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Attached is a corrected version of the habitat survey for Bakewell Creek conducted in 1980. Major changes were made in some of the sub-total values but little change was noted for the overall totals. Please attach this correction to the 1980 Assessment report for the Ketchikan Area.

Mike Pease

Appendix E

Bakewell Lake/Creek, Biological and Habitat Survey

On July 24 and 25, 1980, Bakewell Creek was surveyed above Bakewell Lake and the following parameters were established.

1. Lake area (Bakewell and Badger Lakes) -- 1,230 acres.
2. Stream area -- 823,920 ft.^{2}. 823,900
3. Salmon spawning area -- 363,015.60 ft.^{2}.
4. Salmon rearing area -- 330,551.15 ft.^{2}. 330,531
5. Steelhead rearing area -- 135,110.00 ft.^{2}. 135,080

With an operating fish ladder this stream has the potential of producing a large run of sockeye and coho salmon. The stream is navigable to salmon all the way from Bakewell Lake to Badger Lake. Quantities and distribution of fish habitat is presented in the following tables.

On September 13, 1980, the stream from Badger Lake to Bakewell Lake was surveyed for adult salmon. One tagged sockeye and 21 untagged sockeye were observed in the lower one-half mile of this section. Three dead sockeye and one dead coho were also observed in the same section of creek. No adult salmon were observed above, but coho fry were seen throughout the system. At the confluence of the creek and Bakewell Lake, a school of approximately 100 adult coho salmon was observed.

From observations and the results of these surveys, it is apparent that adult salmon are readily passling the fish ladder but that the spawning area in the stream is still under utilized.

Using the results of the habitat surveys and unit production estimates prepared in Sheridans 1969 Benefit/Cost Handbook and subsequent revisions in appropriate factors, the production capability of Bakewell Lake and Creek is estimated as follows:

Sockeye Salmon

Total Run	102,500
Harvestable surplus	61,500
Optimum Escapement	41,000

Coho Salmon

Total Run	41,333
Harvestable surplus	24,800
Optimum Escapement	16,533

Estimates of Benefit/Cost for the reconstruction of the Bakewell Fishway and the economic return potential for the above production estimates must be done at a later date when more refinied data are available.

Steve McCall
Fisheries Technician

July 24-25, 1980

Survey Starting at Head of Bakewell Lake

Cumulative Distance (ft.)	Length (ft.)	Width (ft.)	Area(ft.^{2}) L x W	P/R	% ASA	Spawning Habitat(ft.^{2})	Rearing Habitat(ft.^{2})	% Gradient	Depth Inches
0	--	--	--	--	--	--			
285	285	50	14250	100/0	0	0	14250	0-.25	24
514	229	100	22900	80/20	20	4580	18320	.5	10-14
658	144	60	8640	100/0	0	0	8640	0	48
786	128	30	3840	50/50	40	1536	1920	1	12-24
965	179	30	5370	20/80	50	2685	1074	.5	15
1202	237	30	7110	60/40	40	2844	4266	1	12-24
1313	111	40	4440	20/80	60	2664	888	1	8-12
1483	170	40	6800	90/10	10	680	6102	0-.5	12-18
1661	178	50	8900	90/10	10	890	8010	1	36
1831	170	30	5100	10/90	80	4590	5100	1	10
1971	140	35	4900	50/50	40	1960	2450	.5	12
2305	334	20	6680	10/90	90	6012	668	1-2	12-15
Side Channel	120	8	960	60/40	40	384	576	1	10
2517	212	35	7420	50/50	50	3710	3710	1-1.5	8-12
3060	543	40	21720	50/50	30	6516	10860	.5-1	10
3363	303	40	12120	10/90	80	1212	9696	1-1.5	10-14
3730	367	30	11010	10/90	70	7707	1101	2	15-20
4130	400	35	14000*	20/80	20	2800	2800	3-4	12-15
4428	298	40	11920*	10/90	10	1192	1192	2-3	12
4921	493	35	17225*	5/95	0	0	862.75	3-4	12-15
5156	235	25	5875*	5/95	0	0	293.75	5-6	18
5600 reset to 0	444	35	15540	95/5	5	777	14763	.5	18
265	265	30	7950	20/80	80	6360	1590	2	12-18
534	269	35	9415	5/95	90	8473	470.75	2	12-15
1119	585	25	14625*	20/80	5	731	2925	4-5	18
1605	486	35	17010	10/90	80	13608	1701	1-2	8-12
1989	384	40	15360	40/60	10	1536	6144	1	12-18
2197	208	25	5200*	10/90	5	260	520	[illegible]	18-24
[illegible]	135	35	[illegible]	[illegible]	10	462.5	1387.5	[illegible]	[illegible]
[illegible]	112	30	[illegible]	[illegible]	40	[illegible]	672	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Survey Starting at Head of Bakewell Lake

Cumulative Distance (ft.)	Length (ft.)	Width (ft.)	Area(ft.^{2}) L x W	P/R	% ASA	Spawning Habitat(ft.^{2})	Rearing Habitat(ft.^{2})	% Gradient	Depth Inches
121	121	46	~~5556~~ 5566	75/25	25	1389	4167	15	30
605	484	46	22264	60/40	40	8905.6	13358.4	5	36
1605	1000	40	40000	65/35	35	14000.	[illegible]000.	5	40
2605	1000	40	40000	70/30	30	12000.	28000.	3	30
3605	1000	35	35000	60/40	40	14000.	21000.	3	30
4605	1000	30	30000	10/90	90	27000.	3000.	3	30
6605	2000	35	70000	40/60	60	42000.	28000.	2	25
8605	2000	35	70000	40/60	60	42000.	28000.	2	32
10605	2000	46	92000	10/90	90	82800.	9200.	2	40
~~[illegible]~~			~~[illegible]~~			~~[illegible]~~	~~[illegible]~~		
10605			404830			244,094	160,725		

Tributaries to Bakewell Lake

Tributary No. 1									
1182	1182	15	17730*	25/75	15	2660	4432	3	12-18
Tributary No.2									
655	655	25	16375	50/50	35	5731	8188	2	18-36
1655	1000	20	20000	40/60	25	5000	8000	2	
3385	1730	10	17300*	40/60	15	2595	6920	3	
5505	2120	6	12780*	30/70	5	639	3834	5-7	
7805	2300	6	13800*	30/70	5	690	4140	5-7	
~~[illegible]~~			97985			17315	35514		
7805									

Grand Totals

* = Areas Identified as potential steelhead rearing habitat.

~~[illegible]~~	~~[illegible]~~	363015	~~[illegible]~~
[illegible]	823900		330531