STREAM INVENTORY REPORT

Bridge Creek 2007

INTRODUCTION

A stream inventory was conducted from June 21, 2007 to June 26, 2007 on Bridge Creek. The survey began at the confluence with South Fork Eel River and extended upstream 5,172 feet. A stream sub report to this report was also completed for one unnamed tributary to Bridge Creek.

The Bridge Creek inventory was conducted in two parts: habitat inventory and biological inventory. The objective of the habitat inventory was to document the habitat available to anadromous salmonids in Bridge Creek. The objective of the biological inventory was to document the presence and distribution of juvenile salmonid species.

The objective of this report is to document the current habitat conditions and recommend options for the potential enhancement of habitat for Chinook salmon, coho salmon, and steelhead trout. Recommendations for habitat improvement activities are based upon target habitat values suitable for salmonids in California's north coast streams.

WATERSHED OVERVIEW

Bridge Creek is a tributary to South Fork Eel River, tributary to the Eel River which drains into the Pacific Ocean, located in Humboldt County, California (Map 1). Bridge Creek's legal description at the confluence with South Fork Eel River is T2S R3E S20. Its location is 40.2822 north latitude and 123.8561 west longitude, LLID number 1238561402822. Bridge Creek is a first order stream and has approximately 2.0 miles of blue line stream according to the USGS Myers Flat 7.5 minute quadrangle. Bridge Creek drains a watershed of approximately 2.7 square miles. Elevations range from about 145 feet at the mouth of the creek to 1,600 feet in the headwater areas. Redwood forest dominates the lower watershed, while tan oak and Douglas fir dominate upper watershed. The lower watershed is primarily managed by State Parks, while mid-upper watershed is privately owned. Vehicle access exists via highway 101, exit Myers Flat and take the Avenue of the Giants south approximately one mile, turn left onto Bridge Creek Road.

METHODS

The habitat inventory conducted in Bridge Creek follows the methodology presented in the *California Salmonid Stream Habitat Restoration Manual* (Flosi et al, 1998). The California Conservation Corps (CCC) Technical Advisors and Watershed Stewards Project/AmeriCorps (WSP) Members that conducted the inventory were trained in standardized habitat inventory methods by the California Department of Fish and Game (DFG). This inventory was conducted by a two-person team.

SAMPLING STRATEGY

The inventory uses a method that samples approximately 10% of the habitat units within the survey reach. All habitat units included in the survey are classified according to habitat type and their lengths are measured. All pool units are measured for maximum depth, depth of pool tail crest (measured in the thalweg), dominant substrate composing the pool tail crest, and embeddedness. Habitat unit types encountered for the first time are measured for all the parameters and characteristics on the field form. Additionally, from the ten habitat units on each field form page, one is randomly selected for complete measurement.

HABITAT INVENTORY COMPONENTS

A standardized habitat inventory form has been developed for use in California stream surveys and can be found in the *California Salmonid Stream Habitat Restoration Manual*. This form was used in Bridge Creek to record measurements and observations. There are eleven components to the inventory form.

1. Flow:

Flow is measured in cubic feet per second (cfs) near the bottom of the stream survey reach using a Marsh-McBirney Model 2000 flow meter.

2. Channel Type:

Channel typing is conducted according to the classification system developed and revised by David Rosgen (1994). This methodology is described in the *California Salmonid Stream Habitat Restoration Manual*. Channel typing is conducted simultaneously with habitat typing and follows a standard form to record measurements and observations. There are five measured parameters used to determine channel type: 1) water slope gradient, 2) entrenchment, 3) width/depth ratio, 4) substrate composition, and 5) sinuosity. Channel characteristics are measured using a clinometer, hand level, hip chain, tape measure, and a stadia rod.

3. Temperatures:

Both water and air temperatures are measured and recorded at every tenth habitat unit. The time of the measurement is also recorded. Both temperatures are taken in degrees Fahrenheit at the middle of the habitat unit and within one foot of the water surface.

4. Habitat Type:

Habitat typing uses the 24 habitat classification types defined by McCain and others (1990). Habitat units are numbered sequentially and assigned a type identification number selected from a standard list of 24 habitat types. Dewatered units are labeled "dry". Bridge Creek habitat typing used standard basin level measurement criteria. These parameters require that the minimum length of a described habitat unit must be equal to or greater than the stream's mean

wetted width. All measurements are in feet to the nearest tenth. Habitat characteristics are measured using a clinometer, hip chain, and stadia rod.

5. Embeddedness:

The depth of embeddedness of the cobbles in pool tail-out areas is measured by the percent of the cobble that is surrounded or buried by fine sediment. In Bridge Creek, embeddedness was ocularly estimated. The values were recorded using the following ranges: 0 - 25% (value 1), 26 - 50% (value 2), 51 - 75% (value 3) and 76 - 100% (value 4). Additionally, a value of 5 was assigned to tail-outs deemed unsuited for spawning due to inappropriate substrate like bedrock, log sills, boulders or other considerations.

6. Shelter Rating:

Instream shelter is composed of those elements within a stream channel that provide juvenile salmonids protection from predation, reduce water velocities so fish can rest and conserve energy, and allow separation of territorial units to reduce density related competition for prey. The shelter rating is calculated for each fully-described habitat unit by multiplying shelter value and percent cover. Using an overhead view, a quantitative estimate of the percentage of the habitat unit covered is made. All cover is then classified according to a list of nine cover types. In Bridge Creek, a standard qualitative shelter value of 0 (none), 1 (low), 2 (medium), or 3 (high) was assigned according to the complexity of the cover. Thus, shelter ratings can range from 0-300 and are expressed as mean values by habitat types within a stream.

7. Substrate Composition:

Substrate composition ranges from silt/clay sized particles to boulders and bedrock elements. In all fully-described habitat units, dominant and sub-dominant substrate elements were ocularly estimated using a list of seven size classes and recorded as a one and two, respectively. In addition, the dominant substrate composing the pool tail-outs is recorded for each pool.

8. Canopy:

Stream canopy density was estimated using modified handheld spherical densiometers as described in the *California Salmonid Stream Habitat Restoration Manual*. Canopy density relates to the amount of stream shaded from the sun. In Bridge Creek, an estimate of the percentage of the habitat unit covered by canopy was made from the center of approximately every third unit in addition to every fully-described unit, giving an approximate 30% sub-sample. In addition, the area of canopy was estimated ocularly into percentages of coniferous or hardwood trees.

9. Bank Composition and Vegetation:

Bank composition elements range from bedrock to bare soil. However, the stream banks are usually covered with grass, brush, or trees. These factors influence the ability of stream banks to withstand winter flows. In Bridge Creek, the dominant composition type and the dominant

vegetation type of both the right and left banks for each fully-described unit were selected from the habitat inventory form. Additionally, the percent of each bank covered by vegetation (including downed trees, logs, and rootwads) was estimated and recorded.

10. Large Woody Debris Count:

Large woody debris (LWD) is an important component of fish habitat and an element in channel forming processes. In each habitat unit all pieces of LWD partially or entirely below the elevation of bankfull discharge are counted and recorded. The minimum size to be considered is twelve inches in diameter and six feet in length. The LWD count is presented by reach and is expressed as an average per 100 feet.

11. Average Bankfull Width:

Bankfull width can vary greatly in the course of a channel type stream reach. This is especially true in very long reaches. Bankfull width can be a factor in habitat components like canopy density, water temperature, and pool depths. Frequent measurements taken at riffle crests (velocity crossovers) are needed to accurately describe reach widths. At the first appropriate velocity crossover that occurs after the beginning of a new stream survey page (ten habitat units), bankfull width is measured and recorded in the appropriate header block of the page. These widths are presented as an average for the channel type reach.

BIOLOGICAL INVENTORY

Biological sampling during the stream inventory is used to determine fish species and their distribution in the stream. Fish presence was observed from the stream banks in Bridge Creek. In addition, underwater observations were made at 21 sites using techniques discussed in the *California Salmonid Stream Habitat Restoration Manual*.

DATA ANALYSIS

Data from the habitat inventory form are entered into Stream Habitat 2.0.19, a Visual Basic data entry program developed by Karen Wilson, Pacific States Marine Fisheries Commission in conjunction with the California Department of Fish and Game. This program processes and summarizes the data, and produces the following ten tables:

- Riffle, Flatwater, and Pool Habitat Types
- Habitat Types and Measured Parameters
- Pool Types
- Maximum Residual Pool Depths by Habitat Types
- Mean Percent Cover by Habitat Type
- Dominant Substrates by Habitat Type
- Mean Percent Vegetative Cover for Entire Stream
- Fish Habitat Inventory Data Summary by Stream Reach (Table 8)

- Mean Percent Dominant Substrate / Dominant Vegetation Type for Entire Stream
- Mean Percent Shelter Cover Types for Entire Stream

Graphics are produced from the tables using Microsoft Excel. Graphics developed for Bridge Creek include:

- Riffle, Flatwater, Pool Habitat Types by Percent Occurrence
- Riffle, Flatwater, Pool Habitat Types by Total Length
- Total Habitat Types by Percent Occurrence
- Pool Types by Percent Occurrence
- Maximum Residual Depth in Pools
- Percent Embeddedness
- Mean Percent Cover Types in Pools
- Substrate Composition in Pool Tail-outs
- Mean Percent Canopy
- Dominant Bank Composition by Composition Type
- Dominant Bank Vegetation by Vegetation Type

HABITAT INVENTORY RESULTS

* ALL TABLES AND GRAPHS ARE LOCATED AT THE END OF THE REPORT *

The habitat inventory of June 21, 2007 to June 26, 2007 was conducted by R. Marsh and L. Lee (WSP). The total length of the stream surveyed was 5,172 feet with an additional 33 feet of side channel.

Stream flow was measured near the bottom of the survey reach with a Marsh-McBirney Model 2000 flowmeter at 0.43 cfs on June 28, 2007.

Bridge Creek is a B4 channel type for 2,356 feet of the stream surveyed (Reach 1), a B2 channel type for 2,816 feet of the stream surveyed (Reach 2). B4 channels are moderately entrenched riffle dominated channels with infrequently spaced pools, very stable plan and profile, stable banks on moderate gradients with low width /depth ratios and gravel-dominant substrates. B2 channels are moderately entrenched riffle dominated channels with infrequently spaced pools, very stable plan and profile, stable banks on moderate gradients with low moderate gradients with infrequently spaced pools, very stable plan and profile, stable banks on moderate gradients with low width /depth ratios and boulder-dominant substrates.

Water temperatures taken during the survey period ranged from 53 to 60 degrees Fahrenheit. Air temperatures ranged from 49 to 64 degrees Fahrenheit.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. Based on frequency of occurrence there were 43% riffle units, 30% pool units and 27% flatwater units (Graph 1). Based on total length of Level II habitat types there were 65% riffle units, 18% flatwater, and 17% pool units (Graph 2).

Ten Level IV habitat types were identified (Table 2). The most frequent habitat types by percent occurrence were 23% mid-channel pool units, 20% high gradient riffle units, 20% low gradient riffle units and 19% run units (Graph 3). Based on percent total length, low gradient riffles made up 32%, high gradient riffle units 26%, and mid-channel pool units 12%.

A total of 32 pools were identified (Table 3). Main channel pools were the most frequently encountered, at 87.5% (Graph 4), and comprised 87 % of the total length of all pools (Table 3).

Table 4 is a summary of maximum residual pool depths by pool habitat types. Pool quality for salmonids increases with depth. Seven of the 32 pools (22%) had a residual depth of two feet or greater (Graph 5).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the 32 pool tail-outs measured, 2 had a value of 1 (6.2%); 18 had a value of 2 (56.2%); 7 had a value of 3 (21.9%); 3 had a value of 4 (9.4%); and 2 had a value of 5 (6.2%) (Graph 6). On this scale, a value of 1 indicates the best spawning conditions and a value of 4 the worst. Additionally, a value of 5 was assigned to tail-outs deemed unsuited for spawning due to inappropriate substrate such as bedrock, log sills, boulders, or other considerations.

A shelter rating was calculated for each habitat unit and expressed as a mean value for each habitat type within the survey using a scale of 0-300. Riffle habitat types had a mean shelter rating of 13, flatwater habitat types had a mean shelter rating of 14, and pool habitats had a mean shelter rating of 28 (Table 1). Of the pool types, the main channel pools had a mean shelter rating of 27 and scour pools had a mean shelter rating of 29 (Table 3).

Table 5 summarizes mean percent cover by habitat type. Boulders are the dominant cover types in Bridge Creek. Graph 7 describes the pool cover in Bridge Creek. Boulders are the dominant pool cover type followed by large woody debris.

Table 6 summarizes the dominant substrate by habitat type. Graph 8 depicts the dominant substrate observed in pool tail-outs. Small cobble was observed in 34% of the habitat units while gravel was observed in 31% of pool tail-outs.

The mean percent canopy density for the surveyed length of Bridge Creek was 89%. Eleven percent of the canopy was open. Of the canopy present, the mean percentages of hardwood and coniferous trees were 50% and 50%, respectively. Graph 9 describes the mean percent canopy in Bridge Creek.

For the stream reach surveyed, the mean percent right bank vegetated was 84%. The mean percent left bank vegetated was 81%. The dominant elements composing the structure of the stream banks consisted of 57.1% sand/silt/clay, 21.4% cobble/gravel, 16.3% boulder and 5.1% bedrock (Graph 10). Coniferous trees and hardwood trees were the dominant vegetation type, each observed in 34.7% of the units surveyed. Additionally, 20.4% of the units surveyed had brush as the second most dominant vegetation type and 10.2% had grass as the dominant vegetation (Graph 11).

BIOLOGICAL INVENTORY RESULTS

Twenty-one sites were electrofished for species composition and distribution in Bridge Creek on September 24, 2007. Water temperatures taken during the snorkel period (0935 to 1155) ranged from 51 to 53 degrees Fahrenheit. Air temperatures ranged from 48 to 58 degrees Fahrenheit. The sites were sampled by S. Monday (DFG), R. Marsh and T. Chapple (WSP).

In reach one, which comprised the first 2,356 feet of stream, 11 sites were sampled. The reach sites yielded 25 young-of-the-year steelhead/rainbow trout (SH/RT), 5 age 1+ SH/RT and 1 age 2+ SH/RT.

In reach two, 10 sites were sampled starting approximately 2,356 from the confluence with South Fork Eel River and continuing upstream 1,075 feet. The reach sites yielded 21 young-of-the-year SH/RT, 10 age 1+ SH/RT, and 2 age 2+ SH/RT.

The following chart displays the information yielded from these sites:

Date	Site #	Hab.	Hab.	Approx.	Coho			SH/R7			
Date	Site #	Unit # Type		mouth (ft.)	YOY	1+	YOY	1+	2+		
Reach 1: B4 Channel Type											
09/24/07	1	002	4.2	80	0	0	1	1	0		
09/24/07	2	007	4.2	371	0	0	2	0	0		
09/24/07	3	009	4.2	421	0	0	1	0	0		
09/24/07	4	011	4.4	556	0	0	0	1	0		
09/24/07	5	013	4.4	681	0	0	1	1	0		
09/24/07	6	018	4.2	849	0	0	1	1	0		
09/24/07	7	020	4.2	993	0	0	6	0	0		
09/24/07	8	023	4.2	1211	0	0	3	1	0		
09/24/07	9	025	4.2	1265	0	0	0	0	0		
09/24/07	10	029	4.2	1366	0	0	10	0	1		

2007 Bridge Creek Underwater Observations.

Date	Site #	Hab.	Hab.	Approx.	Coh	10		2+ 0 0 0 0 0 0 0 0	
Date	Site #	Unit #	Туре	mouth (ft.)	YOY	1+	YOY	1+	2+
09/24/07	11	046	4.2	2338	0	0	0	0	0
Reach 2: B2	2 Channel 7	Гуре							
09/24/07	12	048	4.2	2393	0	0	3	1	0
09/24/07	13	051	4.2	2565	0	0	3	1	0
09/24/07	14	053	4.2	2611	0	0	0	0	0
09/24/07	15	055	4.2	2789	0	0	4	0	0
09/24/07	16	057	3.3	2874	0	0	3	1	0
09/24/07	17	059	4.2	2944	0	0	2	2	0
09/24/07	18	061	4.2	3072	0	0	0	0	0
09/24/07	19	065	4.2	3209	0	0	1	2	0
09/24/07	20	068	4.4	3270	0	0	4	2	2
09/24/07	21	071	4.2	3371	0	0	1	1	0

DISCUSSION

Bridge Creek is a B4 channel type for the first 2,356 feet of stream surveyed and a B2 channel type for the last 2,816 feet surveyed.

The water temperatures recorded on the survey days June 21, 2007 to June 26, 2007, ranged from 53 to 60 degrees Fahrenheit. Air temperatures ranged from 49 to 64 degrees Fahrenheit. To make any further conclusions, temperatures would need to be monitored throughout the warm summer months, and more extensive biological sampling would need to be conducted.

Flatwater habitat types comprised 18% of the total length of this survey, riffles 65%, and pools 17%. The pools are relatively shallow, with only 7 of the 32 (22%) pools having a maximum residual depth greater than 2 feet. In general, pool enhancement projects are considered when primary pools comprise less than 40% of the length of total stream habitat. In first and second order streams, a primary pool is defined to have a maximum residual depth of at least two feet, occupy at least half the width of the low flow channel, and be as long as the low flow channel width. Installing structures that will increase or deepen pool habitat is recommended.

Twenty of the 32 pool tail-outs measured had embeddedness ratings of 1 or 2. Ten of the pool tail-outs had embeddedness ratings of 3 or 4. Two of the pool tail-outs had a rating of 5, which is considered unsuitable for spawning. Cobble embeddedness measured to be 25% or less, a rating of 1, is considered to indicate good quality spawning substrate for salmon and steelhead.

Twenty-one of the 32 pool tail-outs (65%) measured had gravel or small cobble as the dominant substrate. This is generally considered good for spawning salmonids.

The mean shelter rating for pools was 28. The shelter rating in the flatwater habitats was 14. A pool shelter rating of approximately 100 is desirable. The amount of cover that now exists is being provided primarily by boulders in Bridge Creek. Boulders are the dominant cover type in pools followed by large woody debris. Log and root wad cover structures in the pool and flatwater habitats would enhance both summer and winter salmonid habitat. Log cover structure provides rearing fry with protection from predation, rest from water velocity, and also divides territorial units to reduce density related competition.

The mean percent canopy density for the stream was 89%. Reach 1 had a canopy density of 87.6% while Reach 2 had a canopy density of 90.7%. In general, revegetation projects are considered when canopy density is less than 80%.

The percentage of right and left bank covered with vegetation was 84% and 81% respectively. In areas of stream bank erosion or where bank vegetation is sparse, planting endemic species of coniferous and hardwood trees, in conjunction with bank stabilization, is recommended.

RECOMMENDATIONS

- 1) Bridge Creek should be managed as an anadromous, natural production stream.
- 2) Where feasible, design and engineer pool enhancement structures to increase the number of pools. This must be done where the banks are stable or in conjunction with stream bank armor to prevent erosion.
- 3) Increase woody cover in the pools and flatwater habitat units. Most of the existing cover in the pools is from boulders. Adding high quality complexity with woody cover in the pools is desirable.
- 4) Inventory and map sources of stream bank erosion and prioritize them according to present and potential sediment yield. Identified sites should then be treated to reduce the amount of fine sediments entering the stream.
- 5) Active and potential sediment sources related to the road system need to be identified, mapped, and treated according to their potential for sediment yield to the stream and its tributaries.

6) The limited water temperature data available suggest that maximum temperatures are within the acceptable range for juvenile salmonids. To establish more complete and meaningful temperature regime information, 24-hour monitoring during the July and August temperature extreme period should be performed for 3 to 5 years.

COMMENTS AND LANDMARKS

The following landmarks and possible problem sites were noted. All distances are approximate and taken from the beginning of the survey reach.

Position (ft):	Habitat Unit #:	Comments:
0	0001.00	Start of survey at the confluence with the South Fork Eel River. The latitude was 40.2823 N and the longitude was 123.8575 W
147	0005.00	It appeared that Bridge Creek was out of the influence of the South Fork Eel River.
203	0006.00	Bridge #01 for Avenue of the Giants was located 12' into the habitat unit. The dimensions of the concrete bridge were 31.5' wide, 35' high and 160' long. The bridge was in good condition.
556	0011.00	There was erosion on the right bank which measured 80' long x 20' high.
881	0019.00	There was active erosion on the right bank that was 40' wide x 30' high.
1051	0022.00	The left bank was actively eroding; starting at the bottom of the habitat unit and extending 30' upslope. It was contributing sediment ranging in size from sand to large cobble.
1265	0025.00	Log debris accumulation (LDA#01) was 15' high x 38' wide x 58' long. There were 19 pieces of large woody debris (LWD) with visible gaps. Sediment was being retained that ranged in size from small to large cobbles. The dimensions of the stored sediment were 17' wide x 8' long and 2' deep. There were fish seen above the accumulation. Water flowed through without any plunges or plugs. One large redwood is perched above.
1660	0034.00	Bridge #02 was a rail car bridge to a private drive and was located 13' into the habitat unit. The dimensions were 12' wide x 14' high x 61' long. Both banks are secured with rip-rap.
1685	0035.00	The right bank was covered a by a concrete slab that measured 12' x 5.2', while the left bank had boulder rip-rap.

1718	0037.00	Tributary #01 entered from the left bank. The estimated flow was less than 0.5 cfs contributing less than 5% to the Bridge Creek flow. The water temperature of the tributary was 54 degrees Fahrenheit while up and downstream of the confluence were both 53 degrees Fahrenheit on Bridge Creek. A visual observation of roughly 200' up the tributary verified that it was accessible to fish, though there were not any fish seen. The first 200' consisted of a low gradient riffle having gravel and cobbles.
1718	0037.00	There was a plunge that was 2.1' high. The pool downstream of the plunge was formed by a gravel and rebar weir.
3527	0078.00	Tributary #02 entered Bridge Creek within this habitat unit. The estimated flow was less than 0.5 cfs contributing less than 0.5% to Bridge Creeks flow. The water temperature of the tributary was 55 degrees Fahrenheit as was the downstream temperature of Bridge Creek; however the upstream temperature was 52 degrees Fahrenheit. Visual observation was conducted from the confluence up roughly 650'. The slope was measured with the hand level and found to be 5%. Salmonids were observed in the tributary. A stream inventory was completed on this tributary on 6/27/07, see sub-report.
3651	0081.00	A plunge measuring 1.5' high occurred 12' into the habitat unit.
3713	0083.00	An old erosion site was on the right bank that was 100' long x 10' high. At the time of the survey the site was revegetated.
4008	0089.00	A plunge height of 1.4' was recorded in this habitat unit.
4032	0090.00	An erosion site on the left bank measured 15' long x 15' high that was contributing gravel to small cobble was recorded.
4409	0097.00	A landslide on the left bank was 50' long x 70' high. The slide was not contributing sediment and was covered in small woody debris and large woody debris.
4732	0103.00	Tributary #03 entered from the right bank 24' into the habitat unit with an estimated flow of less than 1 cfs and contributing 20% of Bridge Creek's flow. The temperatures of the tributary as well as upstream and downstream of the confluence were all 56 degrees Fahrenheit. The crew performed a visual observation roughly 250' upstream and found the creek to have a gradient of 16%. There were no fish observed in the tributary.

4732 0103.00 Young-of-the-year salmonids as well as 1+ salmonid were observed throughout the entirety of the Bridge Creek survey.
5172 0106.00 End of survey and the possible end of anadromy. The survey ended at a 3' plunge with no jump pool that followed by a 2.5' plunge that only had a 1.1' jump 'hole'. The channel continued at a slope of 20% and greater, boulder cascade. The crew walked upstream roughly 500' past the end of survey. Two small log debris accumulations with jumps obstructed by small woody debris, large woody debris and boulders, then at 500' the gradient goes to less than 10% again.

REFERENCES

Flosi, G., Downie, S., Hopelain, J., Bird, M., Coey, R., and Collins, B. 1998. *California Salmonid Stream Habitat Restoration Manual*, 3rd edition. California Department of Fish and Game, Sacramento, California.

LEVEL III and LEVEL IV HABITAT TYPES

RIFFLE		F1 11	(1)
Low Gradient Riffle	(LGR)	[1.1]	$\{1\}$
High Gradient Killie	(HGK)	[1.2]	{ 2 }
CASCADE			
Cascade	(CAS)	[2.1]	{ 3 }
Bedrock Sheet	(BRS)	[2.2]	{24}
FLATWATER		50.43	(
Pocket Water	(POW)	[3.1]	{21}
Glide	(GLD)	[3.2]	$\{14\}$
Kun Stop Dup	(RUN)	[3.3]	$\{15\}$
Edgewater	(SKN)	[3.4]	{10} {18}
Eugewater	$(\mathbf{L}\mathbf{D}\mathbf{W})$	[3.3]	{10}
MAIN CHANNEL POOLS			
Trench Pool	(TRP)	[4.1]	{ 8 }
Mid-Channel Pool	(MCP)	[4.2]	{17}
Channel Confluence Pool	(CCP)	[4.3]	{19}
Step Pool	(STP)	[4.4]	{23}
SCOUR POOLS		r r 11	(22)
Corner Pool	(CRP)	[5.1]	$\{22\}$
Lateral Scour Pool - Log Enhanced	(LSL)	[5.2]	$\{10\}$
Lateral Scour Pool - Root wat Emilanced	(LSR) (LSRk)	[3.5]	$\{11\}$
Lateral Scour Pool - Boulder Formed	(LSDR) (LSBo)	[5,4]	$\{20\}$
Plunge Pool	(PLP)	[5.5]	$\{20\}$
	(121)	[5:0]	[>]
BACKWATER POOLS			
Secondary Channel Pool	(SCP)	[6.1]	{ 4 }
Backwater Pool - Boulder Formed	(BPB)	[6.2]	{ 5 }
Backwater Pool - Root Wad Formed	(BPR)	[6.3]	{ 6 }
Backwater Pool - Log Formed	(BPL)	[6.4]	{7}
Dammed Pool	(DPL)	[6.5]	{13}
ADDITIONAL UNIT DESIGNATIONS			
Drv	(\mathbf{DRY})	[7 0]	
Culvert	(CUL)	[8.0]	
Not Surveyed	(NS)	[9.0]	
Not Surveyed due to a marsh	(MÁR)	[9.1]	



Table 1 - Summary of Riffle, Flatwater, and Pool Habitat Types

Stream Name: Bridge Creek LLID: 1238561402822 Drainage: Eel River - South Fork Survey Dates: 6/21/2007 to 6/26/2007 Confluence Location: Quad: MYERS FLAT Legal Description: T02SR03ES20 Latitude: 40:16:56.0N Longitude: 123:51:22.0 Habitat Units Fully Habitat Habitat Mean Total Total Mean Mean Mean Mean Estimated Mean Estimated Units Measured Туре Length Width Depth Max Area Total Area Total Occurrence Length Length Volume

			(%)	(ft.)	(ft.)	(%)	(ft.)	(ft.)	Depth (ft.)	(sq.ft.)	(sq.ft.)	(cu.ft.)	Volume (cu.ft.)	Pool Vol (cu.ft.)	Rating
29	7	FLATWATER	27.1	33	954	18.3	8.9	0.6	1.1	326	9444	187	5414		14
32	32	POOL	29.9	28	891	17.1	11.2	0.8	1.6	285	9107	328	10487	239	28
46	10	RIFFLE	43.0	73	3360	64.6	11.7	0.5	1.0	665	30594	344	15811		13

Mean

Residual

Mean

Shelter

Total	Total Units	Total Length	Total Area	Total Volume	
Units	Fully Measured	(ft.)	(sq.ft.)	(cu.ft.)	
107	49	5205	49145	31712	

Table 2 - Summary of Habitat Types and Measured Parameters

Stream Name: Bridge Creek

Survey Dates: 6/21/2007 to 6/26/2007

Confluence Location: Quad: MYERS FLAT Legal Description: T02SR03ES20 Latitude: 40:16:56.0N Longitude: 123:51:22.0W

Habitat Units	Units Fully Measured	Habitat Type	Habitat Occurrence (%)	Mean Length (ft.)	Total Length (ft.)	Total Length (%)	Mean Width (ft.)	Mean Depth (ft.)	Max Depth (ft.)	Mean Area (sq.ft.)	Estimated Total Area (sq.ft.)	Mean Volume (cu.ft.)	Estimated Total Volume (cu.ft.)	Mean Residual Pool Vol (cu.ft.)	Mean Shelter Rating	Mean Canopy (%)
21	5	LGR	19.6	80	1671	32.1	10	0.5	1.1	760	15969	319	6697		7	91
21	3	HGR	19.6	63	1333	25.6	11	0.5	1.2	190	3994	102	2142		17	88
4	2	CAS	3.7	89	356	6.8	15	0.6	2	1139	4556	768	3073		20	79
20	4	RUN	18.7	28	560	10.8	8	0.6	1.5	239	4781	152	3048		6	93
9	3	SRN	8.4	44	394	7.6	9	0.6	1.2	441	3970	232	2091		23	82
25	25	MCP	23.4	25	618	11.9	12	0.7	2.8	268	6708	316	7901	227	26	89
3	3	STP	2.8	53	159	3.1	10	0.8	2.1	489	1467	512	1537	391	37	92
1	1	CRP	0.9	56	56	1.1	6	0.6	1.8	353	353	247	247	212	10	74
1	1	LSBo	0.9	13	13	0.2	10	0.7	1.9	96	96	105	105	67	25	91
2	2	PLP	1.9	22	45	0.9	12	1.1	2.1	242	483	349	697	265	40	99

LLID: 1238561402822 Drainage: Eel River - South Fork

Total Units	Total Units Fully Measured	Total Length (ft.)	Total Area (sq.ft.)	Total Volume (cu.ft.)	
107	49	5205	42377	27539	

Table 3 - Summary of Pool Types

Stream Name: Bridge Creek

Survey Dates: 6/21/2007 to 6/26/2007

Confluence Location: Quad: MYERS FLAT Legal Description: T02SR03ES20 Latitude: 40:16:56.0N Longitude: 123:51:22.0W

Habitat Units	Units Fully Measured	Habitat Type	Habitat Occurrence (%)	Mean Length (ft.)	Total Length (ft.)	Total Length (%)	Mean Width (ft.)	Mean Residual Depth (ft.)	Mean Area (sq.ft.)	Estimated Total Area (sq.ft.)	Mean Residual Pool Vol (cu.ft.)	Estimated Total Resid.Vol. (cu.ft.)	Mean Shelter Rating	
28	28	MAIN	88	28	777	87	11.3	0.8	292	8175	244	6842	27	
4	4	SCOUR	13	29	114	13	10.3	0.9	233	932	202	808	29	

LLID: 1238561402822

Drainage: Eel River - South Fork

Total Units	Total Units Fully Measured	Total Length (ft.)	Total Area	Total Volume	
32	32	891	9107	7650	

Table 4 - Summary of Maximum Residual Pool Depths By Pool Habitat Types

Stream Name: Bridge Creek

LLID: 1238561402822 Drainage: Eel River - South Fork

Survey Dates: 6/21/2007 to 6/26/2007

Confluence Location: Quad: MYERS FLAT Legal Description: T02SR03ES20 Latitude: 40:16:56.0N Longitude: 123:51:22.0W

Habitat Units	Habitat Type	Habitat Occurrence (%)	< 1 Foot Maximum Residual Depth	< 1 Foot Percent Occurrence	1 < 2 Feet Maximum Residual Depth	1 < 2 Feet Percent Occurrence	2 < 3 Feet Maximum Residual Depth	2 < 3 Feet Percent Occurrence	3 < 4 Feet Maximum Residual Depth	3 < 4 Feet Percent Occurrence	>= 4 Feet Maximum Residual Depth	>= 4 Feet Percent Occurrence
25	MCP	78	1	4	19	76	5	20	0	0	0	0
3	STP	9	0	0	2	67	1	33	0	0	0	0
1	CRP	3	0	0	1	100	0	0	0	0	0	0
1	LSBo	3	0	0	1	100	0	0	0	0	0	0
2	PLP	6	0	0	1	50	1	50	0	0	0	0

Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
Units	< 1 Foot	< 1 Foot	1< 2 Foot	1< 2 Foot	2< 3 Foot	2< 3 Foot	3< 4 Foot	3< 4 Foot	>= 4 Foot	>= 4 Foot
	Max Resid.	% Occurrence								
	Depth		Depth		Depth		Depth		Depth	
32	1	3	24	75	7	22	0	0	0	0

Mean Maximum Residual Pool Depth (ft.): 1.6

Table 5 - Summary of Mean Percent Cover By Habitat Type

Stream Name: Bridge Creek					LLID: 1238561402822				Drainage: Eel River - South Fork		
Survey D	Dates: 6/21	/2007 to 6/26/200	07	Dry l	Jnits: 0						
Confluer	nce Location	: Quad: MYE	RS FLAT	Lega	I Description:	T02SR03ES20	D Latitude:	40:16:56.0N	Longitude:	123:51:22.0W	
Habitat Units	Units Fully Measured	Habitat Type	Mean % Undercut Banks	Mean % SWD	Mean % LWD	Mean % Root Mass	Mean % Terr. Vegetation	Mean % Aquatic Vegetation	Mean % White Water	Mean % Boulders	Mean % Bedrock Ledges
21	5	LGR	0	0	10	6	11	0	10	63	0
21	3	HGR	23	0	0	0	0	0	15	63	0
4	2	CAS	0	0	0	0	0	0	30	70	0
46	10	TOTAL RIFFLE	5	0	6	3	6	0	16	64	0
20	4	RUN	0	0	10	0	0	0	0	90	0
9	3	SRN	22	3	12	12	0	0	13	38	0
29	7	TOTAL FLAT	11	2	11	6	0	0	7	64	0
25	25	MCP	3	15	18	10	2	0	4	47	0
3	3	STP	0	18	20	25	0	0	5	18	13
1	1	CRP	30	65	0	0	0	0	0	5	0
1	1	LSBo	0	10	0	0	0	0	0	90	0
2	2	PLP	0	0	5	20	0	0	20	55	0
32	32	TOTAL POOL	4	16	16	11	1	0	5	45	1
107	49	TOTAL	5	11	14	9	2	0	7	51	1

Table 6 - Summary of Dominant Substrates By Habitat Type

Stream N	Name: Bridge	Creek				LLIC): 1238561402822	Drainage:	Eel River - South Fork
Survey D	Dates: 6/21/2	007 to 6/26/2	2007	Dry Units:	0				
Confluer	nce Location:	Quad: M	YERS FLAT	Legal Des	scription: T02S	R03ES20 Latit	ude: 40:16:56.0N	Longitude:	123:51:22.0W
Habitat Units	Units Fully Measured	Habitat Type	% Total Silt/Clay Dominant	% Total Sand Dominant	% Total Gravel Dominant	% Total Small Cobble Dominant	% Total Large Cobble Dominant	% Total Boulder Dominant	% Total Bedrock Dominant
21	5	LGR	0	0	0	20	80	0	0
21	3	HGR	0	0	0	0	33	67	0
4	2	CAS	0	0	0	0	0	100	0
20	4	RUN	0	0	25	25	0	50	0
9	3	SRN	0	0	0	33	33	33	0
25	25	MCP	16	20	32	4	12	16	0
3	3	STP	0	0	67	0	0	33	0
1	1	CRP	0	0	0	100	0	0	0
1	1	LSBo	0	0	100	0	0	0	0
2	2	PLP	0	50	0	0	0	50	0

Table 7 - Summary of Mean Percent Canopy for Entire Stream

Stream Name:	Bridge Creek					LLID: 1238561402822	Drainage:	Eel River - South Fork
Survey Dates: 6/21/2007 to 6/26/2007								
Confluence Loo	cation: Quad:	MYERS FLAT	Legal	Description:	T02SR03ES20	Latitude: 40:16:56.0N	Longitude:	123:51:22.0W
Mean Percent Canopy	Mean Percent Conifer	Mean Percent Hardwood	Mean Percent Open Units	Mean Right Bank % Cover	t Mean Left Bank % Cover			
89	50	50	0	84	81			

Note: Mean percent conifer and hardwood for the entire reach are means of canopy components from units with canopy values greater than zero.

Open units represent habitat units with zero canopy cover.

Table 8 - Fish Habitat Inventory Data Summary

Stream Name:	Bridge (Creek			LLID: 123	8561402822	Drainage: Ee	el River -	South Fork
Survey Dates:	6/21/20	07 to 6/26/2007	Survey Length (ft.): 8	5205 N	lain Channel (f	t.): 5172	Side Channe	el (ft.): 3	33
Confluence Loc	ation:	Quad: MYERS FLAT	Legal Description:	T02SR03ES2	20 Latitude:	40:16:56.0N	Longitude:	123:51:2	2.0W

Summary of Fish Habitat Elements By Stream Reach

STREAM REACH: 1		
Channel Type: B4	Canopy Density (%): 87.6	Pools by Stream Length (%): 23.7
Reach Length (ft.): 2356	Coniferous Component (%): 55.0	Pool Frequency (%): 39.1
Riffle/Flatwater Mean Width (ft.): 10.1	Hardwood Component (%): 45.0	Residual Pool Depth (%):
BFW:	Dominant Bank Vegetation: Coniferous Trees	< 2 Feet Deep: 83
Range (ft.): 13 to 20	Vegetative Cover (%): 77.4	2 to 2.9 Feet Deep: 17
Mean (ft.): 17	Dominant Shelter: Boulders	3 to 3.9 Feet Deep: 0
Std. Dev.: 3	Dominant Bank Substrate Type: Sand/Silt/Clay	>= 4 Feet Deep: 0
Base Flow (cfs.): 0.4	Occurrence of LWD (%): 19	Mean Max Residual Pool Depth (ft.): 1.6
Water (F): 53 - 60 Air (F): 49 - 64	LWD per 100 ft.:	Mean Pool Shelter Rating: 23
Dry Channel (ft): 0	Riffles: 3	
	Pools: 5	
	Flat: 3	
Pool Tail Substrate (%): Silt/Clay: 0 San	nd: 0 Gravel: 39 Sm Cobble: 44 Lg Cobble: 11	Boulder: 0 Bedrock: 6
Embeddedness Values (%): 1, 5,6, 2	. 66.7 3. 22.2 4. 0.0 5. 5.6	
STREAM REACH: 2		
STREAM REACH: 2 Channel Type: B2	Canopy Density (%): 90.7	Pools by Stream Length (%): 11.7
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816	Canopy Density (%): 90.7 Coniferous Component (%): 44.6	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%):
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: 10.8	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17 5	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders Dominant Bank Substrate Type: Sand/Silt/Clay	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0 >= 4 Feet Deep: 0
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17 5 5 Base Flow (cfs.): 0.4	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders Dominant Bank Substrate Type: Sand/Silt/Clay Occurrence of LWD (%): 7	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0 >= 4 Feet Deep: 0 Mean Max Residual Pool Depth (ft.): 1.6
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17 Std. Dev.: 5 Base Flow (cfs.): 0.4 Water (F): 50 - 60	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders Dominant Bank Substrate Type: Sand/Silt/Clay Occurrence of LWD (%): 7 LWD per 100 ft.:	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0 >= 4 Feet Deep: 0 Mean Max Residual Pool Depth (ft.): 1.6 Mean Pool Shelter Rating: 33
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17 5 5 Base Flow (cfs.): 0.4 Water (F): 50 - 60 Dry Channel (ft): 0 0 0	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders Dominant Bank Substrate Type: Sand/Silt/Clay Occurrence of LWD (%): 7 LWD per 100 ft.: Riffles: 2	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0 >= 4 Feet Deep: 0 Mean Max Residual Pool Depth (ft.): 1.6 Mean Pool Shelter Rating: 33
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17 Std. Dev.: 5 Base Flow (cfs.): 0.4 Water (F): 50 - 60 Dry Channel (ft): 0	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders Dominant Bank Substrate Type: Sand/Silt/Clay Occurrence of LWD (%): 7 LWD per 100 ft.: Riffles: 2 Pools: 6	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0 >= 4 Feet Deep: 0 Mean Max Residual Pool Depth (ft.): 1.6 Mean Pool Shelter Rating: 33
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17 Std. Dev.: 5 Base Flow (cfs.): 0.4 Water (F): 50 - 60 Dry Channel (ft): 0	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders Dominant Bank Substrate Type: Sand/Silt/Clay Occurrence of LWD (%): 7 LWD per 100 ft.: Riffles: 2 Pools: 6 Flat: 2	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0 >= 4 Feet Deep: 0 Mean Max Residual Pool Depth (ft.): 1.6 Mean Pool Shelter Rating: 33
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17 Std. Dev.: 5 Base Flow (cfs.): 0.4 Water (F): 50 - 60 Dry Channel (ft): 0	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders Dominant Bank Substrate Type: Sand/Silt/Clay Occurrence of LWD (%): 7 LWD per 100 ft.: Riffles: 2 Pools: 6 Flat: 2 md: 0 Gravel: 21 Sm Cobble: 21 Lg Cobble: 21	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0 >= 4 Feet Deep: 0 Mean Max Residual Pool Depth (ft.): 1.6 Mean Pool Shelter Rating: 33 Boulder: 36 Bedrock: 0
STREAM REACH: 2 Channel Type: B2 Reach Length (ft.): 2816 Riffle/Flatwater Mean Width (ft.): 10.8 BFW: Range (ft.): 11 to 26 Mean (ft.): 17 Std. Dev.: 5 Base Flow (cfs.): 0.4 Water (F): 50 - 60 Dry Channel (ft): 0 Pool Tail Substrate (%): Silt/Clay: 0 San Embeddedness Values (%): 1.7.1 2.	Canopy Density (%): 90.7 Coniferous Component (%): 44.6 Hardwood Component (%): 55.4 Dominant Bank Vegetation: Hardwood Trees Vegetative Cover (%): 87.6 Dominant Shelter: Boulders Dominant Bank Substrate Type: Sand/Silt/Clay Occurrence of LWD (%): 7 LWD per 100 ft.: Riffles: 2 Pools: 6 Flat: 2 nd: 0 Gravel: 21 Sm Cobble: 21 Lg Cobble: 21	Pools by Stream Length (%): 11.7 Pool Frequency (%): 23.0 Residual Pool Depth (%): < 2 Feet Deep: 71 2 to 2.9 Feet Deep: 29 3 to 3.9 Feet Deep: 0 >= 4 Feet Deep: 0 Mean Max Residual Pool Depth (ft.): 1.6 Mean Pool Shelter Rating: 33

Table 9 - Mean Percentage of Dominant Substrate and Vegetation

Stream Name:	Bridge	Creek				LLID: 12385	561402822	Drainage:	Eel River - South Fork
Survey Dates:	6/21/20	07 to 6/2	26/2007						
Confluence Loc	ation:	Quad:	MYERS FLAT	Legal Description:	T02SR03ES20	Latitude: 40	D:16:56.0N	Longitude:	123:51:22.0W

3

Mean Percentage of Dominant Stream Bank Substrate

Dominant Class of Substrate	Number of Units Right Bank	Number of Units Left Bank	Total Mean Percent (%)
Bedrock	2	3	5.1
Boulder	5	11	16.3
Cobble / Gravel	12	9	21.4
Sand / Silt / Clay	30	26	57.1

Mean Percentage of Dominant Stream Bank Vegetation

Dominant Class of Vegetation	Number of Units Right Bank	Number of Units Left Bank	Total Mean Percent (%)
Grass	4	6	10.2
Brush	11	9	20.4
Hardwood Trees	18	16	34.7
Coniferous Trees	16	18	34.7
No Vegetation	0	0	0.0

Total Stream Cobble Embeddedness Values:

Table 10 - Mean Percent of Shelter Cover Types For Entire Stream

StreamName: Bridge Creek

LLID: 1238561402822 Drainage: Eel River - South Fork

Survey Dates: 6/21/2007 to 6/26/2007

Confluence Location: Quad: MYERS FLAT

Legal Description: T02SR03ES20 Latitude: 40:16:56.0N Longitude: 123:51:22.0W

	Riffles	Flatwater	Pools
UNDERCUT BANKS (%)	5	11	4
SMALL WOODY DEBRIS (%)	0	2	16
LARGE WOODY DEBRIS (%)	6	11	16
ROOT MASS (%)	3	6	11
TERRESTRIAL VEGETATION (%)	6	0	1
AQUATIC VEGETATION (%)	0	0	0
WHITEWATER (%)	16	7	5
BOULDERS (%)	64	64	45
BEDROCK LEDGES (%)	0	0	1





BRIDGE CREEK 2007 HABITAT TYPES BY PERCENT TOTAL LENGTH



BRIDGE CREEK 2007 HABITAT TYPES BY PERCENT OCCURRENCE



BRIDGE CREEK 2007 POOL TYPES BY PERCENT OCCURRENCE



BRIDGE CREEK 2007 MAXIMUM DEPTH IN POOLS



BRIDGE CREEK 2007 PERCENT EMBEDDEDNESS



BRIDGE CREEK 2007 MEAN PERCENT COVER TYPES IN POOLS



BRIDGE CREEK 2007 SUBSTRATE COMPOSITION IN POOL TAIL-OUTS



BRIDGE CREEK 2007 MEAN PERCENT CANOPY



BRIDGE CREEK 2007 DOMINANT BANK COMPOSITION IN SURVEY REACH



BRIDGE CREEK 2007 DOMINANT BANK VEGETATION IN SURVEY REACH

