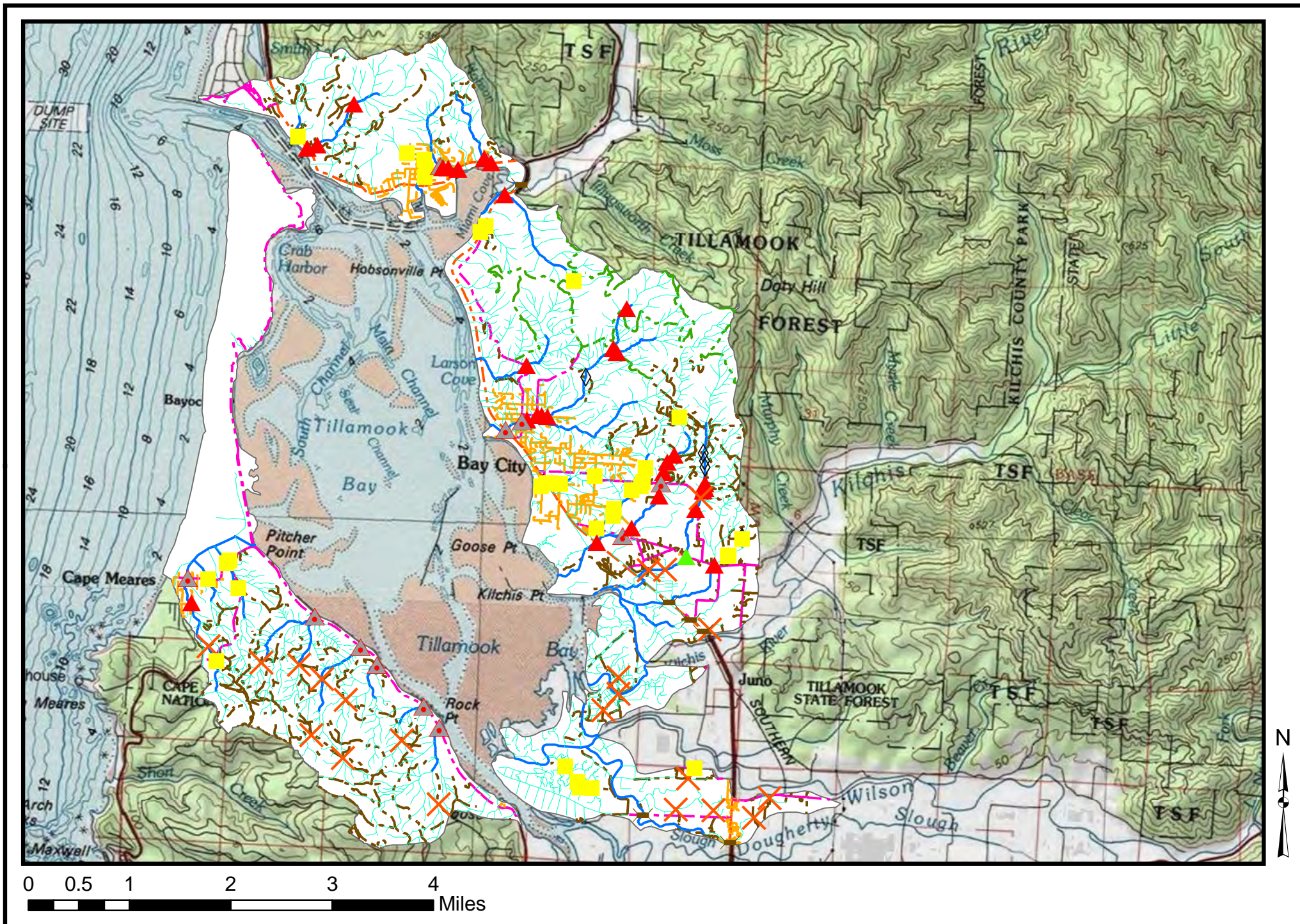

Tillamook Bay Tributaries Culverts




Tillamook Bay Tributaries Crossings



Tillamook Bay Tributaries Clusters

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


North Tillamook Bay Tributaries Culverts

SMITH CREEK CULVERTS


LOCATION INFO				Culvert #	441	Priority	H
Watershed				Tillamook Bay			
Stream Name				Smith Creek			
Township-Range-Section-1/4				T1N, R10W, Sec. 20, NW¼ of NE¼			
UTM Easting/Northing (Zone 10, NAD 1983)				426950/5046015			
Road Name				Highway 101			
Road/Culvert Owner				Oregon Department of Transportation			
Adjacent Landowners				Compass Rose Properties			
CULVERT INFO		CHANNEL INFO					
Shape	Box	Inlet Gradient (%)	8.1				
Material	Concrete	Upstream Gradient (%)	7.1				
Length (ft)	81	Bankfull Width (ft)	8.5				
Width (in)	48	Bankfull:Culvert Ratio	0.5				
Height (in)	48						
Outlet Perch (ft)	7.7						
Slope (%)	1.0						
Rustline Height (in)	N/A						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	1.0	Habitat Points	2				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	10				
Notes: Stream flows cascade over rip-rap into Tillamook Bay. Fish can only access culvert during very high tide events.							

LOCATION INFO				Culvert #	440	Priority	H	
Watershed		Tillamook Bay						
Stream Name		Smith Creek						
Township-Range-Section-1/4		T1N, R10W, Sec. 20, NW¼ of NE¼						
UTM Easting/Northing (Zone 10, NAD 1983)		427105/5046081						
Road Name		Harbor View Drive						
Road/Culvert Owner		Private Drive						
Adjacent Landowners		B. & D. Hubbard, G. Howe						
CULVERT INFO		CHANNEL INFO						
Shape	Box	Inlet Gradient (%)						13.4
Material	Concrete	Upstream Gradient (%)						5.6
Length (ft)	52	Bankfull Width (ft)						8.8
Width (in)	56	Bankfull:Culvert Ratio						0.5
Height (in)	56							
Outlet Perch (ft)	1.9							
Slope (%)	11.9							
Rustline Height (in)	22							
Overall Condition	Critical							
PRIORITIZATION ANALYSIS								
Upstream Habitat Length (mi)	0.9	Habitat Points				2		
Habitat Quality	Fair	Habitat Quality Points				2		
Fish Species	Anad.	Fish Points				3		
Barrier Type	Red	Barrier Points				3		
		Prioritization Total Points				10		
Notes: Large holes in invert, pipe barrel is also deformed. Water running under pipe.								

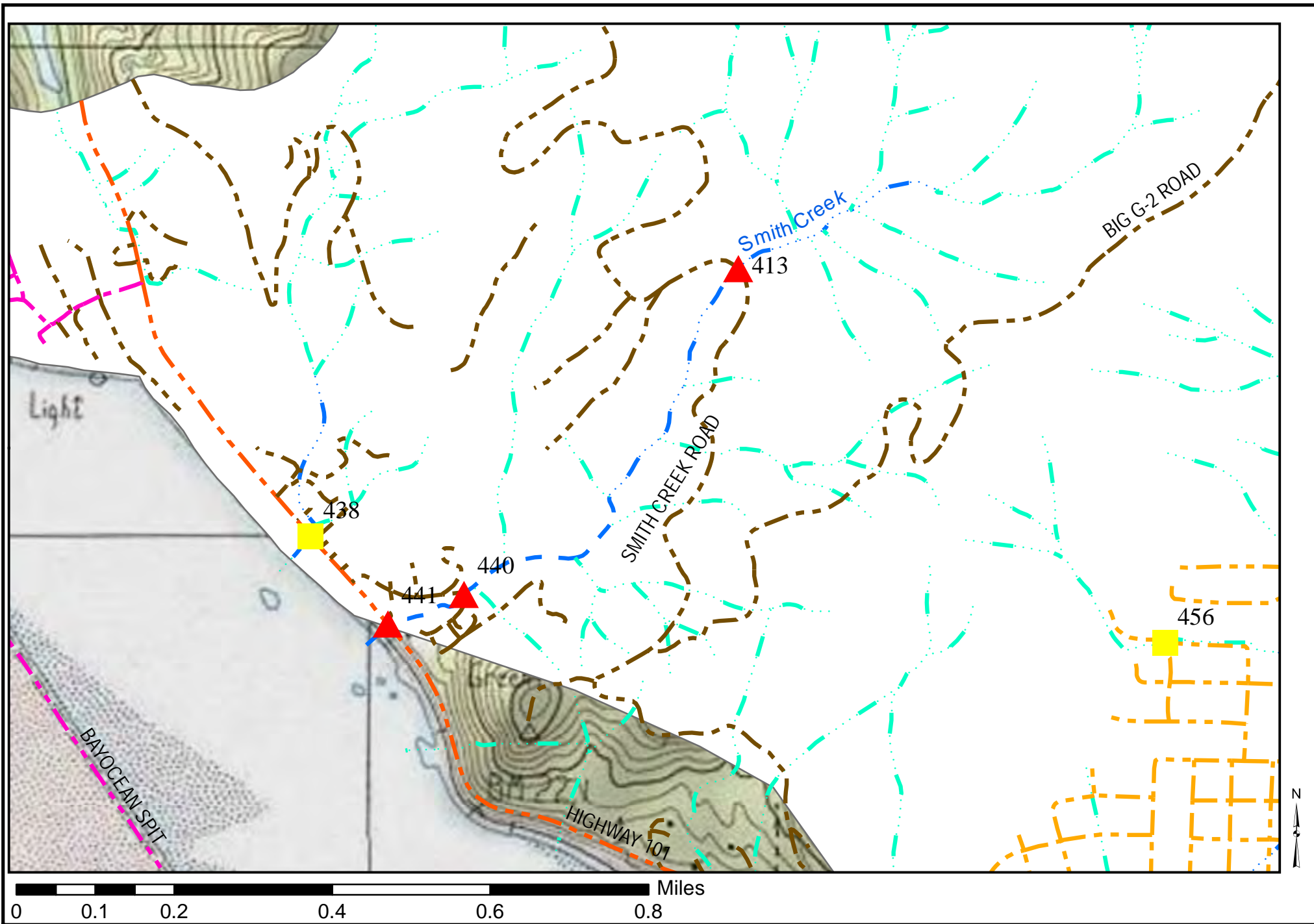
LOCATION INFO				Culvert #	413	Priority	M
Watershed		Tillamook Bay					
Stream Name		Smith Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 20, NE¼ of SE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		427659/5046723					
Road Name		Barview Forest Road					
Road/Culvert Owner		Private Drive – ORM Timber					
Adjacent Landowners		ORM Timber					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	12.0(N/A)				
Material	Corrugated metal	Upstream Gradient (%)	1.1				
Length (ft)	45(45)	Bankfull Width (ft)	10.1				
Width (in)	36(36)	Bankfull:Culvert Ratio	0.6*				
Height (in)	36(36)	Two pipes at this location. The outlet picture depicts pipe 2 in the foreground and the outfall of pipe 1 in the background (upper right corner of photo).					
Outlet Perch (ft)	7.5(0.8)						
Slope (%)	3.0(N/A)						
Rustline Height (in)	16(N/A)						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.3	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total 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.							



Inlet





Outlet




Smith Creek Culverts, Tillamook Bay Tributaries

SCHOOL CREEK CULVERTS


LOCATION INFO				Culvert #	453/454	Priority	?
Watershed		Tillamook Bay					
Stream Name		School Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 21, SE¼ of NE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		429205/5045779 (inlet)					
Road Name		Several within Garibaldi Town Limits					
Road/Culvert Owner		City of Garibaldi					
Adjacent Landowners		Numerous private properties in Garibaldi					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	1.0				
Material (at inlet)	Corrugated Metal	Upstream Gradient (%)	1.0				
Length (ft)	~700*	Bankfull Width (ft)	5.0				
Width (in)	36	Bankfull:Culvert Ratio	0.6				
Height (in)	36	*Slope and length estimated from aerial photograph and GIS data. A board across stream creates an ~1ft step in stream ~5ft above inlet.					
Outlet Perch (ft)	None						
Slope (%)	~2.0*						
Rustline Height (in)	20						
Overall Condition	unknown						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.9	Habitat Points	2				
Habitat Quality	Poor	Habitat Quality Points	1				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	9				
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.							



LOCATION INFO				Culvert #	5304	Priority	M
Watershed		Tillamook Bay					
Stream Name		School Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 20, SW¼ of NE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		429112/5045771					
Road Name		Church Parking Lot					
Road/Culvert Owner		Private Drive					
Adjacent Landowners		Garibaldi Faith Church					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	7.0				
Material	Corrugated Metal	Upstream Gradient (%)	4.0				
Length (ft)	125	Bankfull Width (ft)	8.0				
Width (in)	36	Bankfull:Culvert Ratio	0.4				
Height (in)	36	Natural substrate throughout pipe.					
Outlet Perch (ft)	None						
Slope (%)	1.0						
Rustline Height (in)	18						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.7	Habitat Points	2				
Habitat Quality	Poor	Habitat Quality Points	1				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		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.							



Inlet





Outlet

LOCATION INFO				Culvert #	452	Priority	L
Watershed				Tillamook Bay			
Stream Name				School Creek			
Township-Range-Section-1/4				T1N, R10W, Sec. 20, SW¼ of NE¼			
UTM Easting/Northing (Zone 10, NAD 1983)				429064/5045799			
Road Name				Driftwood Avenue, Garibaldi			
Road/Culvert Owner				Private Drive			
Adjacent Landowners		J.&D. McGeever, B. Merrill, Garibaldi Faith Church					
CULVERT INFO		CHANNEL INFO					
Shape	Pipe Arch	Inlet Gradient (%)	8.0				
Material	Corrugated Metal	Upstream Gradient (%)	5.0				
Length (ft)	82	Bankfull Width (ft)	9.5				
Width (in)	96	Bankfull:Culvert Ratio	0.8				
Height (in)	48	Natural substrate through entire pipe.					
Outlet Perch (ft)	None						
Slope (%)	3.0						
Rustline Height (in)	6						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.7	Habitat Points	2				
Habitat Quality	Poor	Habitat Quality Points	1				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Gray	Barrier Points	2				
		Prioritization Total Points	8				
Notes:							







WHITNEY CREEK CULVERTS

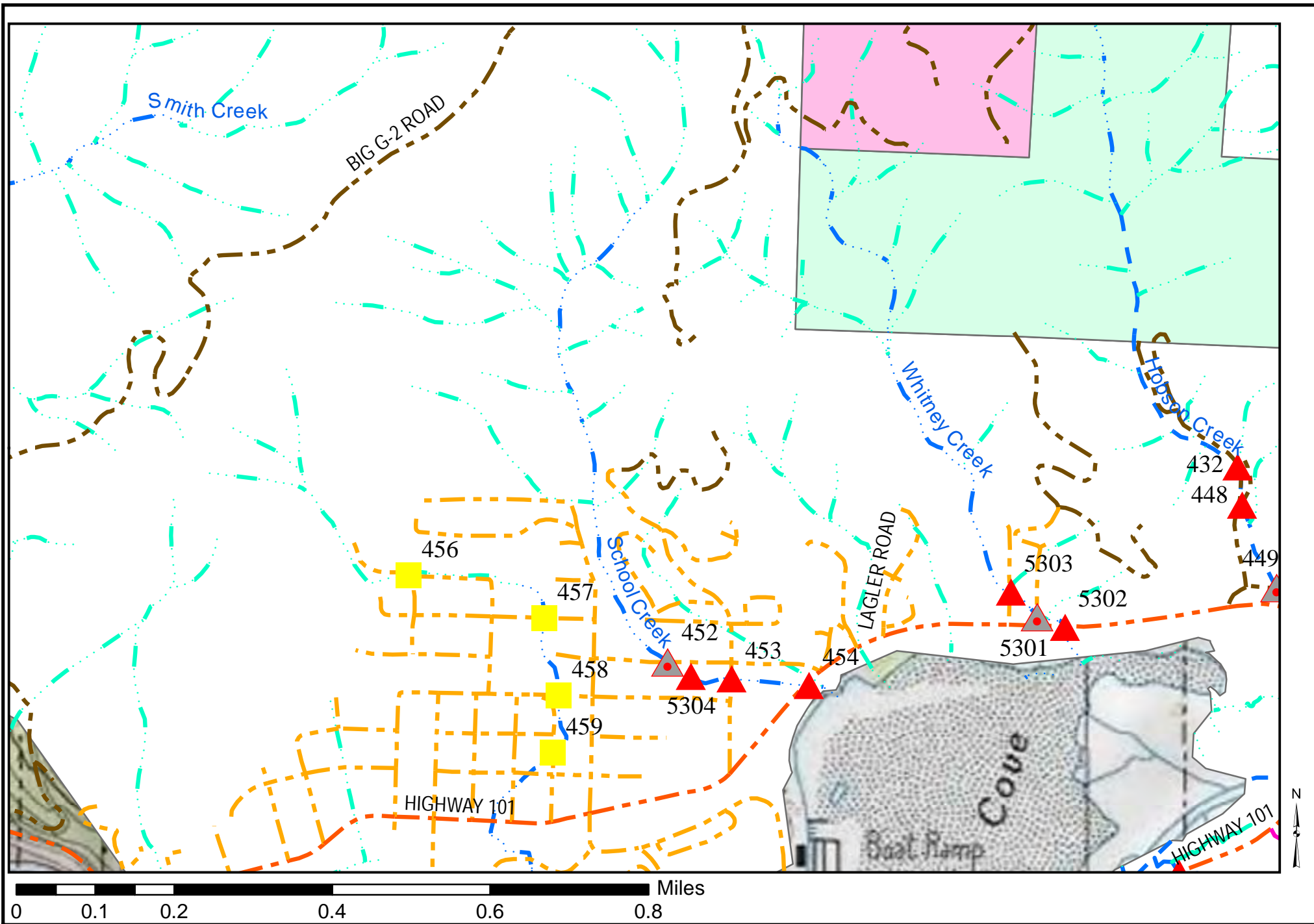
LOCATION INFO				Culvert #	5302	Priority	L
Watershed		Tillamook Bay					
Stream Name		Whitney Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 22, NE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		429847/5045882					
Road Name		Highway 101					
Road/Culvert Owner		Oregon Department of Transportation					
Adjacent Landowners		B. Merrill and L. Godfrey					
CULVERT INFO		CHANNEL INFO				 Inlet	
Shape	Circular	Inlet Gradient (%)	17.0				
Material	Concrete	Upstream Gradient (%)	2.0				
Length (ft)	55	Bankfull Width (ft)	7.2				
Width (in)	36	Bankfull:Culvert Ratio	0.4				
Height (in)	36						
Outlet Perch (ft)	None						
Slope (%)	1.0						
Rustline Height (in)	14						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS						 Outlet	
Upstream Habitat Length (mi)	0.5	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: 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.

LOCATION INFO				Culvert #	5301	Priority	L
Watershed		Tillamook Bay					
Stream Name		Whitney Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 22, NE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		429817/5045895					
Road Name		Arizona Way					
Road/Culvert Owner		City of Garibaldi					
Adjacent Landowners		D. Calliau and L. Godfrey					
CULVERT INFO		CHANNEL INFO				 	
Shape	Pipe arch	Inlet Gradient (%)	4.5				
Material	Corrugated metal	Upstream Gradient (%)	3.5				
Length (ft)	61	Bankfull Width (ft)	4.9				
Width (in)	42	Bankfull:Culvert Ratio	0.7				
Height (in)	30						
Outlet Perch (ft)	None						
Slope (%)	1.0						
Rustline Height (in)	9						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.4	Habitat Points	1				
Habitat Quality	Poor	Habitat Quality Points	1				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Gray	Barrier Points	2				
		Prioritization Total Points	7				
Notes:							


LOCATION INFO				Culvert #	5303	Priority	L
Watershed		Tillamook Bay					
Stream Name		Whitney Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 22, NE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		429760/5045944					
Road Name		Martin Smith Lane					
Road/Culvert Owner		Private					
Adjacent Landowners		R. Perigo and T. & C. North					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)			6.5		
Material	Corrugated metal	Upstream Gradient (%)			4.5		
Length (ft)	55	Bankfull Width (ft)			5.2		
Width (in)	36	Bankfull:Culvert Ratio			0.6		
Height (in)	36						
Outlet Perch (ft)	0.7						
Slope (%)	3.5						
Rustline Height (in)	18						
Overall Condition	Critical						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (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 completely worn through. Culvert in extremely poor condition. Couldn't access inlet.							




Garibaldi Town Limits Culverts, Tillamook Bay Tributaries

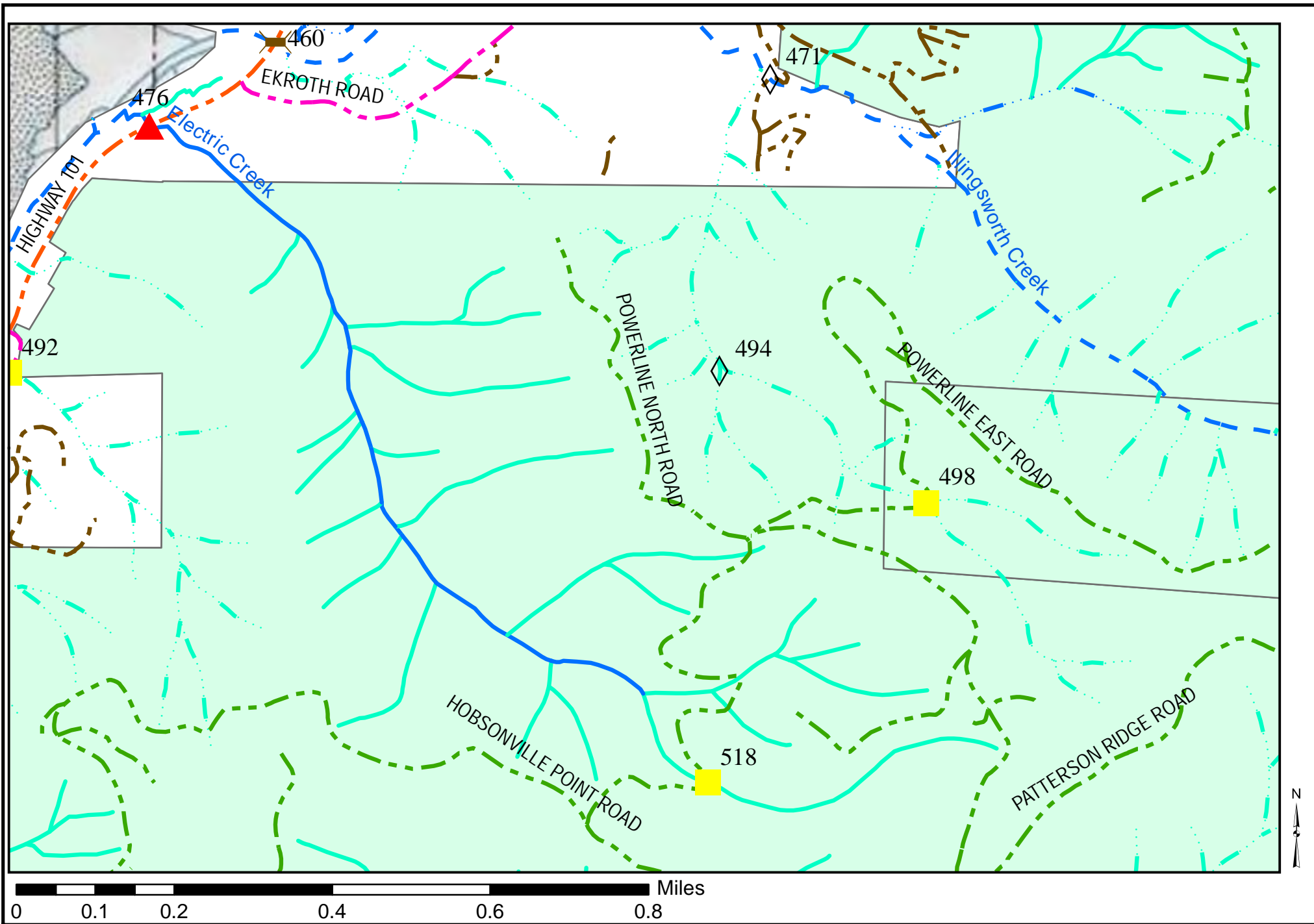
ELECTRIC CREEK CULVERT

LOCATION INFO				Culvert #	476	Priority	M
Watershed		Tillamook Bay					
Stream Name		Electric Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 22, SW¼ of NE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		430186/5045387					
Road Name		Highway 101					
Road/Culvert Owner		Oregon Department of Transportation					
Adjacent Landowners		B. Green					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	1.1				
Material	Corrugated metal	Upstream Gradient (%)	1.1				
Length (ft)	~160	Bankfull Width (ft)	5.2				
Width (in)	48 (inlet) 60 (outlet)	Bankfull:Culvert Ratio	1.0				
Height (in)	48 (inlet) 60 (outlet)						
Outlet Perch (ft)	None						
Slope (%)	Variable						
Rustline Height (in)	30						
Overall Condition	Critical						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	1.0	Habitat Points	2				
Habitat Quality	Poor	Habitat Quality Points	1				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	9				
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.							




Inlet

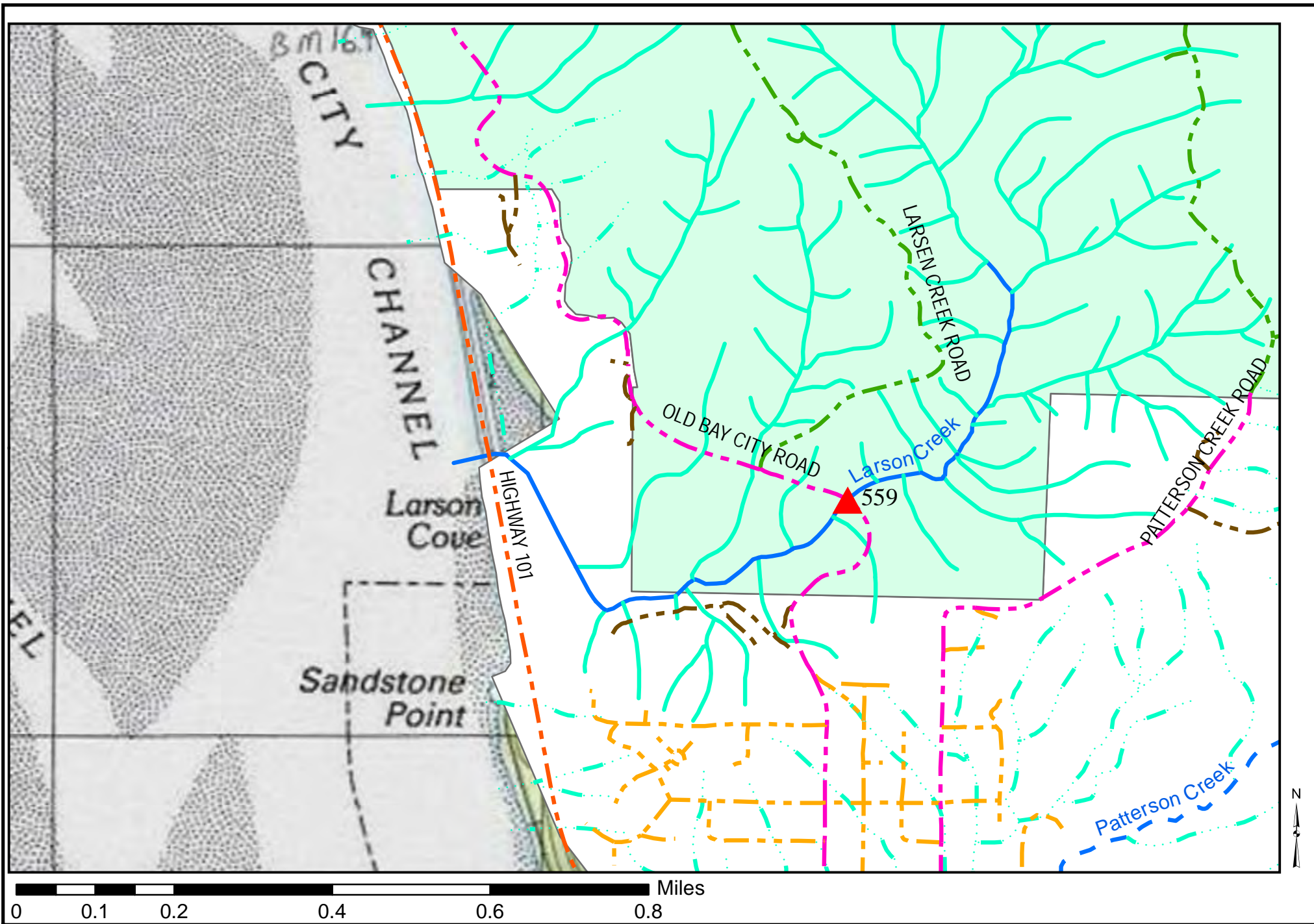




Electric Creek Culverts, Tillamook Bay Tributaries


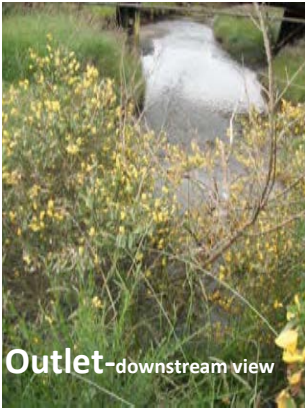
LARSON CREEK CULVERT



LOCATION INFO				Culvert #	559	Priority	M
Watershed		Tillamook Bay					
Stream Name		Larson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 34, NE¼ of NE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		430546/5042675					
Road Name		Old Bay City Road					
Road/Culvert Owner		Tillamook County					
Adjacent Landowners		Oregon Department of Forestry					
CULVERT INFO		CHANNEL INFO				 	

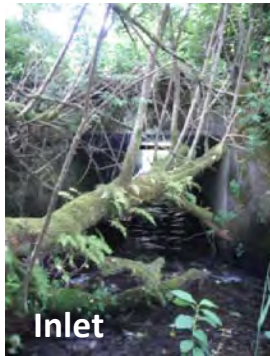



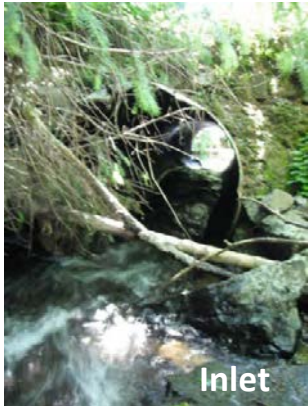

Larson Creek Culvert, Tillamook Bay Tributaries



PATTERSON CREEK CULVERTS

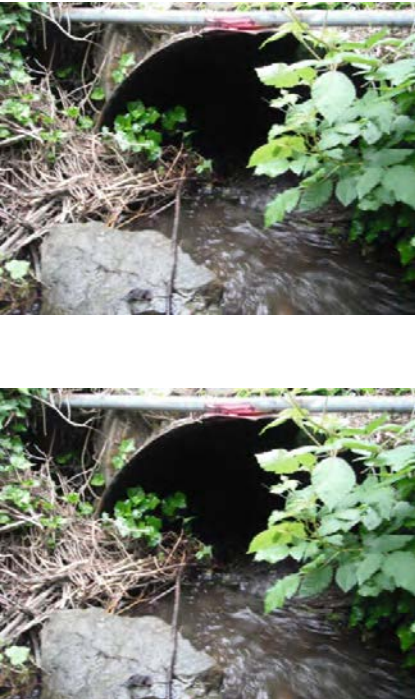
LOCATION INFO				Culvert #	581	Priority	H
Watershed		Tillamook Bay					
Stream Name		Patterson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 34, SW¼ of SE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		430242/5041650					
Road Name		Highway 101					
Road/Culvert Owner		Oregon Department of Transportation					
Adjacent Landowners		ODOT, Port of Garibaldi					
CULVERT INFO		CHANNEL INFO					
Shape	Box	Inlet Gradient (%)	0.1				
Material	Concrete	Upstream Gradient (%)	0.2				
Length (ft)	105	Bankfull Width (ft)	22.0				
Width (in)	96	Bankfull:Culvert Ratio	0.4				
Height (in)	96						
Outlet Perch (ft)	None						
Slope (%)	0.2						
Rustline Height (in)	48						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (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				
		Prioritization Total Points	11				
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.							



LOCATION INFO				Culvert #	579	Priority	H
Watershed		Tillamook Bay					
Stream Name		Patterson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 22, NW¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		430484/5041795					
Road Name		4 th Street					
Road/Culvert Owner		City of Bay City					
Adjacent Landowners		City of Bay City, B.&C. Scovel					
CULVERT INFO		CHANNEL INFO				 Inlet	
Shape	Circular	Inlet Gradient (%)	7.6				
Material	Corrugated Metal	Upstream Gradient (%)	1.9				
Length (ft)	97	Bankfull Width (ft)	11.4				
Width (in)	72	Bankfull:Culvert Ratio	0.5				
Height (in)	72						
Outlet Perch (ft)	None						
Slope (%)	1.6						
Rustline Height (in)	33						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS						 Outlet	
Upstream Habitat Length (mi)	3.7	Habitat Points	4				
Habitat Quality	Fair(-)	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Class	Gray	Barrier Points	2				
		Prioritization Total Points	11				
Notes:							

LOCATION INFO				Culvert #	578	Priority	H
Watershed		Tillamook Bay					
Stream Name		Patterson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 35, SE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		430568/5041806					
Road Name		5 th Street					
Road/Culvert Owner		City of Bay City					
Adjacent Landowners		A & E. Troyer, A. Harris, J. Fullan					
CULVERT INFO		CHANNEL INFO				 Inlet  Outlet	
Shape	Box	Inlet Gradient (%)			4.2		
Material	Concrete	Upstream Gradient (%)			10		
Length (ft)	71	Bankfull Width (ft)			15.0		
Width (in)	96	Bankfull:Culvert Ratio			0.5		
Height (in)	72						
Outlet Perch (ft)	1.8						
Slope (%)	0.5						
Rustline Height (in)	24						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	3.6	Habitat Points			4		
Habitat Quality	Fair(-)	Habitat Quality Points			2		
Fish Species	Anad.	Fish Points			3		
Barrier Class	Red	Barrier Points			3		
		Prioritization Total Points			12		
Notes:							

LOCATION INFO				Culvert #	575	Priority	H
Watershed		Tillamook Bay					
Stream Name		Patterson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 35, SE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		430727/5041881					
Road Name		Unnamed drive off Main Ave.					
Road/Culvert Owner		City of Bay City					
Adjacent Landowners		D. Buxton, R. & S. Blodget					
CULVERT INFO		CHANNEL INFO				 Inlet	
Shape	Circular	Inlet Gradient (%)	2.8				
Material	Corrugated metal	Upstream Gradient (%)	2.2				
Length (ft)	36	Bankfull Width (ft)	11.6				
Width (in)	60	Bankfull:Culvert Ratio	0.4				
Height (in)	60						
Outlet Perch (ft)	0.8						
Slope (%)	3.4						
Rustline Height (in)	18						
Overall Condition	Critical						
PRIORITIZATION ANALYSIS						 Outlet	
Upstream Habitat Length (mi)	2.3	Habitat Points	4				
Habitat Quality	Fair(-)	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	12				
Notes: Bottom and side of culvert completely worn through.							

LOCATION INFO				Culvert #	5555	Priority	H
Watershed		Tillamook Bay					
Stream Name		Patterson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 35, SE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		430799/5041890					
Road Name		8 th Street					
Road/Culvert Owner		City of Bay City					
Adjacent Landowners		D. & C. McBride and C. & N. Ek					
CULVERT INFO		CHANNEL INFO				 Inlet	
Shape	Circular	Inlet Gradient (%)	12.9				
Material	CMP	Upstream Gradient (%)	8.5				
Length (ft)	41	Bankfull Width (ft)	11.2				
Width (in)	56	Bankfull:Culvert Ratio	0.4				
Height (in)	56						
Outlet Perch (ft)	None						
Slope (%)	-0.2						
Rustline Height (in)	30						
Overall Condition	Critical						
PRIORITIZATION ANALYSIS						 Outlet	
Upstream Habitat Length (mi)	2.3	Habitat Points	4				
Habitat Quality	Fair(-)	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Class	Red	Barrier Points	3				
		Prioritization Total Points	12				
Notes: Bottom worn through at inlet and outlet and probably along much of the length of the pipe (substrate obscure view of entire invert)..							

LOCATION INFO				Culvert #	572	Priority	H
Watershed		Tillamook Bay					
Stream Name		Patterson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 35, SE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		430901/5041865					
Road Name		9 th Street					
Road/Culvert Owner		City of Bay City					
Adjacent Landowners		C. Bosch and G. & S. Petty					
CULVERT INFO		CHANNEL INFO					
Shape	Pipe arch	Inlet Gradient (%)	15.3				
Material	Corrugated metal	Upstream Gradient (%)	4.6				
Length (ft)	42	Bankfull Width (ft)	6.0				
Width (in)	48	Bankfull:Culvert Ratio	0.7				
Height (in)	48	Couldn't access downstream end of pipe. Area is fenced and includes a fish ladder.					
Outlet Perch (ft)	Unknown						
Slope (%)	Unknown						
Rustline Height (in)	17						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	2.2	Habitat Points	4				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	12				
Notes: Fish ladder at downstream end of pipe.							


LOCATION INFO				Culvert #	542	Priority	M
Watershed		Tillamook Bay					
Stream Name		Patterson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 26, SE¼ of SW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		431891/5042999					
Road Name		Unnamed Forest Road					
Road/Culvert Owner		Oregon Department of Forestry					
Adjacent Landowners		Oregon Department of Forestry					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	28.8				
Material	Corrugated metal	Upstream Gradient (%)	3.6				
Length (ft)	43	Bankfull Width (ft)	8.7				
Width (in)	36	Bankfull:Culvert Ratio	0.3				
Height (in)	36						
Outlet Perch (ft)	1.6						
Slope (%)	5.0						
Rustline Height (in)	7						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.5	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	9				
Notes: Large amount of sediment and debris in inlet. Water overflowing pipe inlet during early summer survey visit.							

Notes: Large amount of sediment and debris in inlet. Water overflowing pipe inlet during early summer survey visit.


LOCATION INFO				Culvert #	528	Priority	L
Watershed				Tillamook Bay			
Stream Name				Patterson Creek			
Township-Range-Section-1/4				T1N, R10W, Sec. 26, NW¼ of SE¼			
UTM Easting/Northing (Zone 10, NAD 1983)				432101/5043624			
Road Name				Patterson Creek Road			
Road/Culvert Owner				Oregon Department of Forestry			
Adjacent Landowners				Oregon Department of Forestry			
CULVERT INFO		CHANNEL INFO		 <			

Notes:

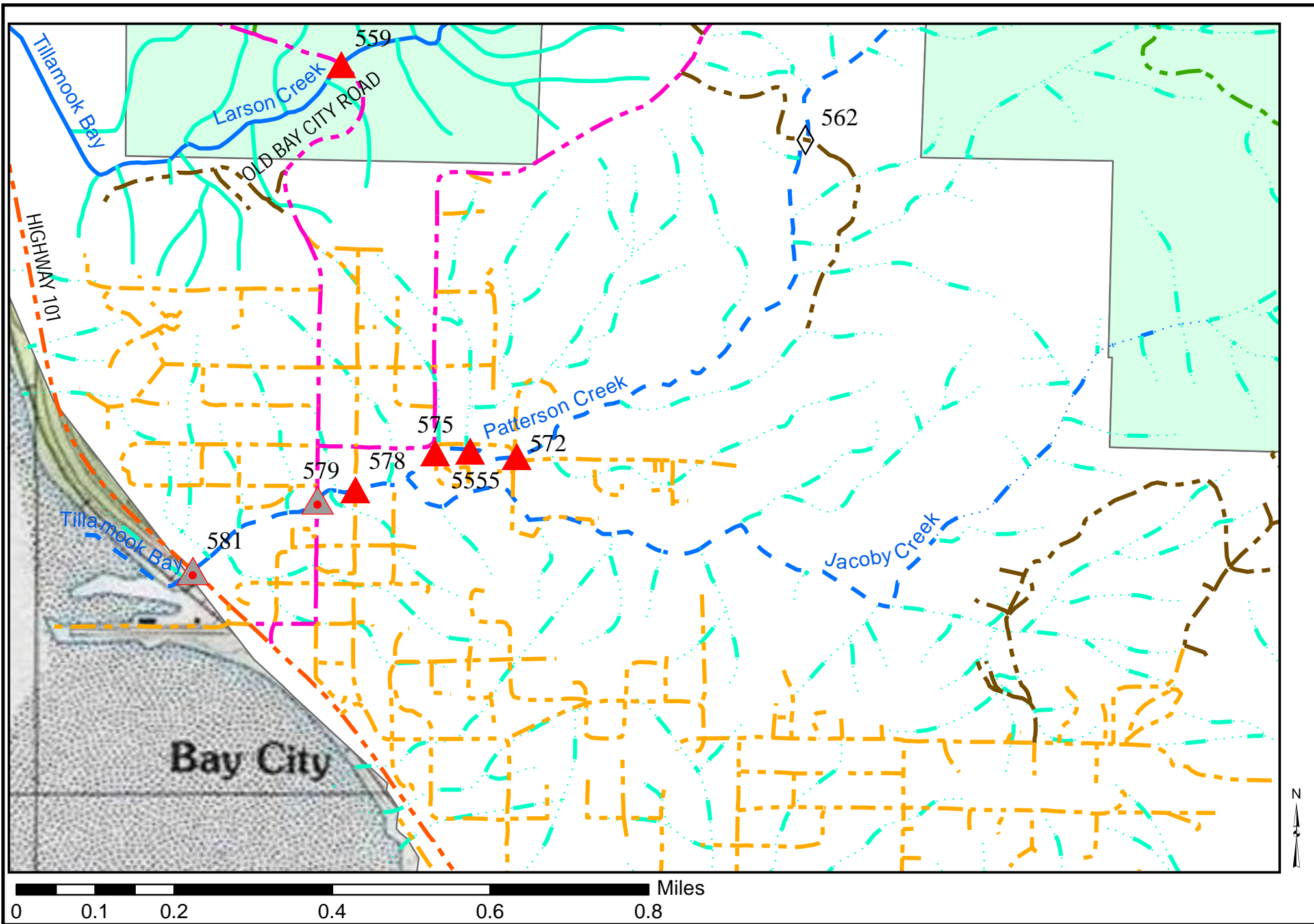
LOCATION INFO				Culvert #	543	Priority	M
Watershed		Tillamook Bay					
Stream Name		Unnamed tributary to Patterson Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 25, NW¼ of SE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		431979/5042920					
Road Name		Unnamed Forest Road					
Road/Culvert Owner		Oregon Department of Forestry					
Adjacent Landowners		Oregon Department of Forestry					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	66.3				
Material	Corrugated metal	Upstream Gradient (%)	7.3				
Length (ft)	41	Bankfull Width (ft)	5.7				
Width (in)	42	Bankfull:Culvert Ratio	0.6				
Height (in)	42						
Outlet Perch (ft)	3.1						
Slope (%)	4.2						
Rustline Height (in)	23						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.4	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	9				
Notes: Large amount of debris in inlet.							



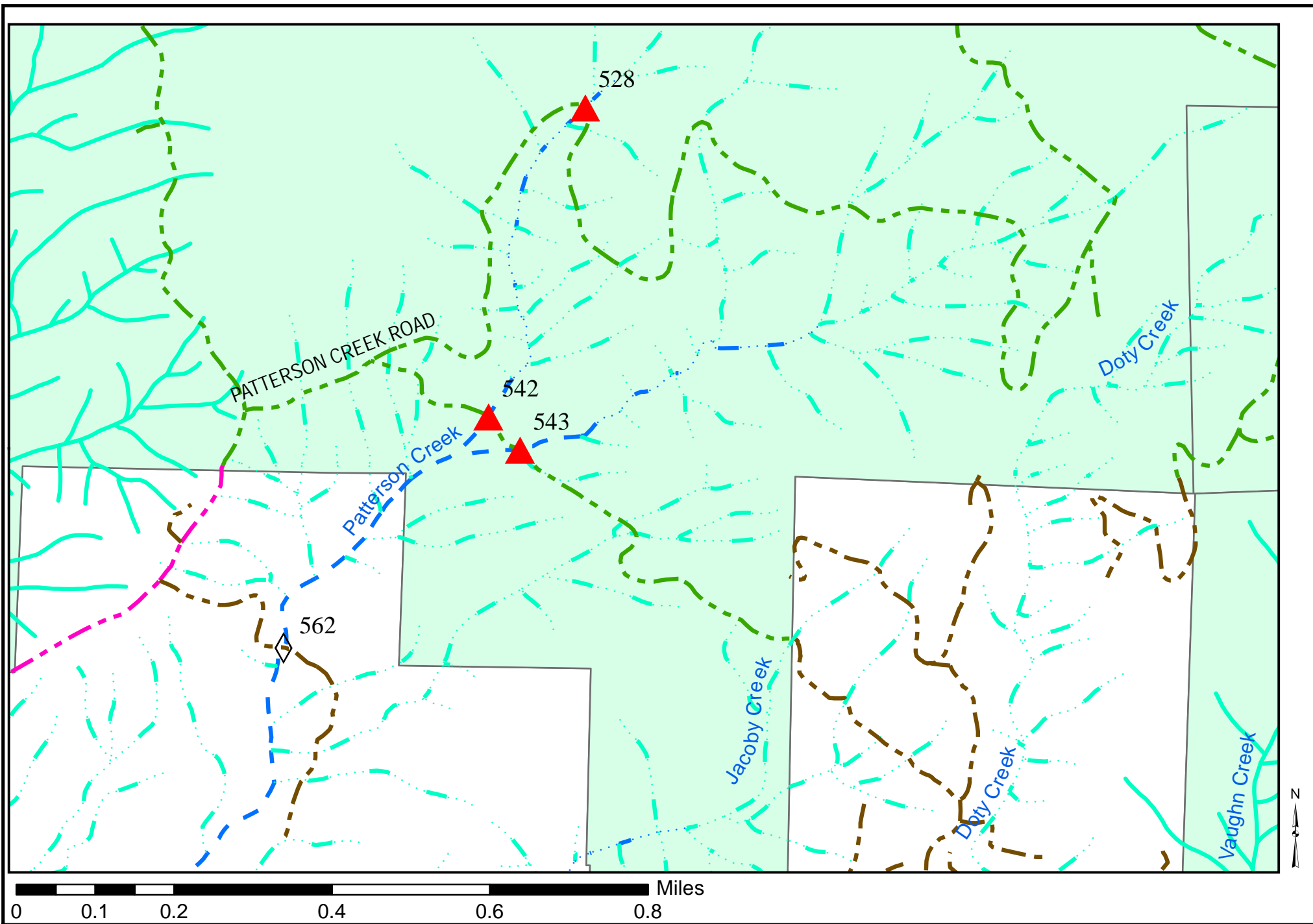
Inlet



Outlet




Lower Patterson Creek Culverts, Tillamook Bay Tributaries





Upper Patterson Creek Culverts, Tillamook Bay Tributaries


DOTY CREEK CULVERTS

LOCATION INFO				Culvert #	647	Priority	H
Watershed		Kilchis River					
Stream Name		Doty Creek					
Township-Range-Section-1/4		T1S, R10W, Sec. 2, SW¼ of SE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		431728/5039890					
Road Name		Highway 101					
Road/Culvert Owner		Oregon Department of Transportation					
Adjacent Landowners		M. Farrington, F. & L. Adkins					
CULVERT INFO		CHANNEL INFO				 <	

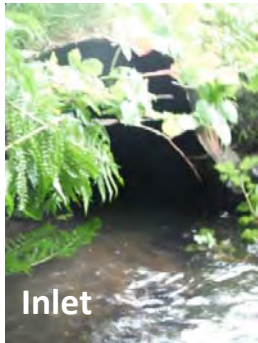
LOCATION INFO				Culvert #	637	Priority	H
Watershed		Kilchis River					
Stream Name		Doty Creek					
Township-Range-Section-1/4		T1S, R10W, Sec. 2, SE¼ of SE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		432147/5040015					
Road Name		Alderbrook Loop Road					
Road/Culvert Owner		Tillamook County					
Adjacent Landowners	L.&C. Oswald, D.&C. Phillips, and J. Johnson						
CULVERT INFO			CHANNEL INFO				
Shape	Circular	Inlet Gradient (%)	13.6				
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						
Slope (%)	0.1						
Rustline Height (in)	N/A						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	1.4	Habitat Points	3				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Gray	Barrier Points	2				
		Prioritization Total Points	10				
Notes:							

LOCATION INFO				Culvert #	636	Priority	H	
Watershed		Tillamook Bay						
Stream Name		Doty Creek						
Township-Range-Section-1/4		T1S, R10W, Sec. 2, NE¼ of SE¼						
UTM Easting/Northing (Zone 10, NAD 1983)		432285/5040153						
Road Name		Vaughan Road						
Road/Culvert Owner		City of Bay City						
Adjacent Landowners		J. Johnson, M. Smith, J.&J. Keppner						
CULVERT INFO		CHANNEL INFO						
Shape	Circular	Inlet Gradient (%)						2.9
Material	Corrugated metal	Upstream Gradient (%)						1.2
Length (ft)	37	Bankfull Width (ft)						6.8
Width (in)	36	Bankfull:Culvert Ratio						0.4
Height (in)	36							
Outlet Perch (ft)	0.1							
Slope (%)	0.3							
Rustline Height (in)	16							
Overall Condition	Fair							
PRIORITIZATION ANALYSIS								
Upstream Habitat Length (mi)	1.2	Habitat Points	3					
Habitat Quality	Fair	Habitat Quality Points	2					
Fish Species	Anad.	Fish Points	3					
Barrier Type	Red	Barrier Points	3					
		Prioritization Total Points	11					
Notes: Entire culvert rusty.								


	
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LOCATION INFO				Culvert #	622	Priority	H
Watershed		Tillamook Bay					
Stream Name		Doty Creek					
Township-Range-Section-1/4		T1S, R10W, Sec. 1, SW¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		432654/5040550					
Road Name		Private Drive off Doughty Road					
Road/Culvert Owner		G. Oldenkamp					
Adjacent Landowners		R. Rasmussen, J.&T. Jepson					
CULVERT INFO		CHANNEL INFO				 Inlet	
Shape	Circular	Inlet Gradient (%)	11.8				
Material	Corrugated metal	Upstream Gradient (%)	1.2				
Length (ft)	19	Bankfull Width (ft)	8.6				
Width (in)	45	Bankfull:Culvert Ratio	0.4				
Height (in)	45						
Outlet Perch (ft)	0.6						
Slope (%)	8.0						
Rustline Height (in)	18						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.8	Habitat Points	2				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	10				
Notes: Cascade into inlet and bottom worn through on outlet.							



LOCATION INFO				Culvert #	613	Priority	M
Watershed			Tillamook Bay				
Stream Name			Doty Creek				
Township-Range-Section-1/4			T1S, R10W, Sec. 1, NW¼ of NW¼				
UTM Easting/Northing (Zone 10, NAD 1983)			432729/5040868				
Road Name			Doughty Road				
Road/Culvert Owner			Tillamook County				
Adjacent Landowners		R. Rasmussen, Alderbrook Hills, W.&D. Collum					
CULVERT INFO			CHANNEL INFO				
Shape	Circular		Inlet Gradient (%)	10.8			
Material	Corrugated metal		Upstream Gradient (%)	3.5			
Length (ft)	36		Bankfull Width (ft)	6.5			
Width (in)	46		Bankfull:Culvert Ratio	0.6			
Height (in)	46						
Outlet Perch (ft)	None						
Slope (%)	-1.1						
Rustline Height (in)	17						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.7		Habitat Points	2			
Habitat Quality	Fair		Habitat Quality Points	2			
Fish Species	Anad.		Fish Points	3			
Barrier Type	Gray		Barrier Points	2			
			Prioritization Total Points	9			
Notes:							








Inlet

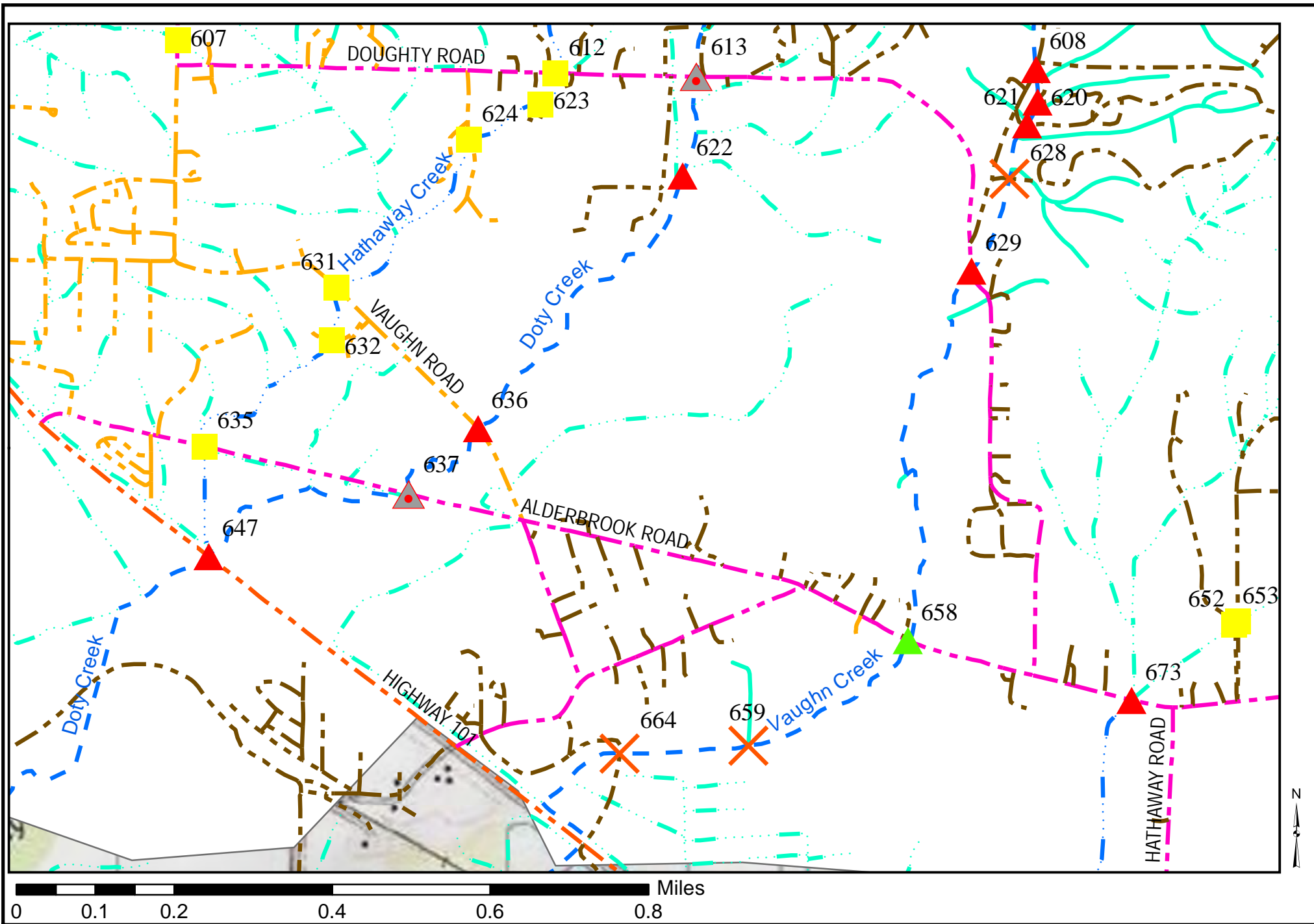


Outlet

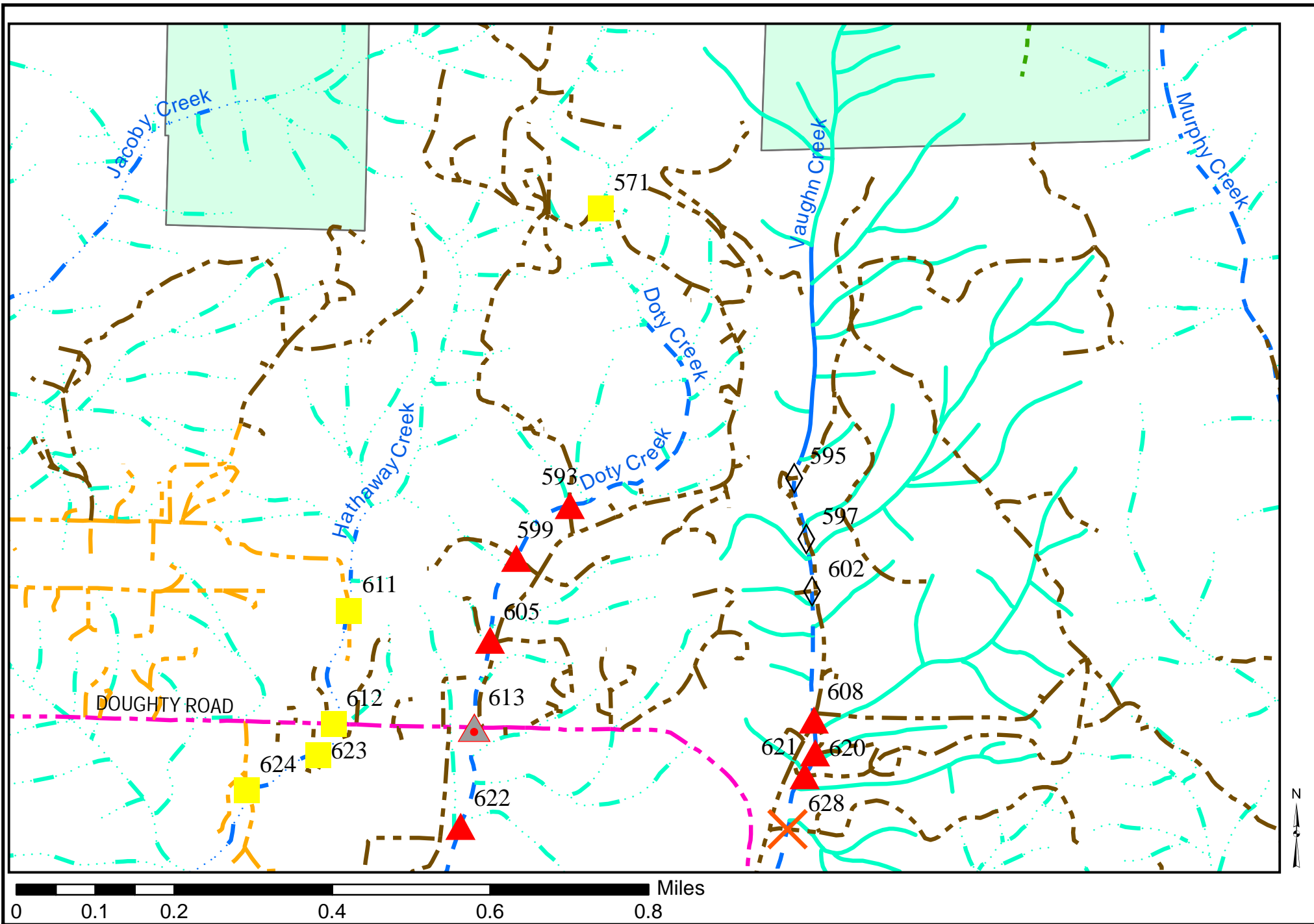
LOCATION INFO				Culvert #	605	Priority	M
Watershed		Tillamook Bay					
Stream Name		Doty Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 36, SE¼ of SW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		432768/5041048					
Road Name		Private Drive off Doughty Road					
Road/Culvert Owner		Oregon Department of Forestry					
Adjacent Landowners		Oregon Department of Forestry					
CULVERT INFO		CHANNEL INFO				 Inlet	
Shape	Circular	Inlet Gradient (%)	12.0				
Material	Corrugated metal	Upstream Gradient (%)	0.58				
Length (ft)	31	Bankfull Width (ft)	7.6				
Width (in)	48	Bankfull:Culvert Ratio	0.5				
Height (in)	48						
Outlet Perch (ft)	None						
Slope (%)	3.4						
Rustline Height (in)	20.4						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS						 Outlet	
Upstream Habitat Length (mi)	0.5	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	9				
Notes:							

LOCATION INFO				Culvert #	599	Priority	M
Watershed		Tillamook Bay					
Stream Name		Doty Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 36, SE¼ of SW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		432833/5041204					
Road Name		Timberline Drive					
Road/Culvert Owner		J.&S. Smith					
Adjacent Landowners		J.&S. Smith and P. Early					
CULVERT INFO		CHANNEL INFO				 	
Shape	Circular	Inlet Gradient (%)	18.1				
Material	Corrugated metal	Upstream Gradient (%)	3.1				
Length (ft)	40	Bankfull Width (ft)	9.0				
Width (in)	48	Bankfull:Culvert Ratio	0.4				
Height (in)	48						
Outlet Perch (ft)	0.9						
Slope (%)	1.2						
Rustline Height (in)	18						
Overall Condition	Good						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.4	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	9				
Notes:							

LOCATION INFO				Culvert #	593	Priority	
Watershed		Tillamook Bay					
Stream Name		Doty Creek					
Township-Range-Section-1/4		T1N, R10W, Sec. 36, SE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		432915/5041390					
Road Name		Private drive off Willowbrook Drive					
Road/Culvert Owner		Alderbrook Hills Road & Maintenance					
Adjacent Landowners		E.&K. Heuberger, B. Germond					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	5.6				
Material	Corrugated metal	Upstream Gradient (%)	1.9				
Length (ft)	44	Bankfull Width (ft)	5.2				
Width (in)	24	Bankfull:Culvert Ratio	0.4				
Height (in)	24						
Outlet Perch (ft)	4.2						
Slope (%)	6.3						
Rustline Height (in)	unknown						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.3	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Red	Barrier Points	3				
		Prioritization Total Points	9				
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


LOCATION INFO				Culvert #	778	Priority	L
Watershed		Tillamook Bay					
Stream Name		Dick Creek					
Township-Range-Section-1/4		T1S, R10W, Sec. 15, NW¼ of SW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		429330/5036881					
Road Name		Bayocean Road					
Road/Culvert Owner		Tillamook County					
Adjacent Landowners		J. Winter.					
CULVERT INFO		CHANNEL INFO					
Shape	Pipe Arch	Inlet Gradient (%)	1.5				
Material	Corrugated metal	Upstream Gradient (%)	3.8				
Length (ft)	44	Bankfull Width (ft)	11.4				
Width (in)	72	Bankfull:Culvert Ratio	0.5				
Height (in)	42						
Outlet Perch (ft)	Not measurable						
Slope (%)	2.1						
Rustline Height (in)	6						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.5	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Gray	Barrier Points	2				
		Prioritization Total Points	8				
Notes: Outlets directly into bay.							

LOCATION INFO				Culvert #	757	Priority	L
Watershed				Tillamook Bay			
Stream Name				Unnamed Tributary near Bock Point			
Township-Range-Section-1/4				T1S, R10W, Sec. 16, SE¼ of NE¼			
UTM Easting/Northing (Zone 10, NAD 1983)				429068/5037210			
Road Name				Bayocean Road			
Road/Culvert Owner				Tillamook County			
Adjacent Landowners				Stimson Lumber Co.			
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	15.3				
Material	Concrete	Upstream Gradient (%)	1.1				
Length (ft)	59	Bankfull Width (ft)	5.8				
Width (in)	36	Bankfull:Culvert Ratio	0.5				
Height (in)	36						
Outlet Perch (ft)	Not measurable						
Slope (%)	0.0						
Rustline Height (in)	12						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.3	Habitat Points	1				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Type	Gray	Barrier Points	2				
		Prioritization Total Points	8				
Notes: Outlets directly into bay.							

LOCATION INFO				Culvert #	725	Priority	L
Watershed				Tillamook Bay			
Stream Name				Unnamed Tributary at Boulder Point			
Township-Range-Section-1/4				T1S, R10W, Sec. 16, NE¼ of NW¼			
UTM Easting/Northing (Zone 10, NAD 1983)				428308/5037848			
Road Name				Bayocean Road			
Road/Culvert Owner				Tillamook County			
Adjacent Landowners				J. A. Johnson			
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)		1.8			
Material	Corrugated metal	Upstream Gradient (%)		3.7			
Length (ft)	52	Bankfull Width (ft)		6.7			
Width (in)	72	Bankfull:Culvert Ratio		0.9			
Height (in)	72						
Outlet Perch (ft)	Not measurable						
Slope (%)	2.8						
Rustline Height (in)	30						
Overall Condition	Poor						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.4	Habitat Points		1			
Habitat Quality	Fair	Habitat Quality Points		2			
Fish Species	Anad.	Fish Points		3			
Barrier Class	Gray	Barrier Points		2			
		Prioritization Total Points		8			
Notes: Outlets directly into bay.							








Outlet





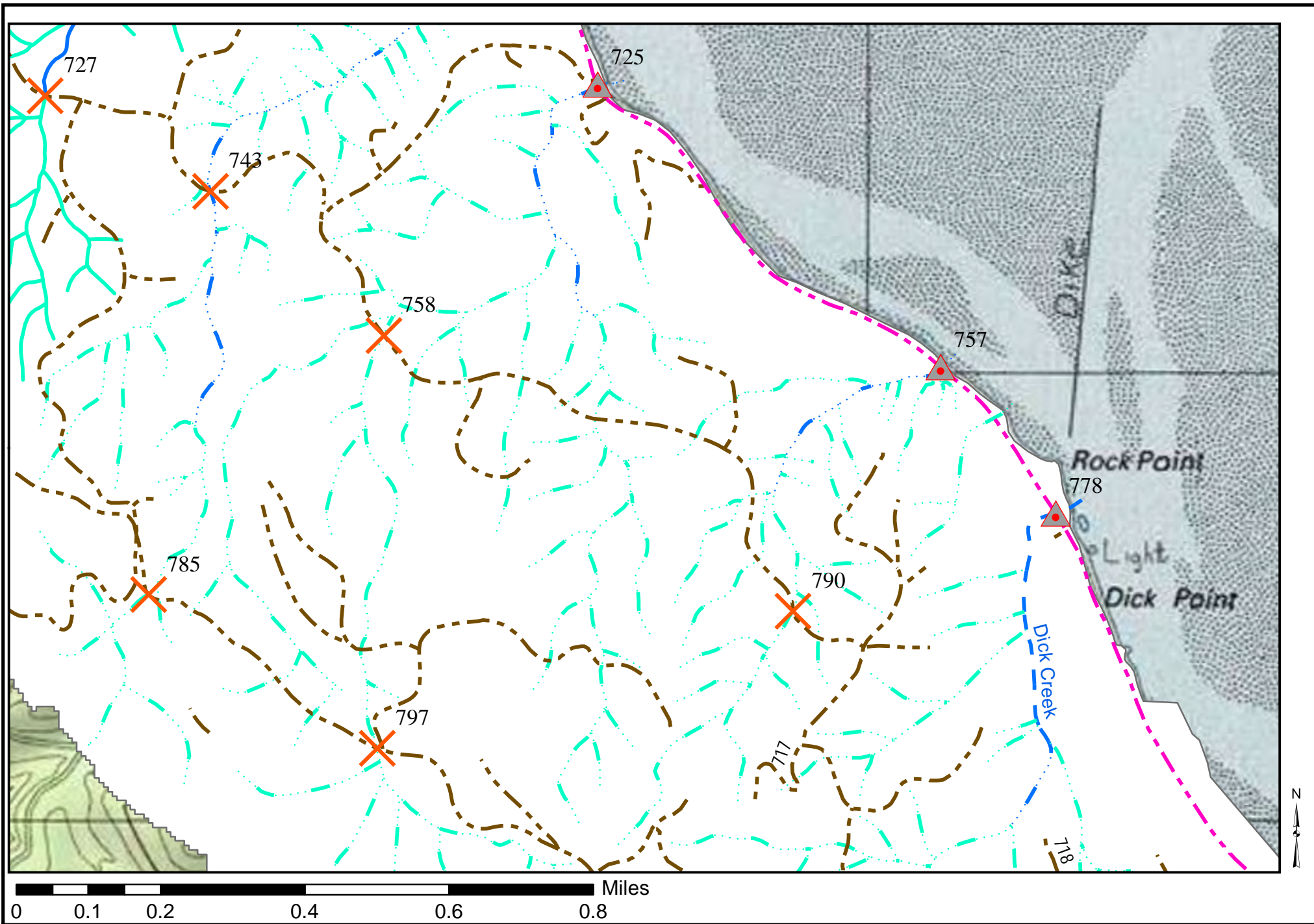
Outlet-downstream



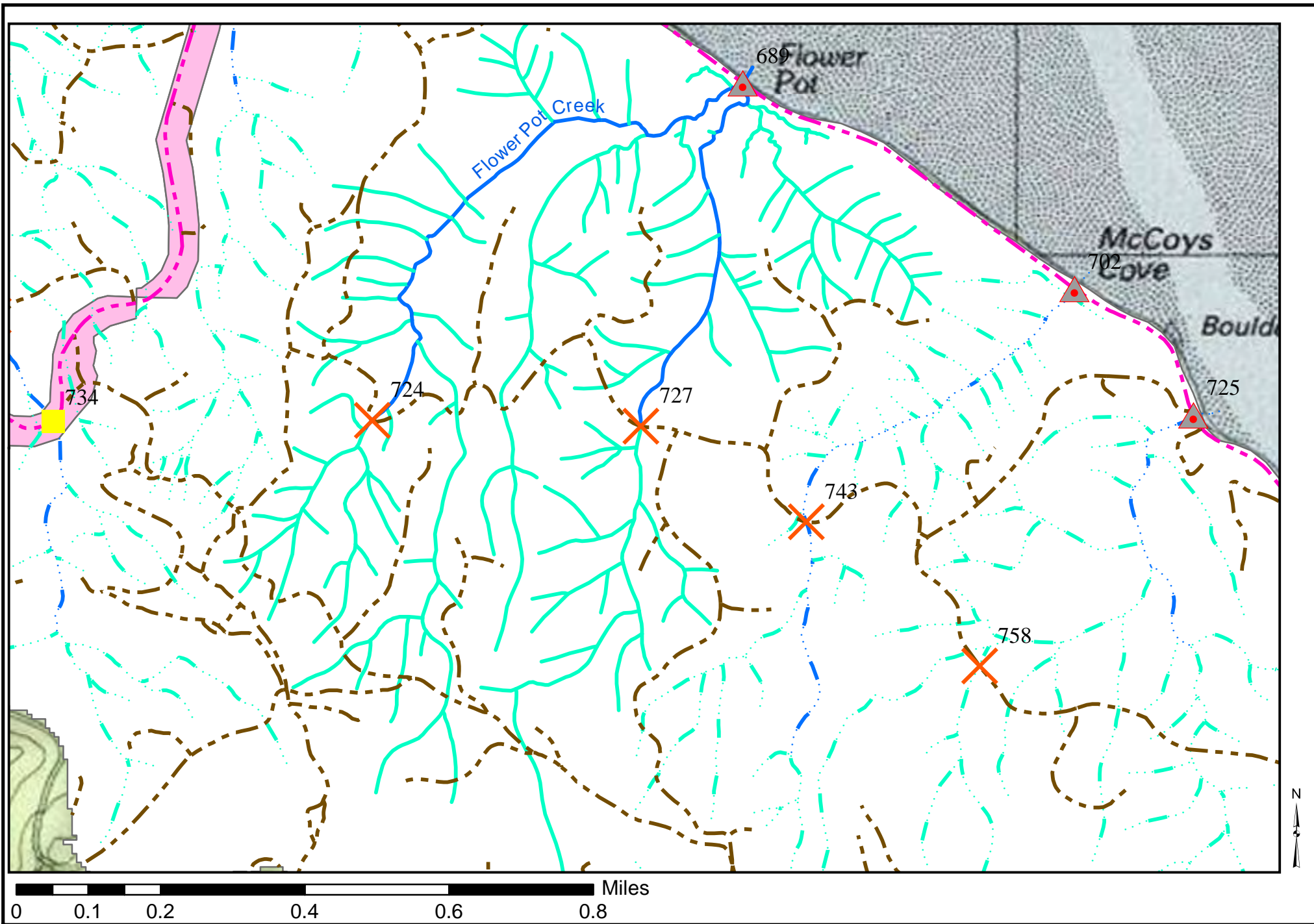
LOCATION INFO				Culvert #	702	Priority	M
Watershed		Tillamook Bay					
Stream Name		Unnamed tributary at McCoy Cove					
Township-Range-Section-1/4		T1S, R10W, Sec. 9, SE¼ of SW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		428043/5038123					
Road Name		Bayocean Road					
Road/Culvert Owner		Tillamook County					
Adjacent Landowners		J. A. Johnson					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	1.0				
Material	Concrete	Upstream Gradient (%)	0.5				
Length (ft)	48	Bankfull Width (ft)	9.3				
Width (in)	48	Bankfull:Culvert Ratio	0.4				
Height (in)	48						
Outlet Perch (ft)	Not measurable						
Slope (%)	0.2						
Rustline Height (in)	34						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.9	Habitat Points	2				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Class	Gray	Barrier Points	2				
		Prioritization Total Points	9				
Notes: Outlets directly into bay.							



LOCATION INFO				Culvert #	689	Priority	H
Watershed		Tillamook Bay					
Stream Name		Flower Pot Creek					
Township-Range-Section-1/4		T1S, R10W, Sec. 8, SW¼ of SE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		427301/5038583					
Road Name		Bayocean Road					
Road/Culvert Owner		Tillamook County					
Adjacent Landowners		Tillamook County					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	0.2				
Material	Concrete	Upstream Gradient (%)	0.5				
Length (ft)	56	Bankfull Width (ft)	12.7				
Width (in)	48	Bankfull:Culvert Ratio	0.3				
Height (in)	48						
Outlet Perch (ft)	Not measurable						
Slope (%)	0.7						
Rustline Height (in)	36						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	1.4	Habitat Points	3				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Anad.	Fish Points	3				
Barrier Class	Gray	Barrier Points	2				
		Prioritization Total Points	10				
Notes: Outlets directly into bay.							




Southeast Bayocean Road Culverts, Tillamook Bay Tributaries




Northwest Bayocean Road Culverts, Tillamook Bay Tributaries

CAPE MEARES AREA CULVERTS


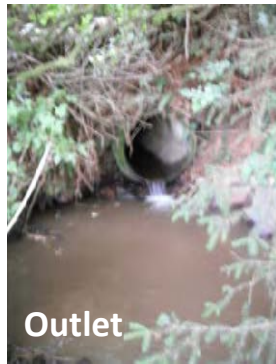
LOCATION INFO				Culvert #	675	Priority	L
Watershed		Tillamook Bay					
Stream Name		Coleman Creek					
Township-Range-Section-1/4		T1S, R10W, Sec. 7, SE¼ of NW¼					
UTM Easting/Northing (Zone 10, NAD 1983)		425267/5039131					
Road Name		5 th Street					
Road/Culvert Owner		Tillamook County					
Adjacent Landowners		Tillamook County					
CULVERT INFO		CHANNEL INFO					
Shape	Circular	Inlet Gradient (%)	---				
Material	Plastic	Upstream Gradient (%)	---				
Length (ft)	50	Bankfull Width (ft)	---				
Width (in)	42	Bankfull:Culvert Ratio	---				
Height (in)	42	--- = Not Measurable					
Outlet Perch (ft)	Not measurable						
Slope (%)	6.1						
Rustline Height (in)	Unknown						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	1.0	Habitat Points	2				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Resident	Fish Points	2				
Barrier Class	Gray	Barrier Points	2				
		Prioritization Total Points	8				
Notes: Outlets directly into Cape Meares Lake.							

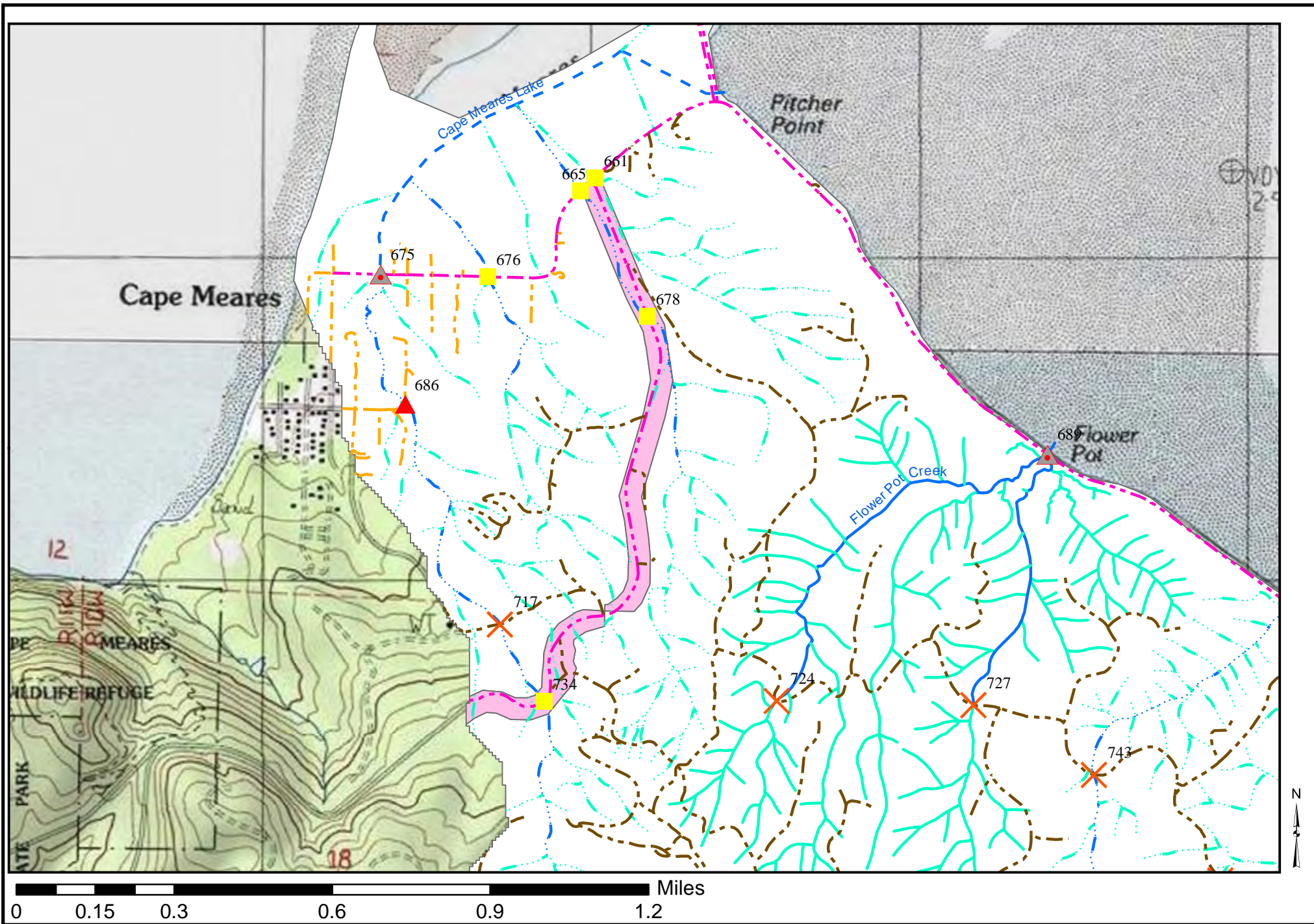


Inlet-upstream



Outlet-downstream

LOCATION INFO				Culvert #	686	Priority	M
Watershed		Tillamook Bay					
Stream Name		Coleman Creek					
Township-Range-Section-1/4		T1S, R10W, Sec. 7, NW¼ of SE¼					
UTM Easting/Northing (Zone 10, NAD 1983)		425312/5038726					
Road Name		Pacific Avenue					
Road/Culvert Owner		Cape Meares					
Adjacent Landowners		C.&S. Overstreet and C. Friedman					
CULVERT INFO		CHANNEL INFO				 Inlet  Outlet	
Shape	Circular	Inlet Gradient (%)	14.1				
Material	Concrete	Upstream Gradient (%)	7.3				
Length (ft)	39	Bankfull Width (ft)	6.4				
Width (in)	36	Bankfull:Culvert Ratio	0.5				
Height (in)	36						
Outlet Perch (ft)	2.1						
Slope (%)	3.1						
Rustline Height (in)	6						
Overall Condition	Fair						
PRIORITIZATION ANALYSIS							
Upstream Habitat Length (mi)	0.7	Habitat Points	2				
Habitat Quality	Fair	Habitat Quality Points	2				
Fish Species	Resident	Fish Points	2				
Barrier Class	Red	Barrier Points	3				
		Prioritization Total Points	9				
Notes:							



Cape Meares Area Culverts, Tillamook Bay Tributaries