APPENDIX D: North Fork Nooksack Sub-basin Report

WHATCOM COUNTY FISH PASSAGE ASSESSMENT SUBBASIN REPORT
NORTH FORK NOOKSACK RIVER

Description of Sub-basin

The North Fork Nooksack River originates at an alpine glacier on the east side of Mount Shuksan and flows roughly 40 miles west and south to its confluence with the Middle Fork near Deming, WA (figures 1 - 5). The upper watershed of the North Fork flows down a relatively confined valley with relatively steep gradient tributaries forming alluvial fans from the north and south. These tributaries include Wells, Glacier, Boulder, Hedrick, and Canyon Creeks. Downstream from Maple Creek, the valley widens and the river corridor becomes a well-developed braided channel system with broad floodplains, and low relief outwash terraces. This braided reach extends to the confluence with the South Fork Nooksack near Deming, except where it is pinched against a portion of the Slide Mountain Block slide on the left bank immediately south of Racehorse Creek. Numerous alluvial fan forming tributary streams are found along the lower watershed of the North Fork, including Kendall, Coal, and Racehorse Creeks.

The primary land use on the steep forested hillsides surrounding the North Fork is commercial logging. Agricultural and rural residential activities dominate the river terraces and alluvial fans that border the lower river. Pockets of urban development occur along Kendal Creek, Maple Creek and near Glacier Creek. Land use jurisdiction is split between Whatcom County in the low-lying areas, United States Forest Service east of the town of Glacier, and the state Department of Natural Resources in the foothills (Whatcom County, 1997).

Numerous small, unnamed tributary streams enter the North Fork Nooksack from the steep forested hillsides that flank the river in the upper watershed. These streams share many characteristics. The upper watershed is typically steep gradient cascade and falls which transition abruptly to moderate gradient, gravel rich streams on alluvial fans that border the river floodplain. Streamside vegetation is usually thick conifer forest on the hill-slope, and fragmented deciduous/conifer forest and pasture on the alluvial fan. Fish use is usually restricted to the short alluvial fan reaches and commonly include pink, chum, and, coho salmon and steelhead and cutthroat trout. Some of the larger streams also support small runs of Chinook and sockeye salmon, and native char (Whatcom County, 1994, NWIFC, 2003).

The lower portion of Maple Creek, below Maple falls, is located on the North Fork Nooksack floodplain. Well developed pool and riffle complexes, off-channel wetlands and clean gravel substrate, characterize this reach. Stream side vegetation is fragmented forest/shrub. This reach is heavy utilization by Chinook, coho, pink, chum and occasional sockeye salmon, and by cutthroat and steelhead trout (Whatcom County, 1994, NWIFC, 2003).

Kendall Creek begins as Sprague and Kendall lakes and flows south through low gradient marshes and pastureland to the North Fork Nooksack River. Upstream of Mount Baker Highway, the stream is dominated by shrub and pasture vegetation and sand/silt substrate. Downstream reaches are primarily pasture vegetation and substrate dominated by grave/cobble.

Fish use in the main stem, upstream of the hatchery, is mostly coho salmon and cutthroat trout. Below the State fish hatchery, located near the mouth of Kendall Creek, many species have access including Chinook, coho, chum, pink, and occasionally sockeye salmon, and cutthroat and steelhead trout (Whatcom County, 1994, NWIFC, 2003). Other than the fish hatchery, no barriers were identified on the main channel. However, several tributary streams did have barriers.

High Creek is the largest tributary to Kendall Creek. Numerous small tributaries flow southward off of Red Mountain, cross Mount Baker Highway, and together, flow west as High Creek. Abundant gravel substrate characterizes High Creek. In fact, the lower reaches have aggraded so much that adult salmon are regularly stranded on dewatered gravel bars in the lower reaches. Streamside vegetation is mixed deciduous/conifer forest in the upper reaches that transition to fragmented forest and pasture in the lower reaches. Fish use is primarily coho salmon and cutthroat trout (Whatcom County, 1994, NWIFC, 2003).

Kenney Creek originates on Racehorse Mountain, traverses several elevated river terraces, and drops to the North Fork floodplain from the east via a large fish ladder. The channel substrate is dominantly gravel in long riffle segments and coarse sand in pools. The streamside vegetation is entirely mixed deciduous/conifer forest except for occasional small residential clearing. Fish use includes Chinook, pink and chum salmon in the lower reaches and steelhead and coho in the upper watershed (Whatcom County, 1994, NWIFC, 2003).

Jim Creek and Bonner Creeks originate on south flank of Sumas Mountain and cross Mount Baker Highway and Truck Road before joining the North Fork floodplain. Flow in both creeks is seasonal, but abundant gravel substrate and mixed forest riparian vegetation facilitate moderate returns of coho salmon, and cutthroat, and steelhead trout (Whatcom County, 1994, NWIFC, 2003).

Data Integration from Previous Projects

In the North Fork Sub-basin, previous barrier data from Whatcom County (County roads), Washington Department of Fish and Wildlife (WDFW) for State highways, and Nooksack Salmon Enhancement Association is standardized and integrated into the WDFW State Fish Passage and Screening Inventory (FPSI) data base format and is included in the final summary table (table 1).

Reach Prioritization Summary

Prior to contacting landowners for access permission, inventory staff met with tribal and state biologists, and local fisheries professionals to identify priority stream reaches that had not been previously inventoried. In the interest of efficiency, we did not include areas with previously completed inventories, or where barrier inventories are required by law, and focused on reaches where information was lacking.

The extent of fish barrier assessment within the Sub-basin was limited to the anadromous zone of fish bearing streams within the jurisdiction of Whatcom County. Similar inventories have been

completed by the U.S. Forest Service (USFS), the state Department of Transportation (WSDOT), and the Washington Department of Natural Resources (DNR) for their respective ownerships. With the possible exception of Boyd Creek, the USFS does not have barriers in anadromous fish streams, WSDOT and Whatcom County Public Works will be repairing barriers on roadways as part of their ongoing maintenance and repair program, and the DNR will be correcting blockages on state land under Road Maintenance and Abandonment Plans scheduling and implementation (Currents, 2004).

In the North Fork Nooksack Sub-basin, we identified the following priority reaches for intensive review:

- Jim Creek: From NF confluence to end of anadromous habitat
- Bonner Creek: Inventory culvert at Deal Road MP 0.0.
- Kenney Creek: From NF confluence to end of anadromous habitat
- Bell Creek Area: Downstream check from SR 542 at MP 17.85 to confluence with NF Nooksack River.
- Kendall Creek, Zender Trib., and Bodhi Creeks: Complete survey of anadromous habitat.
- High Creek: WDFW main channel surveys completed. Surveyed associated fish-bearing tributaries.
- WRIA 01.0422: Trib near the end of North Fork Road. From NF confluence to end of anadromous habitat
- Boulder Creek Area: (WRIA 01.0425) immediately west of bridge and other unnamed tributaries nearby.
- Hedrick Creek and unnamed Tributary that crosses Cornell Creek Road at MP 0.36: Surbey entire anadromous reach on both systems.
- Two unnamed tributaries just east of Wildcat Creek. From NF confluence to end of anadromous habitat
- Lower Maple Creek System (01.0145) from HWY 542 to end of anadromous habitat (Maple Falls). System includes an unnamed tributary.
- Unnamed tributary in the NW corner of Section 32. From NF confluence to end of anadromous habitat
- Unnamed Slough just north of Racehorse Creek.

Barrier Assessment

Prior to conducting fieldwork, landowners adjacent to stream inventory sites provided written or verbal permission for field crews to access their property. Field crews did not evaluate culverts or habitat conditions on land parcels in which property access was denied.

Two levels of assessment are included in this report. The first is a road inventory conducted by Whatcom County Public Works staff that identified fish blocking culverts on the County road system for known and possible fish bearing streams. The second level of assessment was a stream based inventory by Nooksack Tribe and Nooksack Salmon Enhancement Association field crews on priority stream reaches identified in the reach prioritization effort described above. All human made features in priority stream reaches were geo-referenced using GPS and

evaluated for their ability to pass fish. Field evaluation and data collection followed the methodologies described in the *Fish Passage Barrier and surface Water Diversion Screening Assessment and Prioritization Manual* (WDFW 2000).

Summary of Results

Figure 1 is a map of the North Fork Sub-basin showing the location and site ID number of each feature inventoried. Table 1 summarizes the inventory results sequentially by site ID number for the North Fork Nooksack Sub-basin. Table 2 summarizes the details associated with identified fish passage barriers and is sorted by Priority Index number (PI). Due primarily to property access restrictions, some blockages did not have PI's calculated. However, this project captured the vast majority of fish passage barriers for a reasonably complete inventory of all passage barriers to anadromous fish in this sub-basin.

Table 1. Stream features inventoried in the North Fork Nooksack Sub-basin, sorted by Site ID number.

Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers		Survey Type[3]	Total PI
								Upstream	Downstream		
01.0392 0.10		Kenney Cr	NF Nooksack R	County	Fishway	RR	67			LME	
01.0406 0.10		Kendall Cr	NF Nooksack R	State	Dam	RR	FW			PS3	75.57
1280050	1.1	Unnamed	Kenney Cr	Private	Culvert	RR	33	0	2	RSFS	8.38
1280051	1.2	Kenney Cr	NF Nooksack R	Private	Culvert	RR	0	3	1	RSFS	42.76
1280058	1.1	Unnamed	NF Nooksack R	Private	Culvert	LG	0			TD	
1280060	1.1	Unnamed	Boulder Cr	State	Culvert	OK	100				
1280061	1.3	Jim Cr	NF Nooksack R	Private	Culvert	OK	100				
1280063	1.1	Jim Cr	NF Nooksack R	Private	Culvert	OK	100				
1280064		Unnamed	NF Nooksack R	Private	Dam	RR	33	0	2	FS	18.54
1280065	1.1	Unnamed	Kenney Cr	Private	Culvert	LG	33	0	3	RSFS	3.84
1280066	1.1	Unnamed	Kenney Cr	Private	Culvert	RR	0	1	2	RSFS	4.77
1280067	1.1	Unnamed	High Cr	Private	Culvert	RR	33	2	3	ETD	12.25
1285021	1.1	Unnamed	Kendall Cr	Private	Culvert	RR	33	2	0	RSFS	14.07
1285023	1.1	Bodhi Cr	Kendall Cr	Private	Culvert	OK	100				
1285024	1.1	Bodhi Cr	Kendall Cr	Private	Culvert	RR	33	0	1	RSFS	3.21
1285025	1.1	Unnamed	Kendall Cr	Private	Culvert	RR	33	0	1	RSFS	6.09
1285028	1.1	Unnamed	High Cr	Private	Culvert	RR	33	1	4	TD	
1285032	1.1	Unnamed	Kendall Cr	Private	Culvert	OK	100				
1285033	1.1	Bonner Cr	NF Nooksack R	Private	Culvert	OK	100				
1285034	1.1	Bonner Cr	NF Nooksack R	Private	Culvert	UD					
1285035	1.1	Unnamed	Bonner Cr	Private	Culvert	OK	100				

[1] Sequencer: 1:2 – One culvert of two, 1:3 - One culvert of three, etc.

[2] Repair Status: OK – No action needed, RR – Repair required, LG – Habitat gain is less than 200 m., UD – Habitat gain undetermined, FX – Fixed, Blank – No fish use potential.

[3] Survey Type: TD – Threshold Determination, LME – Lineal Map Estimate, ETD – Expanded threshold determination, UETD – Unexpanded Threshold Determination, FS, PS – Full habitat Survey, RSFS – Reduced Sampling Physical Survey.

Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers		Survey Type[3]	Total PI
								Upstream	Downstream		
1285036	1.1	Bonner Cr	NF Nooksack R	Private	Culvert	OK	100				
1285187	1.1	Unnamed	High Cr	Private	Culvert	RR	0	0	2	RSFS	7.45
1285188	1.1	Unnamed	NF Nooksack R	Private	Culvert	OK	100				
1285189	1.1	Unnamed	NF Nooksack R	Private	Culvert	LG	0	0	0	RSFS	1.71
370177	1.1	Unnamed	NF Nooksack R	County	Culvert	OK	100				
370407	1.1	Kenney Cr	NF Nooksack R	County	Culvert	RR	67			TD	
370408	1.1	Van Hook's Cr	NF Nooksack R	County	Culvert	RR	0	0	0	RSFS	21.01
370493	1.1	Unnamed	Maple Cr	County	Culvert	UD					
370495	1.1	Unnamed	Maple Cr	County	Culvert	RR	33			TD	
370496	1.1	Doaks Cr	Maple Cr	County	Culvert	RR	67			TD	
370556	1.1	Unnamed	NF Nooksack R	County	Culvert	RR	33	4	0	FS	26.09
370622	1.1	Jim Cr	NF Nooksack R	County	Culvert	RR	33	0	1	RSFS	8.01
370623	1.2	Unnamed	NF Nooksack R	County	Culvert	RR	33	2	1	FS	18.91
370624	1.1	Unnamed	NF Nooksack R	County	Culvert	UD					
370625	1.1	Jim Cr	NF Nooksack R	County	Culvert	RR	33	1	0	RSFS	21.43
990023	1.1	Baptist Camp Cr	NF Nooksack R	State	Culvert	RR	67	3	0	FS	8.36
990046	1.1	Bruce Cr	NF Nooksack R	State	Culvert	RR	67	0	0	UETD	
990187	1.2	Hedrick Cr	NF Nooksack R	State	Culvert	RR	0	0	0	PS1	16.63
990434	1.1	Jim Cr	NF Nooksack R	State	Culvert	OK	100				
990577	1.1	Unnamed	High Cr	State	Culvert	RR	67	3	0	UETD	
990578	1.1	Unnamed	Boulder Cr	State	Culvert	OK	100				
990579	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
990580	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0	0		UETD	

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[3] Survey Type: TD – Threshold Determination, LME – Lineal Map Estimate, ETD – Expanded threshold determination, UETD – Unexpanded Threshold Determination, FS, PS – Full habitat Survey, RSFS – Reduced Sampling Physical Survey.

Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers		Survey Type[3]	Total PI
								Upstream	Downstream		
990582	1.1	Marshal Hill Cr	NF Nooksack R	State	Culvert	LG	0			TD	
990583	1.1	Unnamed	NF Nooksack R	State	Culvert	UD					
990584	1.1	Unnamed	Jim Cr	State	Culvert	RR	67	1	0	UETD	
990585	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	33	0	0	UETD	
990586	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
990587	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
990588	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
990589	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0	0		UETD	
990590	1.1	Unnamed	NF Nooksack R	State	Culvert	UD					
990591	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
990592	1.1	Unnamed	NF Nooksack R	State	Culvert						
990593	1.1	Unnamed	NF Nooksack R	State	Culvert				1	TD	
990594	1.1	Unnamed	NF Nooksack R	State	Culvert						
990595	1.1	Unnamed	NF Nooksack R	State	Culvert						
990596	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0			TD	
990597	1.1	Unnamed	NF Nooksack R	State	Culvert						
990598	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
990599	1.1	Unnamed	NF Nooksack R	State	Culvert						
990600	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
990601	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
990602	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	0	1	2	UETD	
990603	1.1	Lookout Cr	NF Nooksack R	State	Culvert	RR	0	0	0	UETD	
990604	1.2	Deerhorn Cr	NF Nooksack R	State	Culvert	RR	0	0	0	UETD	

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Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers		Survey Type[3]	Total PI
								Upstream	Downstream		
990605	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	0	0	0	UETD	
990606	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	0	0	0	UETD	
991060	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0	0		UETD	
991107	1.1	Bonner Cr	NF Nooksack R	State	Culvert	LG	50	0		UETD	
991108	1.2	Unnamed	High Cr	State	Culvert	UD	10			TD	
991112	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
991113	1.2	Unnamed	High Cr	State	Culvert	RR	0	0	0	UETD	
991621	1.1	High Cr	Kendall Cr	State	Culvert	RR	33	2	7	PS3	21.37
991639	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
991640	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	33	0	0	UETD	
991704	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
991705	1.1	Unnamed	Kendall Cr	State	Culvert	RR	33	0	0	UETD	
991883	1.1	Baptist Camp Cr	NF Nooksack R	Private	Culvert	OK	100				
991884	1.1	Baptist Camp Cr	NF Nooksack R	Private	Culvert	LG	0	0	0	FS	5.60
991885	1.1	Unnamed	NF Nooksack R	Private	Culvert	UD	33			TD	
991887	1.1	Unnamed	NF Nooksack R	Private	Culvert	UD	33			TD	
992152	1.1	High Cr	Kendall Cr	Private	Culvert	OK	100				
992153		High Cr	Kendall Cr	Private	Other	RR	0	3	4	PS3	25.96
992154	1.1	High Cr	Kendall Cr	Private	Culvert	RR	33	4	3	PS3	24.22
992155		High Cr	Kendall Cr	Private	Other	RR	0	5	2	PS3	20.85
992156		High Cr	Kendall Cr	Private	Other	RR	0	6	1	PS3	27.88
992157		High Cr	Kendall Cr	Private	Other	RR	67	7	0	PS3	22.33
992158		High Cr	Kendall Cr	Private	Other	OK	100			PS3	

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[3] Survey Type: TD – Threshold Determination, LME – Lineal Map Estimate, ETD – Expanded threshold determination, UETD – Unexpanded Threshold Determination, FS, PS – Full habitat Survey, RSFS – Reduced Sampling Physical Survey.

Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers		Survey Type[3]	Total PI
								Upstream	Downstream		
992159		Kendall Cr	NF Nooksack R	State	Fishway	RR	33			PS3	75.34
992160	1.1	Unnamed	High Cr	Private	Culvert	RR	33	0	11	PS4	12.06
992161	1.1	Unnamed	High Cr	Private	Culvert	RR	33	1	10	PS4	12.44
995409	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	0	1	1	ETD	8.41
995410	1.1	Unnamed	NF Nooksack R	State	Culvert						
995412	1.1	Unnamed	NF Nooksack R	State	Culvert						
995413	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0	0	0	UETD	
995414		Unnamed	NF Nooksack R	Private	Dam	RR	0			TD	
995415	1.1	Unnamed	NF Nooksack R	Private	Culvert	RR	33			TD	
995439	1.1	Unnamed	Bagley Cr	State	Culvert	RR	0	1	0	TD	
995443	1.1	Unnamed	Razor Hone Cr	State	Culvert	LG	67	0	1	UETD	
995557	1.1	Unnamed	NF Nooksack R	State	Culvert						
995558	1.1	Unnamed	NF Nooksack R	State	Culvert						
995559	1.1	Unnamed	NF Nooksack R	State	Culvert						
995560	1.1	Unnamed	NF Nooksack R	State	Culvert						
995561	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0	0	0	UETD	
995562	1.1	Unnamed	NF Nooksack R	State	Culvert						
995563	1.1	Unnamed	NF Nooksack R	State	Culvert						
995564	1.1	Unnamed	NF Nooksack R	State	Culvert						
995565	1.1	Unnamed	NF Nooksack R	State	Culvert						
995566	1.1	Unnamed	NF Nooksack R	State	Culvert						
995567	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0	0		UETD	
995568	1.1	Unnamed	NF Nooksack R	State	Culvert						

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Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers		Survey Type[3]	Total PI
								Upstream	Downstream		
995569	1.1	Unnamed	NF Nooksack R	State	Culvert	LG				TD	
995570	1.1	Unnamed	NF Nooksack R	State	Culvert						
995571	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	67	0		UETD	
995572	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
995573	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	67	0		TD	
995574	1.1	Unnamed	NF Nooksack R	State	Culvert						
995575	1.1	Unnamed	NF Nooksack R	State	Culvert						
995576	1.1	Unnamed	NF Nooksack R	State	Culvert						
995577	1.2	Unnamed	NF Nooksack R	State	Culvert	RR	67	0	0	UETD	
995578	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
995579	1.1	Unnamed	NF Nooksack R	State	Culvert	UD					
995580	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
995581	1.1	Unnamed	NF Nooksack R	State	Culvert						
995582	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0	0	0	UETD	
995583	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	0	0	0	UETD	
995584	1.1	Unnamed	NF Nooksack R	County	Culvert	RR	0	0	0	UETD	
995585	1.2	Unnamed	NF Nooksack R	State	Culvert	RR	67	0	0	UETD	
995586	1.1	Unnamed	NF Nooksack R	State	Culvert						
995587	1.1	Unnamed	NF Nooksack R	State	Culvert						
995592	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995593	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995594	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995595	1.2	Unnamed	Razor Hone Cr	State	Culvert			1	0	UETD	

[1] Sequencer: 1:2 – One culvert of two, 1:3 - One culvert of three, etc.

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Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers Upstream	Additional Barriers Downstream	Survey Type[3]	Total PI
995596	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995597	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995598	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995599	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995600	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995601	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995602	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995603	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995604	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995605	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995606	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995607	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995679	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995680	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995681	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995682	1.1	Unnamed	Razor Hone Cr	State	Culvert						
995683	1.1	Unnamed	NF Nooksack R	State	Culvert						
995684	1.1	Unnamed	NF Nooksack R	State	Culvert						
995685	1.1	Unnamed	NF Nooksack R	State	Culvert						
995686	1.1	Unnamed	NF Nooksack R	State	Culvert						
995687	1.1	Unnamed	NF Nooksack R	State	Culvert						
995688	1.1	Unnamed	NF Nooksack R	State	Culvert						
995689	1.1	Unnamed	NF Nooksack R	State	Culvert						

[1] Sequencer: 1:2 – One culvert of two, 1:3 - One culvert of three, etc.

[2] Repair Status: OK – No action needed, RR – Repair required, LG – Habitat gain is less than 200 m., UD – Habitat gain undetermined, FX – Fixed, Blank – No fish use potential.

[3] Survey Type: TD – Threshold Determination, LME – Lineal Map Estimate, ETD – Expanded threshold determination, UETD – Unexpanded Threshold Determination, FS, PS – Full habitat Survey, RSFS – Reduced Sampling Physical Survey.

Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers		Survey Type[3]	Total PI
								Upstream	Downstream		
995690	1.1	Unnamed	NF Nooksack R	State	Culvert						
995691	1.1	Unnamed	NF Nooksack R	State	Culvert						
995692	1.1	Unnamed	NF Nooksack R	State	Culvert						
995693	1.1	Unnamed	NF Nooksack R	State	Culvert						
995694	1.1	Unnamed	NF Nooksack R	State	Culvert						
995695	1.1	Unnamed	Bagley Cr	State	Culvert	LG	33	0	1	TD	
995696	1.1	Unnamed	NF Nooksack R	State	Culvert						
995697	1.1	Unnamed	NF Nooksack R	State	Culvert						
995769	1.1	Unnamed	High Cr	State	Culvert	LG				TD	
995770	1.1	Unnamed	High Cr	State	Culvert	RR	33	0	1	UETD	
995775	1.1	Unnamed	NF Nooksack R	State	Culvert	OK	100				
995776	1.1	Unnamed	NF Nooksack R	State	Culvert	LG	0	0		UETD	
995777	1.1	Unnamed	NF Nooksack R	State	Culvert	RR	0	0	0	UETD	
995778	1.1	Unnamed	NF Nooksack R	State	Culvert						
995779	1.1	Unnamed	NF Nooksack R	State	Culvert						
995997	1.1	Unnamed	Baptist Camp Cr	Private	Culvert	RR	33	1	1	FS	10.10
995998	1.1	Unnamed	Baptist Camp Cr	Private	Culvert	LG	67	0	2	FS	6.52
996057	1.1	Unnamed	Jim Cr	Private	Culvert	OK	100				
996058	1.1	Unnamed	Kendall Cr	Private	Culvert	OK	100				
996059	1.1	Unnamed	High Cr	Private	Culvert	UD					
996143	1.2	Unnamed	High Cr	Private	Culvert	UD					
996144	1.2	Unnamed	High Cr	Private	Culvert	RR	0			TD	
996145	1.1	Unnamed	High Cr	Private	Culvert	UD					

[1] Sequencer: 1:2 – One culvert of two, 1:3 - One culvert of three, etc.

[2] Repair Status: OK – No action needed, RR – Repair required, LG – Habitat gain is less than 200 m., UD – Habitat gain undetermined, FX – Fixed, Blank – No fish use potential.

[3] Survey Type: TD – Threshold Determination, LME – Lineal Map Estimate, ETD – Expanded threshold determination, UETD – Unexpanded Threshold Determination, FS, PS – Full habitat Survey, RSFS – Reduced Sampling Physical Survey.

Site ID	Sequencer[1]	Stream	Tributary To	Owner Type	Feature	Repair[2] Status	% Passable	Additional Barriers		Survey Type[3]	Total PI
								Upstream	Downstream		
996169	1.1	Unnamed	High Cr	Private	Culvert	RR	0	1	0	UETD	
996174	1.1	Unnamed	Jim Cr	County	Culvert	OK	100				
996175	1.1	Unnamed	Jim Cr	Private	Culvert	LG	33	0	1	UETD	

[1] Sequencer: 1:2 – One culvert of two, 1:3 - One culvert of three, etc.

[2] Repair Status: OK – No action needed, RR – Repair required, LG – Habitat gain is less than 200 m., UD – Habitat gain undetermined, FX – Fixed, Blank – No fish use potential.

[3] Survey Type: TD – Threshold Determination, LME – Lineal Map Estimate, ETD – Expanded threshold determination, UETD – Unexpanded Threshold Determination, FS, PS – Full habitat Survey, RSFS – Reduced Sampling Physical Survey.

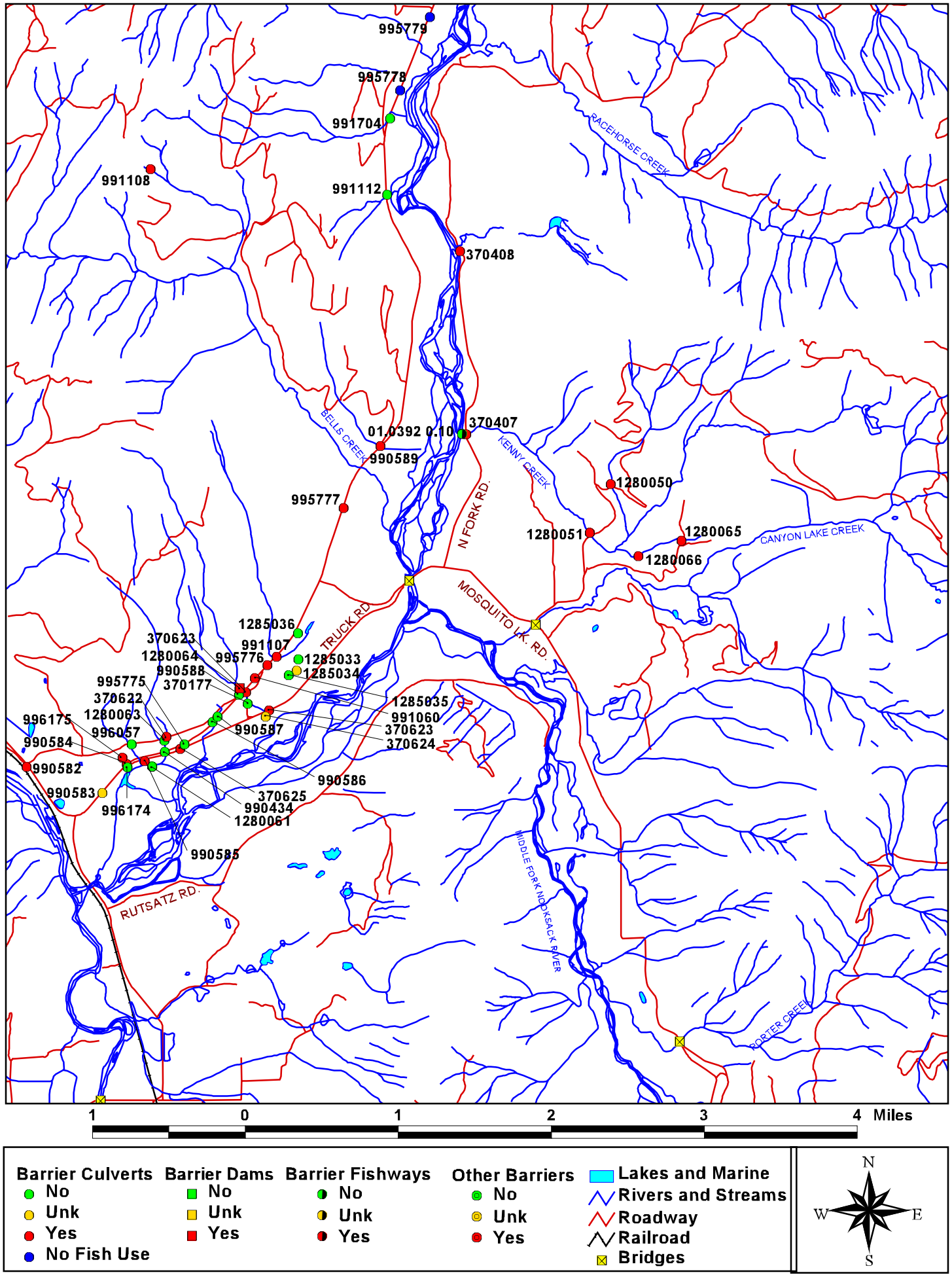


Figure 1. Lower North Fork Nooksack River Features.

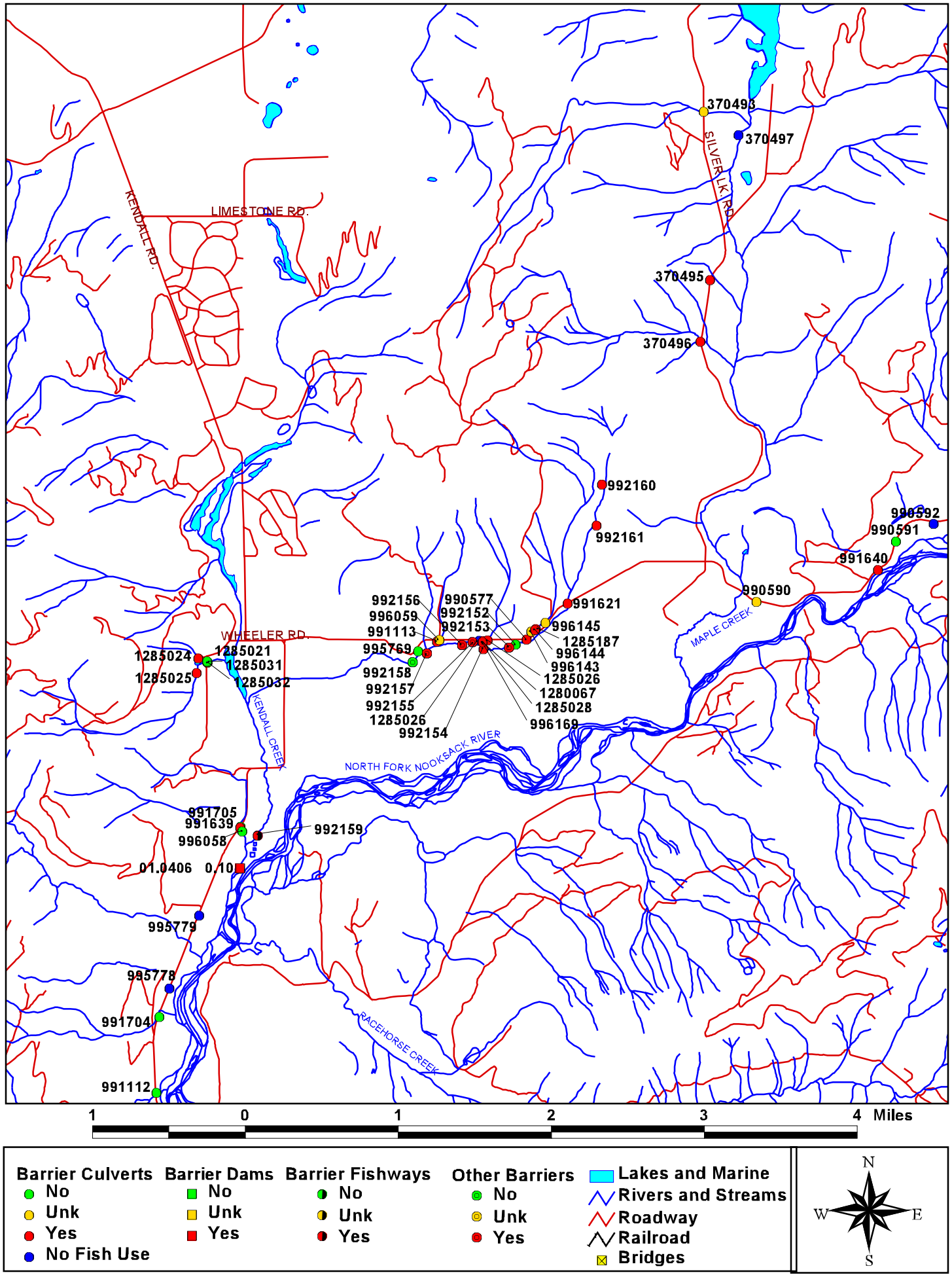


Figure 2. North Fork Nooksack River Features.

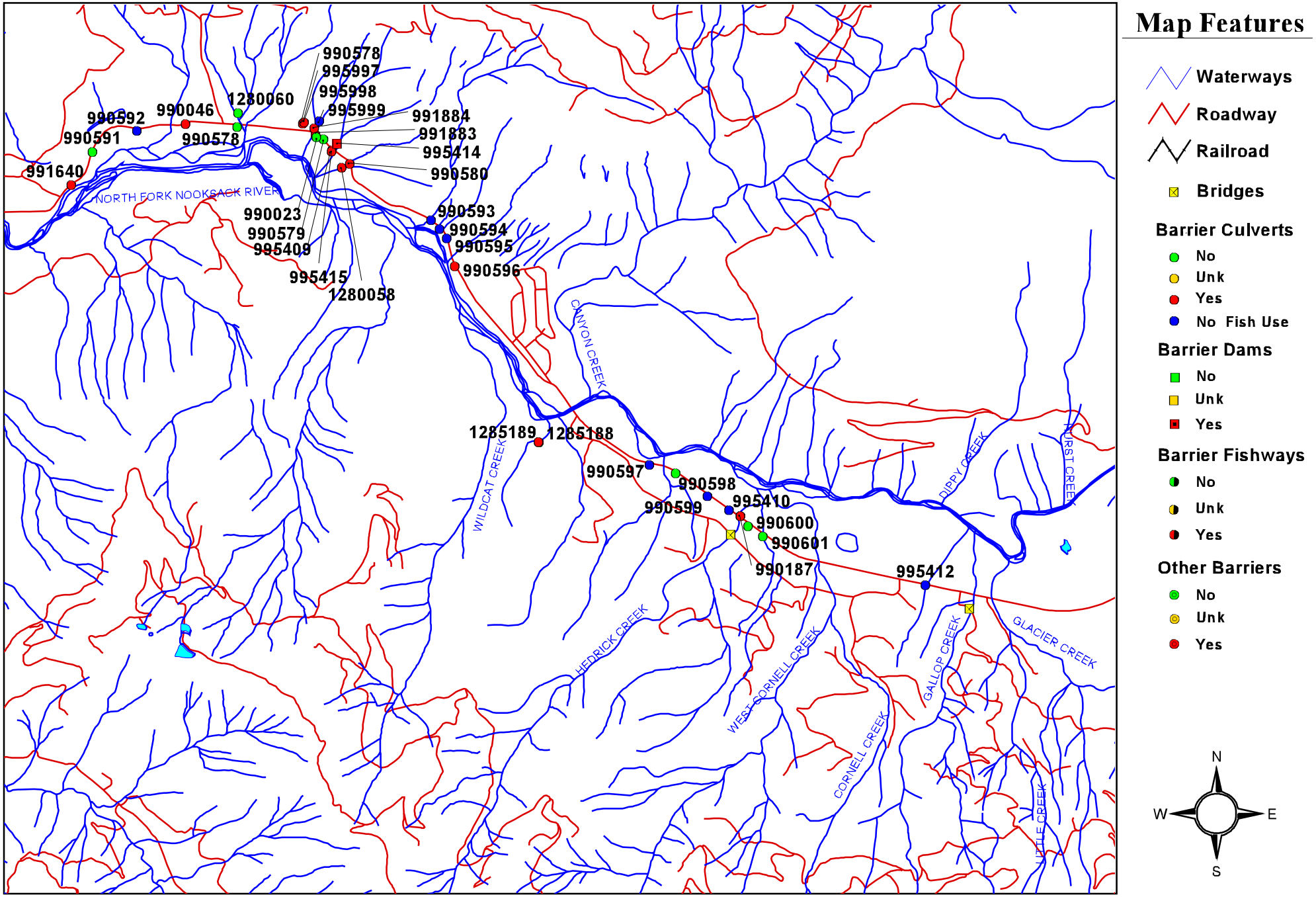
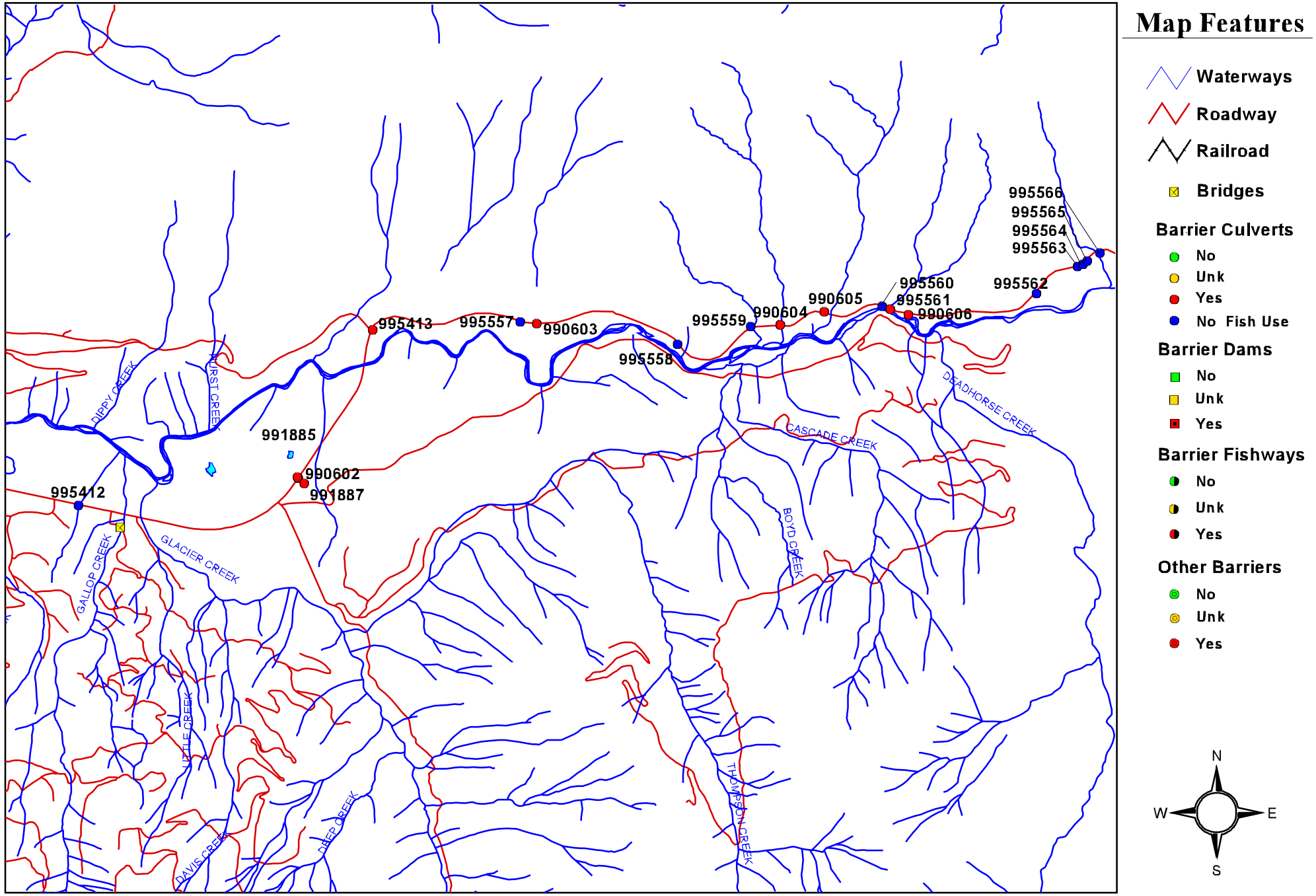


Figure 3. Upper North Fork Features



Map Features

- Waterways
- Roadway
- Railroad
- Bridges

Barrier Culverts
- No
- Unk
- Yes
- No Fish Use

Barrier Dams
- No
- Unk
- Yes

Barrier Fishways
- No
- Unk
- Yes

Other Barriers
- No
- Unk
- Yes

Figure 4. Upper North Fork Features

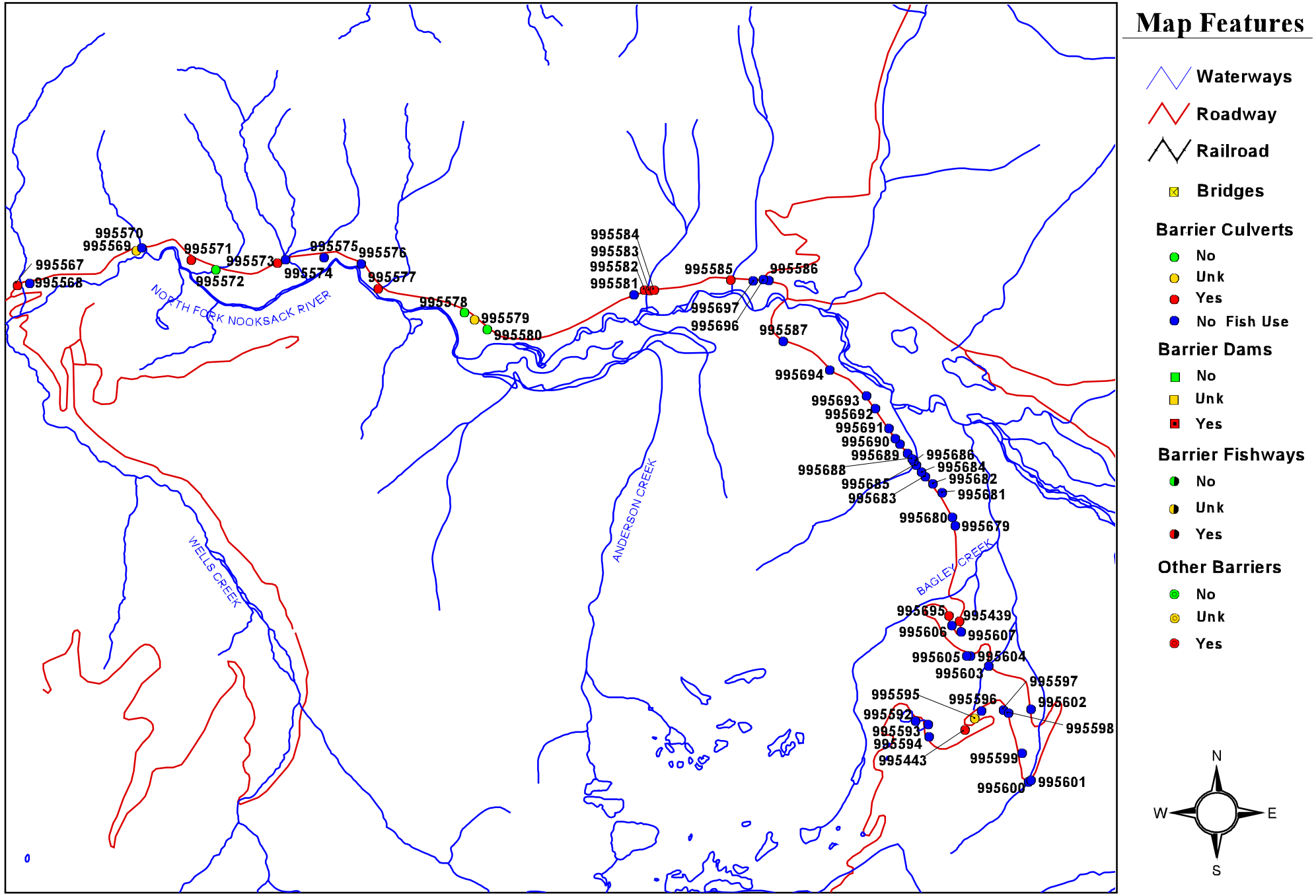


Figure 5. Upper North Fork Features

North Fork Nooksack River Culvert Barriers:

PI TOTAL: **42.76**

GENERAL INFORMATION

Site ID:	1280051
Stream:	Kenney Cr
Trib To:	NF Nooksack R
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.59
Length (m):	12.35

BARRIER STATUS

Problem:	Outfall drop
Ds Barriers:	1
Us Barriers:	3

HABITAT GAIN

Lineal Gain (m):	4,235
Spawn Area (m2):	20,945
Rear Area (m2):	11,084

PI TOTAL: **42.76**

GENERAL INFORMATION

Site ID:	1280051
Stream:	Kenney Cr
Trib To:	NF Nooksack R
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.00
Length (m):	12.55

BARRIER STATUS

Problem:	Outfall drop
Ds Barriers:	1
Us Barriers:	3

HABITAT GAIN

Lineal Gain (m):	4,235
Spawn Area (m2):	20,945
Rear Area (m2):	11,084

PI TOTAL: **26.09**

GENERAL INFORMATION

Site ID:	370556
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	1.52
Length (m):	11.28

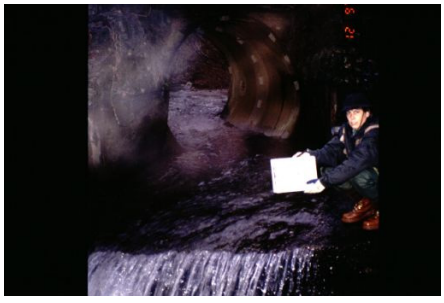
BARRIER STATUS

Problem:	Gradient
Ds Barriers:	0
Us Barriers:	4

HABITAT GAIN

Lineal Gain (m):	1,970
Spawn Area (m2):	2,344
Rear Area (m2):	1,829

PI TOTAL: **24.22**



GENERAL INFORMATION

Site ID:	992154
Stream:	High Cr
Trib To:	Kendall Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	OTH
Span (m):	2.20
Length (m):	8.17

BARRIER STATUS

Problem:	Outfall;Slope
Ds Barriers:	3
Us Barriers:	4

HABITAT GAIN

Lineal Gain (m):	4,996
Spawn Area (m2):	6,107
Rear Area (m2):	13,293

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL: **21.43**

No Image Available

GENERAL INFORMATION

Site ID:	370625
Stream:	Jim Cr
Trib To:	NF Nooksack R
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.55
Length (m):	10.59

BARRIER STATUS

Problem:	slope
Ds Barriers:	0
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	416
Spawn Area (m2):	271
Rear Area (m2):	462

PI TOTAL: **21.37**

GENERAL INFORMATION

Site ID:	991621
Stream:	High Cr
Trib To:	Kendall Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.89
Length (m):	15.24

BARRIER STATUS

Problem:	Slope
Ds Barriers:	7
Us Barriers:	2

HABITAT GAIN

Lineal Gain (m):	3,882
Spawn Area (m2):	5,286
Rear Area (m2):	10,279

PI TOTAL: **21.01**

GENERAL INFORMATION

Site ID:	370408
Stream:	Van Hook's Cr
Trib To:	NF Nooksack R
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	CAL
Span (m):	1.37
Length (m):	12.19

BARRIER STATUS

Problem:	outfall drop
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	417
Spawn Area (m2):	89
Rear Area (m2):	2,465

PI TOTAL: **18.91**

No Image Available

GENERAL INFORMATION

Site ID:	370623
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	CAL
Span (m):	0.95
Length (m):	12.04

BARRIER STATUS

Problem:	Slope
Ds Barriers:	1
Us Barriers:	2

HABITAT GAIN

Lineal Gain (m):	689
Spawn Area (m2):	250
Rear Area (m2):	484

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL: **18.91**

No Image Available

GENERAL INFORMATION

Site ID:	370623
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	CAL
Span (m):	0.95
Length (m):	12.58

BARRIER STATUS

Problem:	Slope
Ds Barriers:	1
Us Barriers:	2

HABITAT GAIN

Lineal Gain (m):	689
Spawn Area (m2):	250
Rear Area (m2):	484

PI TOTAL: **16.63**

No Image Available

GENERAL INFORMATION

Site ID:	990187
Stream:	Hedrick Cr
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	BOX
Material:	PCC
Span (m):	1.83
Length (m):	24.38

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	551
Spawn Area (m2):	159
Rear Area (m2):	576

PI TOTAL: **16.63**

No Image Available

GENERAL INFORMATION

Site ID:	990187
Stream:	Hedrick Cr
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	BOX
Material:	PCC
Span (m):	1.83
Length (m):	24.38

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	551
Spawn Area (m2):	159
Rear Area (m2):	576

PI TOTAL: **14.07**

GENERAL INFORMATION

Site ID:	1285021
Stream:	Unnamed
Trib To:	Kendall Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.76
Length (m):	5.65

BARRIER STATUS

Problem:	Bedload
Ds Barriers:	0
Us Barriers:	2

HABITAT GAIN

Lineal Gain (m):	1,001
Spawn Area (m2):	527
Rear Area (m2):	496

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL: **12.44**

GENERAL INFORMATION

Site ID:	992161
Stream:	Unnamed
Trib To:	High Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	2.50
Length (m):	17.91

BARRIER STATUS

Problem:	Culvert set too high
Ds Barriers:	10
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	1,502
Spawn Area (m2):	937
Rear Area (m2):	4,895

PI TOTAL: **12.25**

GENERAL INFORMATION

Site ID:	1280067
Stream:	Unnamed
Trib To:	High Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.11
Length (m):	8.50

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL: **12.06**

GENERAL INFORMATION

Site ID:	992160
Stream:	Unnamed
Trib To:	High Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.61
Length (m):	8.00

BARRIER STATUS

Problem:	
Ds Barriers:	11
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	1,023
Spawn Area (m2):	549
Rear Area (m2):	4,297

PI TOTAL: **10.10**

GENERAL INFORMATION

Site ID:	995997
Stream:	Unnamed
Trib To:	Baptist Camp Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.20
Length (m):	12.26

BARRIER STATUS

Problem:	Outfall;Slope
Ds Barriers:	1
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	206
Spawn Area (m2):	112
Rear Area (m2):	419

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL: **8.41**

GENERAL INFORMATION

Site ID:	995409
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.76
Length (m):	17.97

BARRIER STATUS

Problem:	Slope
Ds Barriers:	1
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	300
Spawn Area (m2):	56
Rear Area (m2):	188

PI TOTAL: **8.38**

GENERAL INFORMATION

Site ID:	1280050
Stream:	Unnamed
Trib To:	Kenney Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.59
Length (m):	15.58

BARRIER STATUS

Problem:	Slope
Ds Barriers:	2
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	70
Spawn Area (m2):	37
Rear Area (m2):	30

PI TOTAL: **8.36**

GENERAL INFORMATION

Site ID:	990023
Stream:	Baptist Camp Cr
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.45
Length (m):	12.53

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	3

HABITAT GAIN

Lineal Gain (m):	512
Spawn Area (m2):	344
Rear Area (m2):	810

PI TOTAL: **8.01**

No Image Available

GENERAL INFORMATION

Site ID:	370622
Stream:	Jim Cr
Trib To:	NF Nooksack R
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.75
Length (m):	10.52

BARRIER STATUS

Problem:	Slope
Ds Barriers:	1
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	124
Spawn Area (m2):	0
Rear Area (m2):	191

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL: **7.45**

GENERAL INFORMATION

Site ID:	1285187
Stream:	Unnamed
Trib To:	High Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	PVC
Span (m):	0.61
Length (m):	8.40

BARRIER STATUS

Problem:	Slope
Ds Barriers:	2
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	1,066
Spawn Area (m2):	0
Rear Area (m2):	96

PI TOTAL: **6.52**

GENERAL INFORMATION

Site ID:	995998
Stream:	Unnamed
Trib To:	Baptist Camp Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	PVC
Span (m):	0.15
Length (m):	3.32

BARRIER STATUS

Problem:	Slope
Ds Barriers:	2
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	187
Spawn Area (m2):	76
Rear Area (m2):	210

PI TOTAL: **6.09**

GENERAL INFORMATION

Site ID:	1285025
Stream:	Unnamed
Trib To:	Kendall Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.35
Length (m):	7.70

BARRIER STATUS

Problem:	slope
Ds Barriers:	1
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	543
Spawn Area (m2):	0
Rear Area (m2):	464

PI TOTAL: **5.60**

GENERAL INFORMATION

Site ID:	991884
Stream:	Baptist Camp Cr
Trib To:	NF Nooksack R
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	OTH
Span (m):	0.61
Length (m):	3.35

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	127
Spawn Area (m2):	92
Rear Area (m2):	106

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL: **4.77**

GENERAL INFORMATION

Site ID:	1280066
Stream:	Unnamed
Trib To:	Kenney Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.64
Length (m):	11.05

BARRIER STATUS

Problem:	Outfall drop
Ds Barriers:	2
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	251
Spawn Area (m2):	0
Rear Area (m2):	53

PI TOTAL: **3.84**

GENERAL INFORMATION

Site ID:	1280065
Stream:	Unnamed
Trib To:	Kenney Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.63
Length (m):	10.62

BARRIER STATUS

Problem:	Slope
Ds Barriers:	3
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	50
Spawn Area (m2):	0
Rear Area (m2):	10

PI TOTAL: **3.21**

GENERAL INFORMATION

Site ID:	1285024
Stream:	Bodhi Cr
Trib To:	Kendall Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.63
Length (m):	6.10

BARRIER STATUS

Problem:	slope
Ds Barriers:	1
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	543
Spawn Area (m2):	0
Rear Area (m2):	95

PI TOTAL: **1.71**

GENERAL INFORMATION

Site ID:	1285189
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.68
Length (m):	10.73

BARRIER STATUS

Problem:	Outfall Drop
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	124
Spawn Area (m2):	0
Rear Area (m2):	106

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	990577
Stream:	Unnamed
Trib To:	High Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.61
Length (m):	16.46

BARRIER STATUS

Problem:	Outfall
Ds Barriers:	0
Us Barriers:	3

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	990602
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.76
Length (m):	19.81

BARRIER STATUS

Problem:	Outfall;Slope
Ds Barriers:	2
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	370495
Stream:	Unnamed
Trib To:	Maple Cr
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.46
Length (m):	11.58

BARRIER STATUS

Problem:	Outfall drop
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	990596
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.30
Length (m):	

BARRIER STATUS

Problem:	Outfall;Slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

GENERAL INFORMATION

Site ID:	990589
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.91
Length (m):	30.55

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	90
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	990585
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	OTH
Span (m):	0.76
Length (m):	19.20

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	990584
Stream:	Unnamed
Trib To:	Jim Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	OTH
Span (m):	0.61
Length (m):	23.63

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	228
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	990582
Stream:	Marshal Hill Cr
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.70
Length (m):	40.84

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	98
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

GENERAL INFORMATION

Site ID:	990046
Stream:	Bruce Cr
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	1.07
Length (m):	17.24

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	1280058
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.35
Length (m):	6.50

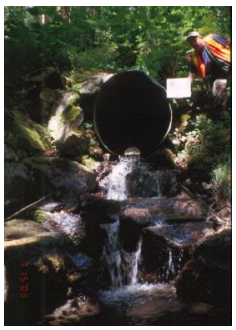
BARRIER STATUS

Problem:	physical barrier
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:



GENERAL INFORMATION

Site ID:	990603
Stream:	Lookout Cr
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.22
Length (m):	25.02

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	370407
Stream:	Kenney Cr
Trib To:	NF Nooksack R
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.52
Length (m):	26.52

BARRIER STATUS

Problem:	outfall drop
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	991107
Stream:	Bonner Cr
Trib To:	NF Nooksack R
Owner:	State

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	0

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	1.07
Length (m):	30.48

HABITAT GAIN

Lineal Gain (m):	115
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	370496
Stream:	Doaks Cr
Trib To:	Maple Cr
Owner:	County

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	1.22
Length (m):	16.76

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	1285028
Stream:	Unnamed
Trib To:	High Cr
Owner:	Private

BARRIER STATUS

Problem:	slope
Ds Barriers:	
Us Barriers:	

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.25
Length (m):	8.45

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	990580
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	0

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.61
Length (m):	63.49

HABITAT GAIN

Lineal Gain (m):	108
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	995583
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.46
Length (m):	15.36

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	990606
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	1.66
Length (m):	24.61

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995561
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.46
Length (m):	18.32

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	38
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995567
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	BOX
Material:	CPC
Span (m):	1.84
Length (m):	23.88

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	38
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

GENERAL INFORMATION

Site ID:	995571
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.91
Length (m):	16.38

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	64
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	995573
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	BOX
Material:	CPC
Span (m):	1.84
Length (m):	13.15

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995577
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	BOX
Material:	CPC
Span (m):	1.84
Length (m):	16.14

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995439
Stream:	Unnamed
Trib To:	Bagley Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	OTH
Span (m):	0.61
Length (m):	29.52

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	995582
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.61
Length (m):	15.26

BARRIER STATUS

Problem:	Plugged culvert
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	165
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995415
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.53
Length (m):	6.22

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	995584
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	County

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.46
Length (m):	14.66

BARRIER STATUS

Problem:	Occlusion
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995585
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	BOX
Material:	CPC
Span (m):	1.83
Length (m):	12.19

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

GENERAL INFORMATION

Site ID:	995585
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	BOX
Material:	CPC
Span (m):	1.83
Length (m):	12.19

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995695
Stream:	Unnamed
Trib To:	Bagley Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.61
Length (m):	13.25

BARRIER STATUS

Problem:	Slope
Ds Barriers:	1
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	95
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	996144
Stream:	Unnamed
Trib To:	High Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CAL
Span (m):	0.61
Length (m):	9.11

BARRIER STATUS

Problem:	outfall drop, slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	996144
Stream:	Unnamed
Trib To:	High Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CAL
Span (m):	0.46
Length (m):	9.01

BARRIER STATUS

Problem:	outfall drop, slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	996169
Stream:	Unnamed
Trib To:	High Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	OTH
Material:	OTH
Span (m):	1.05
Length (m):	8.09

BARRIER STATUS

Problem:	Slope, velocity, bre
Ds Barriers:	0
Us Barriers:	1

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995577
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	BOX
Material:	CPC
Span (m):	1.84
Length (m):	16.14

BARRIER STATUS

Problem:	Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	991640
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.61
Length (m):	19.81

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	990604
Stream:	Deerhorn Cr
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.83
Length (m):	23.84

BARRIER STATUS

Problem:	Slop;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

GENERAL INFORMATION

Site ID:	990605
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.91
Length (m):	18.29

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	216
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	991060
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.91
Length (m):	13.28

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	188
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	996175
Stream:	Unnamed
Trib To:	Jim Cr
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.46
Length (m):	4.30

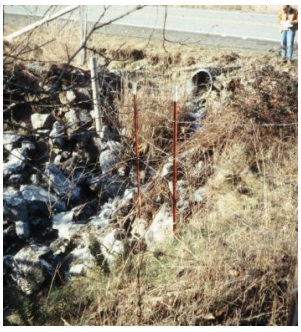
BARRIER STATUS

Problem:	Slope
Ds Barriers:	1
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	144
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:



GENERAL INFORMATION

Site ID:	991108
Stream:	Unnamed
Trib To:	High Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.61
Length (m):	12.50

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

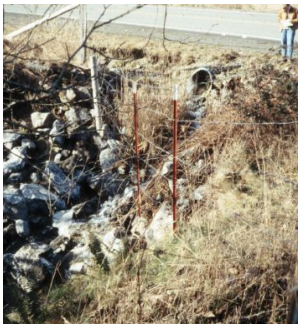
Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:



GENERAL INFORMATION

Site ID:	991108
Stream:	Unnamed
Trib To:	High Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.61
Length (m):	12.50

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995443
Stream:	Unnamed
Trib To:	Razor Hone Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.61
Length (m):	14.18

BARRIER STATUS

Problem:	Slope
Ds Barriers:	1
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	153
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	991113
Stream:	Unnamed
Trib To:	High Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.61
Length (m):	19.91

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	990604
Stream:	Deerhorn Cr
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	1.83
Length (m):	23.84

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

GENERAL INFORMATION

Site ID:	991705
Stream:	Unnamed
Trib To:	Kendall Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	SQSH
Material:	CST
Span (m):	1.06
Length (m):	11.32

BARRIER STATUS

Problem:	Outfall;Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	991885
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.91
Length (m):	57.30

BARRIER STATUS

Problem:	Slope/Undersized
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	991887
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	Private

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.61
Length (m):	10.06

BARRIER STATUS

Problem:	slope
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	995770
Stream:	Unnamed
Trib To:	High Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.91
Length (m):	24.37

BARRIER STATUS

Problem:	Outfall
Ds Barriers:	1
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Culvert Barriers:

PI TOTAL:

GENERAL INFORMATION

Site ID:	995776
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.76
Length (m):	43.12

BARRIER STATUS

Problem:	Slope
Ds Barriers:	
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	104
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995777
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	PCC
Span (m):	0.61
Length (m):	27.61

BARRIER STATUS

Problem:	Outfall;Slope
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

GENERAL INFORMATION

Site ID:	995413
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.46
Length (m):	17.89

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

PI TOTAL:

No Image Available

GENERAL INFORMATION

Site ID:	991113
Stream:	Unnamed
Trib To:	High Cr
Owner:	State

CULVERT ATTRIBUTES

Shape:	RND
Material:	CST
Span (m):	0.61
Length (m):	19.76

BARRIER STATUS

Problem:	Slope;Outfall
Ds Barriers:	0
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

Culvert Shape: RND = Round, BOX = Rectangular, ARCH = Bottomless arch, SQSH = Pipe arch, ELL = Ellipse, OTH = Other.

Culvert Material: PCC = Pre-cast concrete, CPC = Cast in place concrete, CST = Corrugated steel, SST = Smooth Steel, CAL = Corrugated aluminum, SPS = Structuural plate steel, SPA = Structural plate aluminum, PVC = Plastic, TMB = Timber, MRY = Masonary, OTH = Other

North Fork Nooksack River Barrier Dams:

PI TOTAL: **75.57**

GENERAL INFORMATION

Site ID:	01.0406 0.10
Stream:	Kendall Cr
Trib To:	NF Nooksack R
Owner:	State

DAM ATTRIBUTES

Dam Name:	Kendall Cr. Hatc
Height (m):	1.4
Span:	Full

BARRIER STATUS

Fish passage (%):	FW
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	13,694
Spawn Area (m2):	20,199
Rear Area (m2):	55,113

PI TOTAL: **18.54**

No Image Available

GENERAL INFORMATION

Site ID:	1280064
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	Private

DAM ATTRIBUTES

Dam Name:	Vaught Property
Height (m):	1.7
Span:	Full

BARRIER STATUS

Fish passage (%):	33
Ds Barriers:	2
Us Barriers:	0

HABITAT GAIN

Lineal Gain (m):	339
Spawn Area (m2):	250
Rear Area (m2):	384

PI TOTAL:

GENERAL INFORMATION

Site ID:	995414
Stream:	Unnamed
Trib To:	NF Nooksack R
Owner:	Private

DAM ATTRIBUTES

Dam Name:	
Height (m):	4
Span:	Full

BARRIER STATUS

Fish passage (%):	0
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	
Spawn Area (m2):	
Rear Area (m2):	

North Fork Nooksack River Barrier Fishways:

PI TOTAL: **75.34**

GENERAL INFORMATION

Site ID:	992159
Stream:	Kendall Cr
Trib To:	NF Nooksack R
Owner:	State

FISHWAY ATTRIBUTES

FW Type:	WP
Attached To:	Dam
Weir No:	5
Bed Control:	

BARRIER STATUS

Fish Passage(%):	33
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	12,342
Spawn Area (m2):	19,397
Rear Area (m2):	53,994

PI TOTAL:

GENERAL INFORMATION

Site ID:	01.0392 0.10
Stream:	Kenney Cr
Trib To:	NF Nooksack R
Owner:	County

FISHWAY ATTRIBUTES

FW Type:	WP
Attached To:	Culvert
Weir No:	6
Bed Control:	

BARRIER STATUS

Fish Passage(%):	67
Ds Barriers:	
Us Barriers:	

HABITAT GAIN

Lineal Gain (m):	2,382
Spawn Area (m2):	
Rear Area (m2):	

Fishway Type: BC = baffled culvert, PC = pool chute, RCC = roughened channel, SBC = streambed control, WP = weir pool

Bed Control: RC = Rock, CC = Concrete, GC = gabion , LC = Log, PLC = Plank.

Other Miscellaneous North Fork Nooksack River Barriers:

PI TOTAL: **27.88**

GENERAL INFORMATION

Site ID:	992156
Stream:	High Cr
Trib To:	Kendall Cr
Owner:	Private

BARRIER ATTRIBUTES

BarrierType: CC Bridge Apron

BARRIER STATUS

Fish Passage (%):	0
Ds Barriers:	1
Us Barriers:	6

HABITAT GAIN

Lineal Gain (m):	5,282
Spawn Area (m2):	6,576
Rear Area (m2):	14,757

PI TOTAL: **25.96**

GENERAL INFORMATION

Site ID:	992153
Stream:	High Cr
Trib To:	Kendall Cr
Owner:	Private

BARRIER ATTRIBUTES

BarrierType: CC Bridge apron

BARRIER STATUS

Fish Passage (%):	0
Ds Barriers:	4
Us Barriers:	3

HABITAT GAIN

Lineal Gain (m):	4,706
Spawn Area (m2):	5,848
Rear Area (m2):	12,385

PI TOTAL: **22.33**

No Image Available

GENERAL INFORMATION

Site ID:	992157
Stream:	High Cr
Trib To:	Kendall Cr
Owner:	Private

BARRIER ATTRIBUTES

BarrierType: Streambed Control

BARRIER STATUS

Fish Passage (%):	67
Ds Barriers:	0
Us Barriers:	7

HABITAT GAIN

Lineal Gain (m):	5,719
Spawn Area (m2):	7,417
Rear Area (m2):	17,297

PI TOTAL: **20.85**

GENERAL INFORMATION

Site ID:	992155
Stream:	High Cr
Trib To:	Kendall Cr
Owner:	Private

BARRIER ATTRIBUTES

BarrierType: CC Bridge Apron

BARRIER STATUS

Fish Passage (%):	0
Ds Barriers:	2
Us Barriers:	5

HABITAT GAIN

Lineal Gain (m):	5,146
Spawn Area (m2):	6,425
Rear Area (m2):	14,225
