed down this chute and into the stream channel. The end of this chute was perched above the stream channel by 6-12". The configuration resulted in the outlet being perched a total of 12 to 18". In addition, there was an inchannel water measuring device a short distance upstream of this culvert that also created a 6-12" step at its outlet.

	I	OCATIO	ON INFO		Culvert #	1447	Priority	NA
Watershed			П	Trask River	Design The Control of		*	
Stream Name			East Fork South Fork Trask River		Inlet			
Township-Range-	hip-Range-Section-1/4		T2S, R6W, Sec. 31, SE	1/4 of NW1/4				
UTM Easting/Nor	thing (Zone 10, NAI	1983)	46264	2/5022621				3000
Road Name			Headqua	rters Grade			1	
Road/Culvert Ow	ner		Weyerhaeuse	r Company			The Car	at .
Adjacent Landow	ners		Weyerhaeuse	r Company				
CULVERT INFO		CHANNEL INFO			- //		150	
Shape			Inlet Gradient (%)	10.8	The state of the s	THE PERSON		4
Material	Corrugat	ed metal	Upstream Gradient (%)	1.0	3			
Length (ft)		40	Bankfull Width (ft)	10.0		***		
Width (in)		138	Bankfull:Culvert Ratio	1.15				
Height (in)		84			100	110 110 CM		SATE OF
Outlet Perch (ft)		None		100				
Slope (%)		-0.7						
Rustline Height (i	n)	30			The same	C		
Overall Condition		Poor						
	PRIOR	TIZATI	ON ANALYSIS		C 17 1	No.	12 M	
Upstream Habitat	Length (mi)	0.8	Habitat Points	2	The To	Water Jan	1	
Habitat Quality	Quality Good		Habitat Quality Points	3				4
Fish Species	Fish Species Anad.		Fish Points	3			To The	
Barrier Class		Green	Barrier Points	1			Outle	1
			Prioritization Total Points	10			CLAIG	
Notes:								

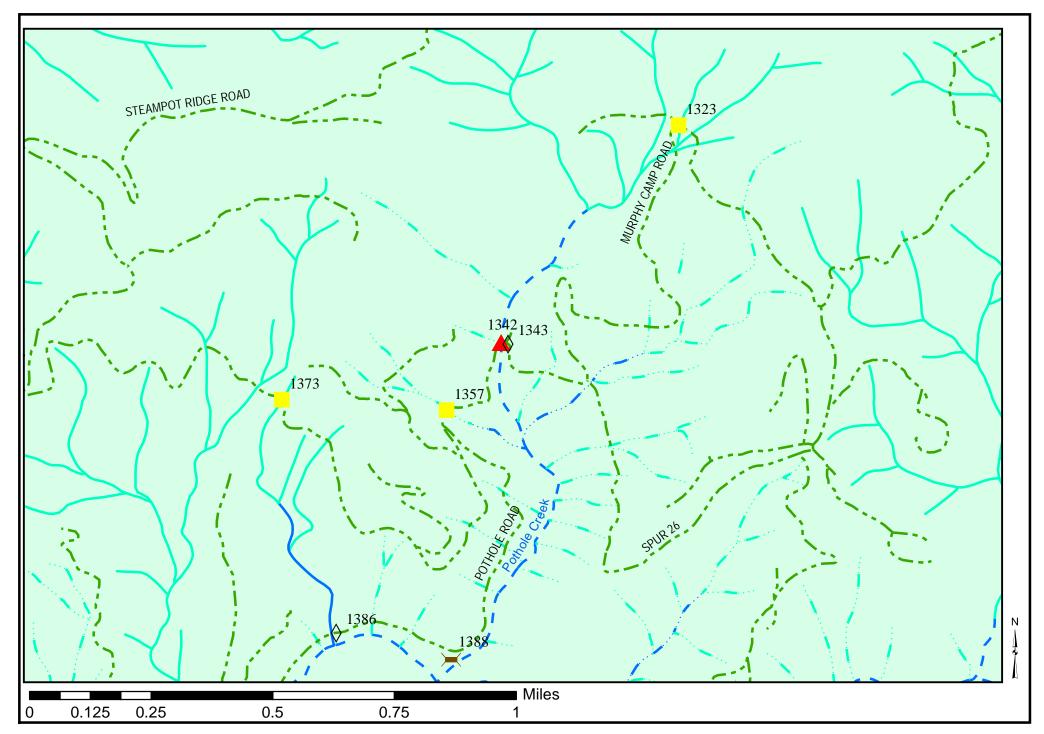
	I	LOCATIO	ON INFO		Culvert #	1455	Priority	Н
Watershed			7	Trask River		•		
Stream Name		Unnam	ed tributary of East Fork South	Fork Trask		Marian Araban		Vis. no.
Stream Name			-					
Township-Range-Sect	tion-1/4		T2S, R6W, Sec. 31, NE	MEN	1		1836	
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)		46263	5/5022586	AMA			1111
Road Name		Headqua	rters Grade				717	
Road/Culvert Owner	Road/Culvert Owner		Weyerhaeuse	r Company		美洲的		11
Adjacent Landowners		Weyerhaeuse	r Company				7	
CULVERT INFO			CHANNEL INFO					Section
Shape		Circular	Inlet Gradient (%)	22.4				
Material	Corrugat	ted metal	Upstream Gradient (%)	0.2	TXXX			1
Length (ft)		45	Bankfull Width (ft)	10.1*	124			1/4
Width (in)		54	Bankfull:Culvert Ratio	0.5				
Height (in)		54			HYANE SO	N. M. Market		
Outlet Perch (ft)		0.9	*Multi-channel wetlands upstr	eam and		HIIIIIIIII		
Slope (%)		1.4	downstream of pipe.	caiii aiiu				1
Rustline Height (in)		23	downstream of pipe.		* LANGE	سير)))	A	
Overall Condition		Fair			VI -	= 3/4	All	
	PRIOR	ITIZATI	ON ANALYSIS			1		10
Upstream Habitat Lei			Habitat Points	1				
Habitat Quality		Good	Habitat Quality Points	3		12.0		
Fish Species			Fish Points	3				15
Barrier Class		Red	Barrier Points	3	Outlet			
			Prioritization Total Points 10					
Notes: Inlet blocked with sediment. No flow apparent through inlet, but water was freely flowing from outlet.								



East Fork Trask River and Rock Creek Area Culverts, Trask River Basin

POTHOLE CREEK CULVERT

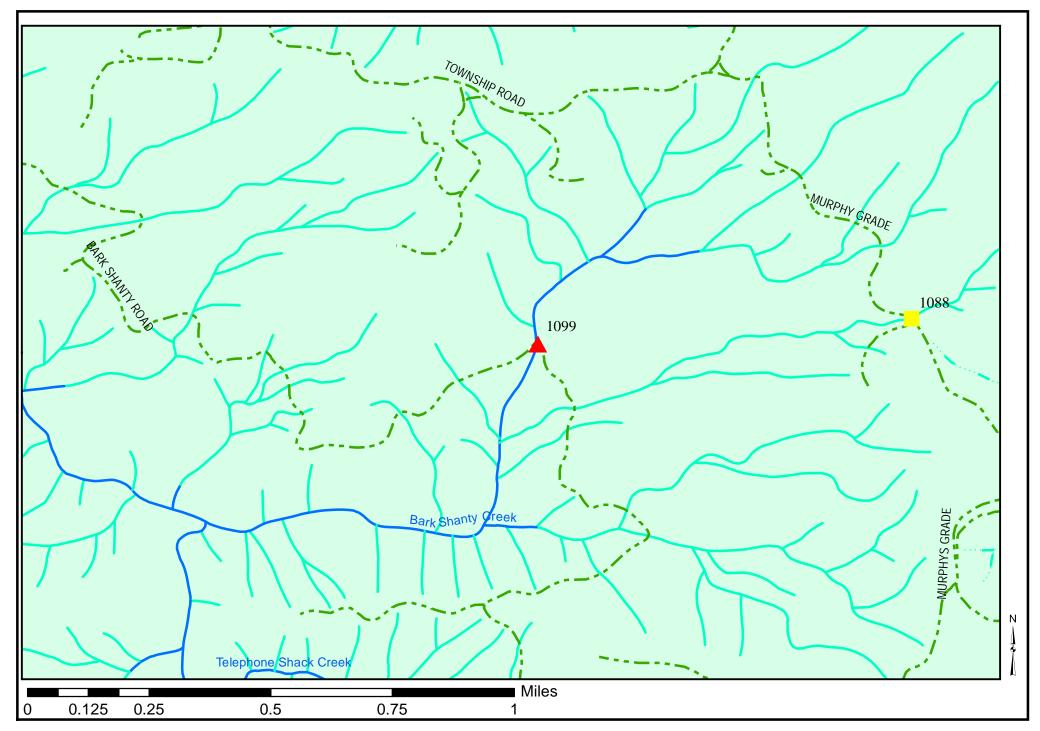
	L	OCATIO	ON INFO		Culvert #	1342	Priority	Н
Watershed			7	Γrask River				
Stream Name			Pot	thole Creek	2 X X		The state of the s	PA.
Township-Range-Sec	tion-1/4		T1S, R7W, Sec. 23, SW	1/4 of SW1/4		100	100	
UTM Easting/Northin	ng (Zone 10, NAD	1983)	45922			16.15		
Road Name			Murphy (Camp Road				
Road/Culvert Owner	Road/Culvert Owner		Oregon Department	of Forestry			3 4	
Adjacent Landowner	Adjacent Landowners		Oregon Department	of Forestry	-			
CULVER	CULVERT INFO		CHANNEL INFO			The second		
Shape		Circular	Inlet Gradient (%)	11.5				
Material st	eel lined wit	h plastic	Upstream Gradient (%)	5.1	Inlet	all a land		
Length (ft)		53	Bankfull Width (ft)	9.3	Sales Con			
Width (in)		60	Bankfull:Culvert Ratio	0.5				
Height (in)		60						100
Outlet Perch (ft)		1.3			and the same			10
Slope (%)		6.6						-
Rustline Height (in)		N/A						
Overall Condition		Fair					Air Sales	3.5
	PRIOR	TIZATI	ON ANALYSIS		Market Market	ALV.	Thail de	-19
Upstream Habitat Le	ngth (mi)	0.4	Habitat Points	2		MAN A		
Habitat Quality	oitat Quality Good		Habitat Quality Points	3	1 1111	1		
Fish Species	Fish Species Anad.		Fish Points	3		3.00	The same of	1
Barrier Class		Red	Barrier Points	3	NATIONAL PROPERTY.	Outle	et	The
			Prioritization Total Points	11		10 - 10 EK		33
Notes:								



Pothole Creek Area Culverts, Trask River Basin

BARK SHANTY CREEK AREA CULVERT

]	LOCATI	ON INFO		Culvert #	1099	Priority	Н
Watershed				Trask River	A-1-2-P			
Stream Name			Unnamed tributary to Bark S	Shanty Creek				
Township-Range-Sect	tion-1/4		T2S, R7W, Sec. 3, NE ¹ / ₄ of SE ¹ / ₄			-/	1	
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)		458	843/5029888		(F. = 1		
Road Name			Bark	Shanty Road		Ant	100	
Road/Culvert Owner			Oregon Departmen	nt of Forestry			1000	
Adjacent Landowners	5		Oregon Departmen	nt of Forestry	- Salar			
CULVERT	INFO	<u>.</u>	CHANNEL INFO)				
Shape	(Circular	Inlet Gradient (%)	17.5		13184		
Material	Corrugate	d metal	Upstream Gradient (%)	9.5	The state of the s			
Length (ft)		40	Bankfull Width (ft)	11.6		45	nlet	
Width (in)		66	Bankfull:Culvert Ratio	0.5				
Height (in)		66				Act.	-	
Outlet Perch (ft)		1.4					1	
Slope (%)		9.2				1		
Rustline Height (in)		19					1	
Overall Condition		Fair				199		
	PRIOR	ITIZAT	ION ANALYSIS			11/		
Upstream Habitat Lei	ngth (mi)	0.6	Habitat Points	2				
Habitat Quality		Fair	Habitat Quality Points	2	-			
Fish Species		Anad.	Fish Points	3			-	
Barrier Class		Red	Barrier Points	3	Ou	ıtlet		
			Prioritization Total Points	10				
Notes:								



Bark Shanty Creek Area Culverts, Trask River Basin

CRUISER CREEK AREA CULVERTS

	I	LOCATI	ON INFO		Culvert #	1058	Priority	NA
Watershed				Trask River		2		-
Stream Name			Unnamed tributary	of July Creek				-
Township-Range-Sect	tion-1/4		T2S, R6W, Sec. 6, S'	W1/4 of NW1/4				
UTM Easting/Northin	1g (Zone 10, NAI	1983)	462		6.0			
Road Name			Cruise	r Creek Road	1 / 1	-		4
Road/Culvert Owner			Oregon Departmen	nt of Forestry		to the	Star Star	5
Adjacent Landowner	Adjacent Landowners		Oregon Departmen	nt of Forestry				
CULVERT	CULVERT INFO		CHANNEL INFO)		- Ne		
Shape	Pipe arch		Inlet Gradient (%)	8.0		· Veri	The same	
Material	Corrugate	d metal	Upstream Gradient (%)	7.0	Inlet		1	
Length (ft)		78	Bankfull Width (ft)	10.5		1		2006
Width (in)		126	Bankfull:Culvert Ratio	1.0				
Height (in)		84						1.
Outlet Perch (ft)		None	An active wasp nest at inlet pr					Y S
Slope (%)		3.0	of survey equipment to collect	t longitudinal		1		a di
Rustline Height (in)		12	profile data.			-	Carried States	1
Overall Condition		Fair						
	PRIOR	ITIZAT	ION ANALYSIS			-	- 17 76	0
Upstream Habitat Le	ngth (mi)	1.3	Habitat Points	3			*	
Habitat Quality		Good	Habitat Quality Points	3	- Jest			
Fish Species		Anad.	Fish Points	3				
Barrier Class		Green	Barrier Points	1	Out	let		No.
			Prioritization Total Points	10		2000	THE RESIDENCE	1
Notes:								

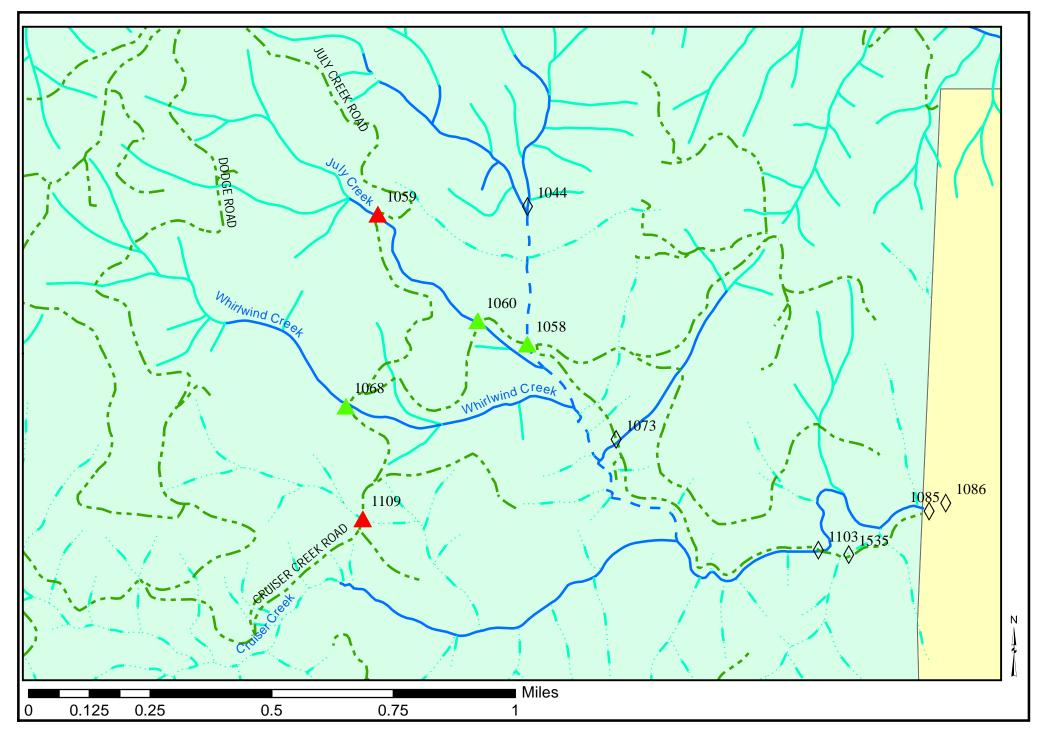
	L	OCATI	ON INFO		Culvert #	1060	Priority	NA
Watershed				Trask River	A 44 14 7	利用	100	
Stream Name				July Creek				
Township-Range-Sect	tion-1/4		T2S, R6W, Sec. 6, S	W1/4 of NW1/4				
UTM Easting/Northin	1 g (Zone 10, NAD	1983)	462					
Road Name			Cruise	r Creek Road		7 3		
Road/Culvert Owner			Oregon Department	nt of Forestry	1			
Adjacent Landowner	Adjacent Landowners		Oregon Department	nt of Forestry	- 1			4 Buch
CULVERT INFO			CHANNEL INFO					2///
Shape	*		Inlet Gradient (%)	3.8				
Material	Corrugated	d metal	Upstream Gradient (%)	7.6	met		A-	July 1
Length (ft)		51	Bankfull Width (ft)	6.2			ALC: A	-
Width (in)		120	Bankfull:Culvert Ratio	1.6				
Height (in)		78						
Outlet Perch (ft)		None					1	No.
Slope (%)		7.3						7/70
Rustline Height (in)		None						75/1
Overall Condition		Fair			A Think			Y
			ION ANALYSIS					
Upstream Habitat Le	ngth (mi)	0.4	Habitat Points	1				
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3		733	PART Y	
Barrier Class	Green		Barrier Points	1	1 Outlet		1	1
			Prioritization Total Points	7	72 (See 19)		E	- OF PAC
Notes:								

]	LOCATI	ON INFO		Culvert #	1059	Priority	L
Watershed				Trask River		1	The state of the s	
Stream Name				July Creek	10	1		
Township-Range-Sect	tion-1/4		T2S, R7W, Sec. 1,	3.		The state of		
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	461					
Road Name	_		July					
Road/Culvert Owner			Oregon Departmen	nt of Forestry	2/2		1/2	
Adjacent Landowners			Oregon Departmen	nt of Forestry	Alba-		2-11/2	
CULVERT	INFO	•	CHANNEL INFO					
Shape	(Circular	Inlet Gradient (%)	28.3		1		
Material	Corrugate	d metal	Upstream Gradient (%)	4.0	1	Valla		
Length (ft)		72	Bankfull Width (ft)	4.3				
Width (in)		50	Bankfull:Culvert Ratio	1.0	In	let		
Height (in)		50						
Outlet Perch (ft)		4.3					130	
Slope (%)		6.4				2		
Rustline Height (in)		14				The same		* *
Overall Condition		Fair					**	
	PRIOR	ITIZAT	ION ANALYSIS					
Upstream Habitat Le	ngth (mi)	0.1	Habitat Points	1	25			
Habitat Quality		Poor	Habitat Quality Points	1		***		
Fish Species		Anad.	Fish Points	3	A TOWN	The same of		1
Barrier Class		Red	Barrier Points	3	Out	let		
			Prioritization Total Points	8		The state of	*	14
Notes: Stream channel	l dry during	summer	2011 survey effort.					

	I	OCATI	ON INFO		Culvert #	1068	Priority	NA
Watershed				Trask River		C 1124		3/1/2
Stream Name			Whi	rlwind Creek		A MAN	1	15
Township-Range-Sect	tion-1/4		T2S, R7W, Sec. 1,	NE¼ of SE¼	1	1	5	W.
UTM Easting/Northin	g (Zone 10, NAI	1983)	461		A		Va.	
Road Name			Cruiser Creek Road			X))	A = 2a	1
Road/Culvert Owner			Oregon Departmen		18	The state of	The same	
Adjacent Landowners	S		Oregon Departmen					
CULVERT	INFO	<u>-</u>	CHANNEL INFO		1			
Shape	(Circular	Inlet Gradient (%)	7.7	1-70		Inlet	77
Material	Corrugate	d metal	Upstream Gradient (%)	1.8			milet	
Length (ft)		43	Bankfull Width (ft)	4.9				
Width (in)		120	Bankfull:Culvert Ratio	2.0				
Height (in)		84				a de la la		
Outlet Perch (ft)		None			4	3		
Slope (%)		3.1			1			
Rustline Height (in)		None						1
Overall Condition		Fair			X - Z	3		
	PRIOR	ITIZAT	ION ANALYSIS		/			
Upstream Habitat Lei	ngth (mi)	0.3	Habitat Points	1		Δ		
Habitat Quality		Fair	Habitat Quality Points	2		100 mg	N. C.	1
Fish Species		Anad.	Fish Points	3	ST AZ			
Barrier Class		Green	Barrier Points	1	Outlet		1	
			Prioritization Total Points	7				X X
Notes:								

]	LOCATI	ON INFO		Culvert #	1109	Priority	L
Watershed				Trask River		The state of the s		
Stream Name			Unnamed tributary of C	Cruiser Creek	Valle 1		A STATE OF THE STA	
Township-Range-Sec	tion-1/4		T2S, R7W, Sec. 1,					
UTM Easting/Northin	1g (Zone 10, NAI	1983)	461			ALL WEST CONTROL OF THE PARTY O		
Road Name			Cruiser Creek Road					
Road/Culvert Owner			Oregon Departmen					
Adjacent Landowner			Oregon Department of Forestry					
CULVERT	CULVERT INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	4.9	Marin Service			
Material	Corrugate	d metal	Upstream Gradient (%)	4.9		V.	inlet	
Length (ft)		44	Bankfull Width (ft)	5.9				
Width (in)		48	Bankfull:Culvert Ratio	0.7				
Height (in)		48					ESTANA N	1.5
Outlet Perch (ft)		None					21680	
Slope (%)		4.6				The state of the s		
Rustline Height (in)		22						171
Overall Condition		Fair			321			$ au \leq \lambda$
	PRIOR	ITIZAT	ION ANALYSIS				A -	
Upstream Habitat Le	ngth (mi)	0.3	Habitat Points	1		Y		
Habitat Quality		Poor	Habitat Quality Points	1		/		
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	Outlet	12		
			Prioritization Total Points	8				

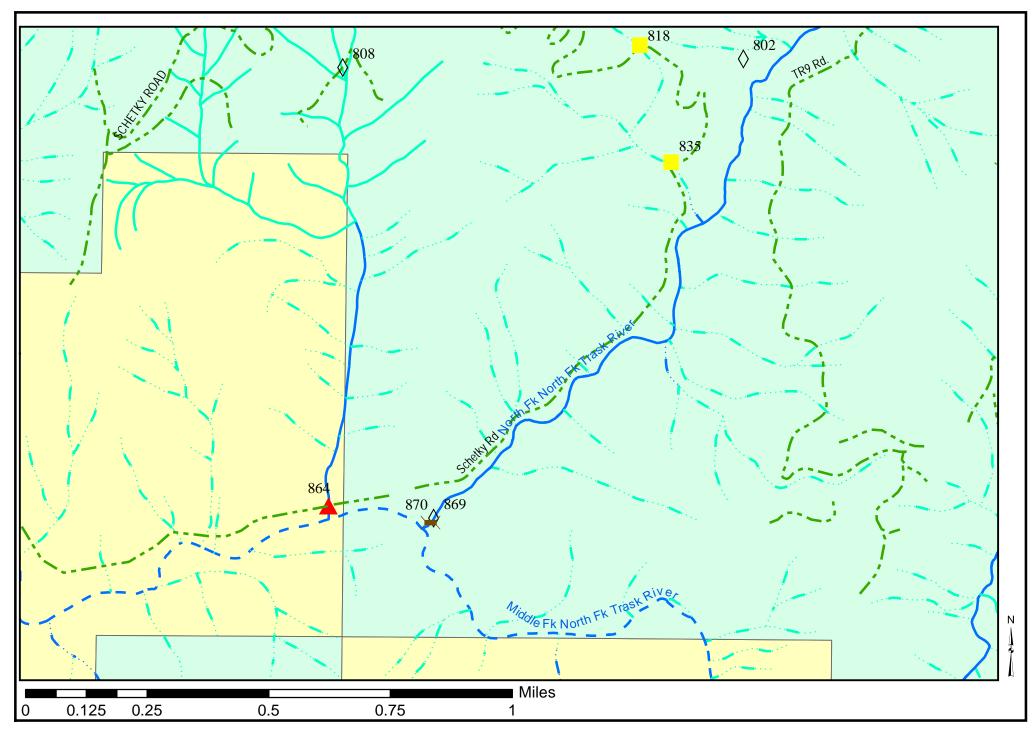
Notes: This crossing was located on a stream designated as Nonfish-modeled. However, because this stream is a tributary of Cruiser Creek, one of the more productive coho streams in the Trask Basin, we elected to include this culvert in this report. There are bedrock falls that appear to limit the distribution of coho on Cruiser Creek. However, based on GIS data it is unclear to us exactly where this tributary lies relative to these falls. Habitat quality was based primarily on stream gradient, bankfull width, and intrinsic potential modeling.



Cruiser Creek Area Culverts, Trask River Basin

UPPER NORTH FORK TRASK RIVER AREA CULVERT

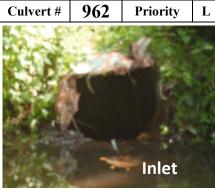
	I	LOCATI	ON INFO		Culvert #	864	Priority	M
Watershed				Trask River			2.7	•
Stream Name		U	Innamed tributary of North Forl	k Trask River		000	10	
Township-Range-Sect	tion-1/4		T1S, R6W, Sec. 19, S	W1/4 of SW1/4	- 3		三 不 四 年	
UTM Easting/Northin	1g (Zone 10, NAI	1983)	463	The second				
Road Name			North Fork Tras				A CHARLES	
Road/Culvert Owner			US Bureau of Land					
Adjacent Landowners	5		US Bureau of Land	Wash		1		
CULVERT	INFO		CHANNEL INFO	S. S. S. S.		Ken		
Shape	(Circular	Inlet Gradient (%)	6.6	200	21		
Material	Corrugate	d metal	Upstream Gradient (%)	6.4		1		
Length (ft)		60	Bankfull Width (ft)	11.9			-	
Width (in)		90	Bankfull:Culvert Ratio	0.7	123		Inlet	
Height (in)		90						N 100
Outlet Perch (ft)		2.4						
Slope (%)		8.4			A.			1
Rustline Height (in)		12					1	
Overall Condition		Fair				- W		X
	PRIOR	ITIZAT	ION ANALYSIS		1 3 mg	/ /		
Upstream Habitat Le	Upstream Habitat Length (mi) 0.6		Habitat Points	2				
Habitat Quality	Fair		Habitat Quality Points	2				354
Fish Species		Anad.	Fish Points	3		100		
Barrier Class		Red	Barrier Points	3	Out	let		
			Prioritization Total Points	10				
Notes:					•			



Upper North Fork Trask River Area Culverts, Trask River Basin

UPPER MIDDLE FORK NORTH FORK TRASK RIVER AREA CULVERTS

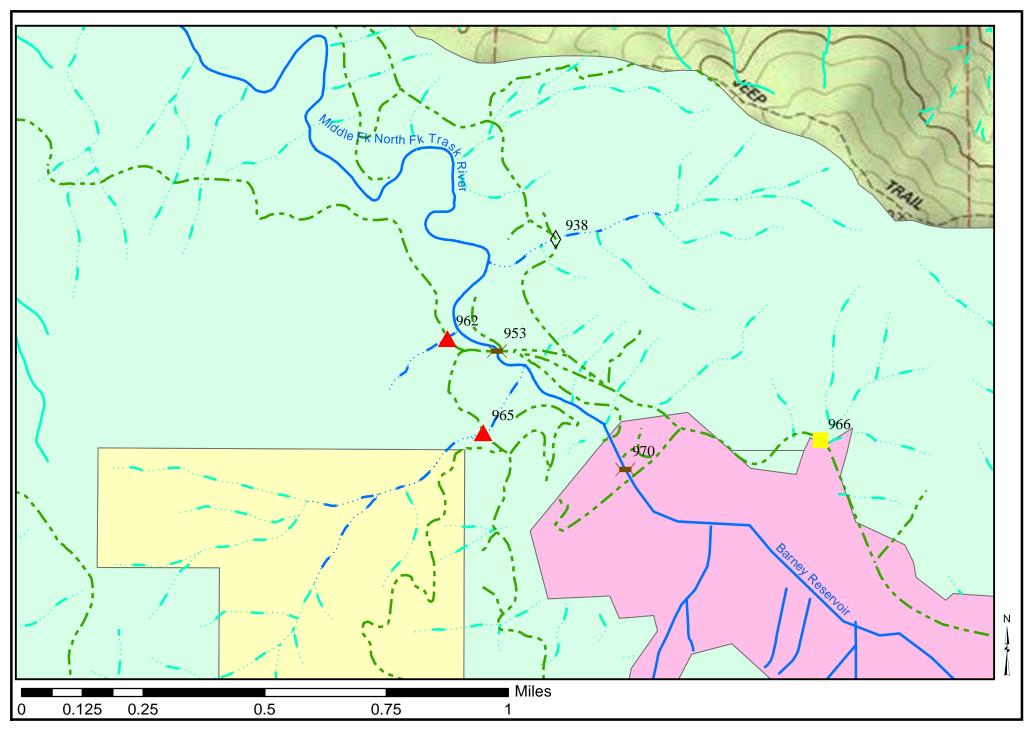
LOCATION INFO										
Watershed				Trask River						
Stream Name	Unna	med tribu	utary of Middle Fork North Fork Trask River							
Township-Range-Sec			T1S, R6W, Sec. 27, SE ¹ / ₄ of SE ¹ / ₄							
UTM Easting/Northin		D 1983)	468	476/5033151						
Road Name			Reimer Road							
Road/Culvert Owner			Oregon Departmen	nt of Forestry						
Adjacent Landowner	S		Oregon Departmen	nt of Forestry						
CULVER	Γ INFO		CHANNEL INFO)						
Shape	(Circular	Inlet Gradient (%)	3.0						
Material	Corrugate	d metal	Upstream Gradient (%)	3.5						
Length (ft)		57	Bankfull Width (ft)	2.5						
Width (in)		30	Bankfull:Culvert Ratio	1.0						
Height (in)		30								
Outlet Perch (ft)		9.5								
Slope (%)		6.4								
Rustline Height (in)		18								
Overall Condition	Ve	ry Poor								
		ITIZAT	ION ANALYSIS							
Upstream Habitat Le	ngth (mi)	0.2	Habitat Points	1						
Habitat Quality Poor			Habitat Quality Points	1						
Fish Species Anad.			Fish Points	3						
Barrier Class		Red	Barrier Points	3						
			Prioritization Total Points	8						





Notes: Invert was worn completely through for a substantial length of the pipe. Also, the inlet was partially blocked with debris and badly damaged.

	1	LOCATI	ON INFO		Culvert #	965	Priority	L
Watershed				Trask River		The state of the s		4
Stream Name	Unna	med tribu	itary of Middle Fork North Fork	K Trask River	P			
Township-Range-Sect	tion-1/4		T1S, R6W, Sec. 26, S					
UTM Easting/Northin	1g (Zone 10, NAI			598/5032837	3		102	
Road Name	Unna		named Forest Road (ODF ID =	REIMO25B)				
Road/Culvert Owner			Oregon Departmen				7	
Adjacent Landowner	Adjacent Landowners		Oregon Departmen	nt of Forestry			-	
CULVERT INFO			CHANNEL INFO	O		243		
Shape	(Circular	Inlet Gradient (%)	9.0			halat	
Material	Corrugate	d metal	Upstream Gradient (%)	7.5	2000		Inlet	
Length (ft)		60	Bankfull Width (ft)	6.5	1 THE			
Width (in)		36	Bankfull:Culvert Ratio	0.5			11/12	
Height (in)		36				4		
Outlet Perch (ft)		~6.0		Topography precluded use of surveying			A STATE OF THE STA	
Slope (%)		5.0	equipment to collect longitudi	equipment to collect longitudinal profile		M		
Rustline Height (in)		18	data.					
Overall Condition		Fair						
	PRIOR	ITIZAT	ION ANALYSIS					
Upstream Habitat Le	ngth (mi)	0.7	Habitat Points	2		11.		
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3		h soul	Medical	
Barrier Class		Red	Barrier Points	3	Out	let		
			Prioritization Total Points	9	Asia I	SA BATTE	AL THE	
Notes:								

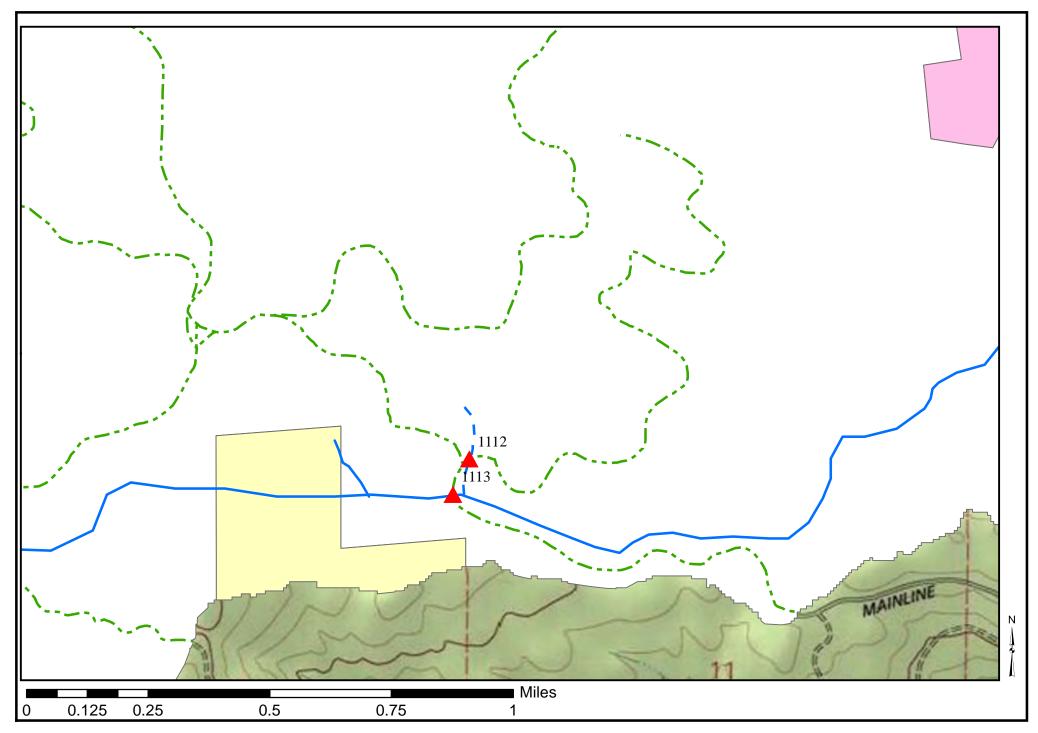


Upper Middle Fork North Fork Trask River Area Culverts, Trask River Basin

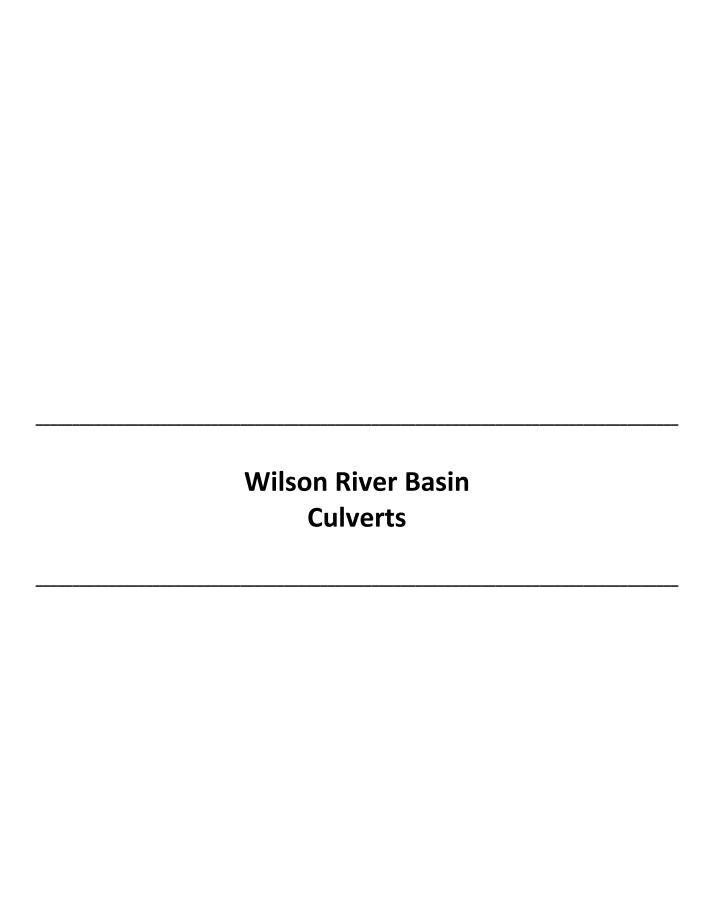
FLORA MAINLINE ROAD AREA CULVERTS

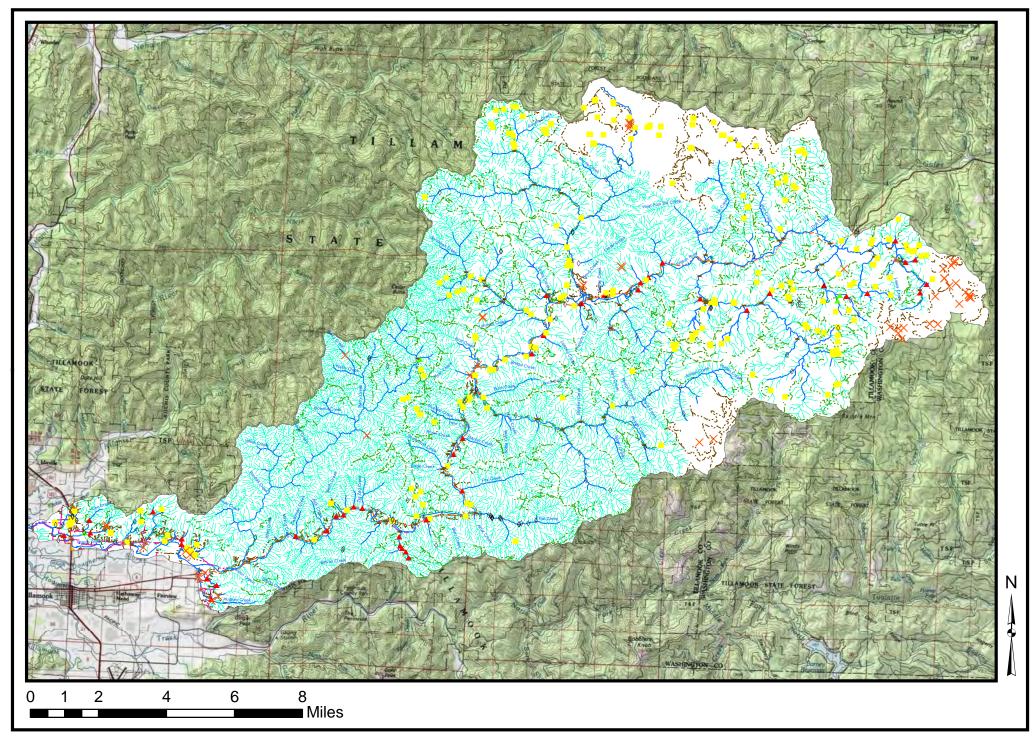
		LOCATI	ON INFO		Culvert #	1113	Priority	L
Watershed				Trask River				4
Stream Name			Middle Fork North Forl	Trask River		0		
Township-Range-Sec	tion-1/4		T2S, R6W, Sec. 10, 1		*			No.
UTM Easting/Northin	ng (Zone 10, NA	D 1983)	468					
Road Name			Flora M	W. Committee	1		MI	
Road/Culvert Owner			Weyerhaeu	ser Company	1			+ X-
Adjacent Landowners			Weyerhaeu	ser Company	11			1
CULVERT	CULVERT INFO		CHANNEL INFO)	1	1 2		
Shape			Inlet Gradient (%)	10.0		300	Inlet	
Material	Corrugate	ed metal	Upstream Gradient (%)	5.0	A		THE CO	
Length (ft)		105	Bankfull Width (ft)	8.3				
Width (in)		64	Bankfull:Culvert Ratio	0.6				
Height (in)		64		·				
Outlet Perch (ft)		1.5	Topography precluded use of					3
Slope (%)		7.0	equipment to collect longitudi	nal profile	Sec. of			
Rustline Height (in)		24	data				1	
Overall Condition		Poor				N. Committee	M7 (1)	
	PRIOF	RITIZAT	ION ANALYSIS		7			
Upstream Habitat Le	ngth (mi)	1.0	Habitat Points	2		1		
Habitat Quality	0 \ /		Habitat Quality Points	2		A PERSONAL PROPERTY.		
Fish Species	Fish Species Resident		Fish Points	2				10 3
Barrier Class		Red	Barrier Points	3			Outlet	153
			Prioritization Total Points	9	X XX TABLE	and of the same		
Notes:								

	LOCATION INFO					1112	Priority	L
Watershed				Trask River	1 1 2			
Stream Name	Unnaı	ned tribu	tary of Middle Fork North Fork Trask River		1 10 10			色点
Township-Range-Sec	tion-1/4		T2S, R6W, Sec. 11, N	W1/4 of NW1/4	S-MI		3/	
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)			510/5029400				
Road Name			Unnamed off of Flora M	fainline Road				N
Road/Culvert Owner			Weyerhaeu	ser Company			Wit !	
Adjacent Landowner	S		Weyerhaeu	ser Company		X		
CULVER	ΓINFO	-	CHANNEL INFO)		tolet		
Shape	(Circular	Inlet Gradient (%)	2.0	de la late			
Material	Corrugate	d metal	Upstream Gradient (%)	10.2				
Length (ft)		100	Bankfull Width (ft)	5.0				
Width (in)		42	Bankfull:Culvert Ratio	0.7				
Height (in)		42		·		rrrram	40401110111011101	270
Outlet Perch (ft)		3.0	Topography precluded use of		11111111111			
Slope (%)		12.0	equipment to collect longitudi	nal profile	2011 H	(l (EEBBAA		
Rustline Height (in)		14	data			1151111111		
Overall Condition		Poor				Kullill		F (-
	PRIOR	ITIZAT	ION ANALYSIS		5111			
Upstream Habitat Le	ngth (mi)	0.1	Habitat Points	1				18
Habitat Quality		Poor	Habitat Quality Points	1			1000	
Fish Species	F	Resident	Fish Points	2				7
Barrier Class		Red	Barrier Points	3			Outlet	
			Prioritization Total Points	7			Garica	0293
Notes:								



Flora Mainline Road Area Culverts, Trask River Basin





Wilson Basin Crossings

Wilson River Basin Clusters

GI .	Culvert	D • • •	a.	**
Cluster	Numbers	Priority	Stream	Upstream Habitat
	792 781	H N/A	Juno Creek	
Juno Creek	755	N/A	Juno Creek Juno Creek	2.3
	780	L L		
	/80	L	Unnamed tributary	
	5306	M	Yankee Branch	
	814	H	Beaver Creek	
Sollie Smith Area	735	L	Unnamed tributary	3.2
Some Simul Area	803	L	Unnamed tributary	3.2
	788	L	Unnamed tributary	
	700	L	Cimamed tributary	I
	898	?	Hughey Creek	
	900	?	Hughey Creek	
Hughey Creek	901	M	Hughey Creek	2.8
	910	Н	Hughey Creek	
	710	11	Trughey creek	
	877	L	Donaldson Creek	
Donaldson Creek	881	L	Donaldson Creek	0.3
	001		2 onareson creen	
Little N.F. Wilson River Area	465	N/A	Unnamed tributary	0.5
	I		,	1
I 1 C 1 A	775	M	Hatchery Creek	1.0
Jack Creek Area	760	M	Jack Creek	1.8
				·
	722	L	Unnamed tributary	
	713	M	Smith Creek	
Smith Creek Area	693	L	Smith Creek	2.9
	696	L	Fern Creek	
	697	Н	Zig Zag Creek	
	762	L	Unnamed tributary	
	799	L	Unnamed tributary	
Kansas Creek Area	798	L	Kansas Creek	0.9
	822	L	Kansas Creek	
	823	L	Kansas Creek	
	T	Т	T ==	
Bear Creek Area	723	L	Unnamed tributary	0.5
			T = ~ .	
Fox Creek	667	Н	Fox Creek	2.0
	604	T T	TT 1, 9 .	
Stanley Creek Area	604	L	Unnamed tributary	0.9
<u> </u>	584	M	Stanley Creek	
	4.47	T	Hashina Cua-1-	
Hoskin and Luebke creeks	447	L	Hoskins Creek	0.8
	405	M	Luebke Creek	

	304	L	Unnamed tributary		
Loos Comp Area	333	Н	Runyon Creek	2.1	
Lees Camp Area	305	Н	Scotty Creek	2.1	
	388	L	Unnamed tributary		
	268	L	Moore Creek		
Dog Creek Area	240	L	Unnamed tributary	2.1	
Dog Creek / Hea	227	L	Unnamed tributary	2.1	
	199	Н	Dog Creek		
	300	L	Unnamed tributary		
S.F. Wilson River Tributaries	356	L	Unnamed tributary	0.6	
	261	L	Unnamed tributary		
	231	Н	Elliot Creek		
Elliot Creek Area	265	L	Elliot Creek	3.3	
Linot Cicck Aica	266	M	Elliot Creek] 3.3	
	299	L	Unnamed tributary		
	249	Н	Deyoe Creek		
	202	Н	Lewis Creek		
	150	L	Unnamed tributary		
Devils Lake Fork Tributaries	178	Н	Unnamed tributary	3.9	
Devins Dake I olk Illoutaires	176	M	Unnamed tributary	1	
	<u> </u>	1.1	-	1	
	222	M	Unnamed tributary		

JUNO CREEK CULVERTS

		LOCATIO	N INFO		Culvert #	792	Priority	Н
Watershed			W	ilson River	24			
Stream Name			Juno Creek			A		
Township-Range-Sec	tion-1/4		T1S, R9W, Sec. 13, SI	E1/4 of SE1/4	1 × 11 ×	1		
UTM Easting/Northin	1 g (Zone 10, NA	D 1983)	43366	0/5036608	1	E)	- 1	
Road Name				quist Road	4			
Road/Culvert Owner				ook County	A			
Adjacent Landowner	Adjacent Landowners			G. Edwards				
CULVERT INFO		CHANNEL INFO)					
Shape		Circular	Inlet Gradient (%)			1		
Material		Concrete	Upstream Gradient (%)	4.0	12	View of the same		
Length (ft)	Unable	to measure	Bankfull Width (ft)	8.8	Inlet 🧪 🦖			
Width (in)		48	Bankfull:Culvert Ratio	0.5		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Height (in)		48						
Outlet Perch (ft)	Unable	to measure	This culvert has a tidegate on	ite outlet				
Gradient (%)		6.0	It is visible in the barrel photo					
Rustline Height (in)		N/A	it is visible in the barrer photo	, .		110	100	
Overall Condition		Fair			1070	1		
		RITIZATIO	N ANALYSIS		1234		1070	
	Upstream Habitat Length (mi) 2.3		Habitat Points	4				
Habitat Quality		Poor/Fair	Habitat Quality Points	1.5	113			
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	Bar	rel	1	
Natara C.1. 4. 41.4			Prioritization Total Points	11.5				

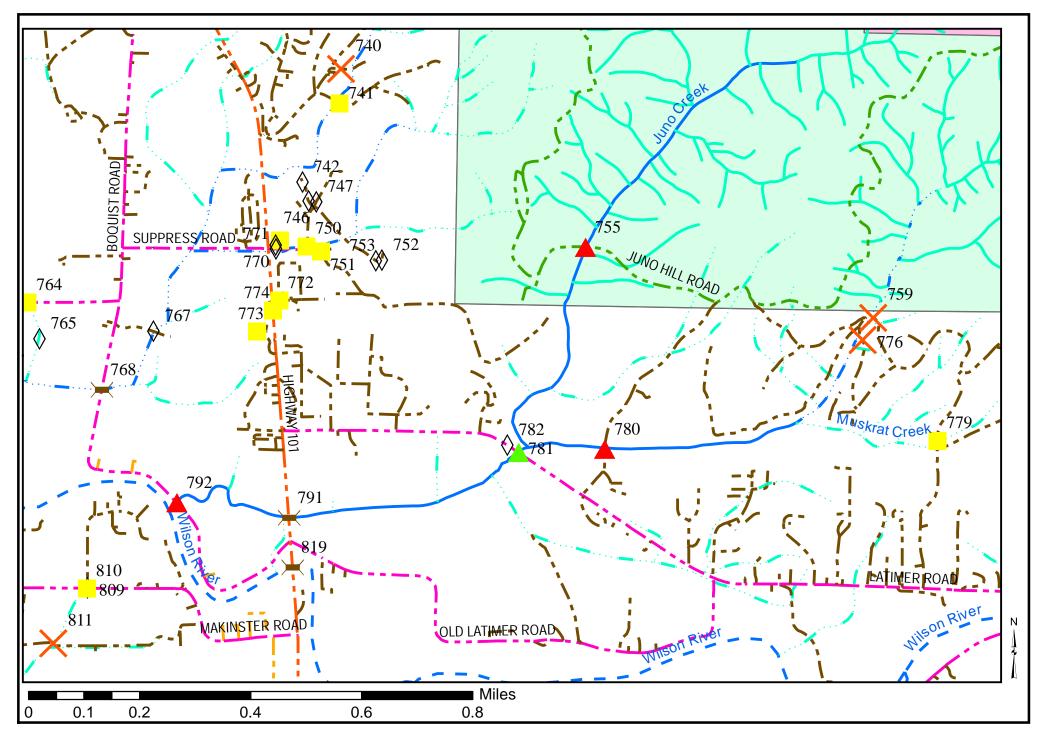
Notes: Culvert outlets into mainstem Wilson River. The reach between this pipe and 781 is poor quality habitat passing through agricultural land and a golf course. Above 781, conditions improve. The habitat quality score for this culvert reflects this dichotomy.

Watershed Stream Name Juno Creek Township-Range-Section-1/4 UTM Easting/Northing (Zone 10, NAD 1983) Road Name Latimer Road Road/Culvert Owner Tillamook Co., Victor Dairy, TCCA CULVERT INFO Shape Circular Corrugated metal Corrugated metal Upstream Gradient (%) Upstream Gradient (%) Latimer Road Circular Upstream Gradient (%) 28.3 Material Corrugated metal Upstream Gradient (%) Latimer Road Circular CHANNEL INFO Shape Circular Upstream Gradient (%) 2.5 Length (ft) 84 Bankfull Width (ft) 5.0 Width (in) 108 Bankfull:Culvert Ratio
Township-Range-Section-1/4 UTM Easting/Northing (Zone 10, NAD 1983) Road Name Latimer Road Road/Culvert Owner Adjacent Landowners Tillamook Co., Victor Dairy, TCCA CULVERT INFO Shape Circular Circular Inlet Gradient (%) Shape Circular Upstream Gradient (%) Length (ft) 84 Bankfull Width (ft) T1S, R9W, Sec. 18, NE¼ of SW¼ 434655/5036763 Latimer Road Cunty Tillamook County Tillamook County CHANNEL INFO Sec. 18, NE¾ of SW¼ 434655/5036763 Latimer Road Latimer
UTM Easting/Northing (Zone 10, NAD 1983) 434655/5036763 Road Name Latimer Road Road/Culvert Owner Tillamook County Adjacent Landowners Tillamook Co., Victor Dairy, TCCA CULVERT INFO CHANNEL INFO Shape Circular Inlet Gradient (%) 28.3 Material Corrugated metal Upstream Gradient (%) 2.5 Length (ft) 84 Bankfull Width (ft) 5.0
Road NameLatimer RoadRoad/Culvert OwnerTillamook CountyAdjacent LandownersTillamook Co., Victor Dairy, TCCACULVERT INFOCHANNEL INFOShapeCircularInlet Gradient (%)28.3MaterialCorrugated metalUpstream Gradient (%)2.5Length (ft)84Bankfull Width (ft)5.0
Road/Culvert Owner Adjacent Landowners Tillamook Co., Victor Dairy, TCCA CULVERT INFO Shape Circular Inlet Gradient (%) Material Corrugated metal Upstream Gradient (%) Ength (ft) 84 Bankfull Width (ft) Tillamook County Total County To
Adjacent Landowners CULVERT INFO Shape Circular Circular Corrugated metal Corrugated metal Corrugated Material Corrugated Material Corrugated Material Bankfull Width (ft) Statement Corrugated Material Corrug
CULVERT INFOCHANNEL INFOShapeCircularInlet Gradient (%)28.3MaterialCorrugated metalUpstream Gradient (%)2.5Length (ft)84Bankfull Width (ft)5.0
ShapeCircularInlet Gradient (%)28.3MaterialCorrugated metalUpstream Gradient (%)2.5Length (ft)84Bankfull Width (ft)5.0
MaterialCorrugated metalUpstream Gradient (%)2.5Length (ft)84Bankfull Width (ft)5.0
Length (ft) 84 Bankfull Width (ft) 5.0
Width (in) 108 Rankfull Culvert Ratio 1.8
Width (iii) Dankfun; Culvert Ratio 1.5
Height (in) 108
Outlet Perch (ft) 0.1
Gradient (%) 2.3
Rustline Height (in) 48
Overall Condition Fair
PRIORITIZATION ANALYSIS
Upstream Habitat Length (mi) 1.6 Habitat Points 4
Habitat Quality Fair Habitat Quality Points 2
Fish Species Anad. Fish Points 3
Barrier Class Green Barrier Points 1
Prioritization Total Points 10

Notes: Although the channel immediately upstream of this pipe is rather narrow, this is somewhat misleading because the upstream side of this pipe is a several acre wetland area with numerous small channels and other open water areas. As a result, the amount of water conveyed by this pipe is often greater than what one would expect from a 5 ft channel.

]	LOCATIO	N INFO		Culvert #	755	Priority	L
Watershed			W	ilson River	70	Market of		•
Stream Name	tream Name		Juno Creek			新 安支		
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 7, SI	E1/4 of NE1/4	00			
UTM Easting/Northin	1g (Zone 10, NAI	1983)	43484	1/5037351				
Road Name			Juno	Hill Road		6 5	Marie St.	
Road/Culvert Owner			Oregon Department	of Forestry		1		
Adjacent Landowners	Adjacent Landowners			of Forestry	- FAR 40			
CULVERT INFO		CHANNEL INFO	1					
Shape		Circular			See See of	1	with the same of t	
Material	Corruga	ated metal	Upstream Gradient (%)	<1.0	200	No. of the last		
Length (ft)		50	Bankfull Width (ft)	N/A	F 24	Inlet*		
Width (in)		42	Bankfull:Culvert Ratio	N/A				
Height (in)		42	Culvert drains a large wetland	lvert drains a large wetland with a				
Outlet Perch (ft)		0.1	complex channel system so no			公共		
Gradient (%)		3.2	bankfull measurements were					
Rustline Height (in)	Entire p	ipe rusted	However, pipe is clearly unde				200	
Overall Condition		Poor	Trowever, pipe is cicurry under	rsizea.		Head	34	
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Le	ngth (mi)	0.5	Habitat Points	1				
Habitat Quality		Fair	Habitat Quality Points	2	100			
Fish Species		Anad.	Fish Points	3				
Barrier Class	· · · · · · · · · · · · · · · · · · ·	Red	Barrier Points	3	Out	lot	4	
			Prioritization Total Points	9		10/2017	100	
Notes:								

]	LOCATIO	N INFO		Culvert #	780	Priority	L	
Watershed			W	ilson River					
Stream Name			Unnamed tributary of .	Juno Creek					
Township-Range-Sect	ion-1/4		T1S, R9W, Sec. 18, SV	V1/4 of SE1/4					
UTM Easting/Northing (Zone 10, NAD 1983)			43490	6/5036782	Outlet	Outlet - looking downstream			
Road Name			Unnamed pr	rivate drive					
Road/Culvert Owner				TCCA			nin X		
Adjacent Landowners	3			TCCA				No.	
CULVERT INFO			CHANNEL INFO			- Armed			
Shape		Circular	ular Inlet Gradient (%)		A CONTRACTOR OF THE PROPERTY O		1		
Material	Corruga	nted metal	Upstream Gradient (%)	<1.0					
Length (ft)		29	Bankfull Width (ft)	4.6					
Width (in)		30	Bankfull:Culvert Ratio	0.6		4			
Height (in)		30							
Outlet Perch (ft)		0.8	Large wetland complex on bo	th sides of	1.7				
Gradient (%)		6.1		iii sides oi		Vacalli de		STATE OF THE PARTY	
Rustline Height (in)		24	pipe.		1		THE WAY		
Overall Condition		Critical			WALK TO SERVICE			11/2	
	PRIOR	ITIZATIO	ON ANALYSIS					4	
Upstream Habitat Lei	ngth (mi)	0.9	Habitat Points	1				M	
Habitat Quality		Fair(-)	Habitat Quality Points	2				200	
Fish Species		Anad.	Fish Points	3					
Barrier Class		Red	Barrier Points	3					
			Prioritization Total Points	9					
Notes: Large portions	of the botto	m of the pi	pe worn through.						



Juno Creek Culverts, Wilson River Basin

SOLLIE SMITH ROAD AREA CULVERTS

	L	OCATIO	N INFO		Culvert #	5306
Watershed			W	ilson River		
Stream Name			Yan	kee Branch		
Township-Range-Sec	tion-1/4		T1S, R9W, Sec. 20, NE	1/4 of NW1/4		
UTM Easting/Northin	ng (Zone 10, NAD	1983)	43646	57/5036370		/
Road Name			La			
Road/Culvert Owner			Oregon Department	of Forestry		1
Adjacent Landowner	s		Oregon Department	of Forestry		16
CULVER	T INFO		CHANNEL INFO			
Shape		Circular	Inlet Gradient (%)	21.6	Inlet	
Material	Corrugat	ed metal	Upstream Gradient (%)	1.1	iner	
Length (ft)		87	Bankfull Width (ft)	3.8		
Width (in)		36	Bankfull:Culvert Ratio	0.8	0.11	
Height (in)		36			Out	et - do
Outlet Perch (ft)		None				X
Gradient (%)		-1.0			Mary A	T. A.
Rustline Height (in)	Entire pip	e rusted				
Overall Condition		Fair				
	PRIORI	TIZATIO	ON ANALYSIS			
Upstream Habitat Le	ngth (mi)	1.1	Habitat Points	3		
Habitat Quality		Fair	Habitat Quality Points	2		
Fish Species		Anad.	Fish Points	3	Alexander 1	Arithmeter
Barrier Class		Gray	Barrier Points	2		
			Prioritization Total Points	10		
					- · · · · ·	



Priority

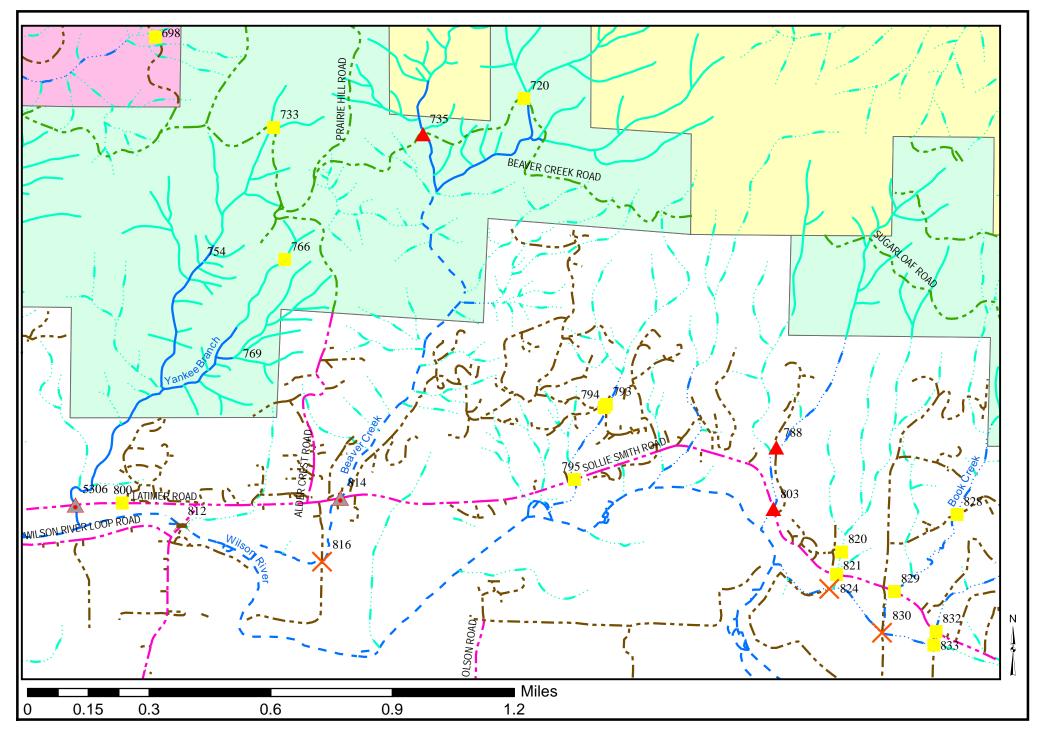
Notes: Outlet area heavily impacted by livestock use. A small overflow pipe was approx. 2 ft above this pipe. The overflow pipe appears to occasionally carry flows, suggesting that the main pipe is inadequately sized for fish passage and stream processes (despite being rated green by the barrier model). Based on this additional information, we rated this pipe a partial barrier to juvenile passage.

	LOCATION INFO						Priority	Н
Watershed			W	ilson River			0 //	
Stream Name			Be	aver Creek	1244	DISC D		
Township-Range-Secti	ion-1/4		T1S, R9W, Sec. 16, SW	1/4 of SW1/4	13.6			
UTM Easting/Northing	g (Zone 10, NAI) 1983)	43752	28/5036405	474		11	
Road Name			Sollie S	Smith Road				
Road/Culvert Owner			Tillamo	ook County	100	A LA		
Adjacent Landowners			D. Barker and I	. Maynock		P.O.		
CULVERT INFO		CHANNEL INFO	1					
Shape		Circular	Inlet Gradient (%)	19.6				
Material	Concrete		Upstream Gradient (%)	4.4				
Length (ft)	104		Bankfull Width (ft)	8.0	Inlet			
Width (in)	48		Bankfull:Culvert Ratio	0.5				
Height (in)		48						
Outlet Perch (ft)		None						
Gradient (%)		2.6			2.42		15 M	
Rustline Height (in)		N/A					A CANA	
Overall Condition		Fair						
-	PRIOR	ITIZATIO	N ANALYSIS			17 11		
Upstream Habitat Len	gth (mi)	1.6	Habitat Points	4				
Habitat Quality		Fair	Habitat Quality Points	2	1		7 2 2 2 3	
Fish Species		Anad.	Fish Points	3				
Barrier Class		Gray	Barrier Points	2	Oil	let		
			Prioritization Total Points	11	Cal		9	
Notes:						•	•	

	LOCATION INFO						Priority	L
Watershed			Wilson River		186-1			
Stream Name			Unnamed tributary of Be	aver Creek		一词		
Township-Range-Sect	ion-1/4		T1S, R9W, Sec. 16, NW	/1/4 of NE1/4	200		4-147	
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	43784	2/5037849				
Road Name			Beaver (Creek Road	No.			
Road/Culvert Owner			Oregon Department	of Forestry				
Adjacent Landowners	}		Oregon Department	of Forestry				
CULVER	CULVERT INFO		CHANNEL INFO			A STATE OF		
Shape		Circular	Inlet Gradient (%)	8.0				
Material	Corruga	ated metal	Upstream Gradient (%)	7.0	2		the Contract of	
Length (ft)		86	Bankfull Width (ft)	8.1		nlet		
Width (in)		42	Bankfull:Culvert Ratio	0.4	39 /	10 100		
Height (in)		42						
Outlet Perch (ft)		4.0						
Gradient (%)		11.0						
Rustline Height (in)		19				3	11/1	
Overall Condition		Poor			400	THE.		
	PRIOR	ITIZATIO	ON ANALYSIS			1		
Upstream Habitat Lei	ngth (mi)	0.1	Habitat Points	1		12.34		
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3	₹		1	
Barrier Class		Red	Barrier Points	3	Οι	ıtlet	1 -	
			Prioritization Total Points	8				
Notes:								

	LOCATION INFO						Priority	L
Watershed			Wilson River		11.50	6		
Stream Name			Unnamed tributary of W		1 4			
Township-Range-Section	on-1/4		T1S, R9W, Sec. 22, NE	1/4 of NW1/4		-		
UTM Easting/Northing	(Zone 10, NAI) 1983)	43924	18/5036338				
Road Name			Sollie S	Smith Road		Non	100	
Road/Culvert Owner			Tillamo	ook County	to a	11	1 3000	
Adjacent Landowners			J. &	& G. Ficher		1	- Care 1	
CULVERT INFO			CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	13.0				
Material	Concrete		Upstream Gradient (%)	11.0		utlet		
Length (ft)	60		Bankfull Width (ft)	10.9		Till		
Width (in)	36		Bankfull:Culvert Ratio	0.3				
Height (in)		36						
Outlet Perch (ft)		0.2					The same	
Gradient (%)		14.0				1		
Rustline Height (in)		N/A				1		
Overall Condition		Fair			14			
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Leng	gth (mi)	0.5	Habitat Points	1			商业区	
Habitat Quality		Poor	Habitat Quality Points	1			2000年	
Fish Species		Anad.	Fish Points	3			1	
Barrier Class		Red	Barrier Points	3	Ou	tlet - de	wnstream	
			Prioritization Total Points	8		and the ball	The state of the s	
Notes:								

]	LOCATIO	N INFO		Culvert #	788	Priority	L
Watershed			W	ilson River				
Stream Name			Unnamed tributary of W	ilson River	91	· 🐦 . ·		
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 22, NE	1/4 of NW1/4				
UTM Easting/Northin	g (Zone 10, NAD 1983)		43924	9/5036600			12 2 W.	
Road Name			Sollie S	Smith Road				
Road/Culvert Owner			Shi	rhar Farms				
Adjacent Landowners	S		Shi	rhar Farms			1	
CULVERT INFO			CHANNEL INFO		257 40			
Shape		Circular	Inlet Gradient (%)	17.0			4	
Material	Corruga	ated metal	Upstream Gradient (%)	6.0	Link	ot		
Length (ft)		63	Bankfull Width (ft)	4.8	The second	A T.		
Width (in)		24	Bankfull:Culvert Ratio	0.4			Angel Pro	
Height (in)		24						
Outlet Perch (ft)		0.8			1			
Gradient (%)		7.0						
Rustline Height (in)		4			2.5	MA		
Overall Condition		Poor			. F 2		MAZ S	
			ON ANALYSIS					
Upstream Habitat Le	ngth (mi)	0.3	Habitat Points	1	72			
Habitat Quality		Poor	Habitat Quality Points	1	100			
Fish Species		Anad.	Fish Points	3		7	158.4	
Barrier Class		Red	Barrier Points	3	Out	let - do	wnstream	
			Prioritization Total Points	8	BASIA C	2	Dee V.	
Notes:								



Sollie Smith Road Area Culverts, Wilson River Basin

HUGHEY CREEK CULVERTS

	LOCATIO	N INFO		Culvert #	898	Priority	?
Watershed		W	ilson River				
Stream Name		Hug	ghey Creek				
Township-Range-Section-1/4		T1S, R9W, Sec. 22, S1	E¼ of SE¼			TA A THE	
UTM Easting/Northing (Zone 10, N	AD 1983)	44008	33/5034989	STATISTICS.			
Road Name			Highway 6		15.00		
Road/Culvert Owner		Oregon Department of Tra	nsportation	A STATE OF			-30
Adjacent Landowners		V. Lucas an	d D. Lucas	THE STATE OF	and the		60°
CULVERT INFO		CHANNEL INFO)			and all from	Marie Control
Shape	Box	Inlet Gradient (%)	unk	Inlet - ເ	ıpstream		
Material	Concrete	Upstream Gradient (%)	unk				
Length (ft)	unknown	Bankfull Width (ft)	unk				
Width (in)	unknown	Bankfull:Culvert Ratio	unk				
Height (in)	unknown	Unable to access private prope	arty where				
Outlet Perch (ft)	unknown	inlet and outlet were located.	As a result	CONTRACT OF	Property of		
Gradient (%)	unknown	no data was collected and only	,				
Rustline Height (in)	unknown	and downstream photos were					1
Overall Condition	unknown	and downstream photos were	tuicii.			Maria Carlo	Maria
PRIO	RITIZATIO	ON ANALYSIS		CONTRACTOR		1000	24.7
Upstream Habitat Length (mi)	2.8	Habitat Points	4	PORT IN	Total Services		75.75 M
Habitat Quality	Poor(+)	Habitat Quality Points	1				
Fish Species	Anad.	Fish Points	3			元献 本意	
Barrier Class	Unk.	Barrier Points	?	Outlet	- downs	tream	Santa.
		Prioritization Total Points	8+				
Notes: Culvert appears to be an ad	equately sized	concrete box. For analysis purpose	es, we assume	d a partial barri	er for Bar	rier Class Poin	ıts.

]	LOCATIO	N INFO		Culvert #	900	Priority	?	
Watershed			W	ilson River					
Stream Name			Hug	ghey Creek		na Vince	No.	*	
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 22, SI						
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	44017	7/5034672	1	1 The second of			
Road Name			Fair	view Road		A T		1/1/2	
Road/Culvert Owner			Tillamo	ook County	A				
Adjacent Landowners			V. Lucas an	d D. Lucas					
CULVERT INFO			CHANNEL INFO						
Shape		Circular	Inlet Gradient (%)	unk	Inlet-	pstream	A Y Y		
Material	Corruga	ated metal	Upstream Gradient (%)	unk		A Plante	17 11 11 11	, F.	
Length (ft)		unknown	Bankfull Width (ft)	unk					
Width (in)		unknown	Bankfull:Culvert Ratio	unk					
Height (in)		unknown	Unable to access private prope	orty whore	THE -	W			
Outlet Perch (ft)		unknown	inlet and outlet were located.		THE THE SALE OF SALES	To the last	A CONTRACTOR OF	A PIP	
Gradient (%)		unknown	no data was collected and only	,					
Rustline Height (in)		unknown	and downstream photos were						
Overall Condition		unknown	and do wilstream photos were	uncii.	1				
	PRIOR	RITIZATIO	ON ANALYSIS					NAME OF THE PERSON OF THE PERS	
Upstream Habitat Lei			Habitat Points	4	A CONTRACT				
Habitat Quality		Poor(+)	Habitat Quality Points	1					
Fish Species	Anad.		Fish Points	3	Outlet				
Barrier Class		Unk.	Barrier Points	?		- downs	MA INDE		
			Prioritization Total Points	8+					
Notes: Crossing 899 is	Notes: Crossing 899 is located between 898 and 900. We were denied permission to access 899 and were unable to observe the								

crossing remotely.

]	LOCATIO	N INFO		Culvert #	901	Priority	M	
Watershed			W	ilson River					
Stream Name			Hug	ghey Creek				1/	
Township-Range-Sect	ion-1/4		T1S, R9W, Sec. 27, NE	S, R9W, Sec. 27, NE ¹ / ₄ of NE ¹ / ₄				1	
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	44023	30/5034296					
Road Name			Нι	ighey Lane				73	
Road/Culvert Owner			Tillamo	ook County				1989	
Adjacent Landowners	1		A. & J. Widmer and G	3. Hodgdon		1 (40)	V 6	* >	
CULVER	T INFO		CHANNEL INFO			* 1			
Shape		Circular	Inlet Gradient (%)	5.5					
Material	Corruga	ated metal	Upstream Gradient (%)	5.5	Inlet –	ooking t	pstream	No. of the last	
Length (ft)		70	Bankfull Width (ft)	7.0			1	3.4	
Width (in)		72	Bankfull:Culvert Ratio	0.9					
Height (in)		48*						1/4	
Outlet Perch (ft)		None	*Couldn't find bottom of pipe	under			oking upstream		
Gradient (%)		3.5	sediment.	under				*	
Rustline Height (in)		18	seament.		X	1	X	2/4	
Overall Condition		Fair				1			
	PRIOR	ITIZATIO	ON ANALYSIS				N		
Upstream Habitat Ler	ngth (mi)	2.3	Habitat Points	4	TKI-		Contract	16	
Habitat Quality	Poor(+)		Habitat Quality Points	1					
Fish Species	Anad.		Fish Points	3	Outlet	1			
Barrier Class			Barrier Points	2	r. de				
			Prioritization Total Points	10					
Notes: Culvert approxi	Notes: Culvert approximately 1/3 full of sediment.								

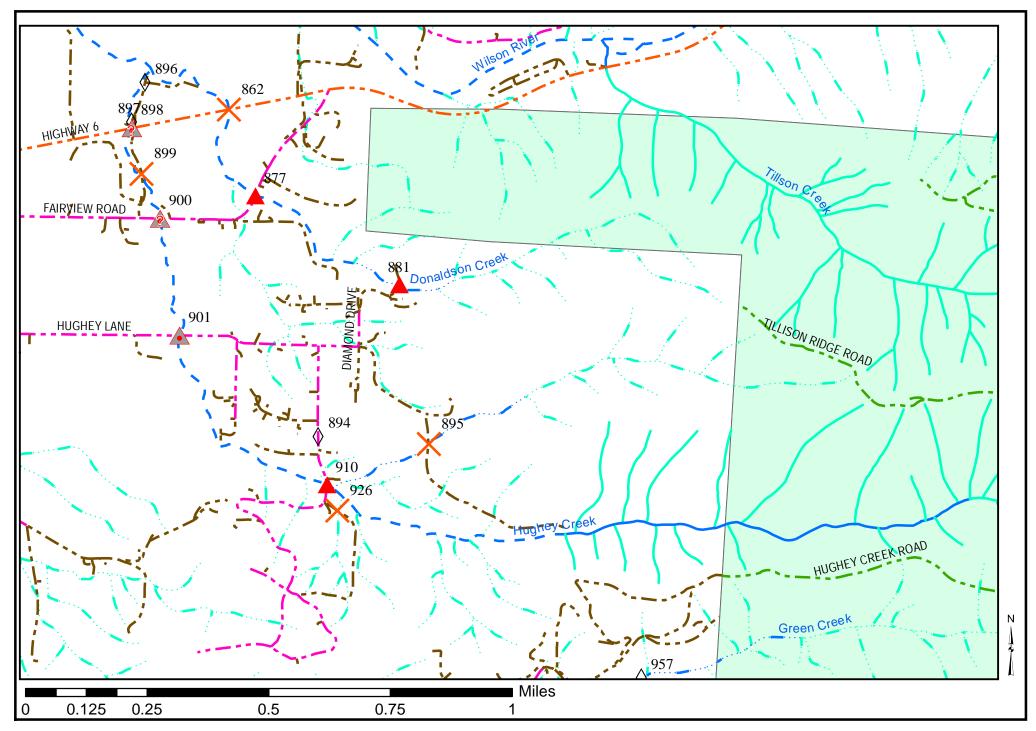
]	LOCATIO	N INFO		Culvert #	910	Priority	Н	
Watershed			W	ilson River		•			
Stream Name			Hug	ghey Creek		N. Carlot		$\rightarrow \rightarrow$	
Township-Range-Sect	tion-1/4		T1S, R9W, Sec. 26, NW	1/4 of SW1/4	· Company				
UTM Easting/Northin	g (Zone 10, NAI) 1983)	44071	440715/5033783				2/1/2	
Road Name			M	Iarvin Lane					
Road/Culvert Owner			Tillamo	ook County	A				
Adjacent Landowners			E. & W. Meyer, J. Main, R.	& D. Steel				11.17	
CULVER	T INFO		CHANNEL INFO)					
Shape		Pipe arch	Inlet Gradient (%)	15.5				1	
Material	Corruga	ated metal	Upstream Gradient (%)	4.9		Inle	100		
Length (ft)		45	Bankfull Width (ft)	7.2	4				
Width (in)		96	Bankfull:Culvert Ratio	1.1					
Height (in)		72							
Outlet Perch (ft)		None	A large slab of concrete was le						
Gradient (%)		6.7	the stream channel at inlet. Th	is resulted			A The second of		
Rustline Height (in)		12	in an ~ 2 ft cascade into pipe.			To the last			
Overall Condition		Fair					A SECTION AND A SECTION ASSESSMENT AND A SECTION ASSESSMENT AS A SECTION ASSESSMENT AS A SECTION		
	PRIOR	ITIZATIO	N ANALYSIS						
Upstream Habitat Lei	ngth (mi)	1.8	Habitat Points	4		NO.	100		
Habitat Quality		Fair	Habitat Quality Points	2		The last of the la	May 1	198	
Fish Species		Anad.	Fish Points	3	Outlet.	-		1	
Barrier Class		Red	Barrier Points	3		-			
			Prioritization Total Points	12					
Notes: Barrier rating based on concrete blocking inlet and the steep pipe gradient and lack of natural substrate through pipe.									

DONALDSON CREEK CULVERTS

]	LOCATIO	N INFO		Culvert #	877	Priority	L
Watershed			W	ilson River				
Stream Name			Donal	dson Creek				
Township-Range-Secti	ion-1/4		T1S, R9W, Sec. 23, SW ¹ / ₄ of SW ¹ / ₄				14	
UTM Easting/Northing	g (Zone 10, NAI	D 1983)	440491/5034773					
Road Name	ne		Fair	9			A.	
Road/Culvert Owner	Road/Culvert Owner			ook County				
Adjacent Landowners	Adjacent Landowners D. No		al, A. & J. Widmer, and J. & E.	Cummings	The state of the s			
CULVERT	CULVERT INFO		CHANNEL INFO)				/
Shape		Circular	Inlet Gradient (%)	61.5				-
Material	Corruga	ated metal	Upstream Gradient (%)	2.6			Inle	U
Length (ft)		69	Bankfull Width (ft)	6.5				
Width (in)		36	Bankfull:Culvert Ratio	0.5		06	The state of the s	
Height (in)		36					100	
Outlet Perch (ft)		2.1						
Gradient (%)		4.4					1 / V	
Rustline Height (in)		18						
Overall Condition		Poor			1-2		4	
-	PRIOR	RITIZATIO	ON ANALYSIS		5			
Upstream Habitat Len	gth (mi)	0.3	Habitat Points	1				
Habitat Quality		Fair(-)	Habitat Quality Points	2		1		
Fish Species	•	Anad.	Fish Points	3		(明显多量)		
Barrier Class		Red	Barrier Points	3	Ou	tlet	MAN TO SERVICE STATE OF THE PARTY OF THE PAR	
			Prioritization Total Points	9			A STATE OF THE	

Notes: Crossing 862 was located downstream of this crossing. We did not have permission to access 862 and could not adequately observe it from Highway 6 to determine what type of pipe occurs there, its condition, or its potential to impede passage.

]	LOCATIO	N INFO		Culvert #	881	Priority	L	
Watershed			W	ilson River				11	
Stream Name			Donal	dson Creek					
Township-Range-Secti	on-1/4		T1S, R9W, Sec. 23, SW	1/4 of SW1/4					
UTM Easting/Northing	Z (Zone 10, NAI) 1983)	44095	56/5034462				NAME OF THE PARTY	
Road Name			Pr	ivate Drive					
Road/Culvert Owner			Н. а	& J. Gollon					
Adjacent Landowners			Н. а	& J. Gollon	Contract of the second		24		
CULVERT	T INFO		CHANNEL INFO			A_{λ}		-	
Shape		Circular	Inlet Gradient (%)	3.1		能入			
Material		Plastic	Upstream Gradient (%)	4.1			Inle	THE STREET	
Length (ft)		34	Bankfull Width (ft)	5.1				2	
Width (in)		18	Bankfull:Culvert Ratio	0.3	Alexander of the		N. Carlo		
Height (in)		18				1	The state of		
Outlet Perch (ft)		5.7			1	A Design			
Gradient (%)		4.4							
Rustline Height (in)		18							
Overall Condition		Fair			人工程	M & N			
-	PRIOR	ITIZATIO	N ANALYSIS		当				
Upstream Habitat Len	gth (mi)	0.1	Habitat Points	1					
Habitat Quality		Poor	Habitat Quality Points	1	是				
Fish Species		Anad.	Fish Points	3					
Barrier Class		Red	Barrier Points	3		W. IV	Outlet -		
	·	·	Prioritization Total Points	8					
Notes:									

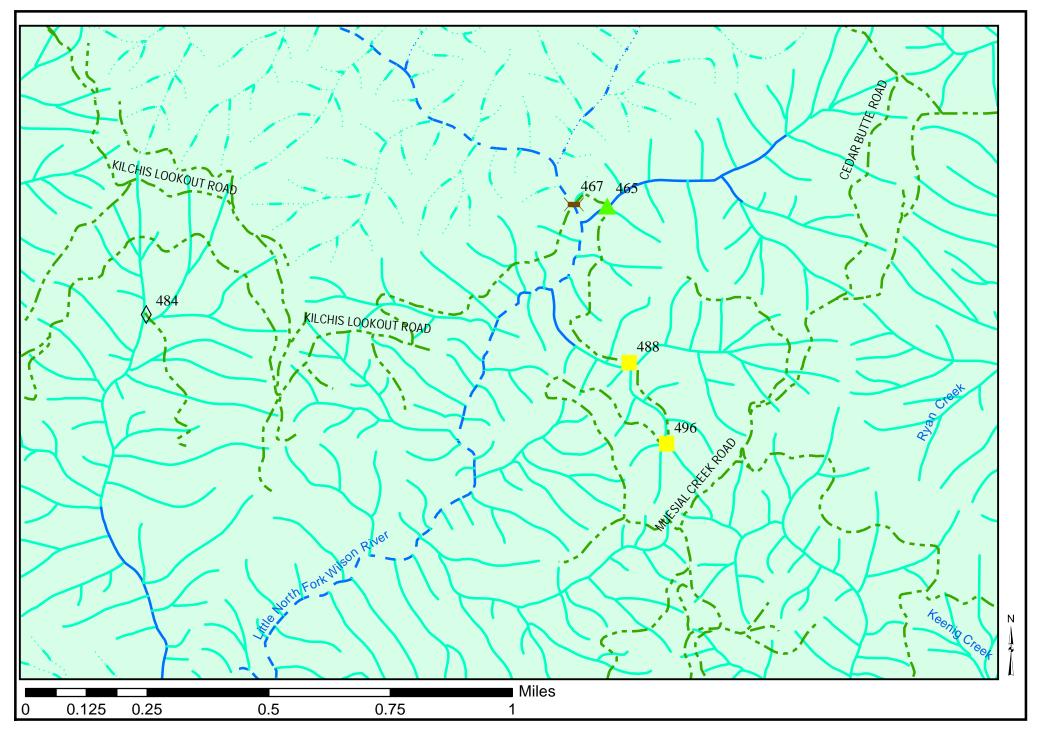


Hughey Creek and Donaldson Creek Culverts, Wilson River Basin

LITTLE NORTH FORK WILSON RIVER AREA CULVERT

	L	OCATIO	N INFO		Culvert #	465	Priority	NA	
Watershed				ilson River	3.344	DE 02/1		-	
Stream Name		Unname	ed tributary of Little N. Fork W						
Township-Range-Sect	ion-1/4		T1N, R8W, Sec. 23, NW	1/4 of NW1/4					
UTM Easting/Northin	g (Zone 10, NAD	1983)	450253/5045470						
Road Name			Kilchis Loc	okout Road					
Road/Culvert Owner			Oregon Department						
Adjacent Landowners	Adjacent Landowners		Oregon Department	of Forestry	200				
CULVERT	ΓINFO		CHANNEL INFO)		Y \			
Shape	F	Pipe arch	Inlet Gradient (%)	3.1			15000		
Material	Corrugat	ed metal	Upstream Gradient (%)	6.2					
Length (ft)		74	Bankfull Width (ft)	8.3	e In	ilet			
Width (in)		162	Bankfull:Culvert Ratio	1.6	MANUFACTURE OF THE PARTY OF THE				
Height (in)		102				2000			
Outlet Perch (ft)		None							
Gradient (%)		2.4				The state of	0		
Rustline Height (in)		10				To a	1000		
Overall Condition		Good					120		
	PRIORI	TIZATIO	ON ANALYSIS						
Upstream Habitat Len	ıgth (mi)	0.5	Habitat Points	1		V			
Habitat Quality		Fair	Habitat Quality Points	2					
Fish Species		Anad.	Fish Points	3					
Barrier Class		Green	Barrier Points	1			Outlet		
			Prioritization Total Points	7					

Notes: It is possible that anadromous fish cannot make it to this point due to natural barriers. However, based on juvenile survey data, it appears that steelhead are capable of negotiating most known barriers below this point, so we elected to consider this reach as having anadromous potential.



Upper Little North Fork Wilson River Area Culverts, Wilson River Basin

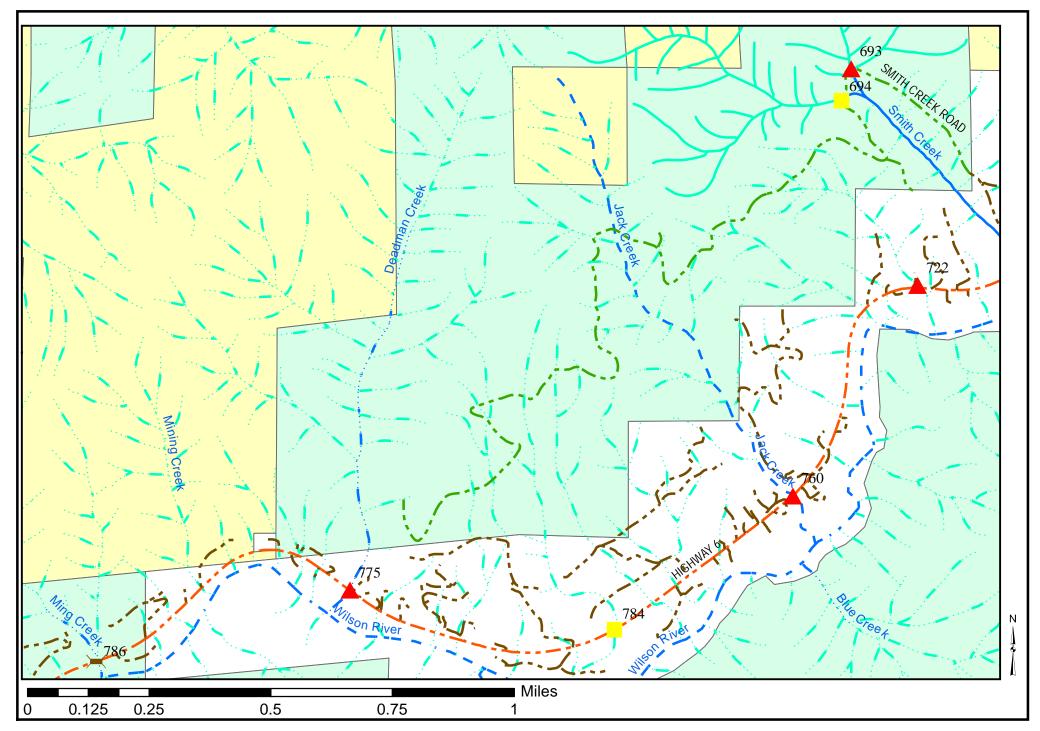
JACK CREEK AREA CULVERTS

]	LOCATIO	N INFO		Culvert #	775	Priority	M
Watershed			W	ilson River	100			
Stream Name		Hatcl	hery Creek (also listed as Dead	man Creek)		-410		
Township-Range-Section	ion-1/4		T1S, R8W, Sec. 18, NV	V1/4 of NE1/4				
UTM Easting/Northin	g (Zone 10, NAI	1983)	44461	13/5036903		-		
Road Name				Highway 6				
Road/Culvert Owner			Oregon Department of Tra	nsportation	4.9/	200		
Adjacent Landowners		J	.&L. Tolbert, R. Hildebrant, N.	&J. Keister		100		
CULVER	CULVERT INFO		CHANNEL INFO					
Shape		Box	Inlet Gradient (%)	7.0		Marie -		
Material		Concrete	Upstream Gradient (%)	6.0				
Length (ft)		75	Bankfull Width (ft)	6.3	Tole			
Width (in)		60	Bankfull:Culvert Ratio	0.8	3	T.		
Height (in)		60						
Outlet Perch (ft)		None			The state of the s	1/1/2		7
Gradient (%)		5.0			Just of	A Second		1
Rustline Height (in)		N/A						11
Overall Condition		Fair				1		~ ()
-	PRIOR	ITIZATIO	N ANALYSIS		The same of the sa	1		
Upstream Habitat Len	gth (mi)	0.8	Habitat Points	2				
Habitat Quality		Fair	Habitat Quality Points	2	10/10/20			
Fish Species		Anad.	Fish Points	3	1	1		1
Barrier Class		Red	Barrier Points	3	Outlet			+
			Prioritization Total Points	10		# 1		
Madage Tamagenter on	1 -141		uga of curricuing loval on this a	I I do a la l	سنمسمه ما ما ما	- :C(1-	4	

Notes: Topography and obstacles precluded use of surveying level on this culvert. Unable to determine if outlet is perched. Trash rack at inlet. Culvert overly steep and lacks natural substrate.

]	LOCATIO	N INFO		Culvert #	760	Priority	M	
Watershed			W	ilson River		LT.			
Stream Name				Jack Creek	6/	3.7	1		
Township-Range-Secti	ion-1/4		T1S, R8W, Sec. 8, SV	V1/4 of SE1/4		1			
UTM Easting/Northin	thing (Zone 10, NAD 1983)		44608	88/5037216	7				
Road Name				Highway 6			1/5		
Road/Culvert Owner			Oregon Department of Trans	nsportation					
Adjacent Landowners	Adjacent Landowners			P.J. Sager					
CULVER	CULVERT INFO		CHANNEL INFO			-	0.0		
Shape		Box	Inlet Gradient (%)	12.0	1	alot			
Material		Concrete	Upstream Gradient (%)	11.0	500	IIIEL	-300		
Length (ft)		97	Bankfull Width (ft)	6.4	10 3 m		The State of		
Width (in)		60	Bankfull:Culvert Ratio	0.8			V V		
Height (in)		60							
Outlet Perch (ft)	•	Unknown				7.7			
Gradient (%)		7.0				A The			
Rustline Height (in)		N/A				人	#3		
Overall Condition		Poor					THE		
-	PRIOR	ITIZATIO	N ANALYSIS		1				
Upstream Habitat Len	igth (mi)	1.0	Habitat Points	2	W.	Tr.			
Habitat Quality		Fair	Habitat Quality Points	2		· wn	e e		
Fish Species		Anad.	Fish Points	3	*		Outlet		
Barrier Class		Red	Barrier Points	3			-		
			Prioritization Total Points	10		1 h			

Notes: Topography and obstacles precluded use of surveying level on this culvert. Unable to determine if outlet is perched. Trash rack at inlet. Culvert overly steep and lacks natural substrate.



Jack Creek Area Culverts, Wilson River Basin

SMITH CREEK AREA CULVERTS

	I	OCATIO	N INFO		Culvert #	722	Priority	L
Watershed			W	ilson River		A Section As		
Stream Name			Unnamed tributary of W	ilson River		7		
Township-Range-Section	on-1/4		T1S, R8W, Sec. 8, SE	E1/4 of NE1/4			A STATE OF THE STA	
UTM Easting/Northing	ng (Zone 10, NAD 1983)		44648	7/5037891		1905-7	The same of the sa	
Road Name				Highway 6				
Road/Culvert Owner	t Owner		Oregon Department of Tran	nsportation				
Adjacent Landowners	Adjacent Landowners Wil		on River Properties, LLC. and .	J. Vandyke				
CULVERT INFO			CHANNEL INFO			1		
Shape	Circular		Inlet Gradient (%)	9.8		1		
Material		Concrete	Upstream Gradient (%)	12.3	100			
Length (ft)		50	Bankfull Width (ft)	4.9	- In	let 🦠	i de	
Width (in)		24	Bankfull:Culvert Ratio	0.4				
Height (in)		24						
Outlet Perch (ft)		None			1			
Gradient (%)		4.8						
Rustline Height (in)		N/A						
Overall Condition		Fair				K. J.		
	PRIOR	ITIZATIO	N ANALYSIS		3		17.00	
Upstream Habitat Leng			Habitat Points	1			- Tail 5	
Habitat Quality		Poor	Habitat Quality Points	1	100	11.11		
Fish Species		Anad.	Fish Points	3		100		
Barrier Class		Red	Barrier Points	3	Ot	utlet		
		-	Prioritization Total Points	8		SVE		
NI-4 Ct 1 1 1	or 1	1 1 1 11		. 1 1 1 11	.1 1		. 1 1: 0	* 1

Notes: Stream depicted as nonfish-modeled. However, technical review team suggested including this culvert in the analysis and ending fish use where stream gradient exceeds 15 percent grade.

]	LOCATIO	N INFO		Culvert #	713	Priority	M	
Watershed				Wilson River					
Stream Name				Smith Creek	Inle	et – upstr	eam		
Township-Range-Sect	tion-1/4		T1S, R8W, Sec. 9, S	W1/4 of NW1/4			- KNA		
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	446	446846/5037955					
Road Name				Highway 6	(4)				
Road/Culvert Owner			Oregon Department of T	ransportation					
Adjacent Landowners	<u> </u>		Stimson Lum	per Company		No. of the last of			
CULVER	T INFO		CHANNEL INF	O'		The state of the s			
Shape		Box	Inlet Gradient (%)	Not measured		3			
Material		Concrete	Upstream Gradient (%)	4.0	· / / 58				
Length (ft)		143	Bankfull Width (ft)	6.2	J. Saint		35000		
Width (in)		120	Bankfull:Culvert Ratio	1.6	45740450	t de Calles (ASCalles			
Height (in)		90							
Outlet Perch (ft)		~1.5	Use of surveying equipment	precluded			Control of the Control		
Gradient (%)		8.0	by terrain and obstacles.	preciuded					
Rustline Height (in)		N/A	by terrain and obstacles.		- 4		E -		
Overall Condition		Poor			- 36		7		
	PRIOR	ITIZATIO	N ANALYSIS			NAME OF TAXABLE PARTY.			
Upstream Habitat Lei	ngth (mi)	0.6	Habitat Points	2	-	18.57	198		
Habitat Quality	Fair		Habitat Quality Points	2			To the same of the		
Fish Species		Anad.	Fish Points	3	-				
Barrier Class		Red	Barrier Points	3		O	utlet		
			Prioritization Total Points	10	367	880			

Notes: Water was observed entering the pipe from holes in the side walls and flowing around the outside of one of the wing walls at outlet. This suggests that water was flowing alongside the entire outer wall of the pipe. An approx. 20 ft wall of debris was trapped upstream of the trash rack and had aggraded the upstream channel an equivalent amount.

]	LOCATIO	N INFO			
Watershed			Wilson River			
Stream Name			Smith Creek			
Township-Range-Sect	tion-1/4		T1S, R8W, Sec. 5, S	E1/4 of SE1/4		
UTM Easting/Northin	1g (Zone 10, NAI	D 1983)	44629	99/5038612		
Road Name			Smith (Creek Road		
Road/Culvert Owner			Oregon Department	of Forestry		
Adjacent Landowners	S		Oregon Department	of Forestry		
CULVER	T INFO		CHANNEL INFO)		
Shape		Circular	Inlet Gradient (%)			
Material	Corruga	ated metal	Upstream Gradient (%)			
Length (ft)		27	Bankfull Width (ft)	4.5		
Width (in)		72	Bankfull:Culvert Ratio			
Height (in)		72				
Outlet Perch (ft)		2.7				
Gradient (%)		9.3				
Rustline Height (in)		12				
Overall Condition		Fair				
	PRIOR	ITIZATIO	ON ANALYSIS			
Upstream Habitat Le	ngth (mi)	0.3	Habitat Points	1		
Habitat Quality		Fair(-)	Habitat Quality Points	2		
Fish Species		Anad.	Fish Points	3		
Barrier Class		Red	Barrier Points	3		



693

Priority

Culvert #



Notes: Stream intermittently subterranean during survey (summer 2011). Depicted as nonfish. Technical team suggested including this culvert and stopping fish use where gradient exceeds 15 percent. Cutthroat observed in watered areas upstream of pipe during 2011 survey work.

Prioritization Total Points

	LOCATIO	N INFO		Culvert #	696	Priority	L
Watershed		W	ilson River		A. Care		
Stream Name			Fern Creek	100	William	-6-	
Township-Range-Section-1/4		T1S, R8W, Sec. 9, NE	1/4 of NW1/4				
UTM Easting/Northing (Zone 10, N.	AD 1983)	44733	1/5038383				
Road Name			Highway 6	Sel land	100	2	
Road/Culvert Owner		Oregon Department of Tra	nsportation		4 10		
Adjacent Landowners		R. & B. Stacks and DH	Kim, LLC.				
CULVERT INFO		CHANNEL INFO	6 5		No.		
Shape	Box	Inlet Gradient (%)	16.0				
Material	Concrete	Upstream Gradient (%)	9.5				
Length (ft)	100	Bankfull Width (ft)	6.6				
Width (in)	48	Bankfull:Culvert Ratio	0.6		Manue R M		
Height (in)	60			S ST	X Marie		
Outlet Perch (ft)	~3.5	Use of surveying equipment p	raaludad			1000	
Gradient (%)	9.3	by terrain and obstacles.	recruded			N. C.	
Rustline Height (in)	12	by terrain and obstacles.		4	MY		
Overall Condition	Poor						
PRIO	RITIZATIO	ON ANALYSIS					
Upstream Habitat Length (mi)	0.5	Habitat Points	1		CAK.		
Habitat Quality	Fair(-)	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3	18		V.	
Barrier Class	Red	Barrier Points	3		0	utlet	
		Prioritization Total Points	9			The state of the s	

Notes: Outlet cascades over boulders and additional cascades over boulders are located a short distance downstream of outlet. Exposed rebar observed on invert of pipe.

]	LOCATIO	N INFO				
Watershed			W	ilson River			
Stream Name			Zig Zag Cree				
Township-Range-Secti	ion-1/4		T1S, R8W, Sec. 9, NI	E1/4 of NE1/4			
UTM Easting/Northing	g (Zone 10, NAI	D 1983)	44773	32/5038310			
Road Name				Highway 6			
Road/Culvert Owner			Oregon Department of Tra				
Adjacent Landowners			D. Kim and J. & S. Coolur				
CULVERT	T INFO		CHANNEL INFO				
Shape		Box	Inlet Gradient (degrees)	90			
Material		Concrete	` /				
Length (ft)		150					
Width (in)		126	Bankfull:Culvert Ratio	0.4			
Height (in)		120					
Outlet Perch (ft)		~13.0	Use of surveying equipment preclude				
Gradient (%)		8.0	by terrain and obstacles.	rectuded			
Rustline Height (in)		24	by terrain and obstacles.				
Overall Condition		Poor					
	PRIOR	RITIZATIO	ON ANALYSIS				
Upstream Habitat Len	gth (mi)	1.6	Habitat Points	4			
Habitat Quality		Good	Habitat Quality Points	3			
Fish Species		Anad.	Fish Points	3			
Barrier Class		Red	Barrier Points	3			
			Prioritization Total Points	13			



697

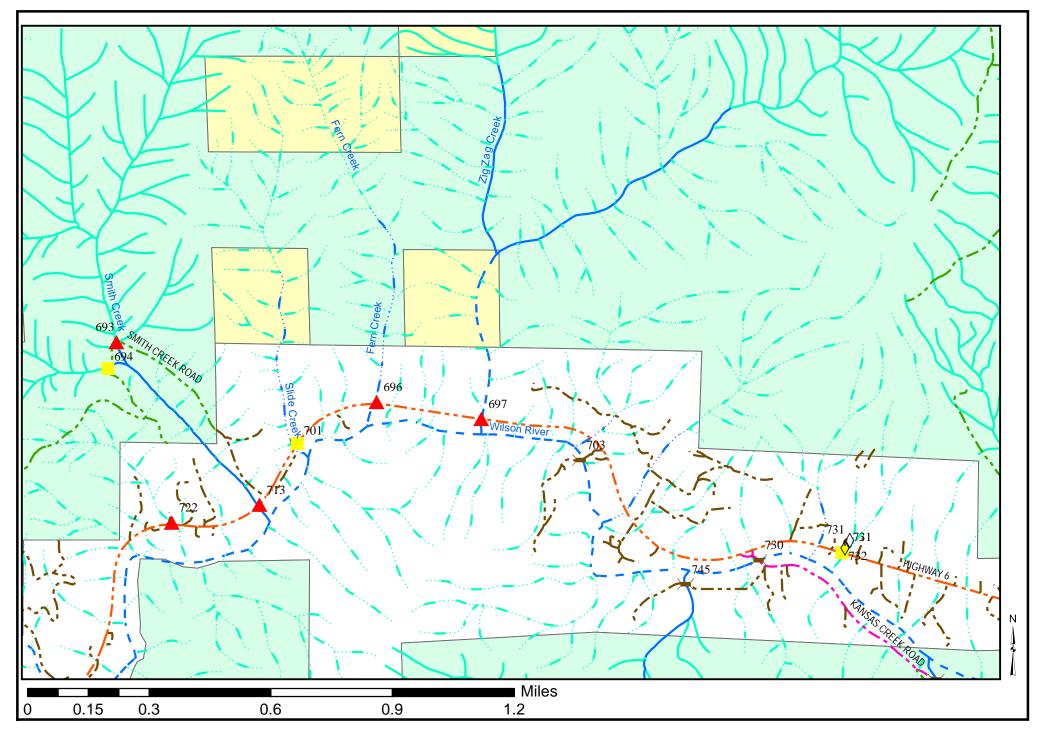
Priority

Н

Culvert #



Notes: An approx. 30 ft wall of debris occurred upstream of trash rack. Channel aggraded an equivalent amount. Culvert in very poor condition – wing walls detached and broken, rebar exposed along entire invert, top of pipe cracked and water leaking in through cracks, water pouring into culvert from holes in side walls, and water flowing out from around both sides of outlet.



Smith Creek Area Culverts, Wilson River Basin

KANSAS CREEK CULVERTS

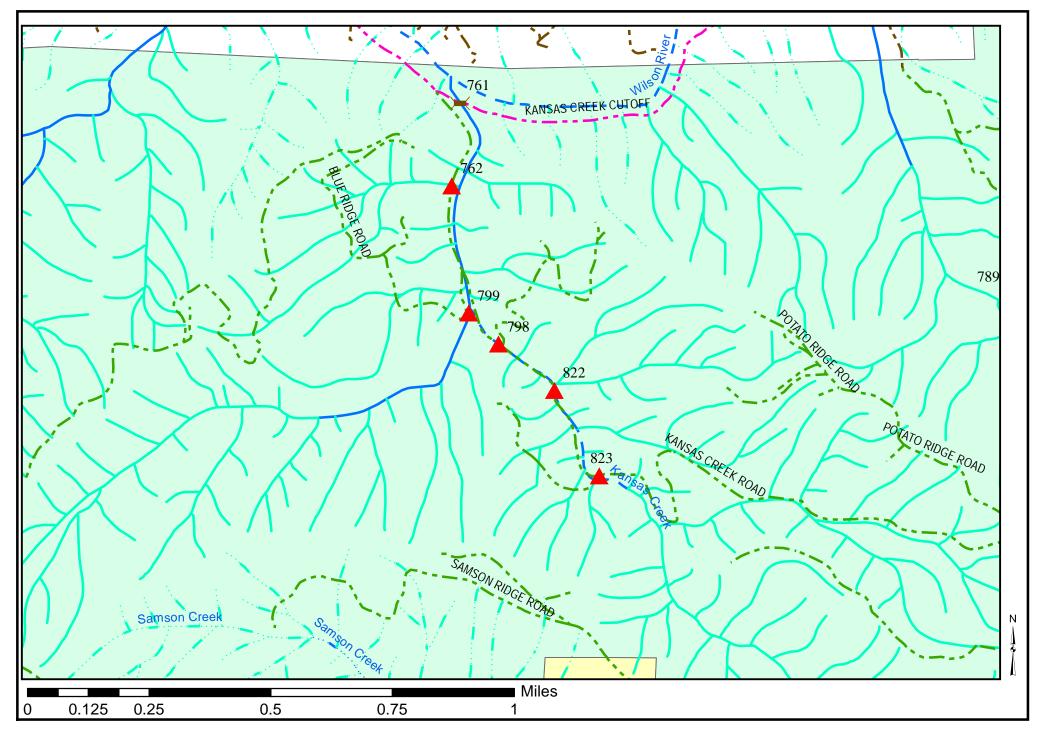
	-	LOCATIO	N INFO		Culvert #	762	Priority	L
Watershed			W	ilson River		A-2		
Stream Name			Unnamed tributary of Ka	Unnamed tributary of Kansas Creek				
Township-Range-Sect	tion-1/4	on-1/4 T1S, R8		E1/4 of NE1/4	-	0.0		
UTM Easting/Northin	g (Zone 10, NA	D 1983)		22/5037009				
Road Name			Kansas (Creek Road		19		
Road/Culvert Owner			Oregon Department	of Forestry		7		
Adjacent Landowners	S		Oregon Department	of Forestry				
CULVER	T INFO		CHANNEL INFO)				
Shape		Circular	Inlet Gradient (%)	14.9				
Material	Corrug	ated metal	Upstream Gradient (%)	4.3	lal	et4	VE /	
Length (ft)		39	Bankfull Width (ft)	5.5		1		
Width (in)		30	Bankfull:Culvert Ratio	0.5			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Height (in)		30					THE PERSON	
Outlet Perch (ft)		0.7				A STATE OF		
Gradient (%)		6.5			400		2	
Rustline Height (in)		12						
Overall Condition		Good					***	
		RITIZATIO	ON ANALYSIS		<i>7</i>	Larry Control	ENDS T	
Upstream Habitat Lei	ngth (mi)	0.1	Habitat Points	1				
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Resident	Fish Points	2	100	100	AND THE	
Barrier Class		Red	Barrier Points	3	0	utlet		
			Prioritization Total Points	7		-		
Notes:								

]	LOCATIO	N INFO		Culvert #	799	Priority	L
Watershed			W	ilson River				
Stream Name			Unnamed tributary of Ka	ınsas Creek		4	W. W.	
Township-Range-Secti	on-1/4		T1S, R8W, Sec. 14, NI	E1/4 of NE1/4				
UTM Easting/Northing	Z (Zone 10, NAI	D 1983)	44959	98/5036566			1	
Road Name			Kansas (Creek Road		2 16 1		de
Road/Culvert Owner			Oregon Department	of Forestry				
Adjacent Landowners			Oregon Department	of Forestry				
CULVERT	T INFO		CHANNEL INFO)	1/			
Shape		Circular	Inlet Gradient (%)	11.3			TO STATE OF	
Material	Corruga	ated metal	Upstream Gradient (%)	11.3	Inlet			
Length (ft)		69	Bankfull Width (ft)	11.9	•		ESCHARIO S	
Width (in)		156	Bankfull:Culvert Ratio	1.1				
Height (in)		108			122.427.03.1909	SMESSE	STATE OF THE STATE OF	110
Outlet Perch (ft)		0.4			100	O TO A VAN		100
Gradient (%)		1.6				AND THE RESERVE		
Rustline Height (in)		None				Maria de la		
Overall Condition		Fair				The state of the s		
_	PRIOR	RITIZATIO	N ANALYSIS			1	of the second	
Upstream Habitat Len	gth (mi)	0.4	Habitat Points	1	700			100
Habitat Quality		Poor	Habitat Quality Points	1			well to	1
Fish Species		Resident	Fish Points	2	737010	NO.		A COL
Barrier Class		Red	Barrier Points	3	Outlet			
			Prioritization Total Points	7				TOTAL M
Notes:			·	·			·	·

]	LOCATIO	N INFO		Culvert #	798	Priority	L
Watershed			W	ilson River	6.4		100	•
Stream Name			Ka	nsas Creek			N. S. C.	
Township-Range-Sect	tion-1/4		T1S, R8W, Sec. 14, SW	1/4 of NW1/4	42			
UTM Easting/Northin	g (Zone 10, NA	D 1983)	44968	37/5036465	1			
Road Name			Kansas (Creek Road		1		
Road/Culvert Owner			Oregon Department					
Adjacent Landowners	S		Oregon Department	of Forestry				
CULVER	T INFO		CHANNEL INFO)	T. M			
Shape		Pipe arch	Inlet Gradient (%)	23.8		1		
Material	Corrug	ated metal	Upstream Gradient (%)	5.6		1		
Length (ft)		71	Bankfull Width (ft)	14.7	Inle	T. Paris		
Width (in)		66	Bankfull:Culvert Ratio	0.4		nt Will	H- ZAYON,	
Height (in)		42			Christian Control		200	
Outlet Perch (ft)		1.6					24 NV + 8	
Gradient (%)		3.1						
Rustline Height (in)		22						
Overall Condition		Fair						
		RITIZATIO	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.4	Habitat Points	1				
Habitat Quality		Poor	Habitat Quality Points	1	Total .			
Fish Species		Resident	Fish Points	2				
Barrier Class		Red	Barrier Points	3			Outlet	
			Prioritization Total Points	7		Facility An		
Notes:								

	LOCAT	ON INFO		Culvert #	822	Priority	L
Watershed		V	Vilson River				
Stream Name		Kansas Creek					
Township-Range-Section-	1/4	T1S, R8W, Sec. 14, SW	/1/4 of NW1/4				
UTM Easting/Northing (Zo	ne 10, NAD 1983)	4498	58/5036361				
Road Name		Kansas	Creek Road				
Road/Culvert Owner		Oregon Departmen	t of Forestry			73	
Adjacent Landowners		Oregon Departmen	t of Forestry				
CULVERT IN	FO	CHANNEL INFO)		T.P	A W BY	
Shape	Pipe arc	Inlet Gradient (%)	11.5			COL	
Material (Corrugated meta	Upstream Gradient (%)	11.8			1000	
Length (ft)	5	Bankfull Width (ft)	11.0	200		nlet	
Width (in)	5	Bankfull:Culvert Ratio	0.4				
Height (in)	4						
Outlet Perch (ft)	1.	1			4.35		
Gradient (%)	9.			5.4	1 -		
Rustline Height (in)	1						
Overall Condition	Fa	r		***			
F	PRIORITIZAT	ION ANALYSIS					
Upstream Habitat Length		TIMBIUM I OIIIUS	1		- 7	Com	
Habitat Quality	Poo	Habitat Quality Points	1				
Fish Species	Resider	t Fish Points	2			Sea.	ļ
Barrier Class	Re	Barrier Points	3		3-4	Dutlet	ļ
		Prioritization Total Points	7		THE CALL	Juliel	
Notes:		·		·		·	

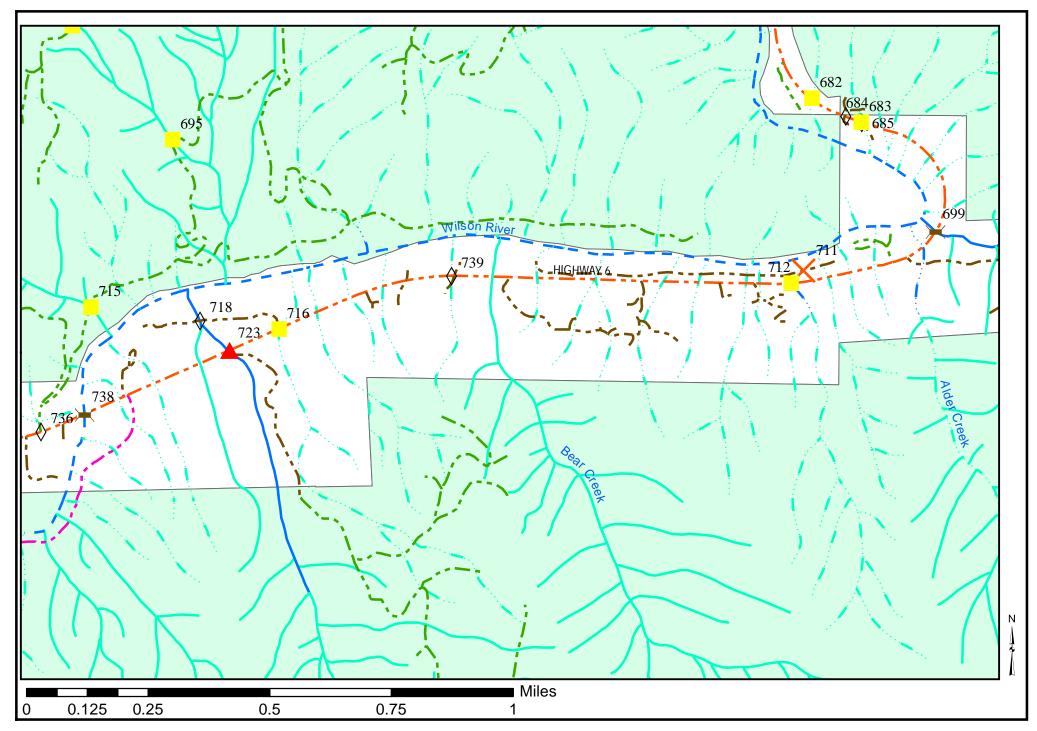
]	LOCATIO	N INFO		Culvert #	823	Priority	L
Watershed			W	ilson River			2 100	
Stream Name			Ka	nsas Creek	Inle	et 🦙 🚕 .		
Township-Range-Sect	ion-1/4		T1S, R8W, Sec. 14, NW	1/4 of SW1/4	100			
UTM Easting/Northin	g (Zone 10, NA	D 1983)	44999	7/5036035	-			
Road Name			Kansas (Creek Road			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Road/Culvert Owner			Oregon Department	of Forestry	-			
Adjacent Landowners			Oregon Department	of Forestry		-		
CULVER	CULVERT INFO		CHANNEL INFO	1		10		
Shape		Pipe arch	Inlet Gradient (%)	14.2		-		
Material		Circular	Upstream Gradient (%)	6.7		1		
Length (ft)		79	Bankfull Width (ft)	15.4				
Width (in)		90	Bankfull:Culvert Ratio	0.5		-	A THE STATE OF THE	
Height (in)		90						
Outlet Perch (ft)		4.1			7			
Gradient (%)		4.2						
Rustline Height (in)		13						
Overall Condition		Poor			***			
	PRIOR	RITIZATIO	ON ANALYSIS					
Upstream Habitat Ler	ngth (mi)	0.1	Habitat Points	1			Care Comme	
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Resident	Fish Points	2				
Barrier Class		Red	Barrier Points	3		3 4	Outlet	
			Prioritization Total Points	7		EL C		
Notes: Seams in culver	rt were sep	arating and	water was flowing under pipe.			·		



Kansas Creek Culverts, Wilson River Basin

BEAR CREEK AREA CULVERT

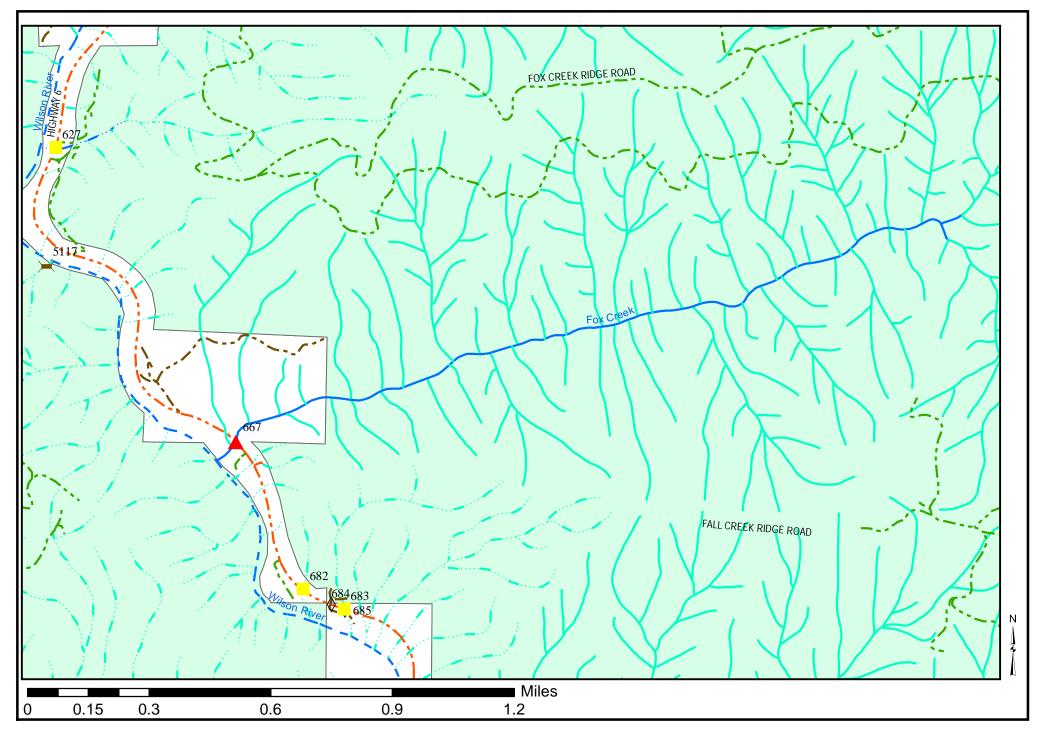
]	LOCATIO	N INFO		Culvert #	723	Priority	L
Watershed			W	ilson River				
Stream Name			Unnamed tributary of W	ilson River			All responds	
Township-Range-Sect	ion-1/4		T1S, R8W, Sec. 11, SW	/¼ of NE¼				
UTM Easting/Northin	g (Zone 10, NAI) 1983)	45076	52/5037876				
Road Name				Highway 6	3.019			
Road/Culvert Owner			Oregon Department of Tra	nsportation				
Adjacent Landowners	3		Tillamo	ook County	45.00		SYN	
CULVER	T INFO		CHANNEL INFO)			A	
Shape		Box	Inlet Gradient (%)	8.2		had to	-	
Material		Concrete	Upstream Gradient (%)	3.1			The state of the s	
Length (ft)		39	Bankfull Width (ft)	9.2	Inl	et	La se	
Width (in)		60	Bankfull:Culvert Ratio	0.5				
Height (in)		60				# 5 Car		
Outlet Perch (ft)		0.2			200	1	ALC: NO.	
Gradient (%)		3.5			4			
Rustline Height (in)		30						
Overall Condition		Poor			270			
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Ler	ngth (mi)	0.5	Habitat Points	1	مبليع		NE MARKET	
Habitat Quality		Poor	Habitat Quality Points	1		-	A S	
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	0	utlet		
			Prioritization Total Points	8	A SANCE			
Notes:	<u>'</u>	<u>'</u>	·	<u>'</u>	·			



Bear Creek Area Culverts, Wilson River Basin

FOX CREEK CULVERT

]	LOCATIO	N INFO		Culvert #	667	Priority	Н
Watershed			W	ilson River			Acres 44 6	
Stream Name				Fox Creek			and the state of	1
Township-Range-Sect	ion-1/4		T1S, R8W, Sec. 1, SE ¹ / ₄ of SE ¹ / ₄			DE IT		
UTM Easting/Northin	l g (Zone 10, NAI	1983)	45240	5/5039358		A. E. A.		1188
Road Name				Highway 6	A SECTION		/	75.4
Road/Culvert Owner			Oregon Department of Tra				5	
Adjacent Landowners	3		Oregon Department	of Forestry	A			
CULVER	T INFO		CHANNEL INFO	CHANNEL INFO				
Shape		Box	Inlet Gradient (%)	15.7	Inlet		N IS IS	Kayle.
Material		Concrete	Upstream Gradient (%)	7.0	-6-1	E.		100
Length (ft)		94	Bankfull Width (ft)	16.9				
Width (in)		120	Bankfull:Culvert Ratio	0.6				
Height (in)		120	Water observed flowing from	around				
Outlet Perch (ft)		4.0	outside of culvert on outlet sid		****		THE LOLD	5-7
Gradient (%)		5.2	baffles inside pipe. Many were				THE RES	
Rustline Height (in)		N/A	or missing.	e damaged				
Overall Condition		Poor						TE OF
		ITIZATIO	ON ANALYSIS			No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other pa		E 10
Upstream Habitat Ler	ngth (mi)	2.0	Habitat Points	4		2000年	如何對於	
Habitat Quality		Good	Habitat Quality Points	3		46	San	
Fish Species		Anad.	Fish Points	3			A The second	
Barrier Class		Red	Barrier Points	3	Outlet	100		
			Prioritization Total Points	13			104	
Notes: Outlet fish ladder	r substantiall	ly blocked w	ith debris, in poor condition, and co	onveyed only	a small fraction	of the tot	al stream flow	



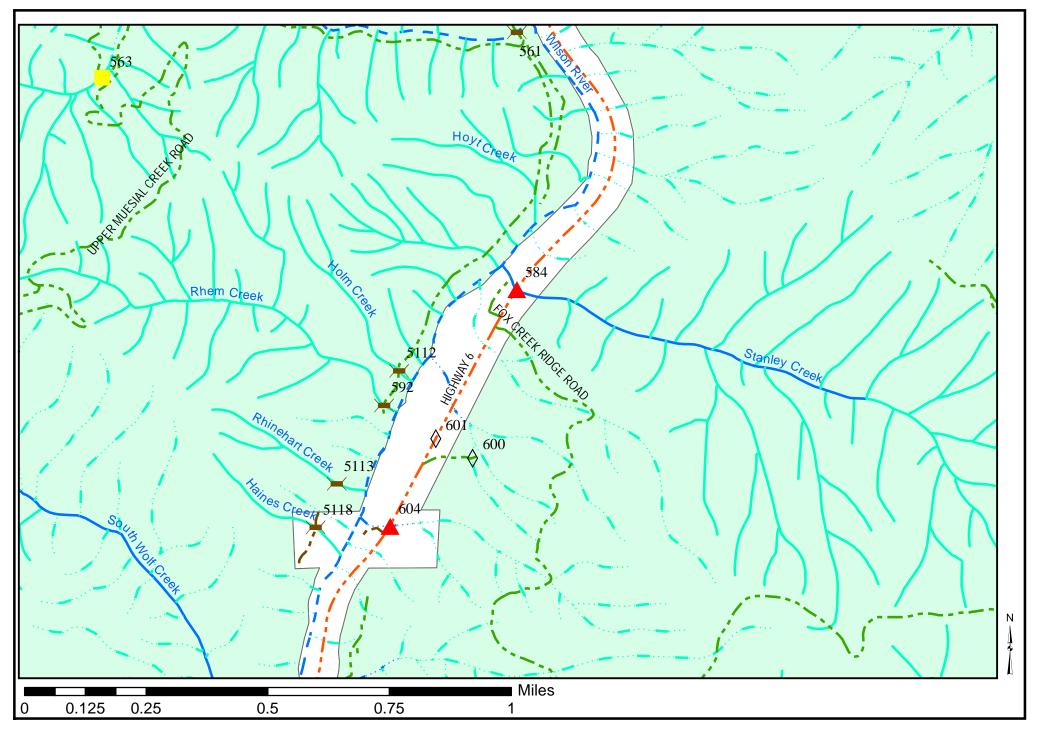
Fox Creek Culvert, Wilson River Basin

STANLEY CREEK AREA CULVERTS

]	LOCATIO	N INFO		Culvert #	604	Priority	L
Watershed			W	ilson River		The second	Control of the second	V.a
Stream Name			Unnamed tributary of W	ilson River	100	E P		
Township-Range-Sect	tion-1/4		T1S, R8W, Sec. 1, NW	/½ of NE¾		1 4		- S. A.
UTM Easting/Northin	asting/Northing (Zone 10, NAD 1983)		45199	08/5041075	The different Walls			in de
Road Name				Highway 6				
Road/Culvert Owner			Oregon Department of Tra	nsportation	an Arm			
Adjacent Landowners	S		Oregon Department	of Forestry				100
CULVER	T INFO		CHANNEL INFO)	A STATE			
Shape		Circular	Inlet Gradient (%)	35.3	1 180			
Material	Corruga	ated metal	Upstream Gradient (%)	14.9	Inlet	1		
Length (ft)		99	Bankfull Width (ft)	6.7		A	100 100	
Width (in)		60	Bankfull:Culvert Ratio	0.8				
Height (in)		60						
Outlet Perch (ft)		0.1	Stream dry during summer 20	11 data		2.00	and the same	M
Gradient (%)		7.3	collection effort.	11 data	W D		William Street	$\mathcal{H}^{\prime\prime}$
Rustline Height (in)		None	conection errort.		i-			
Overall Condition		Good				A STATE OF THE STA		
_	PRIOR	ITIZATIO	N ANALYSIS		A 12 (2)			
Upstream Habitat Lei	ngth (mi)	0.1	Habitat Points	1	The State of			4
Habitat Quality		Poor	Habitat Quality Points	1			等 图 《)	
Fish Species		Anad.	Fish Points	3	1			
Barrier Class		Red	Barrier Points	3	N Wales		Outlet	
			Prioritization Total Points	8		Barre .		
Notes:				-				

	I	LOCATIO	N INFO			Culvert #	584	Priority	M
Watershed				W	ilson River		1	A	
Stream Name				Sta	nley Creek	Inlet			
Township-Range-Section	n-1/4		T1N, R8W, Sec. 3	36, NV	V1/4 of SE1/4		Ver 2		
UTM Easting/Northing	(Zone 10, NAD	1983)		45238	3/5041793		1		
Road Name					Highway 6		-	2	1
Road/Culvert Owner			Oregon Department	of Tra	nsportation				- A
Adjacent Landowners			Oregon Depar	tment	of Forestry				I F
CULVERT	CULVERT INFO			INFO	1				-
Shape		Box	Inlet Gradient (%)	Falls	s-trash rack				1/4
Material		Concrete	Upstream Gradient (%	6)	8.5	E STATE OF THE STA			100
Length (ft)		115	Bankfull Width (ft)		9.6		- Alarm		
Width (in)		60	Bankfull:Culvert Ratio	0	0.5				
Height (in)		60							
Outlet Perch (ft)		4.0	Use of surveying equipr	nant n	raaludad				X/Z
Gradient (%)		12.0	by terrain and obstacles.		recruded	Outlet	C	ownstrear	n
Rustline Height (in)		N/A	by terrain and obstacles.	•			Man .		4
Overall Condition		Poor							To the
	PRIOR	ITIZATIO	ON ANALYSIS			90 1 1 m			5
Upstream Habitat Leng	th (mi)	0.8	Habitat Points		2				
Habitat Quality		Fair(+)	Habitat Quality Points	1	2		PRICE COMPO		110
Fish Species		Anad.	Fish Points		3			No.	
Barrier Class		Red	Barrier Points	•	3	1151	(C)		
			Prioritization Total Po	ints	10				

Notes: An approx. 5 ft wall of debris was trapped upstream of the trash rack and aggraded the upstream channel an equivalent amount. Water cascaded over debris wall. Additional loose woody debris was trapped against trash rack above stream bed.



Stanley Creek Area Culverts, Wilson River Basin

HOSKINS CREEK AND LUEBKE CREEK CULVERTS

]	LOCATIO	N INFO		Culvert #	447	Priority	L
Watershed			W	ilson River		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A LUMBATTO LA	
Stream Name			Hos	skins Creek				
Township-Range-Sect	ion-1/4		T1N, R7W, Sec. 17, SV	V1/4 of SE1/4			Some	
UTM Easting/Northin	g (Zone 10, NAI	1983)	45551	19/5045832				
Road Name				Highway 6				
Road/Culvert Owner			Oregon Department of Tra	nsportation				
Adjacent Landowners	}		Oregon Department	of Forestry				De la companya della companya della companya de la companya della
CULVER	T INFO		CHANNEL INFO)				
Shape		Circular	Inlet Gradient (%)	20.7	1		1/1	4
Material	Corruga	ated metal	Upstream Gradient (%)	10.1	injet			
Length (ft)		66	Bankfull Width (ft)	8.5			7	
Width (in)		72	Bankfull:Culvert Ratio	0.7				
Height (in)		72						
Outlet Perch (ft)		2.2			A SELECT		190-	
Gradient (%)		3.6			SOLE W			
Rustline Height (in)		18			15.	484	1	UNIT
Overall Condition		Fair				9 03		
	PRIOR	ITIZATIO	N ANALYSIS					
Upstream Habitat Len	ngth (mi)	0.1	Habitat Points	1	100			
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	Outlet	7 3 3 4 4		
			Prioritization Total Points	9		TO STATE OF		10
Notes: Stream was dry	during sur	nmer 2011	survey visit.					

]	LOCATIO	N INFO		Culvert #
Watershed			W	ilson River	
Stream Name			Luc	ebke Creek	Inlet
Township-Range-Sect	tion-1/4		T1N, R7W, Sec. 17, SI	E1/4 of NE1/4	
UTM Easting/Northin	lg (Zone 10, NAl	D 1983)	45603	86/5046768	
Road Name				Highway 6	
Road/Culvert Owner			Oregon Department of Tra		AND THE REAL PROPERTY.
Adjacent Landowner	S		Oregon Department	of Forestry	THE REAL PROPERTY.
CULVER	T INFO		CHANNEL INFO		
Shape		Circular	Inlet Gradient (%)	26.5	
Material	Corruga	ated metal	Upstream Gradient (%)	15.5	
Length (ft)		51	Bankfull Width (ft)	6.7	
Width (in)		54	Bankfull:Culvert Ratio	0.7	
Height (in)		54			
Outlet Perch (ft)		1.1			0000
Gradient (%)		10.8			Outlet
Rustline Height (in)		30			
Overall Condition		Fair			
	PRIOR	ITIZATIO	ON ANALYSIS		
Upstream Habitat Le	Iabitat Length (mi)0.7		Habitat Points	2	12
Habitat Quality			Habitat Quality Points	2	-
Fish Species			Fish Points	3	
Barrier Class		Red	Barrier Points	3	
			Prioritization Total Points	10	



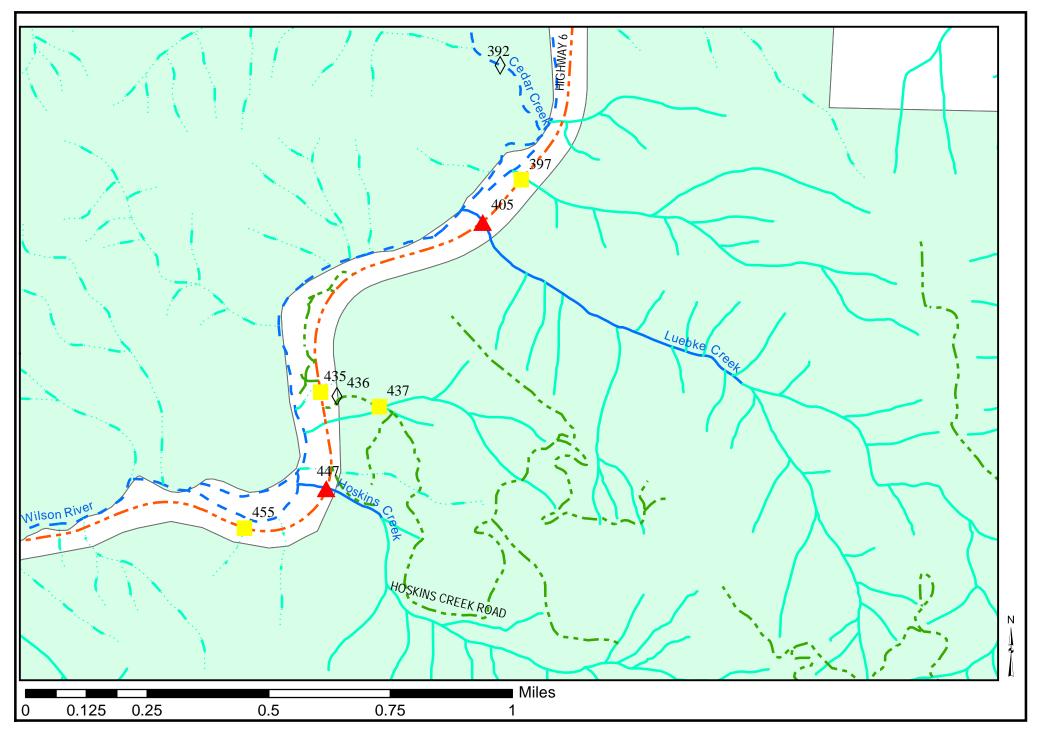
405

Priority

M



Notes: This culvert has rock headwalls and wingwalls that may have been constructed by the Civilian Conservation Corps. The Oregon State Historical Preservation Office should be consulted regarding these features. Replacement of this culvert will likely require compliance with applicable cultural resources protection laws.



Hoskins Creek and Luebke Creek Culverts, Wilson River Basin

LEES CAMP AREA CULVERTS

]	LOCATIO	N INFO		Culvert #	304	Priority	L
Watershed			W	ilson River			THE COLUMN TWO IS NOT	
Stream Name			Unnamed tributary of J	ones Creek		1		
Township-Range-Sect	ion-1/4		T1N, R7W, Sec. 8, NF	E1/4 of NE1/4		The No.		
UTM Easting/Northin	ing (Zone 10, NAD 1983)		456150/5048626				1	
Road Name			Jones (Creek Road				
Road/Culvert Owner			Oregon Department	of Forestry				
Adjacent Landowners			Oregon Department	of Forestry		1 A - 4		
CULVERT INFO			CHANNEL INFO)			+	
Shape		Pipe arch	Inlet Gradient (%)	2.5				
Material	Corruga	ated metal	Upstream Gradient (%)	5.4			1 march	
Length (ft)		45	Bankfull Width (ft)	6.2	Int	et	32	
Width (in)		100	Bankfull:Culvert Ratio	1.4	4			
Height (in)		68						
Outlet Perch (ft)		1.0						
Gradient (%)		1.8				1	The same of	
Rustline Height (in)		None				1		
Overall Condition		Fair						
		ITIZATIC	ON ANALYSIS				The state of the s	
Upstream Habitat Ler	ıgth (mi)	0.4	Habitat Points	1				
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3			M. P. RE	
Barrier Class		Red	Barrier Points	3	Ou	tlet		
			Prioritization Total Points	9		1/2		
Notes:								

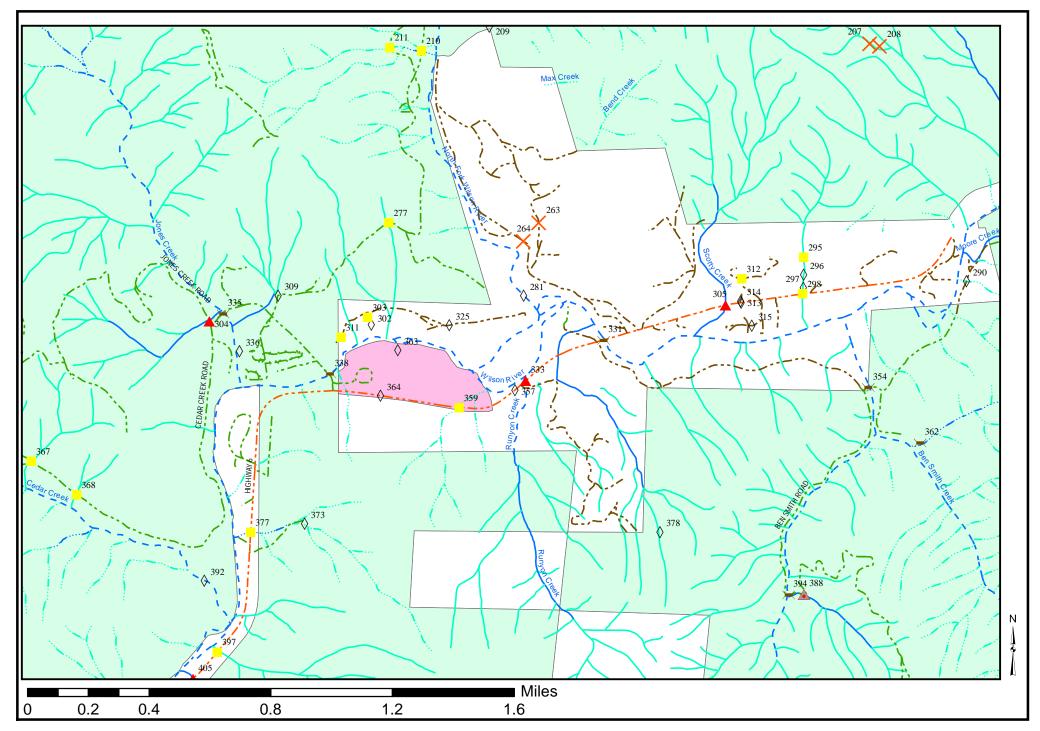
]	LOCATIO	N INFO		Culvert #	333	Priority	Н
Watershed			W	ilson River	A second discourse	Total Marie and		± . 2
Stream Name			Rur	nyon Creek	All the same of	1		
Township-Range-Sect	ion-1/4		T1N, R7W, Sec. 8, NF	E1/4 of NE1/4				
UTM Easting/Northin	g (Zone 10, NAI	1983)	45779	4/5048327				
Road Name				Highway 6		A CHARLES		自国生
Road/Culvert Owner			Oregon Department of Tra	nsportation				
Adjacent Landowners	}		Oregon Department	of Forestry				
CULVER	T INFO		CHANNEL INFO			1 10 14		
Shape		Circular	Inlet Gradient (%)	4.0			THE S	- ax
Material	Corruga	ated metal	Upstream Gradient (%)	3.0	Inlet	(1)	T	
Length (ft)		42	Bankfull Width (ft)	11.2	- No.	on the Man Section		
Width (in)		51	Bankfull:Culvert Ratio	1.4				
Height (in)		51						
Outlet Perch (ft)		8.0	*Used Abney Level to determ	ina	N. Baran		984	
Gradient (%)		1.0	gradients.	ille				
Rustline Height (in)		22	gradients.					
Overall Condition		Poor			ME			
-	PRIOR	ITIZATIO	N ANALYSIS					
Upstream Habitat Len	ngth (mi)	0.9	Habitat Points	2		N Comment	" " " " " " " " " " " " " " " " " " "	(a) 🖎
Habitat Quality		Good	Habitat Quality Points	3			No. 198	
Fish Species		Anad.	Fish Points	3			MAN .	
Barrier Class		Red	Barrier Points	3	Ou	itlet	The Wast	
			Prioritization Total Points	11			The same	

Notes: This culvert has rock headwalls, wingwalls, and an outlet apron that may have been constructed by the Civilian Conservation Corps. The Oregon State Historical Preservation Office should be consulted regarding these features. Replacement of this culvert will likely require compliance with applicable cultural resources protection laws.

]	LOCATIO	N INFO		Culvert #	305	Priority	Н
Watershed			W	ilson River	1		T. L. 183	
Stream Name			S	cottyCreek	1	1		
Township-Range-Sect	ion-1/4		T1N, R7W, Sec. 3, SW	A STATE OF THE STA				
UTM Easting/Northin	TM Easting/Northing (Zone 10, NAD 1983)		45891	2/5048759	150			
Road Name	Road Name			Highway 6				
Road/Culvert Owner		Oregon Department of Tra	nsportation					
Adjacent Landowners			Oregon Department	egon Department of Forestry			The state of the s	
CULVER	T INFO		CHANNEL INFO		3.0			
Shape		Circular	Inlet Gradient (%)	14.0	· 数	-1	THE PARTY OF THE P	
Material	Corruga	ated metal	Upstream Gradient (%)	3.0		1		
Length (ft)		100	Bankfull Width (ft)	4.3	100			
Width (in)		42	Bankfull:Culvert Ratio	0.8	Inlet			
Height (in)		42			Halle	L a		
Outlet Perch (ft)		1.1	Use of surveying equipment p	racludad				100
Gradient (%)		5.0	by terrain and obstacles.	rectuded	12 120 25			
Rustline Height (in)		26	by terrain and obstacles.		第一个			
Overall Condition		Fair			CLA		No think	-
	PRIOR	RITIZATIO	ON ANALYSIS			a design		
Upstream Habitat Ler	ngth (mi)	0.5	Habitat Points	2				No.
Habitat Quality		Good	Habitat Quality Points	3			Adres 1	
Fish Species		Anad.	Fish Points	3	AW.			-
Barrier Class		Red	Barrier Points	3	Au San	20	Outlet	10-30
			Prioritization Total Points	11	AVE	ita. Di ala		

Notes: Tech. team noted that, based on their experience, an unidentified barrier culvert occurs on a utility Right-of-Way across private land approximately 0.1 miles upstream of this crossing.

]	LOCATIO	N INFO		Culvert #	388	Priority	L
Watershed			W	ilson River	Ann Sign	A.		200
Stream Name			Unnamed tributary of Ben S	mith Creek	Inlet		The state of	9
Township-Range-Sect	tion-1/4		T1N, R7W, Sec. 10, SV			1		
UTM Easting/Northin	lg (Zone 10, NAI) 1983)	45929	08/5047224				100
Road Name			Ben Smith (Creek Road	1 3 of 1	100		
Road/Culvert Owner	Road/Culvert Owner		Oregon Department	of Forestry				
Adjacent Landowners	S		Oregon Department	of Forestry				
CULVER	T INFO		CHANNEL INFO)	The state of the s			
Shape		Pipe arch	Inlet Gradient (%)	13.8				-
Material	Corruga	ated metal	Upstream Gradient (%)	3.2	SA STATE			
Length (ft)		63	Bankfull Width (ft)	4.7				
Width (in)		96	Bankfull:Culvert Ratio	1.7				
Height (in)		72						
Outlet Perch (ft)		None					No.	
Gradient (%)		6.3						2
Rustline Height (in)		None						
Overall Condition		Good			2002	A		
		ITIZATIO	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.3	Habitat Points	1				
Habitat Quality		Fair	Habitat Quality Points	2				
Fish Species		Anad.	Fish Points	3				1000
Barrier Class		Gray	Barrier Points	2	Outlet			
			Prioritization Total Points	8	1		电影	A
Notes: Barrier class ba	ised on culv	ert slope b	eing greater than ± 1 percent of	stream grad	ient.			



Lees Camp Area Culverts, Wilson River Basin

DOG CREEK AREA CULVERTS

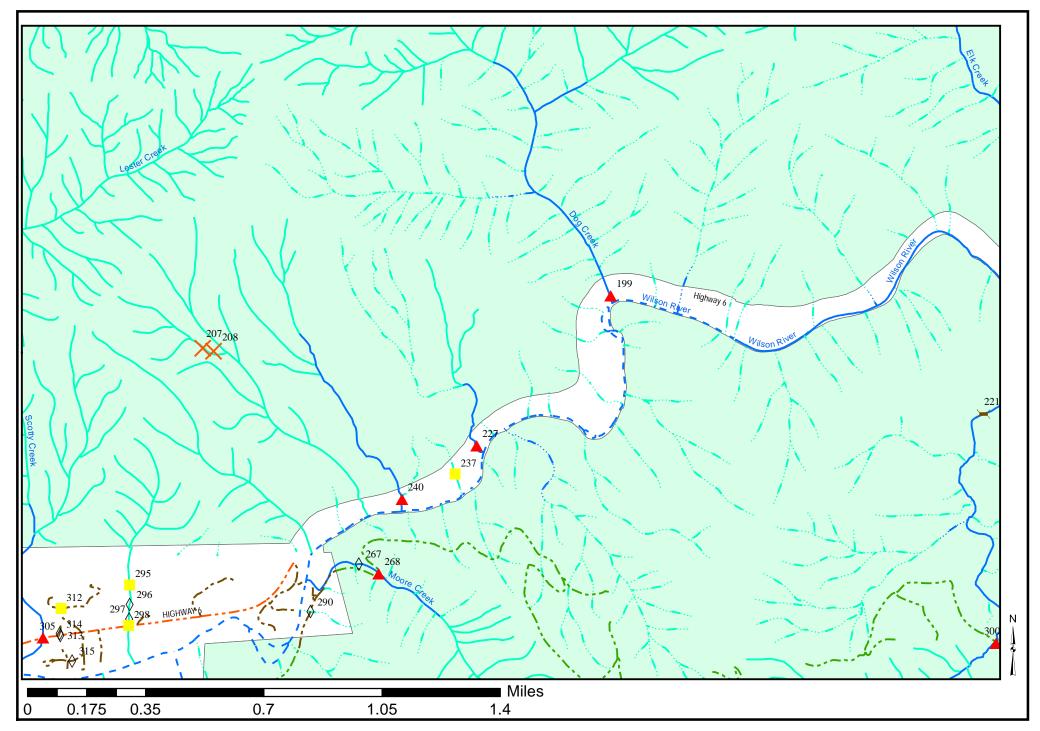
		LOCATION IN	NFO		Culvert #	268	Priority	L
Watershed			Wilso	on River	7. B		THE PERSON NAMED IN	
Stream Name			Moor	re Creek				
Township-Range-Sect	ion-1/4		T1N, R7W, Sec. 2, SW ¹ / ₄					
UTM Easting/Northin	UTM Easting/Northing (Zone 10, NAD 1983)			5049046	AS .	THE REAL PROPERTY.		
Road Name			East Ben Smi	ith Road		1		
Road/Culvert Owner			Oregon Department of	Forestry			1	
Adjacent Landowners			Oregon Department of	Forestry		A TOTAL		
CULVERT INFO			CHANNEL INFO					
Shape		Pipe arch	Inlet Gradient (%)	9.7	E De la			
Material	Сс	orrugated metal	Upstream Gradient (%)	7.5				
Length (ft)		43	Bankfull Width (ft)	6.1	i li	let.		
Width (in)		78	Bankfull:Culvert Ratio	1.1				
Height (in)		60				300		
Outlet Perch (ft)		2.6			MA B			
Gradient (%)		3.5						
Rustline Height (in)		19				-	多) 拉	
Overall Condition		Poor			1	100	1	
•	PRIO	RITIZATION A	NALYSIS			3		
Upstream Habitat Ler	ngth (mi)	0.2	Habitat Points	1	2/32	The state of	7 3 34	
Habitat Quality		Fair	Habitat Quality Points	2	1			
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	0	utlet		
			Prioritization Total Points	9		1	0	
Notes:								

	I	LOCATIO	N INFO		Culvert #	240	Priority	L
Watershed			W	ilson River		1		
Stream Name			Unnamed tributary of W	ilson River			THE REAL PROPERTY.	
Township-Range-Section	on-1/4		T1N R7W, Sec. 2, NV	V1/4 of SE1/4	75			7
UTM Easting/Northing	(Zone 10, NAD	1983)	46058	9/5049407				
Road Name				Highway 6		1		and the
Road/Culvert Owner			Oregon Department of Tra	nsportation				
Adjacent Landowners			Oregon Department	of Forestry				
CULVERT	INFO		CHANNEL INFO					
Shape		Circular	Inlet Gradient (%)	14.0	Inlet	The same	有关工作	
Material		Concrete	Upstream Gradient (%)	12.0				
Length (ft)		80	Bankfull Width (ft)	6.1				
Width (in)		24	Bankfull:Culvert Ratio	0.3				
Height (in)		24						I CARL F
Outlet Perch (ft)		1.0				1-6		
Gradient (%)		9.0					M. Jane	CHURCH
Rustline Height (in)		N/A						
Overall Condition		Poor				1		
-	PRIOR	ITIZATIO	ON ANALYSIS		The state of the s	/		
Upstream Habitat Leng	gth (mi)	0.6	Habitat Points	2	Anna A			
Habitat Quality		Poor	Habitat Quality Points	1	- 4 -		1	
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	Outlet		A STATE OF THE STA	
			Prioritization Total Points	9			1 25 2	

Notes: Stream dry during summer 2011 site visit. This culvert has rock headwalls that may have been constructed by the Civilian Conservation Corps. The Oregon State Historical Preservation Office should be consulted regarding these features. Replacement of this culvert will likely require compliance with applicable cultural resources protection laws.

]	LOCATIO	N INFO		Culvert #	227	Priority	L
Watershed			W	ilson River			The last	1
Stream Name			Unnamed tributary of W	ilson River	The state of the s			
Township-Range-Sect	ion-1/4		T1N R7W, Sec. 2, N	E1/4 of SE1/4	The state of the s	The state of		
UTM Easting/Northin	TM Easting/Northing (Zone 10, NAD 1983)		46095	The state of the s		7	ALL AND	
Road Name	<u> </u>			Highway 6			-	
Road/Culvert Owner	ad/Culvert Owner		Oregon Department of Tra			=		
Adjacent Landowners			Oregon Department	of Forestry		< /	1/7/2/4	
CULVER	CULVERT INFO		CHANNEL INFO	1			7	
Shape		Circular	Inlet Gradient (%)	20.5		nlet		
Material		Concrete	Upstream Gradient (%)	6.3		Mel	The Market	
Length (ft)		61	Bankfull Width (ft)	7.2	William St. P. Jan. St.		A CONTRACTOR	
Width (in)		36	Bankfull:Culvert Ratio	0.4				
Height (in)		36				V V		
Outlet Perch (ft)		1.8			1 6 11 1		(0)	
Gradient (%)		4.3			San Line			
Rustline Height (in)		N/A					KRY S	4
Overall Condition		Fair			A COL		News	1/1
_	PRIOR	ITIZATIO	N ANALYSIS				TO THE REAL PROPERTY.	
Upstream Habitat Len	ngth (mi)	0.2	Habitat Points	1	and the same	7		
Habitat Quality		Fair	Habitat Quality Points	2	1			
Fish Species		Anad.	Fish Points	3				19.0
Barrier Class		Red	Barrier Points	3	Outlet		1	
			Prioritization Total Points	9		1193		PA -
Notes:								

]	LOCATIO	N INFO		Culvert #	199	Priority	Н
Watershed			W	ilson River		A TELESCO	1	W. No
Stream Name				Dog Creek				
Township-Range-Sect	tion-1/4		T1N R7W, Sec. 1, NW	/1/4 of NE1/4	A.	1 66	71	
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	461602/5050380			100		9.00
Road Name				Highway 6	A CONTRACT	1		
Road/Culvert Owner			Oregon Department of Tra		A 1	1		
Adjacent Landowners			Oregon Department	of Forestry				6
CULVER	T INFO		CHANNEL INFO				2/01	To for
Shape		Box	Inlet Gradient (%)	42.7				7
Material		Concrete	Upstream Gradient (%)	7.6	Inlet			031
Length (ft)		116	Bankfull Width (ft)	11.2				
Width (in)		96	Bankfull:Culvert Ratio	0.7				
Height (in)		96	*Outlets directly into Wilson River.		P1 1	ARCHARD AND		
Outlet Perch (ft)	*Not	measured	Unable to measure tailwater c			evi yan		1
Gradient (%)		3.7	at summer flows it cascades o		101			经验
Rustline Height (in)		N/A	step into river.	ver 2-3 it	10.1	1 1	Panis	- Nu
Overall Condition		Fair	step into river.		A SEC	1	Control of	
		ATIZATIO	ON ANALYSIS		3			
Upstream Habitat Lei	ngth (mi)	1.1	Habitat Points	3		Sec.		
Habitat Quality		Good	Habitat Quality Points	3			1	
Fish Species		Anad.	Fish Points	3				3
Barrier Class		Red	Barrier Points	3	Outlet		VI. A. V.	
			Prioritization Total Points	12	C. A. S. Marie			
			step. Culvert is paralleled by a sh. Steps at either end of culver					



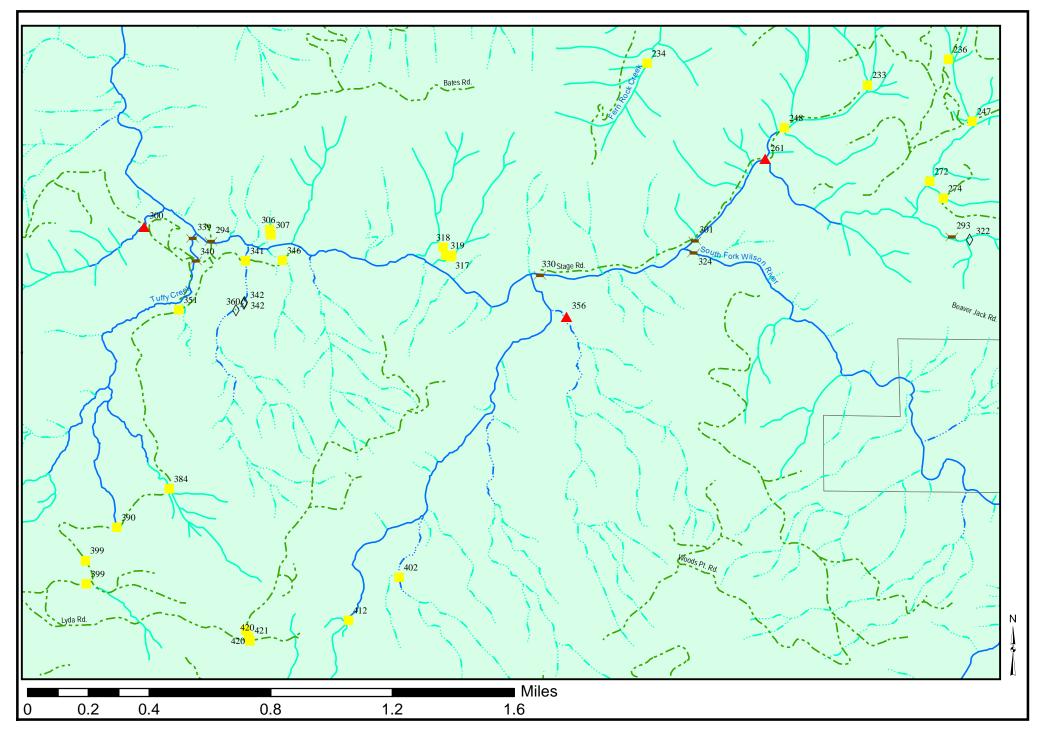
Dog Creek Area Culverts, Wilson River Basin

SOUTH FORK WILSON RIVER TRIBUTARIES CULVERTS

]	LOCATIO	N INFO		Culvert #	300	Priority	L
Watershed			W	ilson River				
Stream Name		J	Innamed tributary of S. Fork W	ilson River				
Township-Range-Sect	ion-1/4		T1N R6W, Sec. 7, NF					
UTM Easting/Northing (Zone 10, NAD 1983)		46342	22/5048729		-			
Road Name			Prison (Camp Road	200		Prince of	
Road/Culvert Owner			Oregon Department	of Forestry				
Adjacent Landowners			Oregon Department	of Forestry		1-5		
CULVER	T INFO		CHANNEL INFO				学 (
Shape		Pipe arch	Inlet Gradient (%)	5.1				
Material	Corruga	ated metal	Upstream Gradient (%)	4.0				
Length (ft)		43	Bankfull Width (ft)	9.2		lle	0	
Width (in)		94	Bankfull:Culvert Ratio	0.9				
Height (in)		72			- (3	12 1		
Outlet Perch (ft)		2.2				是一种的		
Gradient (%)		4.5				A STATE OF	Man ()	
Rustline Height (in)		6			2			
Overall Condition		Good						
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Ler	igth (mi)	0.2	Habitat Points	1				
Habitat Quality		Fair	Habitat Quality Points	2	5			
Fish Species		Anad.	Fish Points	3		21		
Barrier Class	·	Red	Barrier Points	3		utlet		
			Prioritization Total Points	9		delet	Alex	
Notes:					<u> </u>		·	

	-	LOCATIO	N INFO		Culvert #	356	Priority	L
Watershed			W	ilson River				March 1
Stream Name		J	Innamed tributary of S. Fork W	ilson River				
Township-Range-Sect	ion-1/4		T1N R6W, Sec. 9, SW	1/4 of NW1/4		图 。图	Seed to a	
UTM Easting/Northin	g (Zone 10, NA	D 1983)	46564	6/5048242	2 - 2	1000	Same of the second	
Road Name			C	-Line Road				
Road/Culvert Owner			Oregon Department	of Forestry				
Adjacent Landowners			Oregon Department	of Forestry				
CULVER'	CULVERT INFO		CHANNEL INFO					
Shape		Pipe arch	Inlet Gradient (%)	5.2			(5/5	
Material	Corrug	ated metal	Upstream Gradient (%)	6.5	Inlet			
Length (ft)		67	Bankfull Width (ft)	11.1		P. Carrier		
Width (in)		126	Bankfull:Culvert Ratio	0.9	2 100		A DESCRIPTION OF	
Height (in)		86			200			
Outlet Perch (ft)		4.3			2 7	TO THE REAL PROPERTY.		
Gradient (%)		9.2				140	3 400	
Rustline Height (in)		4						
Overall Condition		Fair					A STATE OF THE PARTY OF THE PAR	
	PRIOF	RITIZATIO	ON ANALYSIS					
Upstream Habitat Ler	ngth (mi)	0.3	Habitat Points	1			21	
Habitat Quality		Poor	Habitat Quality Points	1				
Fish Species		Anad.	Fish Points	3				
Barrier Class		Red	Barrier Points	3	Out	let	TO BE A	
			Prioritization Total Points	8	Gul			
Notes:								

]	LOCATIO	N INFO		Culvert #	261	Priority	L
Watershed			W	ilson River				
Stream Name		Unna	amed tributary of South Fork W	ilson River		一个一个		
Township-Range-Sect	tion-1/4		T1N R5W, Sec. 4, S		16			
UTM Easting/Northin	lg (Zone 10, NAI	1983)	46634	17/5048623	Z 35			
Road Name				Stage Road			ラマリ へと	
Road/Culvert Owner			Oregon Department	of Forestry			在 上一个	7 × -
Adjacent Landowners	8		Oregon Department	of Forestry	至人大			
CULVERT INFO			CHANNEL INFO)		=====		4 -
Shape		Circular	Inlet Gradient (%)	12.0				
Material	Corruga	ated metal	Upstream Gradient (%)	18.0	Inlet	THI		
Length (ft)		67	Bankfull Width (ft)	11.2	unec		Maria Pas	
Width (in)		57	Bankfull:Culvert Ratio	0.4				
Height (in)		57			XXI	And Toler		
Outlet Perch (ft)		None						
Gradient (%)		6.0			Sale A			
Rustline Height (in)		-					7	
Overall Condition		Good				4		
		ITIZATIO	ON ANALYSIS					
Upstream Habitat Lei	ngth (mi)	0.1	Habitat Points	1				No.
Habitat Quality	Poor		Habitat Quality Points	1				
Fish Species	Anad.		Fish Points	3	15			
Barrier Class		Red	Barrier Points	3	A A	-	Outle	2
			Prioritization Total Points	8		1		20
Notes:								



South Fork Wilson River Tributaries Culverts, Wilson River Basin

ELLIOT CREEK AREA CULVERTS

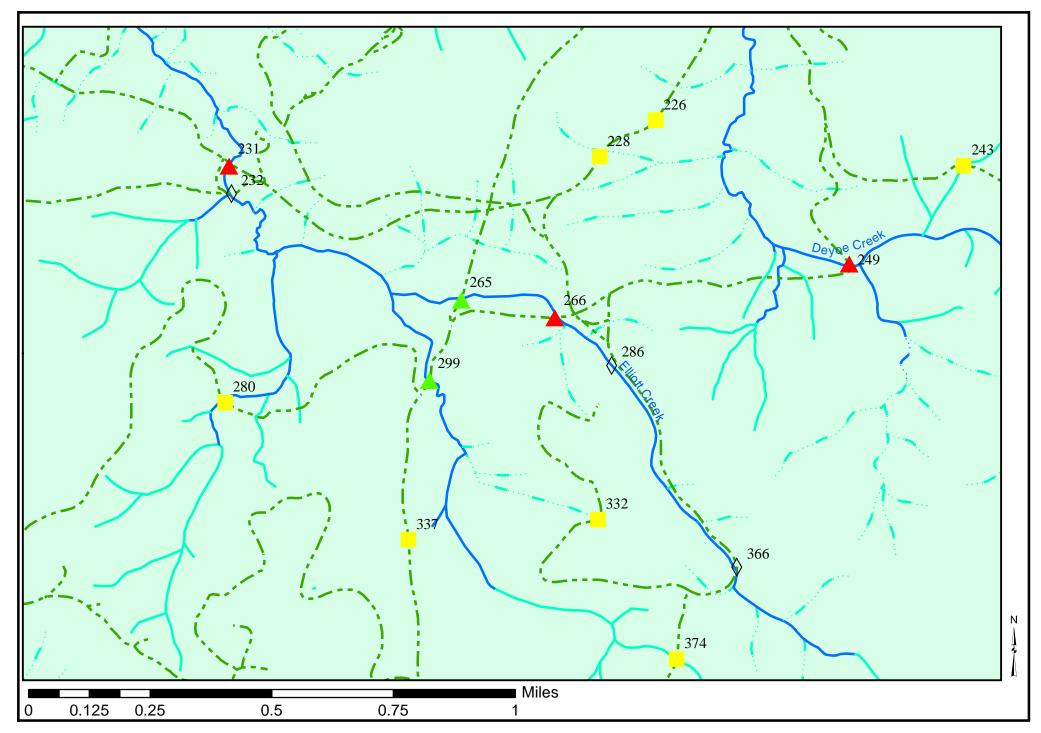
]	LOCATIO	N INFO		Culvert #	231	Priority	Н
Watershed			W	ilson River			I will be a second of	
Stream Name			I	Elliot Creek		mar la		
Township-Range-Sect	-Section-1/4		T1N R6W, Sec. 2, NE	E1/4 of SW1/4	3	-		
UTM Easting/Northin	g (Zone 10, NA	D 1983)	46927	75/5049565				
Road Name			University	Falls Road		1	1	
Road/Culvert Owner			Oregon Department					
Adjacent Landowners	S		Oregon Department	of Forestry				
CULVERT INFO			CHANNEL INFO)				
Shape		Circular	Inlet Gradient (%)	8.0	Inlet			
Material	Corrug	ated metal	Upstream Gradient (%)	5.0	iiilet	100		4
Length (ft)		80	Bankfull Width (ft)	14.3	,		V N-280-11	
Width (in)		76	Bankfull:Culvert Ratio	0.4				
Height (in)		76	Crossing approx 250 ft upstre	am of				
Outlet Perch (ft)		1.5	University Falls, a complete p	assage		5/20		
Gradient (%)		1.0	barrier. Beaver dam blocking	inlet in		4		
Rustline Height (in)		24	summer 2011, creating large v	wetland		-	7	4
Overall Condition		Poor	above culvert. 2012 photos.		-		Pode	45
	PRIOR	RITIZATIO	N ANALYSIS				A K	法
Upstream Habitat Lei	ngth (mi)	3.3	Habitat Points	4		1		
Habitat Quality		Good	Habitat Quality Points	3		=		
Fish Species		Resident	Fish Points	2		Tineve	es as a line	
Barrier Class		Red	Barrier Points	3	Outlet			44
			Prioritization Total Points	12	Outlet			1
Notes Posser dom con	o in 2012	but amall d	ehric iam present Inlet hadly de	ban board	larga halag an	invert n	oor inlot and	٠f

Notes: Beaver dam gone in 2012, but small debris jam present. Inlet badly damaged and large holes on invert near inlet end of pipe.

	LOCATION INFO						Priority	L	
Watershed			W	ilson River				V + S	
Stream Name			Ε	Elliot Creek	CANAL STATE	All All	国际		
Township-Range-Sect	tion-1/4		T1N R6W, Sec. 2, S1	E1/4 of SE1/4	The State of the S			- 13	
UTM Easting/Northin	lg (Zone 10, N	AD 1983)	47004	3/5049124	THE REAL PROPERTY.	Wallet To All Street			
Road Name			Unnamed off Beaver	Dam Road					
Road/Culvert Owner			Oregon Department	of Forestry					
Adjacent Landowner	8		Oregon Department	of Forestry					
CULVERT INFO			CHANNEL INFO						
Shape		Pipe arch	Inlet Gradient (%)	5.2	Inlet			1	
Material	Corruș	gated metal	Upstream Gradient (%)	6.2	三台。正位由				
Length (ft)		41	Bankfull Width (ft)	8.0					
Width (in)		102	Bankfull:Culvert Ratio	1.1					
Height (in)		72							
Outlet Perch (ft)		0.2				# 11			
Gradient (%)		2.6				1 / /		1	
Rustline Height (in)		5							
Overall Condition	-	Good							
		RITIZATIO	ON ANALYSIS				7		
Upstream Habitat Le	ngth (mi)	1.2	Habitat Points	3	and the same				
Habitat Quality	Good		Habitat Quality Points	3	Zhan o	-			
Fish Species	Resident		Fish Points	2	1 1 1 1 1		$ \setminus$ - \cdot		
Barrier Class		Green	Barrier Points	1	Outlet				
			Prioritization Total Points	9	5-2-4VE	A THE			
Notes:									

	j	LOCATIO	N INFO		Culvert #	266	Priority	M
Watershed			W	ilson River	460			
Stream Name			Elliot Creek			ACCEPTANCE OF THE PARTY OF THE	And the state of t	
Township-Range-Sect	tion-1/4		T1N R6W, Sec. 1, SW	11/4 of SW1/4				
UTM Easting/Northin	lg (Zone 10, NAI	D 1983)	47034	13/5049056				
Road Name			Beaver	Dam Road				
Road/Culvert Owner			Oregon Department	of Forestry			2 XA	
Adjacent Landowners	S		Oregon Department	of Forestry		是一种	0.00	
CULVERT INFO		CHANNEL INFO)		A T			
Shape		Pipe arch	Inlet Gradient (%)	2.4	100			
Material	Corrug	ated metal	Upstream Gradient (%)	5.2	1			
Length (ft)		66	Bankfull Width (ft)	9.8	- 1	12		
Width (in)		120	Bankfull:Culvert Ratio	1.0	100	Inlet	The second second	
Height (in)		96			1		100	
Outlet Perch (ft)		1.1						
Gradient (%)		2.7						
Rustline Height (in)		9						
Overall Condition		Poor					COLUMN TO	
	PRIOR	RITIZATIO	N ANALYSIS				PE CAN	
Upstream Habitat Lei	ngth (mi)	1.0	Habitat Points	2	#			
Habitat Quality		Good	Habitat Quality Points	3	$=$ \wedge		and the same	4
Fish Species		Resident	Fish Points	2		See See See		
Barrier Class		Red	Barrier Points	3	Outlet	The sales		
			Prioritization Total Points	10	Curiet	- F		
Notes:							·	

		LOCATIO	N INFO		Culvert #	299	Priority	L
Watershed			W	ilson River				物質
Stream Name			Unnamed tributary to E	Elliot Creek	业业量学		维片域 推	100
Township-Range-Sect	tion-1/4		T1N R6W, Sec. 11, NW	/1/4 of NE1/4				
UTM Easting/Northin	lg (Zone 10, NA	D 1983)	46992	12/10		A SAL	3 4	
Road Name			Beaver	Dam Road	Aller a		No.	
Road/Culvert Owner			Oregon Department	of Forestry	ALL PROPERTY.	WAY TO		1
Adjacent Landowners			Oregon Department	of Forestry	done de la			
CULVERT INFO			CHANNEL INFO	1		A VIVE	Winds and	
Shape		Pipe arch	Inlet Gradient (%)	1.1	Inlet			
Material	Corrug	ated metal	Upstream Gradient (%)	0.7			A STORY	
Length (ft)		56	Bankfull Width (ft)	12.2	The state of the s			
Width (in)		126	Bankfull:Culvert Ratio	0.9				
Height (in)		90						
Outlet Perch (ft)		0.1			- TENE	N.A.		FF.
Gradient (%)		0.5			N. Carlo			
Rustline Height (in)		26						
Overall Condition		Fair			4		THE PARTY NAMED IN	11/4
	PRIOF		ON ANALYSIS		No.			
Upstream Habitat Lei	ngth (mi)	0.5	Habitat Points	1	THE SHAPE	XV		
Habitat Quality		Good	Habitat Quality Points	3				
Fish Species	Resident		Fish Points	2		1		1
Barrier Class		Green	Barrier Points	1	Outlet	WE V		1
			Prioritization Total Points	7	THE PERSON NAMED IN	*		
Notes: Large beaver d	ams just up	stream and	downstream of this pipe during	summer 20	11.			



Elliott Creek Area Culverts, Wilson River Basin

DEVILS LAKE FORK WILSON RIVER TRIBUTARIES CULVERTS

]	LOCATIO	N INFO		Culvert #	249	Priority	Н
Watershed			W	ilson River		1 THE R. P. LEWIS CO., LANSING, MICH.		•
Stream Name			Deyoe Creek		N. Sale			
Township-Range-Sect	wnship-Range-Section-1/4		T1N R6W, Sec. 1, SV	V1/4 of SE1/4		1		
UTM Easting/Northin	lg (Zone 10, NAI	1983)	47131	10/5049236				
Road Name			Spur off of Saddle Mou	ıntain Road		YA		
Road/Culvert Owner			Oregon Department	of Forestry	1			
Adjacent Landowners	S		Oregon Department	of Forestry				
CULVER	CULVERT INFO		CHANNEL INFO)		5		
Shape		Pipe arch	Inlet Gradient (%)	4.8				
Material	Corruga	ated metal	Upstream Gradient (%)	5.1		15-		
Length (ft)		50	Bankfull Width (ft)	10.6				
Width (in)		76	Bankfull:Culvert Ratio	0.6	Inle	t		
Height (in)		54			1818		1970 1970	
Outlet Perch (ft)		0.6						
Gradient (%)		0.6				Plant I	He State	
Rustline Height (in)		12						- 5
Overall Condition		Poor					1	
	PRIOR	ITIZATIO	ON ANALYSIS			219 1		
Upstream Habitat Lei	ngth (mi)	1.7	Habitat Points	4				
Habitat Quality		Good	Habitat Quality Points	3				1
Fish Species		Anad.	Fish Points	3		In control of	-	
Barrier Class		Red	Barrier Points	3	Outlet	MILMOTAL		*
	·	<u>'</u>	Prioritization Total Points	13	Outlet		1	
Notes:								

]	LOCATIO	N INFO		Culvert #	202	Priority	Н
Watershed			W	ilson River		73.5		
Stream Name			L	ewis Creek	HY V			-
Township-Range-Sect	ion-1/4		T2N R5W, Sec. 31, NE	21/4 of SW1/4				
UTM Easting/Northin	g (Zone 10, NAI	D 1983)		2/5050895	人。这个		9±	
Road Name				Creek Road		45	C	
Road/Culvert Owner	ner		Oregon Department	of Forestry				
Adjacent Landowners			Oregon Department	of Forestry		1		J.
CULVER	ΓINFO		CHANNEL INFO			All Day		
Shape		Pipe arch	Inlet Gradient (%)	-8.6		4		
Material	Corrugated metal		Upstream Gradient (%)	0.5	Inlet	121-11		
Length (ft)	54		Bankfull Width (ft)	7.8	19 5 G 19 h			
Width (in)		94	Bankfull:Culvert Ratio	1.0	6.14	医性侧线性		
Height (in)		60			to office	and the same	21 25 25	
Outlet Perch (ft)		None	Crew couldn't find invert of p	ipe below				
Gradient (%)		1.8	substrate, but it appears to be		4			
Rustline Height (in)		12	and not an open-bottomed arc	h.			The same	
Overall Condition		Good			16	A Park		
	PRIOR	RITIZATIO	N ANALYSIS					
Upstream Habitat Len	gth (mi)	0.8	Habitat Points	2	1 h			
Habitat Quality	Good		Habitat Quality Points	3			Z ()	
Fish Species	Anad.		Fish Points	3		/-		
Barrier Class		Gray	Barrier Points	3	Ot	utlet	7.5	
		_	Prioritization Total Points	11			W. V. S. D. S.	
Notes:								

]	LOCATIO	N INFO		Culvert #	150	Priority	L
Watershed				Wilson River	18		200	•
Stream Name		Unnamed t	ributary of Devils Lake Fork V	Wilson River		7		
Township-Range-Sect	tion-1/4		T2N R5W, Sec. 31, S					
UTM Easting/Northing (Zone 10, NAD 1983)		4725	3					
Road Name	Road Name		Powderhous	e Loop Road	Mary Wall		No. of London	
Road/Culvert Owner			Oregon Departmen		Diskill.	See Marie	122	
Adjacent Landowners		Oregon Departmen	t of Forestry					
CULVERT INFO			CHANNEL INF	0	100		1)3	
Shape		Pipe arch	Inlet Gradient (%)	9.0			1	
Material	Corruga	ated metal	Upstream Gradient (%)	0		人通		
Length (ft)		68	Bankfull Width (ft)	lot measured		D		
Width (in)		78	Bankfull:Culvert Ratio	0.3	ini	et		
Height (in)		54	Upstream channel width not	measured.	1 bell 1	J.Phase		
Outlet Perch (ft)		2.4	An ~35 ft long log formed a		A MARK			
Gradient (%)		4.7	upstream of inlet and created				1	
Rustline Height (in)		None	upstream of the culvert. As a				Charles II	
Overall Condition		Good	stream channel remained vis	ible.		1	4	
	PRIOR	RITIZATIO	ON ANALYSIS			The state of the s	44	
Upstream Habitat Lei	ngth (mi)	0.2	Habitat Points	1	A CONTRACTOR			
Habitat Quality		Fair	Habitat Quality Points	2		2		
Fish Species		Anad.	Fish Points	3	Lat. On the			
Barrier Class		Red	Barrier Points	3	Outlet			1
			Prioritization Total Points	9	\$ 3950			
Natan I am Jama amandi		- Cl 41	wah nina Dina autlata inta nin			41	: - 1 1 C	

Notes: Log dam greatly restricting flows through pipe. Pipe outlets into riprap and water runs through this material before coming to the surface in the channel at the downstream end of this material. Tailwater control point was measured at the end of this placed material.

		LOCATIO	N INFO		Culvert #	178	Priority	Н
Watershed			W	ilson River			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	7
Stream Name		Unnamed t	ributary of Devils Lake Fork W	ilson River				
Township-Range-Sect	tion-1/4		T2N R5W, Sec. 31, S	E¼ of SE¼				1
UTM Easting/Northin	g (Zone 10, NA	.D 1983)	47309	94/5050767				
Road Name			Powerl	nouse Road			*	
Road/Culvert Owner			Oregon Department	of Forestry				
Adjacent Landowners			Oregon Department	of Forestry		1	All Control	
CULVERT INFO			CHANNEL INFO)	* 6.5		1	
Shape		Circular	Inlet Gradient (%)	5.2				4
Material	Corrug	ated metal	Upstream Gradient (%)	2.8	Inlet		學是一定	
Length (ft)		29	Bankfull Width (ft)	5.1	2012			
Width (in)		36	Bankfull:Culvert Ratio	0.6	E2/2	LIVE TAN		
Height (in)		36			A. S.			
Outlet Perch (ft)		1.3	According to ODF staff, this p					
Gradient (%)		2.3	scheduled to be replaced in pr	eparation			1	
Rustline Height (in)		10	for an upcoming timber sale.				國國際	
Overall Condition		Poor			- Table			
	PRIO	RITIZATIO	ON ANALYSIS			No.		
Upstream Habitat Lei	ngth (mi)	0.6	Habitat Points	2				
Habitat Quality		Good	Habitat Quality Points	3	4			
Fish Species		Anad.	Fish Points	3			article at	
Barrier Class		Red	Barrier Points	3	Oi	ıtlet	4	
			Prioritization Total Points	11	200	Open .		
Notes: Inlet was badly	damaged,	resulting in	an ~12 inch cascade into the pi	pe				

]	LOCATIO	N INFO		Culvert #	176	Priority	M
Watershed				ilson River	ALEX SEPTEMBER	A A		
Stream Name		Unnamed t	ributary of Devils Lake Fork W					
Township-Range-Sect	ion-1/4		T2N R5W, Sec. 31, NV	V¼ of SE¼		THE	学和智慧	
UTM Easting/Northin	g (Zone 10, NAD 1983)						(1) 生	
Road Name			#7 C	lyde's Trail				
Road/Culvert Owner			Oregon Department	of Forestry	2007			
Adjacent Landowners	djacent Landowners		Oregon Department	of Forestry				
CULVERT INFO			CHANNEL INFO		美人人	A.		-
Shape		Circular	Inlet Gradient (%)	-31.8	19	Sha -		-
Material	Corruga	ated metal	Upstream Gradient (%)	0	Inlet			6
Length (ft)		34	Bankfull Width (ft)	44*				
Width (in)		48	Bankfull:Culvert Ratio	0.1				
Height (in)		48						
Outlet Perch (ft)		None	According to ODF staff, this p	pipe is				
Gradient (%)		8.3	scheduled to be replaced in pr	eparation				1-2
Rustline Height (in)		42	for an upcoming timber sale.		A TOTAL	×		
Overall Condition		Critical			1			TO
	PRIOR	RITIZATIO	ON ANALYSIS					11
Upstream Habitat Ler	ngth (mi)	0.3	Habitat Points	1				- 44
Habitat Quality		Good	Habitat Quality Points	3		3.3		i Ann
Fish Species		Anad.	Fish Points	3	6		The state of the s	
Barrier Class		Red	Barrier Points	3	Outlet			1
			Prioritization Total Points	10		23	131	

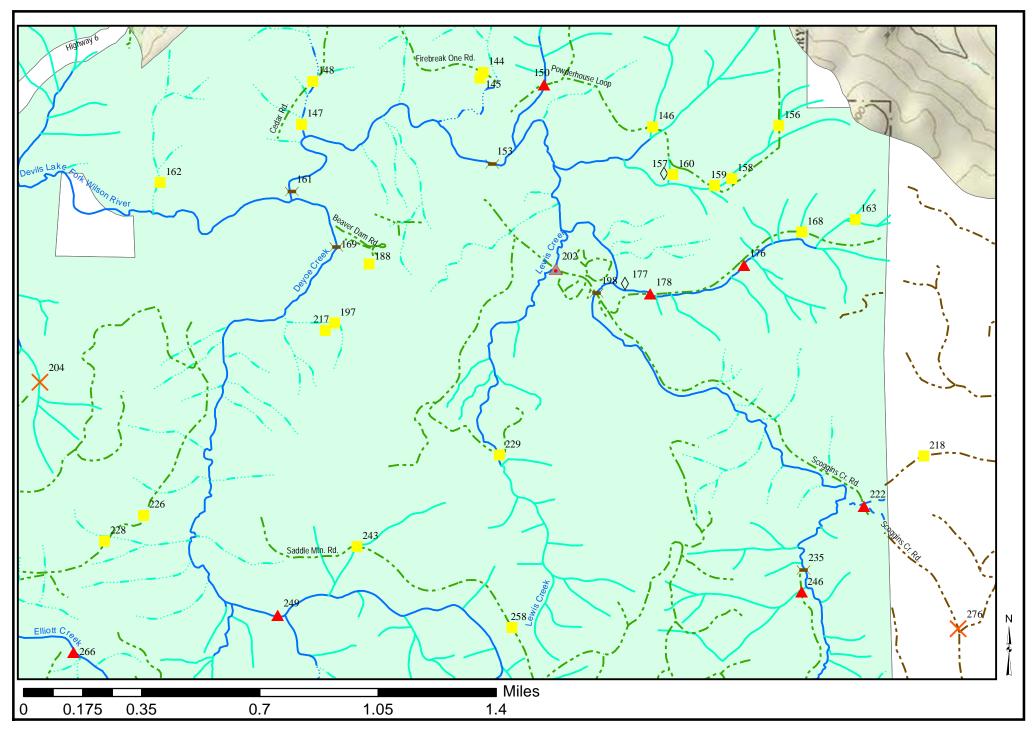
Notes: Pipe barrel deformed and invert highly corroded. Inlet nearly completely blocked with wood and sediment. *Series of beaver ponds along this stream. Inlet drains one of these ponds, and the culvert blockage noted below likely due to beaver activities.

]	LOCATIO	N INFO		Culvert #	222	Priority	M
Watershed			W	ilson River				
Stream Name		Unnamed to	ributary of Devils Lake Fork W	ilson River		1	NEO.	
Township-Range-Secti	ion-1/4		on-1/4 T1N R5W, Sec. 5, SE ¹ / ₄ of NW ¹ / ₄		436	们 。		
UTM Easting/Northin	g (Zone 10, NAI) 1983)	47411	2/5049754		1		ek i
Road Name			Scoggins (Creek Road				
Road/Culvert Owner			Oregon Department	of Forestry				
Adjacent Landowners	Adjacent Landowners		Oregon Department	of Forestry				
CULVER	ΓINFO		CHANNEL INFO			3 13.	一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	
Shape		Pipe arch	Inlet Gradient (%)	-18.1			Inlo	
Material	Corruga	ated metal	Upstream Gradient (%)	-1.1	MIN 1 3		Inle	
Length (ft)		50	Bankfull Width (ft)	13.2				
Width (in)		108	Bankfull:Culvert Ratio	0.7				
Height (in)		74						
Outlet Perch (ft)		2.0			to the second	. 1.		
Gradient (%)		-0.2						
Rustline Height (in)		34						
Overall Condition		Poor						
	PRIOR	ITIZATIO	N ANALYSIS		A STATE OF STREET			
Upstream Habitat Len	igth (mi)	0.5	Habitat Points	1				Sec.
Habitat Quality		Good	Habitat Quality Points	3	-			
Fish Species	·	Anad.	Fish Points	3				-
Barrier Class		Red	Barrier Points	3			Outlet	, ale
	, and the second		Prioritization Total Points	10		-		A Laboratory

Notes: As of September 2012, this culvert has been replaced with a rail car bridge and this crossing no longer impedes fish passage.

]	LOCATIO	N INFO		Culvert #	246	Priority	L
Watershed			W	ilson River	2 00 TY-	E STATE OF	0.72	
Stream Name	Unnamed tr		ributary of Devils Lake Fork Wilson River		The last		Inle	
Township-Range-Sect	Fownship-Range-Section-1/4		T1N R5W, Sec. 5, NW		100	7.1	The same	
UTM Easting/Northin	g (Zone 10, NAI	D 1983)	47381		/	19-19-		
Road Name			OHV Trail off of Scoggins (Creek Road				
Road/Culvert Owner			Oregon Department	of Forestry	- L.			
Adjacent Landowners	3		Oregon Department	of Forestry				EL .
CULVER	CULVERT INFO		CHANNEL INFO			1/2		
Shape		Circular	Inlet Gradient (%)	-15.0		为别源:		
Material	Corruga	ated metal	Upstream Gradient (%)	8.5	-			
Length (ft)		34	Bankfull Width (ft)	4.4				
Width (in)		18	Bankfull:Culvert Ratio	0.3				
Height (in)		18						
Outlet Perch (ft)		2.6						
Gradient (%)		4.2						
Rustline Height (in)		8						
Overall Condition		Poor						1 665
	PRIOR	ITIZATIO	ON ANALYSIS					
Upstream Habitat Lei			Habitat Points	1				
Habitat Quality		Poor	Habitat Quality Points	1	and the same of th	100		A STATE
Fish Species	`	Anad.	Fish Points	3			1	1
Barrier Class		Red	Barrier Points	3	Outlet	11		1000
			Prioritization Total Points	8			1	1

Notes: This stream designated nonfish. However, it is a tributary to a known fishbearing stream and the lower portion appears to provide suitable habitat for fish. Thus, for this project we considered this stream as capable of supporting fish upstream to where it branches into two smaller headwater tributaries.



Devils Lake Fork Wilson River Tributaries Culverts, Wilson River Basin