

APPENDIX K ALIGNMENT ALTERNATIVES SCOUR ANALYSIS

Appendix K.1
Alternative 1 Output

Appendix K.2
Alternative 2 Output

Appendix K.3
Alternative 3 Output

Appendix K.4
Alternative 4 Output

APPENDIX K.1
ALTERNATIVE 1 OUTPUT

Project Name Pantano Wash
 Project Number 07125-01 Made by jco Date 9/20/2008
 Reference COT SMDDFM Checked By Date

NOTES

General Scour $Z_{gs} = Y_{max} \left[\frac{0.0685V_m^{0.8}}{Y_n^{0.4} S_p^{0.3}} - 1 \right]$ General Scour is best estimated by performing a detailed sediment-transport analysis. When not practical this equation (Zeller, 1981) should be used.

Anti-Dune Scour $Z_a = 0.0137V_m^2$ The anti-dune trough depth can never exceed one-half the depth of flow. If the result is greater than one-half the depth of flow, change the results manually.

Low Flow Thawleg To be used when the ratio of the flow width to the flow depth is greater than 1.15 times the average velocity of flow for the 100-year discharge. If the flow width or flow depth exceeds the top width and bank height of the channel, use the topwidth and flow depth at bankfull conditions. If a low flow thawleg is to be used, it should be assumed at least 2 feet deep for regional watercourses and at least 1 foot deep for all other watercourses, unless field observations dictate otherwise.

Bend Scour **Bend scour is not applicable for this project**

Total Scour $Z_t = 1.3 (Z_{gs} + Z_a + Z_{bs} + Z_{lft})$ Total scour is the sum of general scour, anti-dune scour, bend scour and the low flow thawleg depths.

XS	Q		Channel Invert	WSE Water Surface Elevation	Y _{max} Flow Depth	S _p * Energy Slope	V _m Flow Velocity	A Flow Area	T _w Top Width	Y _n Hydraulic Depth	Z _{gs} General Scour	Z _{mb} HEC-6	Z _a Anti-Dune Scour	Z _{lft} Low Flow Thawleg	Total Scour (2)	Z _t Total Scour (3)
	Discharge															
	(cfs)	(ft)														
1600	32000	2540	2548.54	8.54	0.007058	14.81	2160.17	320.56	6.74	1.87	0.62	3.00	2.00	8.94	7.31	
1500	32000	2532	2546.09	14.09	0.00291	10.83	2955.01	354.78	8.33	1.94	0.5	1.61	2.00	7.21	5.34	
1450	32000	2531	2545.54	14.54	0.002535	10.73	2983.01	326.53	9.14	1.95	0	1.58	2.00	7.19	4.65	
1400	32000	2530	2544.44	14.44	0.003276	12.07	2651.62	294.4	9.01	2.32	0	2.00	2.00	8.21	5.19	
1350	32000	2530	2544.07	14.07	0.002249	11.33	2868.98	299.54	9.61	2.86	0.32	1.76	2.00	8.61	5.30	
1300	32000	2529	2542.30	13.30	0.002857	11.97	2672.72	271.88	9.83	2.12	0.35	1.96	2.00	7.91	5.61	
1230	32000	2529	2538.44	9.44	0.006503	16.65	1931.92	265.19	7.29	3.12	0.00	3.80	2.00	11.59	7.54	
1220	32000	2527	2537.18	10.18	0.005447	15.23	2100.79	240.31	8.74	2.18	3.01	3.18	2.00	9.57	10.64	
1200	32000	2526	2535.69	9.69	0.004261	13.68	2338.39	260.39	8.98	1.81	0	2.56	2.00	8.29	5.93	
1120	32000	2524	2536.04	12.04	0.002579	11.76	2721.33	259.41	10.49	1.79	0.92	1.89	2.00	7.39	6.26	
1110	32000	2523	2531.94	8.94	0.006792	16.6	1927.92	227.56	8.47	2.08	0.00	3.78	2.00	10.22	7.51	
1100	32000	2520	2531.21	11.21	0.00459	14.98	2135.82	218.23	9.79	2.31	1.68	3.07	2.00	9.60	8.78	
1050	32000	2520	2528.87	8.87	0.00674	16.31	1961.8	238.16	8.24	2.06	0	3.64	2.00	10.02	7.34	
1010	32000	2519	2526.57	7.57	0.007007	15.08	2121.98	300.86	7.05	1.65	0	3.12	2.00	8.79	6.65	
1000	32000	2510.9	2523.53	12.63	0.001898	10.31	3103.56	290.38	10.69	1.58	0	1.46	2.00	6.55	4.49	
990	32000	2510.2	2523.42	13.21	0.001414	9.73	3288.01	264.08	12.45	1.37	0	1.30	2.00	6.07	4.29	
975	32000	2509.4	2522.85	13.45	0.001653	10.61	3016.54	238.36	12.66	1.64	0	1.54	2.00	6.73	4.60	
965	32000	2508.7	2522.52	13.82	0.001683	10.83	2953.54	228.94	12.90	1.73	0	1.61	2.00	6.94	4.69	
950	32000	2507.9	2521.88	13.98	0.00199	11.79	2713.63	208.35	13.02	1.97	0	1.90	2.00	7.64	5.08	
900	32000	2506.9	2520.81	13.91	0.002662	13.19	2426.12	195.59	12.40	2.32	0	2.38	2.00	8.71	5.70	
875	32000	2505.2	2520.50	14.30	0.002452	12.9	2480	190.61	13.01	2.18	0	2.28	2.00	8.40	5.56	
865	32000	2503.5	2519.95	14.45	0.002622	13.33	2401.46	186.66	12.87	2.38	0	2.43	2.00	8.86	5.78	
850	32000	2504.8	2519.25	14.45	0.00288	13.92	2299.13	176.97	12.99	2.42	0.02	2.65	2.00	9.20	6.08	
825	32000	2503.9	2515.66	11.76	0.006508	18.84	1698.61	156.17	10.88	2.95	1.14	4.86	2.00	12.75	10.40	
800	32000	2503.3	2514.23	10.92	0.006477	18.16	1762.4	172.25	10.23	2.69	0	4.52	2.00	11.97	8.47	
750	32000	2502	2511.59	9.59	0.005613	15.89	2013.69	218.76	9.21	2.11	0.89	3.46	2.00	9.83	8.25	
700	32000	2500.8	2510.66	9.86	0.004744	14.88	2150.35	227.86	9.44	2.02	0	3.03	2.00	9.17	6.54	
650	32000	2499.4	2509.19	9.79	0.004864	15	2132.98	227.57	9.37	2.03	0	3.08	2.00	9.24	6.61	
600	32000	2498.3	2508.14	9.84	0.004816	14.97	2137.76	227.09	9.41	2.03	0	3.07	2.00	9.23	6.59	
550	32000	2496.9	2506.91	10.01	0.004465	14.57	2195.76	229.35	9.57	2.00	0	2.91	2.00	8.98	6.38	
500	32000	2496.1	2506.60	10.50	0.003612	13.33	2400.28	244.5	9.82	1.88	0	2.43	2.00	8.21	5.76	
450	32000	2494.6	2505.83	11.23	0.002922	12.48	2564.12	244.5	10.49	1.80	0	2.13	2.00	7.72	5.37	
400	32000	2493.2	2505.33	12.13	0.002311	11.67	2742.07	240.15	11.42	1.71	0	1.87	2.00	7.24	5.03	
350	32000	2492	2504.38	12.38	0.0026	12.50	2560.59	222.25	11.52	1.93	0	2.14	2.00	7.90	5.38	
325	32000	2491.5	2504.36	12.86	0.0022	11.65	2746.54	227.31	12.08	1.71	0.86	1.86	2.00	7.24	6.14	
300	32000	2490.9	2504.11	13.21	0.0021	11.54	2773.52	232.70	11.92	1.88	0	1.82	2.00	7.41	4.97	
290	32000	2490.2	2502.18	11.98	0.0034	13.97	2290.10	203.18	11.27	2.20	0.2	2.67	2.00	8.94	6.34	
275	32000	2489.8	2500.15	10.35	0.0060	17.09	1871.98	191.22	9.79	2.43	1.63	4.00	2.00	10.96	9.92	
200	32000	2488.8	2498.18	10.18	0.0066	17.63	1815.39	188.47	9.63	2.47	0	4.26	2.00	11.35	8.14	
150	32000	2486.2	2497.02	10.82	0.0047	15.55	2058.50	201.26	10.23	2.29	0	3.31	2.00	9.89	6.91	
100	32000	2484	2496	12.00	0.0050	14.39	2223.50	261.12	8.52	2.44	0.89	2.84	2.00	9.46	7.44	

- (1) Cross-sections reporting aggradation were given a value of zero for the purpose of scour calculations
- (2) Includes COT General Scour Value
- (3) Includes HEC-6 value for mobile bed adjustment at Q₁₀₀

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* SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS * * U.S. ARMY CORPS OF
ENGINEERS * *
* Version: 4.2 - May 2004 * * HYDROLOGIC
ENGINEERING CENTER * *
* INPUT FILE: alt175t..dat * * 609 SECOND STREET
* * *
* OUTPUT FILE: alt175.out * * DAVIS, CALIFORNIA
95616-4687 * *
* RUN DATE: 12 SEP 08 RUN TIME: 12:51:08 * * (530) 756-1104
*
*****
*****

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          X      X  XXXXXXXX  XXXXXX          XXXXXX
          X      X  X          X      X          X      X
          X      X  X          X          X
          XXXXXXXX  XXXX      X          XXXXXX  XXXXXXXX
          X      X  X          X          X      X
          X      X  X          X      X          X      X
          X      X  XXXXXXXX  XXXXXX          XXXXXX

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* MAXIMUM LIMITS FOR THIS VERSION ARE: *
* 10 Stream Segments (Main Stem + Tributaries) *
* 500 Cross Sections *
* 200 Elevation/Station Points per Cross Section *
* 20 Grain Sizes *
* 20 Control Points *
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T1
T2 Pantano-Sediment Transpo rt-alt2
T3 River #1,Reach # 1

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N values... Left Channel Right Contraction Expansion
           0.0450 0.0300 0.0400 1.1000 0.7000

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SECTION NO. 100.000
...ELEVATION of Model Bottom = 2474.000 ft.

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N values... Left Channel Right Contraction Expansion
           0.0500 0.0300 0.0500 1.1000 0.7000

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SECTION NO. 150.000
...ELEVATION of Model Bottom = 2476.200 ft.

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N values... Left Channel Right Contraction Expansion
           0.0450 0.0300 0.0400 1.1000 0.7000

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SECTION NO. 200.000
...ELEVATION of Model Bottom = 2478.000 ft.

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N values... Left Channel Right Contraction Expansion
           0.0450 0.0300 0.0400 1.1000 0.7000

```

SECTION NO. 275.000
...ELEVATION of Model Bottom = 2479.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0450	0.0300	0.0400	1.1000	0.7000

SECTION NO. 290.000
...ELEVATION of Model Bottom = 2490.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 300.000
...ELEVATION of Model Bottom = 2480.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 325.000
...ELEVATION of Model Bottom = 2481.500 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 350.000
...ELEVATION of Model Bottom = 2482.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 400.000
...ELEVATION of Model Bottom = 2483.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 450.000
...ELEVATION of Model Bottom = 2484.600 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 500.000
...ELEVATION of Model Bottom = 2486.100 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 550.000
...ELEVATION of Model Bottom = 2486.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 600.000
...ELEVATION of Model Bottom = 2488.300 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 650.000
...ELEVATION of Model Bottom = 2489.400 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 700.000
...ELEVATION of Model Bottom = 2490.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 750.000
...ELEVATION of Model Bottom = 2492.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 800.000
...ELEVATION of Model Bottom = 2503.300 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 825.000
...ELEVATION of Model Bottom = 2493.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 850.000
...ELEVATION of Model Bottom = 2494.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 865.000
...ELEVATION of Model Bottom = 2495.500 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 875.000
...ELEVATION of Model Bottom = 2496.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 900.000
...ELEVATION of Model Bottom = 2496.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 950.000
...ELEVATION of Model Bottom = 2497.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 965.000
...ELEVATION of Model Bottom = 2498.700 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 975.000
...ELEVATION of Model Bottom = 2499.400 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 990.000
...ELEVATION of Model Bottom = 2500.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1000.000
...ELEVATION of Model Bottom = 2510.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1010.000
...ELEVATION of Model Bottom = 2519.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1050.000
...ELEVATION of Model Bottom = 2510.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1100.000
...ELEVATION of Model Bottom = 2510.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1110.000
...ELEVATION of Model Bottom = 2523.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1120.000
...ELEVATION of Model Bottom = 2514.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1200.000
...ELEVATION of Model Bottom = 2526.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1220.000
...ELEVATION of Model Bottom = 2517.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1230.000
...ELEVATION of Model Bottom = 2529.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1300.000
...ELEVATION of Model Bottom = 2519.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1350.000
...ELEVATION of Model Bottom = 2520.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1400.000
...ELEVATION of Model Bottom = 2520.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1450.000
...ELEVATION of Model Bottom = 2521.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1500.000
...ELEVATION of Model Bottom = 2522.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.5500	1.1000	0.7000

SECTION NO. 1600.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1700.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1800.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1900.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 2000.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 2100.000
...ELEVATION of Model Bottom = 2530.000 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 46
NO. OF INPUT DATA MESSAGES = 0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK = 46
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK= 1
END OF GEOMETRIC DATA

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T4	BED GRADATIONS FROM FIELD SAMPLE	S.					
T5	Use Full Range o f Sandsand Grav	els					
T6	SEDIMENT TRANSPO RT BYToffalet	i					
T7	SEDIMENT INFLOWBY toffaletis EQ	UATI	ON				
T8							

Pantano-Sediment Transpo rt-alt2
River #1, Reach # 1

SEDIMENT PROPERITES AND PARAMETERS

	SPI	IBG	MNQ	SPGF	ACGR	NFALL	IBSHER
I1	20.	0	1	1.000	32.174	2	1

SANDS - BOULDERS ARE PRESENT

I4	MTC 1	IASA 1	LASA 10	SPGS 2.650	GSF 0.667	BSAE 0.500	PSI 30.000	UWDLB 93.000
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USING TRANSPORT CAPACITY RELATIONSHIP # 1, TOFFALETI
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	VERY FINE GRAVEL..	2.828
FINE SAND.....	0.177	FINE GRAVEL.....	5.657
MEDIUM SAND.....	0.354	MEDIUM GRAVEL.....	11.314
COARSE SAND.....	0.707	COARSE GRAVEL.....	22.627
VERY COARSE SAND..	1.414	VERY COARSE GRAVEL	45.255

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

I5	DBI 0.000	DBN 1.000	XID 0.000	XIN 1.000	XIU 0.000	UBI 0.000	UBN 1.000	JSL 1
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SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

FLOW	1000.00	3000.00	6000.00	10000.0	15000.0	20000.0	25000.0	32000.0
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VF SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
F SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
M SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
C SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VC SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VF GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
F GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
M GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
C GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VC GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19

TOTAL	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18
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REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS CHANNEL DISTANCE SECTION DOWNSTREAM NO. (miles)	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS			ACCUMULATED FROM (ft)
			LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	
-----	0.000					
100.000 0.000		457.380	2501.000	2484.000	2502.000	0.000
150.000 0.054	287.460	358.900	2502.000	2486.200	2502.000	287.460
200.000 0.110	293.940	914.950	2507.000	2488.000	2514.000	581.400
275.000 0.160	264.000	316.550	2509.000	2489.800	2507.000	845.400
290.000 0.176	85.000	313.580	2511.000	2490.200	2510.000	930.400
300.000 0.203	142.740	326.780	2511.000	2490.900	2512.000	1073.140
325.000 0.227	128.000	595.080	2513.000	2491.500	2512.000	1201.140
350.000 0.247	102.000	410.830	2512.000	2492.000	2509.000	1303.140
400.000 0.293	246.400	870.860	2512.000	2493.200	2510.000	1549.540
450.000 0.346	275.940	427.130	2513.000	2494.600	2510.000	1825.480
500.000 0.405	311.990	852.010	2515.000	2496.100	2515.000	2137.470
550.000 0.437	170.240	497.230	2515.000	2496.900	2513.000	2307.710
600.000 0.492	292.560	815.390	2516.000	2498.300	2516.000	2600.270
650.000 0.534	219.600	461.500	2516.000	2499.400	2516.000	2819.870
700.000 0.590	294.120	548.150	2518.000	2500.800	2518.000	3113.990
750.000 0.636	245.150	382.010	2518.000	2502.000	2519.000	3359.140
	259.440					

800.000		733.080	2522.000	2503.300	2522.000	3618.580
0.685						
	110.490					
825.000		357.950	2523.000	2503.900	2521.000	3729.070
0.706						
	202.000					
850.000		346.100	2524.000	2504.800	2523.000	3931.070
0.745						
	153.000					
865.000		337.650	2525.000	2505.500	2528.000	4084.070
0.773						
	143.000					
875.000		354.100	2525.000	2506.200	2530.000	4227.070
0.801						
	151.880					
900.000		275.590	2526.000	2506.900	2530.000	4378.950
0.829						
	206.250					
950.000		586.790	2527.000	2507.900	2536.000	4585.200
0.868						
	148.000					
965.000		347.990	2529.000	2508.700	2537.000	4733.200
0.896						
	151.000					
975.000		462.200	2529.000	2509.400	2538.000	4884.200
0.925						
	168.000					
990.000		764.810	2529.000	2510.200	2538.000	5052.200
0.957						
	147.000					
1000.000		655.410	2530.000	2510.900	2540.000	5199.200
0.985						
	71.920					
1010.000		733.300	2533.000	2519.000	2537.000	5271.120
0.998						
	162.000					
1050.000		813.150	2535.000	2520.000	2540.000	5433.120
1.029						
	294.000					
1100.000		527.910	2538.000	2520.000	2537.000	5727.120
1.085						
	36.390					
1110.000		506.220	2538.000	2523.000	2537.000	5763.510
1.092						
	443.700					
1120.000		638.130	2539.000	2524.000	2539.000	6207.210
1.176						
	56.560					
1200.000		443.870	2540.000	2526.000	2539.000	6263.770
1.186						
	411.750					
1220.000		351.910	2542.000	2527.000	2538.000	6675.520
1.264						
	47.440					
1230.000		522.090	2543.000	2529.000	2539.000	6722.960
1.273						
	383.360					

1300.000		496.550	2545.000	2529.000	2546.000	7106.320
1.346						
	277.240					
1350.000		348.110	2544.000	2530.000	2549.000	7383.560
1.398						
	211.150					
1400.000		810.240	2547.000	2530.000	2548.000	7594.710
1.438						
	198.720					
1450.000		391.360	2546.000	2531.000	2547.000	7793.430
1.476						
	214.550					
1500.000		873.220	2552.000	2532.000	2550.000	8007.980
1.517						
	679.420					
1600.000		449.020	2560.000	2540.000	2555.000	8687.400
1.645						
	200.000					
1700.000		449.020	2560.000	2540.000	2555.000	8887.400
1.683						
	200.000					
1800.000		449.020	2560.000	2540.000	2555.000	9087.400
1.721						
	200.000					
1900.000		449.020	2560.000	2540.000	2555.000	9287.400
1.759						
	200.000					
2000.000		449.020	2560.000	2540.000	2555.000	9487.400
1.797						
	200.000					
2100.000		449.020	2560.000	2540.000	2555.000	9687.400
1.835						

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size			
100.000	32.000	0.328	0.210	0.997	0.997	VF SAND	0.042	VC SAND	0.190
M	GRVL	0.057							
						F SAND	0.088	VF GRVL	0.102
C	GRVL	0.025							
						M SAND	0.190	F GRVL	0.088
VC	GRVL	0.005							
						C SAND	0.206		
150.000	32.000	0.328	0.210	0.996	0.992	VF SAND	0.042	VC SAND	0.191
M	GRVL	0.057							
						F SAND	0.086	VF GRVL	0.104
C	GRVL	0.026							
						M SAND	0.187	F GRVL	0.090
VC	GRVL	0.006							
						C SAND	0.203		
200.000	32.000	0.328	0.210	0.996	0.991	VF SAND	0.042	VC SAND	0.193
M	GRVL	0.058							

C GRVL 0.030						F SAND 0.077	VF GRVL 0.106
VC GRVL 0.008						M SAND 0.192	F GRVL 0.087
						C SAND 0.208	
1450.000 32.000	0.328	0.210	0.995	0.992	VF SAND 0.030	VC SAND 0.196	
M GRVL 0.057					F SAND 0.078	VF GRVL 0.104	
C GRVL 0.029					M SAND 0.195	F GRVL 0.086	
VC GRVL 0.007					C SAND 0.211		
1500.000 32.000	0.328	0.210	0.996	0.992	VF SAND 0.029	VC SAND 0.195	
M GRVL 0.056					F SAND 0.080	VF GRVL 0.102	
C GRVL 0.028					M SAND 0.198	F GRVL 0.084	
VC GRVL 0.007					C SAND 0.214		
1600.000 32.000	0.328	0.210	0.997	0.997	VF SAND 0.028	VC SAND 0.193	
M GRVL 0.054					F SAND 0.084	VF GRVL 0.095	
C GRVL 0.025					M SAND 0.209	F GRVL 0.078	
VC GRVL 0.005					C SAND 0.224		
1700.000 32.000	0.328	0.210	0.997	0.997	VF SAND 0.028	VC SAND 0.193	
M GRVL 0.054					F SAND 0.084	VF GRVL 0.095	
C GRVL 0.025					M SAND 0.209	F GRVL 0.078	
VC GRVL 0.005					C SAND 0.224		
1800.000 32.000	0.328	0.210	0.997	0.997	VF SAND 0.028	VC SAND 0.193	
M GRVL 0.054					F SAND 0.084	VF GRVL 0.095	
C GRVL 0.025					M SAND 0.209	F GRVL 0.078	
VC GRVL 0.005					C SAND 0.224		
1900.000 32.000	0.328	0.210	0.997	0.997	VF SAND 0.028	VC SAND 0.193	
M GRVL 0.054					F SAND 0.084	VF GRVL 0.095	
C GRVL 0.025					M SAND 0.209	F GRVL 0.078	
VC GRVL 0.005					C SAND 0.224		
2000.000 32.000	0.328	0.210	0.997	0.997	VF SAND 0.028	VC SAND 0.193	
M GRVL 0.054							

C GRVL 0.025	F SAND 0.084 VF GRVL 0.095
VC GRVL 0.005	M SAND 0.209 F GRVL 0.078
	C SAND 0.224
2100.000 32.000 0.328 0.210 0.997 0.997	VF SAND 0.028 VC SAND 0.193
M GRVL 0.054	F SAND 0.084 VF GRVL 0.095
C GRVL 0.025	M SAND 0.209 F GRVL 0.078
VC GRVL 0.005	C SAND 0.224

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1:

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft) (cu.yd)	
100.000	143.730	424.553	10.000	610211.	22600.4
150.000	290.700	468.838	10.000	0.136291E+07	50478.3
200.000	278.970	722.920	10.000	0.201673E+07	74693.7
275.000	174.500	467.195	10.000	815255.	30194.6
290.000	113.870	316.707	0.200	7212.69	267.137
300.000	135.370	366.742	10.000	496459.	18387.4
325.000	115.000	518.071	10.000	595782.	22066.0
350.000	174.200	537.260	10.000	935907.	34663.2
400.000	261.170	720.387	10.000	0.188143E+07	69682.8
450.000	293.965	571.706	10.000	0.168061E+07	62245.0
500.000	241.115	718.632	10.000	0.173273E+07	64175.2
550.000	231.400	607.774	10.000	0.140639E+07	52088.4
600.000	256.080	704.230	10.000	0.180339E+07	66792.3
650.000	256.860	528.462	10.000	0.135741E+07	50274.4
700.000	269.635	507.221	10.000	0.136765E+07	50653.6
750.000	252.295	469.085	10.000	0.118348E+07	43832.5
800.000	184.965	613.661	0.000	0.00000	0.00000
825.000	156.245	399.609	10.000	624370.	23124.8
850.000	177.500	347.134	10.000	616162.	22820.8
865.000	148.000	341.755	10.000	505797.	18733.2
875.000	147.440	337.962	10.000	498291.	18455.2
900.000	179.065	346.429	10.000	620334.	22975.3
950.000	177.125	493.139	10.000	873473.	32350.8
965.000	149.500	406.617	10.000	607892.	22514.5
975.000	159.500	497.302	10.000	793197.	29377.7
990.000	157.500	693.995	10.000	0.109304E+07	40483.0
1000.000	109.460	688.426	0.000	0.00000	0.00000
1010.000	116.960	743.751	0.000	0.00000	0.00000
1050.000	228.000	742.392	10.000	0.169265E+07	62690.9
1100.000	165.195	611.721	10.000	0.101053E+07	37427.1
1110.000	240.045	547.405	0.000	0.00000	0.00000
1120.000	250.130	591.810	10.000	0.148029E+07	54825.7
1200.000	234.155	424.739	0.000	0.00000	0.00000
1220.000	229.595	385.257	10.000	884531.	32760.4
1230.000	215.400	508.267	0.000	0.00000	0.00000
1300.000	330.300	480.725	10.000	0.158783E+07	58808.7

1350.000	244.195	442.797	10.000	0.108129E+07	40047.7	
1400.000	204.935	663.186	10.000	0.135910E+07	50337.1	
1450.000	206.635	541.885	10.000	0.111972E+07	41471.3	
1500.000	446.985	727.207	10.000	0.325051E+07	120389.	
1600.000	439.710	558.262	10.000	0.245474E+07	90916.1	
1700.000	200.000	449.020	10.000	898040.	33260.7	
1800.000	200.000	449.020	10.000	898040.	33260.7	
1900.000	200.000	449.020	10.000	898040.	33260.7	
2000.000	200.000	449.020	10.000	898040.	33260.7	
2100.000	100.000	449.020	10.000	449020.	16630.4	

NO. OF INPUT DATA MESSAGES= 0
 END OF SEDIMENT DATA

=====
 \$H YD
 BEGIN COMPUTATIONS.

=====
 TIME STEP # 1
 * B
 COMPUTING FROM TIME= 0.0000 DAYS TO TIME= 0.0167 DAYS IN 2
 COMPUTATION STEPS

 ACCUMULATED TIME (yrs).... 0.000
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	8700.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.01	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	0.24***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

 SEDIMENT INFLOW at the Upstream Boundary:
 GRAIN SIZE LOAD (tons/day) | GRAIN SIZE LOAD (tons/day)

VERY FINE SAND....	0.00		VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00		FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00		MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00		COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00		VERY COARSE GRAVEL	0.00
				TOTAL =
				0.00
SEDIMENT OUTFLOW from the Downstream Boundary				
GRAIN SIZE	LOAD (tons/day)		GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	14457.88		VERY FINE GRAVEL..	108.36
FINE SAND.....	8731.43		FINE GRAVEL.....	23.36
MEDIUM SAND.....	5616.03		MEDIUM GRAVEL.....	4.93
COARSE SAND.....	3518.07		COARSE GRAVEL.....	0.91
VERY COARSE SAND..	925.99		VERY COARSE GRAVEL	0.11
				TOTAL =
				33387.07

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.014 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.03	2547.19	2539.97	8700.	1535.
2000.000	-0.02	2546.95	2539.98	8700.	3275.
1900.000	-0.01	2546.66	2539.99	8700.	4662.
1800.000	-0.01	2546.30	2539.99	8700.	7603.
1700.000	-0.01	2545.81	2539.99	8700.	10672.
1600.000	-0.02	2543.92	2539.98	8700.	17805.
1500.000	-0.01	2539.92	2531.99	8700.	22607.
1450.000	0.04	2539.19	2531.04	8700.	14371.
1400.000	-0.01	2537.96	2529.99	8700.	16216.
1350.000	0.00	2537.18	2530.00	8700.	17028.
1300.000	-0.01	2536.18	2528.99	8700.	20256.
1230.000	0.00	2533.19	2529.00	8700.	20254.
1220.000	-0.15	2532.66	2526.85	8700.	36648.
1200.000	0.01	2529.80	2526.01	8700.	33042.
1120.000	-0.07	2530.00	2523.93	8700.	47911.
1110.000	0.00	2526.92	2523.00	8700.	47780.
1100.000	-0.26	2526.35	2519.74	8700.	54345.
1050.000	0.25	2524.15	2520.25	8700.	22856.
1010.000	0.00	2522.33	2519.00	8700.	22857.
1000.000	0.00	2515.41	2510.90	8700.	22882.
990.000	0.09	2515.19	2510.29	8700.	23377.
975.000	0.06	2514.61	2509.46	8700.	20018.
965.000	0.03	2514.19	2508.73	8700.	17288.
950.000	0.01	2513.71	2507.91	8700.	17726.
900.000	0.01	2512.75	2506.91	8700.	18134.
875.000	0.00	2512.24	2506.20	8700.	18786.
865.000	0.01	2511.64	2505.51	8700.	18672.
850.000	-0.03	2511.08	2504.77	8700.	22213.
825.000	-0.05	2508.95	2503.85	8700.	24424.
800.000	0.00	2508.01	2503.30	8700.	24327.
750.000	-0.03	2506.48	2501.97	8700.	28256.
700.000	0.02	2505.36	2500.82	8700.	25590.

650.000	0.00	2503.88	2499.40	8700.	27767.
600.000	0.00	2502.81	2498.30	8700.	29605.
550.000	0.00	2501.36	2496.90	8700.	30671.
500.000	0.00	2500.56	2496.10	8700.	31325.
450.000	0.01	2499.10	2494.61	8700.	29896.
400.000	0.01	2498.09	2493.21	8700.	29116.
350.000	0.01	2496.82	2492.01	8700.	28062.
325.000	0.01	2496.58	2491.51	8700.	27856.
300.000	0.02	2496.08	2490.92	8700.	25613.
290.000	-0.03	2495.43	2490.17	8700.	28569.
275.000	-0.03	2494.38	2489.77	8700.	32329.
200.000	0.01	2492.68	2488.01	8700.	30671.
150.000	0.01	2492.10	2486.21	8700.	29227.
100.000	-0.05	2490.20	2483.95	8700.	33387.

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TIME STEP #          2
*      B
COMPUTING FROM TIME=      0.0139 DAYS TO TIME=      0.0969 DAYS IN      12
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....      0.000
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	18200.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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*****
TIME          ENTRY *          SAND          *
DAYS         POINT *      INFLOW  OUTFLOW  TRAP EFF *
0.10      2100.000 *          0.00          *
TOTAL=     100.000 *          0.00          2.41***** *
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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00

SEDIMENT OUTFLOW from the Downstream Boundary				TOTAL =	0.00
GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)		
VERY FINE SAND....	9103.77	VERY FINE GRAVEL..	131.80		
FINE SAND.....	23445.99	FINE GRAVEL.....	30.60		
MEDIUM SAND.....	7121.19	MEDIUM GRAVEL.....	6.88		
COARSE SAND.....	3070.92	COARSE GRAVEL.....	1.27		
VERY COARSE SAND..	993.45	VERY COARSE GRAVEL	0.12		
				TOTAL =	43905.99

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.097 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.05	2550.13	2539.95	18200.	128.
2000.000	-0.03	2549.81	2539.97	18200.	513.
1900.000	-0.03	2549.43	2539.97	18200.	702.
1800.000	-0.03	2548.97	2539.97	18200.	955.
1700.000	-0.28	2548.41	2539.72	18200.	41289.
1600.000	-0.05	2546.14	2539.95	18200.	41453.
1500.000	-0.05	2542.55	2531.95	18200.	42827.
1450.000	0.21	2541.72	2531.21	18200.	21386.
1400.000	0.01	2540.40	2530.01	18200.	17276.
1350.000	-0.03	2539.75	2529.97	18200.	18595.
1300.000	-0.21	2538.96	2528.79	18200.	54993.
1230.000	0.00	2535.60	2529.00	18200.	54983.
1220.000	-1.89	2535.50	2525.11	18200.	62326.
1200.000	0.51	2532.48	2526.51	18200.	67119.
1120.000	-0.87	2532.91	2523.13	18200.	74102.
1110.000	0.12	2529.46	2523.12	18200.	93546.
1100.000	-0.52	2530.41	2519.48	18200.	89197.
1050.000	1.54	2527.69	2521.54	18200.	50468.
1010.000	0.00	2524.36	2519.00	18200.	50468.
1000.000	0.00	2518.99	2510.90	18200.	50468.
990.000	0.41	2518.80	2510.61	18200.	40681.
975.000	0.18	2518.30	2509.58	18200.	37588.
965.000	0.10	2517.96	2508.80	18200.	35938.
950.000	0.07	2517.41	2507.97	18200.	34597.
900.000	0.06	2516.13	2506.96	18200.	33399.
875.000	0.06	2515.65	2506.26	18200.	33023.
865.000	0.06	2514.58	2505.56	18200.	32681.
850.000	-0.63	2514.27	2504.17	18200.	32038.
825.000	-0.59	2511.72	2503.31	18200.	30423.
800.000	0.16	2511.07	2503.46	18200.	28009.
750.000	-0.68	2509.99	2501.32	18200.	34250.
700.000	0.53	2507.81	2501.33	18200.	32443.
650.000	0.08	2506.39	2499.48	18200.	33227.
600.000	0.06	2505.31	2498.36	18200.	33459.
550.000	0.05	2503.88	2496.95	18200.	33703.
500.000	0.05	2503.21	2496.15	18200.	34188.
450.000	0.05	2501.97	2494.65	18200.	39368.
400.000	0.05	2501.15	2493.25	18200.	31642.

350.000	0.02	2499.78	2492.02	18200.	38323.
325.000	0.04	2499.63	2491.54	18200.	38175.
300.000	0.04	2499.06	2490.94	18200.	37084.
290.000	-0.15	2498.35	2490.05	18200.	37343.
275.000	-0.43	2497.70	2489.37	18200.	50818.
200.000	0.17	2495.27	2488.17	18200.	45698.
150.000	0.03	2493.60	2486.23	18200.	40654.
100.000	-0.69	2492.40	2483.31	18200.	43906.

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TIME STEP # 3
 * B
 COMPUTING FROM TIME= 0.0972 DAYS TO TIME= 0.1392 DAYS IN 6
 COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.000
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	20850.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.14	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	3.35***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	7863.82	VERY FINE GRAVEL..	193.09

FINE SAND.....	16630.57		FINE GRAVEL.....	45.11
MEDIUM SAND.....	15568.05		MEDIUM GRAVEL.....	10.11
COARSE SAND.....	1775.16		COARSE GRAVEL.....	1.86
VERY COARSE SAND..	1345.73		VERY COARSE GRAVEL	0.18
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			TOTAL =	43433.68

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.139 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.05	2550.76	2539.95	20850.	156.
2000.000	-0.04	2550.41	2539.96	20850.	669.
1900.000	-0.03	2550.00	2539.97	20850.	890.
1800.000	-0.03	2549.49	2539.97	20850.	1051.
1700.000	-0.42	2549.07	2539.58	20850.	4245.
1600.000	-0.06	2546.63	2539.94	20850.	5444.
1500.000	-0.25	2543.38	2531.75	20850.	81958.
1450.000	0.46	2542.31	2531.46	20850.	38481.
1400.000	0.06	2540.85	2530.06	20850.	32644.
1350.000	-0.06	2540.20	2529.94	20850.	33909.
1300.000	-0.50	2539.67	2528.50	20850.	31070.
1230.000	0.00	2536.21	2529.00	20850.	31080.
1220.000	-1.94	2536.01	2525.06	20850.	34536.
1200.000	0.34	2532.87	2526.34	20850.	49356.
1120.000	-0.95	2533.78	2523.05	20850.	51611.
1110.000	0.37	2530.11	2523.37	20850.	41781.
1100.000	-0.58	2531.36	2519.42	20850.	42290.
1050.000	1.67	2528.53	2521.67	20850.	48583.
1010.000	0.00	2524.85	2519.00	20850.	48583.
1000.000	0.00	2519.93	2510.90	20850.	48583.
990.000	0.64	2519.64	2510.84	20850.	38117.
975.000	0.23	2519.18	2509.63	20850.	36196.
965.000	0.13	2518.86	2508.83	20850.	35378.
950.000	0.09	2518.27	2507.99	20850.	35014.
900.000	0.08	2516.99	2506.98	20850.	34765.
875.000	0.07	2516.54	2506.27	20850.	34664.
865.000	0.07	2515.61	2505.57	20850.	34566.
850.000	-0.61	2515.32	2504.19	20850.	34170.
825.000	-0.54	2512.35	2503.36	20850.	32760.
800.000	0.21	2511.82	2503.51	20850.	31441.
750.000	-0.77	2510.76	2501.23	20850.	36475.
700.000	0.62	2508.35	2501.42	20850.	27691.
650.000	0.07	2506.99	2499.47	20850.	28017.
600.000	0.05	2505.89	2498.35	20850.	28347.
550.000	0.05	2504.45	2496.95	20850.	28986.
500.000	0.05	2503.84	2496.15	20850.	28643.
450.000	0.04	2502.68	2494.64	20850.	31091.
400.000	0.04	2501.90	2493.24	20850.	29146.
350.000	0.03	2500.48	2492.03	20850.	31081.
325.000	0.04	2500.35	2491.54	20850.	29982.
300.000	0.03	2499.76	2490.93	20850.	31035.
290.000	-0.17	2498.87	2490.03	20850.	31367.
275.000	-0.81	2498.69	2488.99	20850.	46908.
200.000	0.22	2495.94	2488.22	20850.	42300.

150.000	0.06	2493.97	2486.26	20850.	42183.
100.000	-0.78	2492.90	2483.22	20850.	43434.

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TIME STEP # 4

* B

COMPUTING FROM TIME= 0.1389 DAYS TO TIME= 0.1809 DAYS IN 6

COMPUTATION STEPS

- - - - -

ACCUMULATED TIME (yrs).... 0.000

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment #	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No.	(cfs)	(tons/day)	(deg F)
1	26200.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.18	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	4.49***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	11615.08	VERY FINE GRAVEL..	226.44
FINE SAND.....	20430.72	FINE GRAVEL.....	52.40
MEDIUM SAND.....	22137.09	MEDIUM GRAVEL.....	11.44
COARSE SAND.....	2706.73	COARSE GRAVEL.....	2.08
VERY COARSE SAND..	1421.88	VERY COARSE GRAVEL	0.19
			TOTAL = 58604.06

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.181 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.06	2551.79	2539.94	26200.	215.
2000.000	-0.05	2551.40	2539.95	26200.	272.
1900.000	-0.04	2550.91	2539.96	26200.	1177.
1800.000	-0.04	2550.28	2539.96	26200.	1541.
1700.000	-0.45	2549.76	2539.55	26200.	2911.
1600.000	-0.52	2547.25	2539.48	26200.	102305.
1500.000	-0.30	2545.17	2531.70	26200.	49383.
1450.000	0.86	2543.15	2531.86	26200.	47191.
1400.000	0.12	2541.99	2530.12	26200.	47087.
1350.000	-0.44	2541.66	2529.56	26200.	91757.
1300.000	-0.17	2541.01	2528.83	26200.	52626.
1230.000	0.00	2537.31	2529.00	26200.	52625.
1220.000	-1.99	2537.15	2525.01	26200.	54114.
1200.000	0.39	2534.02	2526.39	26200.	51875.
1120.000	-0.98	2535.11	2523.02	26200.	54102.
1110.000	0.28	2531.07	2523.28	26200.	57549.
1100.000	-0.60	2532.45	2519.40	26200.	58212.
1050.000	1.55	2529.49	2521.55	26200.	64353.
1010.000	0.00	2525.72	2519.00	26200.	64353.
1000.000	0.00	2521.67	2510.90	26200.	64352.
990.000	0.90	2521.26	2511.10	26200.	52026.
975.000	0.28	2520.86	2509.68	26200.	50406.
965.000	0.16	2520.54	2508.86	26200.	49616.
950.000	0.10	2519.90	2508.00	26200.	49233.
900.000	0.09	2518.60	2506.99	26200.	49033.
875.000	0.07	2518.21	2506.27	26200.	48970.
865.000	0.08	2517.35	2505.58	26200.	48922.
850.000	-0.55	2517.05	2504.25	26200.	46967.
825.000	-0.52	2513.84	2503.38	26200.	46602.
800.000	0.24	2513.19	2503.54	26200.	45601.
750.000	-0.83	2512.21	2501.17	26200.	47331.
700.000	0.74	2509.35	2501.54	26200.	41210.
650.000	0.07	2508.10	2499.47	26200.	40895.
600.000	0.05	2506.99	2498.35	26200.	40571.
550.000	0.05	2505.56	2496.95	26200.	40263.
500.000	0.05	2505.06	2496.15	26200.	40086.
450.000	0.04	2504.02	2494.64	26200.	40260.
400.000	0.03	2503.33	2493.23	26200.	39723.
350.000	0.03	2501.93	2492.03	26200.	40050.
325.000	0.03	2501.84	2491.53	26200.	39913.
300.000	0.03	2501.34	2490.93	26200.	40421.
290.000	-0.18	2500.35	2490.02	26200.	40608.
275.000	-1.39	2500.43	2488.41	26200.	72518.
200.000	0.34	2497.27	2488.34	26200.	58675.
150.000	0.07	2494.78	2486.27	26200.	57315.
100.000	-0.82	2493.90	2483.18	26200.	58604.

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TIME STEP # 5
 * B
 COMPUTING FROM TIME= 0.1805 DAYS TO TIME= 0.2225 DAYS IN 6
 COMPUTATION STEPS

 ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

 Stream Segment # 1 | DISCHARGE | SEDIMENT LOAD | TEMPERATURE
 Section No. 2100.000 | (cfs) | (tons/day) | (deg F)

 INFLOW | 32000.00 | 0.00 | 75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

 TIME ENTRY * SAND *
 DAYS POINT * INFLOW OUTFLOW TRAP EFF *
 0.22 2100.000 * 0.00 *
 TOTAL= 100.000 * 0.00 5.44***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

 SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	5232.30	VERY FINE GRAVEL..	264.01
FINE SAND.....	15157.32	FINE GRAVEL.....	60.05
MEDIUM SAND.....	16101.76	MEDIUM GRAVEL.....	12.61
COARSE SAND.....	3326.55	COARSE GRAVEL.....	2.24
VERY COARSE SAND..	1526.89	VERY COARSE GRAVEL	0.21
			TOTAL = 41683.95

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.222 DAYS

 SECTION BED CHANGE WS ELEV THALWEG Q TRANSPORT RATE
 (tons/day)

NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.24	2552.98	2539.76	32000.	14352.
2000.000	-0.04	2552.52	2539.96	32000.	13120.
1900.000	-0.05	2551.99	2539.95	32000.	13246.
1800.000	-0.04	2551.28	2539.96	32000.	13753.
1700.000	-0.47	2550.69	2539.53	32000.	15276.
1600.000	-0.55	2548.04	2539.45	32000.	19400.
1500.000	-0.36	2546.48	2531.64	32000.	25991.
1450.000	0.76	2544.67	2531.76	32000.	29315.
1400.000	0.10	2543.22	2530.10	32000.	29768.
1350.000	-0.31	2542.98	2529.69	32000.	19860.
1300.000	-0.26	2542.37	2528.74	32000.	25518.
1230.000	0.00	2538.48	2529.00	32000.	25518.
1220.000	-2.02	2538.31	2524.98	32000.	27267.
1200.000	0.35	2535.17	2526.35	32000.	33371.
1120.000	-1.00	2536.29	2523.00	32000.	34146.
1110.000	0.16	2532.21	2523.16	32000.	38119.
1100.000	-0.65	2533.56	2519.35	32000.	49046.
1050.000	1.49	2530.49	2521.49	32000.	56100.
1010.000	0.00	2526.61	2519.00	32000.	56100.
1000.000	0.00	2523.49	2510.90	32000.	56098.
990.000	1.20	2522.89	2511.40	32000.	41521.
975.000	0.30	2522.56	2509.70	32000.	40521.
965.000	0.17	2522.24	2508.87	32000.	40244.
950.000	0.10	2521.55	2508.00	32000.	40450.
900.000	0.08	2520.23	2506.98	32000.	40682.
875.000	0.07	2519.85	2506.27	32000.	40931.
865.000	0.08	2519.04	2505.58	32000.	41161.
850.000	-0.48	2518.70	2504.32	32000.	38553.
825.000	-0.58	2515.22	2503.32	32000.	40308.
800.000	0.26	2514.52	2503.56	32000.	39059.
750.000	-0.86	2513.51	2501.14	32000.	40931.
700.000	0.78	2510.36	2501.58	32000.	37257.
650.000	0.06	2509.18	2499.46	32000.	37428.
600.000	0.05	2508.09	2498.35	32000.	37435.
550.000	0.05	2506.70	2496.95	32000.	37423.
500.000	0.04	2506.32	2496.14	32000.	37935.
450.000	0.04	2505.37	2494.64	32000.	38071.
400.000	0.03	2504.74	2493.23	32000.	38370.
350.000	0.03	2503.32	2492.03	32000.	38912.
325.000	0.03	2503.27	2491.53	32000.	39145.
300.000	0.04	2502.84	2490.94	32000.	39132.
290.000	-0.18	2501.74	2490.02	32000.	39244.
275.000	-1.37	2501.86	2488.43	32000.	38739.
200.000	0.25	2498.47	2488.25	32000.	40705.
150.000	0.06	2496.10	2486.26	32000.	40266.
100.000	-0.85	2494.90	2483.15	32000.	41684.

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TIME STEP #           6
*           B
COMPUTING FROM TIME=  0.2222 DAYS TO TIME=  0.2642 DAYS IN  6
COMPUTATION STEPS

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 ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	29350.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.26	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	6.30***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

 SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	6136.63	VERY FINE GRAVEL..	269.65
FINE SAND.....	13629.83	FINE GRAVEL.....	64.88
MEDIUM SAND.....	14108.90	MEDIUM GRAVEL.....	14.15
COARSE SAND.....	3036.23	COARSE GRAVEL.....	2.56
VERY COARSE SAND..	1371.45	VERY COARSE GRAVEL	0.24
			TOTAL = 38634.52

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.264 DAYS

SECTION	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
(tons/day)	(ft)	(ft)	(ft)	(cfs)	SAND
NUMBER					
2100.000	-0.38	2552.48	2539.62	29350.	807.
2000.000	-0.04	2551.97	2539.96	29350.	1123.
1900.000	-0.05	2551.45	2539.95	29350.	1345.
1800.000	-0.05	2550.74	2539.95	29350.	1443.

1700.000	-0.49	2550.16	2539.51	29350.	1751.
1600.000	-0.57	2547.62	2539.43	29350.	3511.
1500.000	-0.42	2545.87	2531.58	29350.	13316.
1450.000	0.73	2544.06	2531.73	29350.	17585.
1400.000	0.09	2542.70	2530.09	29350.	18925.
1350.000	-0.21	2542.36	2529.79	29350.	15952.
1300.000	-0.28	2541.77	2528.72	29350.	15893.
1230.000	0.00	2537.96	2529.00	29350.	15893.
1220.000	-2.04	2537.67	2524.96	29350.	17382.
1200.000	0.29	2534.58	2526.29	29350.	20590.
1120.000	-1.01	2535.65	2522.99	29350.	21135.
1110.000	0.10	2531.91	2523.10	29350.	24594.
1100.000	-1.83	2533.38	2518.17	29350.	71144.
1050.000	1.66	2530.14	2521.66	29350.	61902.
1010.000	0.00	2526.21	2519.00	29350.	61902.
1000.000	0.00	2522.89	2510.90	29350.	61902.
990.000	1.57	2522.01	2511.77	29350.	45839.
975.000	0.37	2521.77	2509.77	29350.	43875.
965.000	0.21	2521.45	2508.91	29350.	42406.
950.000	0.12	2520.78	2508.02	29350.	42184.
900.000	0.10	2519.46	2507.00	29350.	41971.
875.000	0.08	2519.07	2506.28	29350.	41669.
865.000	0.08	2518.21	2505.58	29350.	41414.
850.000	-0.38	2517.80	2504.42	29350.	37547.
825.000	-0.62	2514.53	2503.28	29350.	39292.
800.000	0.29	2513.97	2503.59	29350.	38799.
750.000	-0.89	2513.07	2501.11	29350.	40772.
700.000	0.86	2510.10	2501.66	29350.	36191.
650.000	0.07	2508.69	2499.47	29350.	36475.
600.000	0.05	2507.59	2498.35	29350.	36628.
550.000	0.05	2506.18	2496.95	29350.	36787.
500.000	0.05	2505.74	2496.15	29350.	36858.
450.000	0.04	2504.75	2494.64	29350.	36544.
400.000	0.03	2504.09	2493.23	29350.	36296.
350.000	0.03	2502.67	2492.03	29350.	36335.
325.000	0.03	2502.60	2491.53	29350.	36164.
300.000	0.03	2502.13	2490.93	29350.	36093.
290.000	-0.19	2501.07	2490.01	29350.	36192.
275.000	-1.38	2501.20	2488.42	29350.	37665.
200.000	0.25	2497.95	2488.25	29350.	37343.
150.000	0.06	2495.55	2486.26	29350.	37310.
100.000	-0.89	2494.50	2483.11	29350.	38635.

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TIME STEP #          7
*      B
COMPUTING FROM TIME=      0.2639 DAYS TO TIME=      0.3059 DAYS IN      6
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....      0.001
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	22150.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.31	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	6.88***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	5498.01	VERY FINE GRAVEL..	249.62
FINE SAND.....	11370.75	FINE GRAVEL.....	66.20
MEDIUM SAND.....	14128.14	MEDIUM GRAVEL.....	15.46
COARSE SAND.....	2355.43	COARSE GRAVEL.....	2.89
VERY COARSE SAND..	278.76	VERY COARSE GRAVEL	0.27
			TOTAL = 33965.54

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.306 DAYS

SECTION	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
(tons/day)	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.40	2550.89	2539.60	22150.	718.
2000.000	-0.05	2550.42	2539.95	22150.	1003.
1900.000	-0.05	2549.93	2539.95	22150.	1197.
1800.000	-0.05	2549.27	2539.95	22150.	1265.
1700.000	-0.49	2548.73	2539.51	22150.	1552.
1600.000	-0.58	2546.36	2539.42	22150.	3230.
1500.000	-0.46	2544.16	2531.54	22150.	6272.
1450.000	0.74	2542.36	2531.74	22150.	8299.
1400.000	0.08	2541.13	2530.08	22150.	9529.
1350.000	-0.20	2540.67	2529.80	22150.	10483.

1300.000	-0.27	2540.00	2528.73	22150.	10319.
1230.000	0.00	2536.47	2529.00	22150.	10319.
1220.000	-2.17	2536.12	2524.83	22150.	44105.
1200.000	0.17	2532.93	2526.17	22150.	50659.
1120.000	-0.99	2533.83	2523.01	22150.	48120.
1110.000	0.01	2530.18	2523.01	22150.	56167.
1100.000	-1.78	2531.49	2518.22	22150.	47058.
1050.000	1.38	2528.48	2521.38	22150.	49905.
1010.000	0.00	2525.08	2519.00	22150.	49905.
1000.000	0.00	2520.99	2510.90	22150.	49902.
990.000	1.85	2519.67	2512.05	22150.	36939.
975.000	0.36	2519.54	2509.76	22150.	36586.
965.000	0.25	2519.20	2508.95	22150.	34832.
950.000	0.12	2518.62	2508.02	22150.	34177.
900.000	0.10	2517.29	2507.00	22150.	33866.
875.000	0.08	2516.85	2506.28	22150.	34164.
865.000	0.08	2515.84	2505.58	22150.	34157.
850.000	-0.27	2515.30	2504.53	22150.	29153.
825.000	-0.70	2512.93	2503.20	22150.	31728.
800.000	0.30	2512.22	2503.60	22150.	31064.
750.000	-0.92	2511.54	2501.08	22150.	31627.
700.000	0.94	2508.74	2501.74	22150.	26817.
650.000	0.07	2507.25	2499.47	22150.	27124.
600.000	0.05	2506.16	2498.35	22150.	26675.
550.000	0.04	2504.71	2496.94	22150.	27711.
500.000	0.04	2504.12	2496.14	22150.	27596.
450.000	0.04	2502.99	2494.64	22150.	27264.
400.000	0.03	2502.24	2493.23	22150.	27745.
350.000	0.03	2500.84	2492.03	22150.	27486.
325.000	0.03	2500.72	2491.53	22150.	27025.
300.000	0.03	2500.15	2490.93	22150.	27993.
290.000	-0.19	2499.27	2490.01	22150.	28081.
275.000	-1.56	2499.48	2488.24	22150.	31180.
200.000	0.33	2496.38	2488.33	22150.	32634.
150.000	0.06	2494.03	2486.26	22150.	33666.
100.000	-0.90	2493.20	2483.10	22150.	33966.

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TIME STEP # 8
 * B
 COMPUTING FROM TIME= 0.3055 DAYS TO TIME= 0.3475 DAYS IN 6
 COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	17100.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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*****
TIME          ENTRY *          SAND          *
DAYS          POINT *          INFLOW      OUTFLOW    TRAP EFF *
0.35         2100.000 *          0.00              *
TOTAL=       100.000 *          0.00              7.27***** *
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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

 SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	2507.08	VERY FINE GRAVEL..	223.41
FINE SAND.....	6527.73	FINE GRAVEL.....	64.87
MEDIUM SAND.....	6692.92	MEDIUM GRAVEL.....	15.93
COARSE SAND.....	1267.74	COARSE GRAVEL.....	3.05
VERY COARSE SAND..	166.12	VERY COARSE GRAVEL	0.29
			TOTAL = 17469.14

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.347 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.42	2549.60	2539.58	17100.	620.
2000.000	-0.05	2549.17	2539.95	17100.	666.
1900.000	-0.05	2548.72	2539.95	17100.	831.
1800.000	-0.05	2548.10	2539.95	17100.	876.
1700.000	-0.49	2547.58	2539.51	17100.	1149.
1600.000	-0.59	2545.36	2539.41	17100.	2725.
1500.000	-0.49	2542.94	2531.51	17100.	5816.
1450.000	0.77	2541.19	2531.77	17100.	3424.
1400.000	0.06	2539.92	2530.06	17100.	3812.
1350.000	-0.22	2539.39	2529.78	17100.	6352.
1300.000	-0.29	2538.64	2528.71	17100.	8169.
1230.000	0.00	2535.39	2529.00	17100.	8169.
1220.000	-2.67	2534.81	2524.33	17100.	37526.
1200.000	0.10	2531.83	2526.10	17100.	41222.
1120.000	-0.96	2532.43	2523.04	17100.	39754.
1110.000	0.01	2529.05	2523.01	17100.	39896.

1100.000	-1.75	2530.13	2518.25	17100.	39099.
1050.000	1.36	2527.38	2521.36	17100.	40317.
1010.000	0.00	2524.18	2519.00	17100.	40317.
1000.000	0.00	2519.90	2510.90	17100.	40312.
990.000	2.12	2517.88	2512.32	17100.	28872.
975.000	0.38	2517.94	2509.78	17100.	28085.
965.000	0.31	2517.57	2509.01	17100.	26000.
950.000	0.14	2517.08	2508.04	17100.	25681.
900.000	0.10	2515.82	2507.00	17100.	25597.
875.000	0.07	2515.35	2506.27	17100.	25631.
865.000	0.08	2514.30	2505.58	17100.	25616.
850.000	-0.11	2513.22	2504.69	17100.	21150.
825.000	-0.86	2512.36	2503.04	17100.	25288.
800.000	0.34	2510.95	2503.64	17100.	23652.
750.000	-0.93	2510.32	2501.07	17100.	24088.
700.000	1.02	2507.72	2501.82	17100.	19968.
650.000	0.07	2506.13	2499.47	17100.	19621.
600.000	0.05	2505.04	2498.35	17100.	19230.
550.000	0.04	2503.62	2496.94	17100.	19611.
500.000	0.05	2502.93	2496.15	17100.	19135.
450.000	0.04	2501.69	2494.64	17100.	18642.
400.000	0.03	2500.86	2493.23	17100.	18345.
350.000	0.03	2499.45	2492.03	17100.	18240.
325.000	0.03	2499.27	2491.53	17100.	17916.
300.000	0.03	2498.58	2490.93	17100.	17995.
290.000	-0.19	2497.80	2490.01	17100.	18063.
275.000	-1.62	2498.04	2488.18	17100.	20154.
200.000	0.38	2495.16	2488.38	17100.	17158.
150.000	0.05	2493.12	2486.25	17100.	17182.
100.000	-0.91	2492.20	2483.09	17100.	17469.

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TIME STEP #          9
*      B
COMPUTING FROM TIME=      0.3472 DAYS TO TIME=      0.4302 DAYS IN      12
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....      0.001
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	11125.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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TIME          ENTRY *          SAND          *

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DAYS	POINT *	INFLOW	OUTFLOW	TRAP EFF *
0.43	2100.000 *	0.00		*
TOTAL=	100.000 *	0.00	7.94*****	*

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	5219.31	VERY FINE GRAVEL..	177.37
FINE SAND.....	10264.59	FINE GRAVEL.....	62.02
MEDIUM SAND.....	5590.79	MEDIUM GRAVEL.....	16.61
COARSE SAND.....	898.90	COARSE GRAVEL.....	3.30
VERY COARSE SAND..	130.80	VERY COARSE GRAVEL	0.33
			TOTAL = 22364.03

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.431 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.43	2547.78	2539.57	11125.	167.
2000.000	-0.05	2547.41	2539.95	11125.	184.
1900.000	-0.06	2547.01	2539.94	11125.	356.
1800.000	-0.05	2546.44	2539.95	11125.	361.
1700.000	-0.50	2545.97	2539.50	11125.	599.
1600.000	-0.61	2543.99	2539.39	11125.	2063.
1500.000	-0.51	2541.37	2531.49	11125.	3138.
1450.000	0.78	2539.82	2531.78	11125.	2915.
1400.000	0.05	2538.33	2530.05	11125.	3314.
1350.000	-0.30	2537.71	2529.70	11125.	5346.
1300.000	-0.33	2536.89	2528.67	11125.	7493.
1230.000	0.00	2533.89	2529.00	11125.	7493.
1220.000	-3.04	2532.93	2523.96	11125.	18284.
1200.000	0.01	2530.41	2526.01	11125.	19366.
1120.000	-0.92	2530.61	2523.08	11125.	19581.
1110.000	0.00	2527.60	2523.00	11125.	20534.
1100.000	-1.73	2528.08	2518.27	11125.	19321.
1050.000	1.16	2525.78	2521.16	11125.	23248.
1010.000	0.00	2523.00	2519.00	11125.	23248.
1000.000	0.00	2518.69	2510.90	11125.	23243.
990.000	2.51	2516.84	2512.71	11125.	18130.
975.000	0.33	2515.80	2509.73	11125.	19601.

965.000	0.42	2515.27	2509.12	11125.	16509.
950.000	0.15	2514.86	2508.05	11125.	15855.
900.000	0.11	2513.83	2507.01	11125.	15514.
875.000	0.06	2513.32	2506.26	11125.	15496.
865.000	0.07	2512.45	2505.57	11125.	15457.
850.000	-0.02	2511.30	2504.78	11125.	15418.
825.000	-1.14	2511.10	2502.76	11125.	17414.
800.000	0.54	2509.33	2503.84	11125.	14817.
750.000	-0.94	2508.57	2501.06	11125.	15092.
700.000	1.07	2506.36	2501.87	11125.	14056.
650.000	0.07	2504.61	2499.47	11125.	14011.
600.000	0.06	2503.50	2498.36	11125.	13865.
550.000	0.06	2502.06	2496.96	11125.	13724.
500.000	0.06	2501.31	2496.16	11125.	13732.
450.000	0.05	2499.93	2494.65	11125.	13531.
400.000	0.05	2499.02	2493.25	11125.	13648.
350.000	0.04	2497.62	2492.04	11125.	13346.
325.000	-0.85	2497.74	2490.65	11125.	63771.
300.000	0.40	2496.46	2491.30	11125.	38083.
290.000	-0.17	2495.80	2490.03	11125.	34015.
275.000	-1.66	2496.06	2488.14	11125.	34557.
200.000	0.46	2493.57	2488.46	11125.	24155.
150.000	0.06	2491.80	2486.26	11125.	22120.
100.000	-0.93	2490.90	2483.07	11125.	22364.

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TIME STEP # 10

* B

COMPUTING FROM TIME= 0.4305 DAYS TO TIME= 0.4472 DAYS IN 2

COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.001

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	5500.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.44	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	8.03***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
TOTAL =			0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	1168.64	VERY FINE GRAVEL..	121.99
FINE SAND.....	5878.42	FINE GRAVEL.....	52.30
MEDIUM SAND.....	4666.04	MEDIUM GRAVEL.....	15.20
COARSE SAND.....	633.27	COARSE GRAVEL.....	3.13
VERY COARSE SAND..	90.84	VERY COARSE GRAVEL	0.36
TOTAL =			12630.18

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.444 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.43	2545.51	2539.57	5500.	132.
2000.000	-0.05	2545.22	2539.95	5500.	136.
1900.000	-0.06	2544.90	2539.94	5500.	262.
1800.000	-0.05	2544.43	2539.95	5500.	267.
1700.000	-0.50	2544.01	2539.50	5500.	351.
1600.000	-0.62	2542.38	2539.38	5500.	1756.
1500.000	-0.51	2539.46	2531.49	5500.	905.
1450.000	0.77	2538.34	2531.77	5500.	2613.
1400.000	0.05	2536.62	2530.05	5500.	3133.
1350.000	-0.31	2535.77	2529.69	5500.	4957.
1300.000	-0.34	2534.89	2528.66	5500.	6721.
1230.000	0.00	2532.21	2529.00	5500.	6721.
1220.000	-3.04	2530.77	2523.96	5500.	6379.
1200.000	0.00	2528.92	2526.00	5500.	6762.
1120.000	-0.92	2528.51	2523.08	5500.	6911.
1110.000	0.00	2525.94	2523.00	5500.	7460.
1100.000	-1.70	2525.80	2518.30	5500.	4035.
1050.000	1.11	2524.17	2521.11	5500.	12772.
1010.000	0.00	2521.64	2519.00	5500.	12772.
1000.000	0.00	2516.65	2510.90	5500.	12731.
990.000	2.49	2515.30	2512.69	5500.	14921.
975.000	0.28	2513.54	2509.68	5500.	20016.
965.000	0.50	2512.77	2509.20	5500.	11845.
950.000	0.17	2512.29	2508.07	5500.	9848.
900.000	0.11	2511.28	2507.01	5500.	9374.
875.000	0.08	2510.68	2506.28	5500.	8713.
865.000	0.08	2509.87	2505.58	5500.	7341.
850.000	-0.02	2508.91	2504.78	5500.	7244.

825.000	-1.19	2508.76	2502.71	5500.	10288.
800.000	0.52	2507.34	2503.82	5500.	12768.
750.000	-0.93	2506.40	2501.07	5500.	11170.
700.000	1.07	2504.68	2501.87	5500.	10697.
650.000	0.06	2502.85	2499.46	5500.	13109.
600.000	0.08	2501.75	2498.38	5500.	9285.
550.000	0.06	2500.31	2496.96	5500.	9181.
500.000	0.06	2499.50	2496.16	5500.	9274.
450.000	0.05	2497.96	2494.65	5500.	8690.
400.000	0.04	2496.87	2493.24	5500.	8776.
350.000	0.05	2495.59	2492.05	5500.	7920.
325.000	-0.89	2495.72	2490.61	5500.	11285.
300.000	0.39	2494.39	2491.29	5500.	11023.
290.000	-0.19	2493.41	2490.01	5500.	11048.
275.000	-1.66	2493.68	2488.14	5500.	11811.
200.000	0.48	2491.71	2488.48	5500.	11093.
150.000	0.05	2490.10	2486.25	5500.	12449.
100.000	-0.93	2489.30	2483.07	5500.	12630.

```

=====
=====
TIME STEP #      11
*      B
COMPUTING FROM TIME=      0.4444 DAYS TO TIME=      0.4694 DAYS IN      3
COMPUTATION STEPS

```

```

- - - - -
- - - - -

```

```

ACCUMULATED TIME (yrs)....      0.001
FLOW DURATION (days).....      0.007

```

UPSTREAM BOUNDARY CONDITIONS

Stream Segment #	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No.	(cfs)	(tons/day)	(deg F)
1	2050.00	0.00	75.00
INFLOW			

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

```

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****
TIME          ENTRY *          SAND          *
DAYS          POINT *          INFLOW      OUTFLOW    TRAP EFF *
0.47         2100.000 *          0.00              *
TOTAL=       100.000 *          0.00          8.09***** *
*****

```

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

```

-----
SEDIMENT INFLOW at the Upstream Boundary:
GRAIN SIZE          LOAD (tons/day) | GRAIN SIZE          LOAD (tons/day)
-----
VERY FINE SAND....      0.00 | VERY FINE GRAVEL...      0.00

```


FINE SAND.....	0.00		FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00		MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00		COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00		VERY COARSE GRAVEL	0.00

TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)		GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	12.41		VERY FINE GRAVEL..	26.34
FINE SAND.....	4239.51		FINE GRAVEL.....	14.73
MEDIUM SAND.....	2653.39		MEDIUM GRAVEL.....	4.60
COARSE SAND.....	213.81		COARSE GRAVEL.....	0.99
VERY COARSE SAND..	30.58		VERY COARSE GRAVEL	0.32

TOTAL = 7196.67

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.465 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.43	2543.37	2539.57	2050.	47.
2000.000	-0.05	2543.18	2539.95	2050.	75.
1900.000	-0.06	2542.94	2539.94	2050.	136.
1800.000	-0.05	2542.57	2539.95	2050.	223.
1700.000	-0.50	2542.23	2539.50	2050.	156.
1600.000	-0.62	2541.00	2539.38	2050.	900.
1500.000	-0.50	2537.49	2531.50	2050.	195.
1450.000	0.76	2536.66	2531.76	2050.	1264.
1400.000	0.04	2534.97	2530.04	2050.	1489.
1350.000	-0.32	2534.12	2529.68	2050.	3162.
1300.000	-0.35	2533.28	2528.65	2050.	4833.
1230.000	0.00	2530.82	2529.00	2050.	4833.
1220.000	-3.01	2528.85	2523.99	2050.	1641.
1200.000	0.00	2527.68	2526.00	2050.	1774.
1120.000	-0.92	2526.64	2523.08	2050.	1576.
1110.000	0.00	2524.64	2523.00	2050.	1605.
1100.000	-1.68	2523.73	2518.32	2050.	701.
1050.000	1.06	2522.73	2521.06	2050.	5587.
1010.000	0.00	2520.42	2519.00	2050.	5587.
1000.000	0.05	2514.80	2510.95	2050.	3733.
990.000	2.39	2514.00	2512.59	2050.	11425.
975.000	0.19	2512.02	2509.59	2050.	17650.
965.000	0.72	2510.95	2509.42	2050.	4083.
950.000	0.15	2510.30	2508.05	2050.	5510.
900.000	0.14	2509.32	2507.04	2050.	3234.
875.000	0.07	2508.69	2506.27	2050.	3329.
865.000	0.05	2508.07	2505.55	2050.	5138.
850.000	-0.02	2506.67	2504.78	2050.	5010.
825.000	-1.14	2506.56	2502.76	2050.	3239.
800.000	0.45	2505.58	2503.75	2050.	5480.
750.000	-0.89	2504.46	2501.11	2050.	4582.
700.000	1.05	2503.36	2501.85	2050.	7240.
650.000	0.01	2501.34	2499.41	2050.	13805.
600.000	0.13	2500.26	2498.43	2050.	6018.

550.000	0.05	2498.82	2496.95	2050.	7366.
500.000	0.05	2498.08	2496.15	2050.	8141.
450.000	0.06	2496.39	2494.66	2050.	6857.
400.000	0.02	2495.38	2493.22	2050.	10165.
350.000	0.11	2493.59	2492.11	2050.	5112.
325.000	-0.86	2493.72	2490.64	2050.	4165.
300.000	0.35	2493.03	2491.25	2050.	6106.
290.000	-0.20	2491.65	2490.00	2050.	6060.
275.000	-1.63	2491.58	2488.17	2050.	5021.
200.000	0.46	2490.08	2488.46	2050.	6375.
150.000	0.03	2488.42	2486.23	2050.	9064.
100.000	-0.89	2487.70	2483.11	2050.	7197.

 \$\$\$END

0 DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ = 11
 TOTAL NO. OF WS PROFILES = 67
 ITERATIONS IN EXNER EQ = 61640

COMPUTATIONS COMPLETED

RUN TIME = 0 HOURS, 0 MINUTES & 0.00 SECONDS

APPENDIX K.2
ALTERNATIVE 2 OUTPUT

Project Name Pantano Wash
 Project Number 07125-01 Made by jco Date 9/11/2008
 Reference COT SMDDFM Checked By Date

NOTES

General Scour $Z_{gs} = Y_{max} \left[\frac{0.0685V_m^{0.8}}{Y_h^{0.4} S_e^{0.3}} - 1 \right]$ General Scour is best estimated by performing a detailed sediment-transport analysis. When not practical this equation (Zeller, 1981) should be used.

Anti-Dune Scour $Z_a = 0.0137V_m^2$ The anti-dune trough depth can never exceed one-half the depth of flow. If the result is greater then one-half the depth of flow, change the results manually.

Low Flow Thawleg To be used when the ratio of the flow width to the flow depth is greater than 1.15 times the average velocity of flow for the 100-year discharge. If the flow width or flow depth exceeds the top width and bank height of the channel, use the topwidth and flow depth at bankfull conditions. If a low flow thawleg is to be used, it should be assumed at least 2 feet deep for regional watercourses and at least 1 foot deep for all other watercourses, unless field observations dictate otherwise.

Bend Scour **Bend scour is not applicable for this project**

Total Scour $Z_t = 1.3 (Z_{gs} + Z_a + Z_{bs} + Z_{lft})$ Total scour is the sum of general scour, anti-dune scour, bend scour and the low flow thawleg depths.

XS	Q	Channel Invert	WSE	Y_{max}	S_e^*	V_m	A	T_w	Y_h	Z_{gs}	Z_{mb}	Z_a	Z_{lft}	Z_t	Z_t
	Discharge		Water Surface Elevation	Flow Depth	Energy Slope	Flow Velocity	Flow Area	Top Width	Hydraulic Depth	General Scour	HEC-6	Anti-Dune Scour	Low Flow Thawleg	Total Scour (2)	Total Scour (3)
	(cfs)	(ft)	(ft)	(ft)	(ft/ft)	(ft)	(ft ²)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
1600	32000	2540	2548.54	8.54	0.007058	14.81	2160	320.56	6.74	1.87	2.24	3.00	2.00	8.94	9.42
1500	32000	2532	2545.98	13.98	0.003004	10.98	2914	350.97	8.30	1.97	0	1.65	2.00	7.30	4.75
1450	32000	2531	2545.39	14.39	0.002652	10.9	2936	324.74	9.04	1.98	0	1.63	2.00	7.29	4.72
1400	32000	2530	2544.46	14.46	0.003179	11.81	2710	303.95	8.91	2.25	0.11	1.91	2.00	8.01	5.23
1350	32000	2530	2544.10	14.10	0.0024	10.95	2922	299.25	9.77	1.99	0	1.64	2.00	7.32	4.74
1300	32000	2529	2542.18	13.18	0.002992	12.12	2640	272.95	9.67	2.15	0.02	2.01	2.00	8.01	5.24
1230	32000	2529	2539.07	10.07	0.006674	15.27	2121	348.1	6.09	3.25	0	3.19	2.00	10.98	6.75
1220	32000	2527	2537.17	10.17	0.005458	15.24	2099	240.3	8.74	2.18	0.73	3.18	2.00	9.57	7.69
1200	32000	2526	2535.67	9.66	0.004299	13.72	2332	260.29	8.96	1.81	0	2.58	2.00	8.31	5.95
1120	32000	2524	2536.02	12.02	0.002596	11.78	2716	258.96	10.49	1.78	0.54	1.90	2.00	7.39	5.77
1110	32000	2523	2532.00	9.00	0.006658	16.5	1940	227.66	8.52	2.08	0	3.73	2.00	10.16	7.45
1100	32000	2520	2531.30	11.30	0.004459	14.85	2155	218.42	9.87	2.30	1.58	3.02	2.00	9.52	8.58
1050	32000	2520	2528.88	8.88	0.00678	16.37	1955	237.18	8.24	2.07	2.16	3.67	2.00	10.07	10.18
1010	32000	2519	2526.58	7.58	0.00702	15.11	2118	299.89	7.06	1.65	0	3.13	2.00	8.81	6.67
1000	32000	2510.9	2524.45	13.55	0.00148	9.56	3348	289.89	11.55	1.44	0	1.25	2.00	6.11	4.23
990	32000	2510.2	2524.35	14.15	0.00114	9.11	3511	264.14	13.29	1.25	0	1.14	2.00	5.71	4.08
975	32000	2509.4	2523.91	14.51	0.001301	9.85	3249	238.77	13.61	1.50	0	1.33	2.00	6.27	4.33
965	32000	2508.7	2523.65	14.95	0.00131	10.02	3193	229.54	13.91	1.59	0	1.38	2.00	6.45	4.39
950	32000	2507.9	2523.17	15.27	0.001504	10.8	2963	209.14	14.17	1.81	0	1.60	2.00	7.04	4.68
900	32000	2506.9	2521.77	14.87	0.002408	13.25	2415	176.76	13.66	2.39	0.32	2.41	2.00	8.84	6.14
875	32000	2506.2	2520.73	14.53	0.003026	14.58	2194	164.54	13.34	2.64	0.68	2.91	2.00	9.81	7.27
865	32000	2505.5	2519.84	14.34	0.003461	15.41	2076	158.29	13.12	2.78	0.81	3.25	2.00	10.45	7.88
850	32000	2504.8	2518.52	13.72	0.00433	16.75	1911	152.03	12.57	2.94	0.99	3.84	2.00	11.42	8.88
825	32000	2503.9	2516.05	12.15	0.006448	19.06	1679	149.49	11.23	3.03	0.6	4.98	2.00	13.01	9.85
800	32000	2503.3	2514.52	11.22	0.00648	18.42	1737	165.09	10.52	2.76	0	4.65	2.00	12.23	8.64
750	32000	2502	2511.68	9.67	0.005786	16.2	1976	213.24	9.27	2.17	0.32	3.60	2.00	10.09	7.69
700	32000	2500.8	2510.60	9.80	0.005157	15.44	2073	220.65	9.39	2.08	0.17	3.27	2.00	9.56	7.07
650	32000	2499.4	2509.25	9.85	0.004857	15.05	2126	224.62	9.46	2.03	0	3.10	2.00	9.27	6.63
600	32000	2498.3	2508.50	10.20	0.004196	14.31	2237	228.36	9.79	1.98	0	2.81	2.00	8.82	6.25
550	32000	2496.9	2507.43	10.53	0.003856	13.98	2290	226.93	10.09	1.98	0	2.68	2.00	8.65	6.08
500	32000	2496.1	2506.86	10.76	0.003621	13.73	2331	225.99	10.31	1.96	0	2.58	2.00	8.51	5.96
450	32000	2494.6	2506.08	11.48	0.002964	12.92	2478	226.18	10.95	1.92	0.01	2.29	2.00	8.07	5.59
400	32000	2493.2	2505.56	12.36	0.00239	12.12	2640	224.87	11.74	1.87	0.02	2.01	2.00	7.64	5.24
350	32000	2492	2504.45	12.45	0.0029	13.22	2421	205.80	11.77	2.11	0.51	2.39	2.00	8.45	6.38
325	32000	2491.5	2504.26	12.76	0.0026	12.91	2479	205.99	12.03	2.08	0.54	2.28	2.00	8.27	6.27
300	32000	2490.9	2504.04	13.14	0.0024	12.51	2558	206.71	12.38	2.04	0.67	2.14	2.00	8.04	6.26
290	32000	2490.2	2503.16	12.96	0.0025	12.67	2525	207.22	12.18	2.06	0.2	2.20	2.00	8.14	5.72
275	32000	2489.8	2500.21	10.41	0.0066	17.73	1805	185.45	9.73	2.53	1.03	4.31	2.00	11.49	9.54
200	32000	2488	2498.17	10.17	0.0066	17.65	1813	188.45	9.62	2.47	0.36	4.27	2.00	11.36	8.62
150	32000	2486.2	2497.01	10.81	0.0047	15.55	2057	201.24	10.22	2.29	0	3.31	2.00	9.88	6.91
100	32000	2484	2496	12.00	0.0050	14.39	2224	261.12	8.52	2.44	0.44	2.84	2.00	9.46	6.86

- (1) Cross-sections reporting aggradation were given a value of zero for the purpose of scour calculations
- (2) Includes COT General Scour Value
- (3) Includes HEC-6 value for mobile bed adjustment at Q_{100}

```

*****
*****
*   SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS   *   *   U.S. ARMY CORPS OF
ENGINEERS   *
*   Version: 4.2   -   May 2004   *   *   HYDROLOGIC
ENGINEERING CENTER   *
*   INPUT FILE:   alt275t.dat   *   *   609 SECOND STREET
*
*   OUTPUT FILE:   alt275t.out   *   *   DAVIS, CALIFORNIA
95616-4687   *
*   RUN DATE: 11 SEP 08   RUN TIME: 15:57:57   *   *   (530) 756-1104
*
*****
*****

```

```

          X      X  XXXXXXXX   XXXXX           XXXXX
          X      X  X          X      X       X      X
          X      X  X          X              X
          XXXXXXXX  XXXX   X          XXXXX  XXXXXXX
          X      X  X          X              X      X
          X      X  X          X      X       X      X
          X      X  XXXXXXXX   XXXXX           XXXXX

```

```

*****
*   MAXIMUM LIMITS FOR THIS VERSION ARE:   *
*   10 Stream Segments (Main Stem + Tributaries)   *
*   500 Cross Sections   *
*   200 Elevation/Station Points per Cross Section   *
*   20 Grain Sizes   *
*   20 Control Points   *
*****

```

```

T1
T2   Pantano-Sediment Transpo rt-alt2
T3   River #1,Reach #   1

```

```

N values... Left   Channel   Right   Contraction   Expansion
            0.0450   0.0300   0.0400   1.1000       0.7000

```

```

SECTION NO.   100.000
...ELEVATION of Model Bottom =   2474.000 ft.

```

```

N values... Left   Channel   Right   Contraction   Expansion
            0.0500   0.0300   0.0500   1.1000       0.7000

```

```

SECTION NO.   150.000
...ELEVATION of Model Bottom =   2476.200 ft.

```

```

N values... Left   Channel   Right   Contraction   Expansion
            0.0450   0.0300   0.0400   1.1000       0.7000

```

```

SECTION NO.   200.000
...ELEVATION of Model Bottom =   2478.000 ft.

```

```

N values... Left   Channel   Right   Contraction   Expansion
            0.0450   0.0300   0.0400   1.1000       0.7000

```

SECTION NO. 275.000
...ELEVATION of Model Bottom = 2479.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0450	0.0300	0.0400	1.1000	0.7000

SECTION NO. 290.000
...ELEVATION of Model Bottom = 2490.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 300.000
...ELEVATION of Model Bottom = 2480.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 325.000
...ELEVATION of Model Bottom = 2481.500 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 350.000
...ELEVATION of Model Bottom = 2482.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 400.000
...ELEVATION of Model Bottom = 2483.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 450.000
...ELEVATION of Model Bottom = 2484.600 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 500.000
...ELEVATION of Model Bottom = 2486.100 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 550.000
...ELEVATION of Model Bottom = 2486.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 600.000
...ELEVATION of Model Bottom = 2488.300 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 650.000
...ELEVATION of Model Bottom = 2489.400 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 700.000
...ELEVATION of Model Bottom = 2490.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 750.000
...ELEVATION of Model Bottom = 2492.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 800.000
...ELEVATION of Model Bottom = 2503.300 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 825.000
...ELEVATION of Model Bottom = 2493.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 850.000
...ELEVATION of Model Bottom = 2494.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 865.000
...ELEVATION of Model Bottom = 2495.500 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 875.000
...ELEVATION of Model Bottom = 2496.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 900.000
...ELEVATION of Model Bottom = 2496.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 950.000
...ELEVATION of Model Bottom = 2497.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 965.000
...ELEVATION of Model Bottom = 2498.700 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 975.000
...ELEVATION of Model Bottom = 2499.400 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 990.000
...ELEVATION of Model Bottom = 2500.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1000.000
...ELEVATION of Model Bottom = 2510.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1010.000
...ELEVATION of Model Bottom = 2519.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1050.000
...ELEVATION of Model Bottom = 2510.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1100.000
...ELEVATION of Model Bottom = 2510.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1110.000
...ELEVATION of Model Bottom = 2523.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1120.000
...ELEVATION of Model Bottom = 2514.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1200.000
...ELEVATION of Model Bottom = 2526.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1220.000
...ELEVATION of Model Bottom = 2517.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1230.000
...ELEVATION of Model Bottom = 2529.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1300.000
...ELEVATION of Model Bottom = 2519.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1350.000
...ELEVATION of Model Bottom = 2520.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1400.000
...ELEVATION of Model Bottom = 2520.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1450.000
...ELEVATION of Model Bottom = 2521.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1500.000
...ELEVATION of Model Bottom = 2522.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1600.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1700.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1800.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1900.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 2000.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 2100.000
...ELEVATION of Model Bottom = 2530.000 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 46
NO. OF INPUT DATA MESSAGES = 0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK = 46
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK= 1
END OF GEOMETRIC DATA

=====

T4	BED GRADATIONS FROM FIELD SAMPLE	S.				
T5	Use Full Range o f Sandsand Grav	els				
T6	SEDIMENT TRANSPO RT BYToffalet	i				
T7	SEDIMENT INFLOWBY toffaletis EQ	UATI	ON			
T8						

Pantano-Sediment Transpo rt-alt2
River #1,Reach # 1

SEDIMENT PROPERITES AND PARAMETERS

	SPI	IBG	MNQ	SPGF	ACGR	NFALL	IBSHER
I1	20.	0	1	1.000	32.174	2	1

SANDS - BOULDERS ARE PRESENT

I4	MTC 1	IASA 1	LASA 10	SPGS 2.650	GSF 0.667	BSAE 0.500	PSI 30.000	UWDLB 93.000
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USING TRANSPORT CAPACITY RELATIONSHIP # 1, TOFFALETI
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	VERY FINE GRAVEL..	2.828
FINE SAND.....	0.177	FINE GRAVEL.....	5.657
MEDIUM SAND.....	0.354	MEDIUM GRAVEL.....	11.314
COARSE SAND.....	0.707	COARSE GRAVEL.....	22.627
VERY COARSE SAND..	1.414	VERY COARSE GRAVEL	45.255

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

I5	DBI 0.000	DBN 1.000	XID 0.000	XIN 1.000	XIU 0.000	UBI 0.000	UBN 1.000	JSL 1
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SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

FLOW	1000.00	3000.00	6000.00	10000.0	15000.0	20000.0	25000.0	32000.0
------	---------	---------	---------	---------	---------	---------	---------	---------

VF SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
F SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
M SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
C SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VC SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VF GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
F GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
M GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
C GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VC GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19

TOTAL	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18
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REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS CHANNEL DISTANCE SECTION DOWNSTREAM NO. (miles)	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS			ACCUMULATED FROM (ft)
			LEFT SIDE	THALWEG	RIGHT SIDE	
			(ft)	(ft)	(ft)	
	0.000					
100.000 0.000		457.380	2501.000	2484.000	2502.000	0.000
150.000 0.054	287.450	358.900	2502.000	2486.200	2502.000	287.450
200.000 0.110	293.940	914.950	2507.000	2488.000	2514.000	581.390
275.000 0.160	264.000	316.550	2509.000	2489.800	2507.000	845.390
290.000 0.176	85.000	313.580	2511.000	2490.200	2510.000	930.390
300.000 0.203	142.740	326.780	2511.000	2490.900	2512.000	1073.130
325.000 0.227	128.000	595.080	2513.000	2491.500	2512.000	1201.130
350.000 0.247	102.000	410.830	2512.000	2492.000	2509.000	1303.130
400.000 0.293	246.380	870.860	2512.000	2493.200	2510.000	1549.510
450.000 0.346	275.960	427.130	2513.000	2494.600	2510.000	1825.470
500.000 0.405	311.970	852.010	2515.000	2496.100	2515.000	2137.440
550.000 0.437	170.220	497.230	2515.000	2496.900	2513.000	2307.660
600.000 0.492	292.590	815.390	2516.000	2498.300	2516.000	2600.250
650.000 0.534	219.620	461.500	2516.000	2499.400	2516.000	2819.870
700.000 0.590	294.120	548.150	2518.000	2500.800	2518.000	3113.990
750.000 0.636	245.160	382.010	2518.000	2502.000	2519.000	3359.150
	259.430					

800.000		733.080	2522.000	2503.300	2522.000	3618.580
0.685						
	110.490					
825.000		357.950	2523.000	2503.900	2521.000	3729.070
0.706						
	201.980					
850.000		346.100	2524.000	2504.800	2523.000	3931.050
0.745						
	153.000					
865.000		359.090	2525.000	2505.500	2522.000	4084.050
0.773						
	143.000					
875.000		354.100	2525.000	2506.200	2530.000	4227.050
0.801						
	151.890					
900.000		431.720	2526.000	2506.900	2524.000	4378.940
0.829						
	206.230					
950.000		586.790	2527.000	2507.900	2536.000	4585.170
0.868						
	148.000					
965.000		347.990	2529.000	2508.700	2537.000	4733.170
0.896						
	151.000					
975.000		462.200	2529.000	2509.400	2538.000	4884.170
0.925						
	168.000					
990.000		764.810	2529.000	2510.200	2538.000	5052.170
0.957						
	147.000					
1000.000		655.410	2530.000	2510.900	2540.000	5199.170
0.985						
	71.920					
1010.000		733.300	2533.000	2519.000	2537.000	5271.090
0.998						
	162.000					
1050.000		813.150	2535.000	2520.000	2540.000	5433.090
1.029						
	294.000					
1100.000		527.910	2538.000	2520.000	2537.000	5727.090
1.085						
	36.390					
1110.000		590.040	2538.000	2523.000	2532.000	5763.480
1.092						
	443.730					
1120.000		868.760	2539.000	2524.000	2533.000	6207.210
1.176						
	56.560					
1200.000		443.870	2540.000	2526.000	2539.000	6263.770
1.186						
	411.790					
1220.000		514.100	2542.000	2527.000	2539.000	6675.560
1.264						
	47.440					
1230.000		522.090	2543.000	2529.000	2539.000	6723.000
1.273						
	383.380					

C GRVL 0.030						F SAND 0.077	VF GRVL 0.106
VC GRVL 0.008						M SAND 0.192	F GRVL 0.087
						C SAND 0.208	
1450.000 32.000	0.328	0.210	0.995	0.992		VF SAND 0.030	VC SAND 0.196
M GRVL 0.057						F SAND 0.078	VF GRVL 0.104
C GRVL 0.029						M SAND 0.195	F GRVL 0.086
VC GRVL 0.007						C SAND 0.211	
1500.000 32.000	0.328	0.210	0.996	0.992		VF SAND 0.029	VC SAND 0.195
M GRVL 0.056						F SAND 0.080	VF GRVL 0.102
C GRVL 0.028						M SAND 0.198	F GRVL 0.084
VC GRVL 0.007						C SAND 0.214	
1600.000 32.000	0.328	0.210	0.997	0.997		VF SAND 0.028	VC SAND 0.193
M GRVL 0.054						F SAND 0.084	VF GRVL 0.095
C GRVL 0.025						M SAND 0.209	F GRVL 0.078
VC GRVL 0.005						C SAND 0.224	
1700.000 32.000	0.328	0.210	0.997	0.997		VF SAND 0.028	VC SAND 0.193
M GRVL 0.054						F SAND 0.084	VF GRVL 0.095
C GRVL 0.025						M SAND 0.209	F GRVL 0.078
VC GRVL 0.005						C SAND 0.224	
1800.000 32.000	0.328	0.210	0.997	0.997		VF SAND 0.028	VC SAND 0.193
M GRVL 0.054						F SAND 0.084	VF GRVL 0.095
C GRVL 0.025						M SAND 0.209	F GRVL 0.078
VC GRVL 0.005						C SAND 0.224	
1900.000 32.000	0.328	0.210	0.997	0.997		VF SAND 0.028	VC SAND 0.193
M GRVL 0.054						F SAND 0.084	VF GRVL 0.095
C GRVL 0.025						M SAND 0.209	F GRVL 0.078
VC GRVL 0.005						C SAND 0.224	
2000.000 32.000	0.328	0.210	0.997	0.997		VF SAND 0.028	VC SAND 0.193
M GRVL 0.054							

C GRVL 0.025	F SAND 0.084	VF GRVL 0.095
VC GRVL 0.005	M SAND 0.209	F GRVL 0.078
	C SAND 0.224	
2100.000 32.000 0.328 0.210 0.997 0.997	VF SAND 0.028	VC SAND 0.193
M GRVL 0.054	F SAND 0.084	VF GRVL 0.095
C GRVL 0.025	M SAND 0.209	F GRVL 0.078
VC GRVL 0.005	C SAND 0.224	

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1:

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft) (cu.yd)	
100.000	143.725	424.553	10.000	610189.	22599.6
150.000	290.695	468.840	10.000	0.136289E+07	50477.5
200.000	278.970	722.920	10.000	0.201673E+07	74693.7
275.000	174.500	467.195	10.000	815255.	30194.6
290.000	113.870	316.707	0.200	7212.69	267.137
300.000	135.370	366.742	10.000	496459.	18387.4
325.000	115.000	518.071	10.000	595782.	22066.0
350.000	174.190	537.259	10.000	935851.	34661.1
400.000	261.170	720.387	10.000	0.188144E+07	69682.8
450.000	293.965	571.706	10.000	0.168062E+07	62245.0
500.000	241.095	718.632	10.000	0.173259E+07	64169.9
550.000	231.405	607.773	10.000	0.140642E+07	52089.5
600.000	256.105	704.230	10.000	0.180357E+07	66798.8
650.000	256.870	528.464	10.000	0.135747E+07	50276.5
700.000	269.640	507.221	10.000	0.136767E+07	50654.5
750.000	252.295	469.083	10.000	0.118347E+07	43832.4
800.000	184.960	613.661	0.000	0.00000	0.00000
825.000	156.235	399.612	10.000	624334.	23123.5
850.000	177.490	350.214	10.000	621594.	23022.0
865.000	148.000	356.048	10.000	526951.	19516.7
875.000	147.445	368.233	10.000	542942.	20108.9
900.000	179.060	450.513	10.000	806688.	29877.4
950.000	177.115	523.439	10.000	927089.	34336.6
965.000	149.500	406.617	10.000	607892.	22514.5
975.000	159.500	497.302	10.000	793197.	29377.7
990.000	157.500	693.995	10.000	0.109304E+07	40483.0
1000.000	109.460	688.426	0.000	0.00000	0.00000
1010.000	116.960	743.751	0.000	0.00000	0.00000
1050.000	228.000	742.392	10.000	0.169265E+07	62690.9
1100.000	165.195	614.799	10.000	0.101562E+07	37615.4
1110.000	240.060	674.335	0.000	0.00000	0.00000
1120.000	250.145	770.345	10.000	0.192698E+07	71369.6
1200.000	234.175	481.557	0.000	0.00000	0.00000
1220.000	229.615	493.383	10.000	0.113288E+07	41958.6
1230.000	215.410	517.187	0.000	0.00000	0.00000
1300.000	330.310	487.392	10.000	0.160991E+07	59626.1

1350.000	244.195	444.689	10.000	0.108591E+07	40218.8
1400.000	204.930	663.186	10.000	0.135907E+07	50335.8
1450.000	206.620	541.885	10.000	0.111964E+07	41468.3
1500.000	446.995	727.208	10.000	0.325058E+07	120392.
1600.000	439.730	558.264	10.000	0.245485E+07	90920.5
1700.000	200.000	449.020	10.000	898040.	33260.7
1800.000	200.000	449.020	10.000	898040.	33260.7
1900.000	200.000	449.020	10.000	898040.	33260.7
2000.000	200.000	449.020	10.000	898040.	33260.7
2100.000	100.000	449.020	10.000	449020.	16630.4

NO. OF INPUT DATA MESSAGES= 0
 END OF SEDIMENT DATA

=====
 \$H YD
 BEGIN COMPUTATIONS.

=====
 TIME STEP # 1
 * B
 COMPUTING FROM TIME= 0.0000 DAYS TO TIME= 0.0167 DAYS IN 2
 COMPUTATION STEPS

 ACCUMULATED TIME (yrs).... 0.000
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	8700.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.01	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	0.24***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

 SEDIMENT INFLOW at the Upstream Boundary:
 GRAIN SIZE LOAD (tons/day) | GRAIN SIZE LOAD (tons/day)

VERY FINE SAND....	0.00		VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00		FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00		MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00		COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00		VERY COARSE GRAVEL	0.00
				TOTAL = 0.00
SEDIMENT OUTFLOW from the Downstream Boundary				
GRAIN SIZE	LOAD (tons/day)		GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	14030.60		VERY FINE GRAVEL..	106.31
FINE SAND.....	8566.99		FINE GRAVEL.....	22.91
MEDIUM SAND.....	5677.94		MEDIUM GRAVEL.....	4.84
COARSE SAND.....	3461.43		COARSE GRAVEL.....	0.89
VERY COARSE SAND..	907.97		VERY COARSE GRAVEL	0.11
				TOTAL = 32779.99

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.014 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.03	2547.18	2539.97	8700.	1532.
2000.000	-0.02	2546.94	2539.98	8700.	3270.
1900.000	-0.01	2546.65	2539.99	8700.	4654.
1800.000	-0.01	2546.29	2539.99	8700.	7600.
1700.000	-0.01	2545.80	2539.99	8700.	10546.
1600.000	-0.02	2543.95	2539.98	8700.	17679.
1500.000	-0.01	2539.87	2531.99	8700.	23542.
1450.000	0.04	2538.95	2531.04	8700.	14951.
1400.000	0.00	2537.85	2530.00	8700.	16008.
1350.000	0.00	2537.19	2530.00	8700.	16178.
1300.000	-0.01	2536.17	2528.99	8700.	19835.
1230.000	0.00	2533.20	2529.00	8700.	19833.
1220.000	-0.16	2532.67	2526.84	8700.	36211.
1200.000	0.01	2529.79	2526.01	8700.	32705.
1120.000	-0.07	2529.99	2523.93	8700.	47696.
1110.000	0.00	2526.94	2523.00	8700.	47564.
1100.000	-0.26	2526.36	2519.74	8700.	53939.
1050.000	0.25	2524.16	2520.25	8700.	22864.
1010.000	0.00	2522.37	2519.00	8700.	22866.
1000.000	0.00	2515.51	2510.90	8700.	22895.
990.000	0.09	2515.32	2510.29	8700.	25725.
975.000	0.06	2514.83	2509.46	8700.	22109.
965.000	0.04	2514.50	2508.74	8700.	17200.
950.000	0.01	2514.13	2507.91	8700.	16751.
900.000	0.00	2513.21	2506.90	8700.	17409.
875.000	0.00	2512.47	2506.20	8700.	18316.
865.000	0.00	2511.87	2505.50	8700.	19054.
850.000	-0.03	2511.12	2504.77	8700.	22282.
825.000	-0.05	2509.12	2503.85	8700.	24658.
800.000	0.00	2508.11	2503.30	8700.	24553.
750.000	-0.03	2506.54	2501.97	8700.	28509.
700.000	0.02	2505.30	2500.82	8700.	25605.

650.000	0.00	2503.81	2499.40	8700.	28167.
600.000	0.00	2502.79	2498.30	8700.	29006.
550.000	0.00	2501.44	2496.90	8700.	28990.
500.000	0.00	2500.61	2496.10	8700.	29425.
450.000	0.01	2499.19	2494.61	8700.	28504.
400.000	0.01	2498.20	2493.21	8700.	27315.
350.000	0.01	2497.01	2492.01	8700.	25913.
325.000	0.01	2496.64	2491.51	8700.	25712.
300.000	0.02	2496.23	2490.92	8700.	24316.
290.000	-0.04	2495.89	2490.16	8700.	27651.
275.000	-0.03	2494.35	2489.77	8700.	30727.
200.000	0.00	2492.68	2488.00	8700.	31594.
150.000	0.02	2492.10	2486.22	8700.	28501.
100.000	-0.05	2490.20	2483.95	8700.	32780.

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TIME STEP #          2
*      B
COMPUTING FROM TIME=      0.0139 DAYS TO TIME=      0.0969 DAYS IN      12
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....      0.000
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	18200.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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*****
TIME          ENTRY *          SAND          *
DAYS         POINT *      INFLOW  OUTFLOW  TRAP EFF *
0.10        2100.000 *          0.00          *
TOTAL=      100.000 *          0.00          2.35***** *
*****

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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00

SEDIMENT OUTFLOW from the Downstream Boundary				TOTAL =	0.00
GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)		
VERY FINE SAND....	5836.59	VERY FINE GRAVEL..	141.41		
FINE SAND.....	20025.18	FINE GRAVEL.....	33.18		
MEDIUM SAND.....	6026.34	MEDIUM GRAVEL.....	7.53		
COARSE SAND.....	3178.21	COARSE GRAVEL.....	1.40		
VERY COARSE SAND..	1057.17	VERY COARSE GRAVEL	0.13		
				TOTAL =	36307.12

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.097 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.05	2550.13	2539.95	18200.	129.
2000.000	-0.03	2549.81	2539.97	18200.	517.
1900.000	-0.03	2549.43	2539.97	18200.	706.
1800.000	-0.03	2548.97	2539.97	18200.	965.
1700.000	-0.27	2548.41	2539.73	18200.	41224.
1600.000	-0.05	2546.15	2539.95	18200.	41430.
1500.000	-0.06	2542.43	2531.94	18200.	43344.
1450.000	0.23	2541.44	2531.23	18200.	19617.
1400.000	0.01	2540.35	2530.01	18200.	16607.
1350.000	0.00	2539.76	2530.00	18200.	15982.
1300.000	-0.22	2538.95	2528.78	18200.	52811.
1230.000	0.00	2535.62	2529.00	18200.	52802.
1220.000	-1.74	2535.54	2525.26	18200.	62198.
1200.000	0.49	2532.48	2526.49	18200.	69837.
1120.000	-1.00	2532.97	2523.00	18200.	78654.
1110.000	0.19	2529.53	2523.19	18200.	101318.
1100.000	-0.50	2530.54	2519.50	18200.	94086.
1050.000	1.65	2527.84	2521.65	18200.	50326.
1010.000	0.00	2524.39	2519.00	18200.	50326.
1000.000	0.00	2519.46	2510.90	18200.	50326.
990.000	0.44	2519.28	2510.64	18200.	40570.
975.000	0.19	2518.90	2509.59	18200.	37270.
965.000	0.11	2518.63	2508.81	18200.	35443.
950.000	0.08	2518.22	2507.98	18200.	34107.
900.000	0.07	2517.00	2506.97	18200.	33066.
875.000	0.06	2515.99	2506.26	18200.	32843.
865.000	0.06	2514.34	2505.56	18200.	28920.
850.000	-0.80	2514.04	2504.00	18200.	31504.
825.000	-0.63	2511.95	2503.27	18200.	30118.
800.000	0.18	2511.31	2503.48	18200.	28458.
750.000	-0.74	2510.19	2501.26	18200.	33799.
700.000	0.59	2507.74	2501.39	18200.	33141.
650.000	0.08	2506.37	2499.48	18200.	33926.
600.000	0.07	2505.43	2498.37	18200.	35814.
550.000	0.05	2504.12	2496.95	18200.	37407.
500.000	0.05	2503.37	2496.15	18200.	37942.
450.000	0.05	2502.19	2494.65	18200.	37787.
400.000	0.04	2501.43	2493.24	18200.	37586.

350.000	0.04	2500.14	2492.04	18200.	38333.
325.000	0.04	2499.83	2491.54	18200.	37320.
300.000	0.04	2499.48	2490.94	18200.	35940.
290.000	-0.17	2499.29	2490.03	18200.	36221.
275.000	-0.04	2497.06	2489.76	18200.	36161.
200.000	-0.04	2495.04	2487.96	18200.	37357.
150.000	0.13	2493.54	2486.33	18200.	32416.
100.000	-0.73	2492.40	2483.27	18200.	36307.

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TIME STEP # 3
 * B
 COMPUTING FROM TIME= 0.0972 DAYS TO TIME= 0.1392 DAYS IN 6
 COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.000
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	20850.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.14	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	3.25***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	9429.47	VERY FINE GRAVEL..	195.27

FINE SAND.....	20254.53		FINE GRAVEL.....	46.05
MEDIUM SAND.....	16578.37		MEDIUM GRAVEL.....	10.38
COARSE SAND.....	1778.03		COARSE GRAVEL.....	1.92
VERY COARSE SAND..	1339.39		VERY COARSE GRAVEL	0.18
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			TOTAL =	49633.60

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.139 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.05	2550.76	2539.95	20850.	157.
2000.000	-0.04	2550.41	2539.96	20850.	670.
1900.000	-0.03	2550.00	2539.97	20850.	891.
1800.000	-0.03	2549.48	2539.97	20850.	1060.
1700.000	-0.41	2549.06	2539.59	20850.	4212.
1600.000	-0.08	2546.65	2539.92	20850.	21768.
1500.000	-0.38	2543.61	2531.62	20850.	30042.
1450.000	0.61	2541.84	2531.61	20850.	28366.
1400.000	0.07	2540.88	2530.07	20850.	29789.
1350.000	0.06	2540.24	2530.06	20850.	30285.
1300.000	-0.44	2539.66	2528.56	20850.	28993.
1230.000	0.00	2536.23	2529.00	20850.	28994.
1220.000	-1.79	2536.03	2525.21	20850.	32377.
1200.000	0.30	2532.83	2526.30	20850.	46991.
1120.000	-1.07	2533.79	2522.93	20850.	48387.
1110.000	0.44	2530.31	2523.44	20850.	33464.
1100.000	-0.58	2531.50	2519.42	20850.	33947.
1050.000	1.75	2528.63	2521.75	20850.	43199.
1010.000	0.00	2524.87	2519.00	20850.	43199.
1000.000	0.00	2520.50	2510.90	20850.	43199.
990.000	0.67	2520.25	2510.87	20850.	33735.
975.000	0.24	2519.91	2509.64	20850.	32948.
965.000	0.14	2519.66	2508.84	20850.	32635.
950.000	0.09	2519.23	2507.99	20850.	32895.
900.000	0.08	2517.94	2506.98	20850.	33204.
875.000	0.06	2516.84	2506.26	20850.	33454.
865.000	0.05	2515.35	2505.55	20850.	33553.
850.000	-0.83	2515.13	2503.97	20850.	35734.
825.000	-0.54	2512.59	2503.36	20850.	33406.
800.000	0.24	2512.09	2503.54	20850.	31932.
750.000	-0.83	2511.11	2501.17	20850.	37466.
700.000	0.70	2508.27	2501.50	20850.	27915.
650.000	0.07	2506.96	2499.47	20850.	28180.
600.000	0.06	2506.05	2498.36	20850.	28548.
550.000	0.04	2504.76	2496.94	20850.	28877.
500.000	0.04	2504.04	2496.14	20850.	29088.
450.000	0.04	2502.95	2494.64	20850.	30181.
400.000	0.04	2502.23	2493.24	20850.	31820.
350.000	0.04	2500.92	2492.04	20850.	32326.
325.000	0.04	2500.62	2491.54	20850.	32270.
300.000	0.04	2500.29	2490.94	20850.	32101.
290.000	-0.18	2500.11	2490.02	20850.	32271.
275.000	-0.05	2497.69	2489.75	20850.	32410.
200.000	-0.22	2495.79	2487.78	20850.	52885.

150.000	0.22	2493.88	2486.42	20850.	48422.
100.000	-0.80	2492.90	2483.20	20850.	49634.

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TIME STEP # 4

* B

COMPUTING FROM TIME= 0.1389 DAYS TO TIME= 0.1809 DAYS IN 6

COMPUTATION STEPS

- - - - -

ACCUMULATED TIME (yrs).... 0.000

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	26200.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.18	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	4.74***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	12868.43	VERY FINE GRAVEL..	212.62
FINE SAND.....	26322.62	FINE GRAVEL.....	49.48
MEDIUM SAND.....	27456.18	MEDIUM GRAVEL.....	10.84
COARSE SAND.....	3453.50	COARSE GRAVEL.....	1.97
VERY COARSE SAND..	1317.91	VERY COARSE GRAVEL	0.18
			TOTAL = 71693.75

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.181 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.06	2551.76	2539.94	26200.	225.
2000.000	-0.05	2551.35	2539.95	26200.	281.
1900.000	-0.04	2550.85	2539.96	26200.	1235.
1800.000	-0.04	2550.19	2539.96	26200.	1648.
1700.000	-0.44	2549.64	2539.56	26200.	3042.
1600.000	-0.51	2547.15	2539.49	26200.	7373.
1500.000	-0.29	2545.09	2531.71	26200.	29571.
1450.000	0.80	2542.96	2531.80	26200.	31178.
1400.000	0.10	2542.12	2530.10	26200.	33666.
1350.000	0.08	2541.55	2530.08	26200.	34065.
1300.000	-0.39	2541.02	2528.61	26200.	28586.
1230.000	0.00	2537.33	2529.00	26200.	28586.
1220.000	-1.83	2537.18	2525.17	26200.	29974.
1200.000	0.35	2534.22	2526.35	26200.	33331.
1120.000	-1.11	2535.29	2522.89	26200.	35510.
1110.000	0.40	2531.23	2523.40	26200.	39838.
1100.000	-0.59	2532.62	2519.41	26200.	40512.
1050.000	1.64	2529.55	2521.64	26200.	47558.
1010.000	0.00	2525.73	2519.00	26200.	47558.
1000.000	0.00	2522.42	2510.90	26200.	47557.
990.000	0.90	2522.09	2511.10	26200.	36918.
975.000	0.27	2521.79	2509.67	26200.	35997.
965.000	0.16	2521.55	2508.86	26200.	35489.
950.000	0.09	2521.09	2507.99	26200.	35766.
900.000	0.07	2519.73	2506.97	26200.	36022.
875.000	0.05	2518.54	2506.25	26200.	36042.
865.000	0.05	2517.04	2505.55	26200.	36176.
850.000	-0.86	2516.83	2503.94	26200.	37862.
825.000	-0.50	2514.13	2503.40	26200.	36961.
800.000	0.29	2513.48	2503.59	26200.	35642.
750.000	-0.89	2512.51	2501.11	26200.	37435.
700.000	0.80	2509.57	2501.60	26200.	32170.
650.000	0.07	2508.05	2499.47	26200.	31898.
600.000	0.05	2507.18	2498.35	26200.	31635.
550.000	0.04	2505.92	2496.94	26200.	31271.
500.000	0.04	2505.22	2496.14	26200.	31605.
450.000	0.03	2504.18	2494.63	26200.	30946.
400.000	0.03	2503.46	2493.23	26200.	30772.
350.000	0.03	2501.71	2492.03	26200.	28486.
325.000	0.02	2501.17	2491.52	26200.	28647.
300.000	0.02	2500.64	2490.92	26200.	29828.
290.000	-0.19	2500.34	2490.01	26200.	29994.
275.000	-1.05	2498.54	2488.75	26200.	81713.
200.000	-0.54	2497.71	2487.46	26200.	92345.
150.000	0.48	2495.26	2486.68	26200.	70721.
100.000	-0.81	2493.90	2483.19	26200.	71694.

TIME STEP # 5
 * B
 COMPUTING FROM TIME= 0.1805 DAYS TO TIME= 0.2225 DAYS IN 6
 COMPUTATION STEPS

 ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

 Stream Segment # 1 | DISCHARGE | SEDIMENT LOAD | TEMPERATURE
 Section No. 2100.000 | (cfs) | (tons/day) | (deg F)

 INFLOW | 32000.00 | 0.00 | 75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

 TIME ENTRY * SAND *
 DAYS POINT * INFLOW OUTFLOW TRAP EFF *
 0.22 2100.000 * 0.00 *
 TOTAL= 100.000 * 0.00 6.12***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

 SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	15813.31	VERY FINE GRAVEL..	267.63
FINE SAND.....	18949.12	FINE GRAVEL.....	61.42
MEDIUM SAND.....	25083.82	MEDIUM GRAVEL.....	12.99
COARSE SAND.....	4943.57	COARSE GRAVEL.....	2.31
VERY COARSE SAND..	1541.59	VERY COARSE GRAVEL	0.21
			TOTAL = 66675.98

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.222 DAYS

 SECTION BED CHANGE WS ELEV THALWEG Q TRANSPORT RATE
 (tons/day)

NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.25	2552.99	2539.75	32000.	14351.
2000.000	-0.04	2552.52	2539.96	32000.	13088.
1900.000	-0.05	2552.00	2539.95	32000.	13215.
1800.000	-0.04	2551.29	2539.96	32000.	13755.
1700.000	-0.46	2550.69	2539.54	32000.	15261.
1600.000	-0.54	2548.05	2539.46	32000.	19377.
1500.000	-0.38	2546.46	2531.62	32000.	28311.
1450.000	0.81	2544.38	2531.81	32000.	26416.
1400.000	0.10	2543.49	2530.10	32000.	27639.
1350.000	0.08	2542.90	2530.08	32000.	28209.
1300.000	-0.31	2542.30	2528.69	32000.	17690.
1230.000	0.00	2539.03	2529.00	32000.	17690.
1220.000	-1.85	2538.38	2525.15	32000.	19299.
1200.000	0.30	2535.55	2526.30	32000.	23682.
1120.000	-1.13	2536.66	2522.87	32000.	25849.
1110.000	0.33	2532.33	2523.33	32000.	32367.
1100.000	-0.94	2533.79	2519.06	32000.	99807.
1050.000	1.58	2530.65	2521.58	32000.	82595.
1010.000	0.00	2526.66	2519.00	32000.	82595.
1000.000	0.00	2524.38	2510.90	32000.	82592.
990.000	1.19	2523.93	2511.39	32000.	64942.
975.000	0.31	2523.67	2509.71	32000.	61372.
965.000	0.18	2523.43	2508.88	32000.	59475.
950.000	0.09	2522.94	2507.99	32000.	58007.
900.000	0.07	2521.62	2506.97	32000.	56980.
875.000	0.04	2520.20	2506.24	32000.	56453.
865.000	0.02	2518.69	2505.52	32000.	57921.
850.000	-0.90	2518.50	2503.90	32000.	58506.
825.000	-0.49	2515.66	2503.41	32000.	57494.
800.000	0.34	2514.89	2503.64	32000.	54968.
750.000	-0.93	2513.87	2501.07	32000.	56941.
700.000	0.85	2510.76	2501.65	32000.	51691.
650.000	0.07	2509.25	2499.47	32000.	50775.
600.000	0.05	2508.47	2498.35	32000.	50422.
550.000	0.05	2507.26	2496.95	32000.	49494.
500.000	0.04	2506.60	2496.14	32000.	48577.
450.000	0.04	2505.62	2494.64	32000.	47542.
400.000	0.03	2504.95	2493.23	32000.	46960.
350.000	0.03	2502.78	2492.03	32000.	46287.
325.000	0.03	2502.22	2491.53	32000.	46848.
300.000	0.04	2500.96	2490.94	32000.	46260.
290.000	-0.19	2500.37	2490.01	32000.	46371.
275.000	-2.10	2500.52	2487.70	32000.	83715.
200.000	-0.52	2499.26	2487.48	32000.	60230.
150.000	0.60	2496.63	2486.80	32000.	65317.
100.000	-0.87	2494.90	2483.13	32000.	66676.

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TIME STEP #           6
*           B
COMPUTING FROM TIME=  0.2222 DAYS TO TIME=  0.2642 DAYS IN  6
COMPUTATION STEPS

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ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	29350.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.26	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	7.20***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	4641.97	VERY FINE GRAVEL..	265.62
FINE SAND.....	13024.03	FINE GRAVEL.....	64.15
MEDIUM SAND.....	18406.97	MEDIUM GRAVEL.....	14.06
COARSE SAND.....	4408.45	COARSE GRAVEL.....	2.55
VERY COARSE SAND..	1410.20	VERY COARSE GRAVEL	0.24
			TOTAL = 42238.23

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.264 DAYS

SECTION	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
(tons/day)	(ft)	(ft)	(ft)	(cfs)	SAND
NUMBER					
2100.000	-0.39	2552.48	2539.61	29350.	802.
2000.000	-0.04	2551.98	2539.96	29350.	1109.
1900.000	-0.05	2551.46	2539.95	29350.	1331.
1800.000	-0.05	2550.76	2539.95	29350.	1434.

1700.000	-0.48	2550.18	2539.52	29350.	1779.
1600.000	-0.56	2547.63	2539.44	29350.	3512.
1500.000	-0.42	2545.90	2531.58	29350.	7641.
1450.000	0.80	2543.69	2531.80	29350.	12320.
1400.000	0.07	2542.90	2530.07	29350.	14853.
1350.000	0.06	2542.36	2530.06	29350.	16146.
1300.000	-0.27	2541.77	2528.73	29350.	15597.
1230.000	0.00	2537.94	2529.00	29350.	15597.
1220.000	-1.86	2537.81	2525.14	29350.	16962.
1200.000	0.26	2534.76	2526.26	29350.	20648.
1120.000	-1.15	2535.89	2522.85	29350.	22118.
1110.000	0.27	2532.46	2523.27	29350.	25751.
1100.000	-2.27	2533.87	2517.73	29350.	78113.
1050.000	1.92	2530.41	2521.92	29350.	58532.
1010.000	0.00	2526.22	2519.00	29350.	58532.
1000.000	0.00	2523.67	2510.90	29350.	58532.
990.000	1.57	2523.02	2511.77	29350.	41923.
975.000	0.38	2522.83	2509.78	29350.	40136.
965.000	0.22	2522.59	2508.92	29350.	38722.
950.000	0.11	2522.12	2508.01	29350.	38515.
900.000	0.08	2520.76	2506.98	29350.	38565.
875.000	0.05	2519.48	2506.25	29350.	38500.
865.000	0.04	2518.06	2505.54	29350.	38423.
850.000	-0.99	2517.94	2503.81	29350.	40773.
825.000	-0.43	2515.02	2503.47	29350.	39144.
800.000	0.38	2514.36	2503.68	29350.	37863.
750.000	-0.96	2513.41	2501.04	29350.	40005.
700.000	0.94	2510.35	2501.74	29350.	34736.
650.000	0.07	2508.70	2499.47	29350.	34857.
600.000	0.05	2507.88	2498.35	29350.	35840.
550.000	0.05	2506.65	2496.95	29350.	36177.
500.000	0.05	2505.97	2496.15	29350.	36259.
450.000	0.04	2504.94	2494.64	29350.	36030.
400.000	0.04	2504.24	2493.24	29350.	35838.
350.000	0.03	2502.20	2492.03	29350.	35844.
325.000	0.03	2501.73	2491.53	29350.	35897.
300.000	0.04	2500.54	2490.94	29350.	35717.
290.000	-0.19	2500.01	2490.01	29350.	35752.
275.000	-2.57	2500.51	2487.23	29350.	37399.
200.000	-0.33	2498.38	2487.67	29350.	35757.
150.000	0.49	2496.00	2486.69	29350.	40959.
100.000	-0.90	2494.50	2483.10	29350.	42238.

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TIME STEP #          7
*      B
COMPUTING FROM TIME=    0.2639 DAYS TO TIME=    0.3059 DAYS IN    6
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....    0.001
FLOW DURATION (days).....    0.007

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UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	22150.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.31	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	7.87***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	5919.01	VERY FINE GRAVEL..	246.10
FINE SAND.....	9598.52	FINE GRAVEL.....	65.89
MEDIUM SAND.....	13250.36	MEDIUM GRAVEL.....	15.47
COARSE SAND.....	3223.44	COARSE GRAVEL.....	2.90
VERY COARSE SAND..	313.32	VERY COARSE GRAVEL	0.27
			TOTAL = 32635.27

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.306 DAYS

SECTION	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
(tons/day)	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.41	2550.90	2539.59	22150.	716.
2000.000	-0.04	2550.43	2539.96	22150.	988.
1900.000	-0.05	2549.95	2539.95	22150.	1184.
1800.000	-0.05	2549.29	2539.95	22150.	1258.
1700.000	-0.48	2548.74	2539.52	22150.	1544.
1600.000	-0.57	2546.36	2539.43	22150.	3235.
1500.000	-0.45	2544.20	2531.55	22150.	6991.
1450.000	0.82	2542.03	2531.82	22150.	4715.
1400.000	0.05	2541.24	2530.05	22150.	5610.
1350.000	0.03	2540.65	2530.03	22150.	6699.

1300.000	-0.28	2539.99	2528.72	22150.	9129.
1230.000	0.00	2536.49	2529.00	22150.	9129.
1220.000	-2.03	2536.23	2524.97	22150.	49124.
1200.000	0.20	2532.78	2526.20	22150.	44289.
1120.000	-1.14	2533.94	2522.86	22150.	44979.
1110.000	0.27	2530.81	2523.27	22150.	43316.
1100.000	-2.71	2532.17	2517.29	22150.	54729.
1050.000	1.88	2529.00	2521.88	22150.	55998.
1010.000	0.00	2525.09	2519.00	22150.	55998.
1000.000	0.00	2521.45	2510.90	22150.	55992.
990.000	1.91	2520.45	2512.11	22150.	40306.
975.000	0.40	2520.36	2509.80	22150.	38831.
965.000	0.27	2520.11	2508.97	22150.	36691.
950.000	0.12	2519.70	2508.02	22150.	35823.
900.000	0.08	2518.39	2506.98	22150.	35390.
875.000	0.04	2517.34	2506.24	22150.	35650.
865.000	0.03	2516.07	2505.53	22150.	36030.
850.000	-1.08	2516.05	2503.72	22150.	36499.
825.000	-0.32	2513.20	2503.58	22150.	34689.
800.000	0.41	2512.60	2503.71	22150.	33528.
750.000	-0.99	2511.85	2501.01	22150.	34137.
700.000	1.05	2508.98	2501.85	22150.	28925.
650.000	0.07	2507.25	2499.47	22150.	28377.
600.000	0.05	2506.35	2498.35	22150.	28561.
550.000	0.05	2505.05	2496.95	22150.	27983.
500.000	0.04	2504.32	2496.14	22150.	27999.
450.000	0.04	2503.19	2494.64	22150.	27286.
400.000	0.03	2502.44	2493.23	22150.	28370.
350.000	0.04	2500.65	2492.04	22150.	28174.
325.000	0.03	2500.19	2491.53	22150.	28556.
300.000	0.04	2498.89	2490.94	22150.	28088.
290.000	-0.19	2498.17	2490.01	22150.	28074.
275.000	-2.75	2498.82	2487.05	22150.	34975.
200.000	-0.26	2496.77	2487.74	22150.	31162.
150.000	0.46	2494.37	2486.66	22150.	32328.
100.000	-0.91	2493.20	2483.09	22150.	32635.

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TIME STEP # 8
 * B
 COMPUTING FROM TIME= 0.3055 DAYS TO TIME= 0.3475 DAYS IN 6
 COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	17100.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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*****
TIME          ENTRY *          SAND          *
DAYS          POINT *          INFLOW      OUTFLOW    TRAP EFF *
0.35         2100.000 *          0.00              *
TOTAL=       100.000 *          0.00              8.36***** *
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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
		TOTAL =	0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	3070.16	VERY FINE GRAVEL..	221.04
FINE SAND.....	6642.99	FINE GRAVEL.....	64.97
MEDIUM SAND.....	9179.42	MEDIUM GRAVEL.....	16.05
COARSE SAND.....	2308.95	COARSE GRAVEL.....	3.08
VERY COARSE SAND..	228.28	VERY COARSE GRAVEL	0.30
		TOTAL =	21735.23

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.347 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.42	2549.61	2539.58	17100.	621.
2000.000	-0.05	2549.18	2539.95	17100.	689.
1900.000	-0.05	2548.73	2539.95	17100.	855.
1800.000	-0.05	2548.11	2539.95	17100.	905.
1700.000	-0.49	2547.59	2539.51	17100.	1174.
1600.000	-0.58	2545.40	2539.42	17100.	2717.
1500.000	-0.46	2543.09	2531.54	17100.	3596.
1450.000	0.83	2540.91	2531.83	17100.	3696.
1400.000	0.04	2540.05	2530.04	17100.	4117.
1350.000	0.03	2539.38	2530.03	17100.	3671.
1300.000	-0.32	2538.66	2528.68	17100.	7934.
1230.000	0.00	2535.35	2529.00	17100.	7934.
1220.000	-2.54	2534.89	2524.46	17100.	48205.
1200.000	0.13	2531.89	2526.13	17100.	60351.
1120.000	-1.11	2532.53	2522.89	17100.	58411.
1110.000	0.17	2529.40	2523.17	17100.	44588.

1100.000	-2.48	2530.68	2517.52	17100.	45056.
1050.000	1.85	2527.89	2521.85	17100.	45273.
1010.000	0.00	2524.17	2519.00	17100.	45273.
1000.000	0.00	2520.09	2510.90	17100.	45268.
990.000	2.24	2518.37	2512.44	17100.	31649.
975.000	0.42	2518.46	2509.82	17100.	30459.
965.000	0.34	2518.16	2509.04	17100.	28096.
950.000	0.14	2517.80	2508.04	17100.	27627.
900.000	0.09	2516.59	2506.99	17100.	27470.
875.000	0.04	2515.62	2506.24	17100.	27422.
865.000	0.02	2514.46	2505.52	17100.	27416.
850.000	-1.09	2514.46	2503.71	17100.	27874.
825.000	-0.26	2511.83	2503.64	17100.	26296.
800.000	0.42	2511.23	2503.72	17100.	25848.
750.000	-1.00	2510.60	2501.00	17100.	26301.
700.000	1.12	2507.94	2501.92	17100.	22020.
650.000	0.07	2506.09	2499.47	17100.	21631.
600.000	0.06	2505.17	2498.36	17100.	22009.
550.000	0.05	2503.85	2496.95	17100.	21281.
500.000	0.05	2503.06	2496.15	17100.	21114.
450.000	0.04	2501.82	2494.64	17100.	20987.
400.000	0.04	2501.01	2493.24	17100.	20738.
350.000	0.04	2499.37	2492.04	17100.	20394.
325.000	0.03	2498.90	2491.53	17100.	20244.
300.000	0.04	2497.63	2490.94	17100.	20080.
290.000	-0.19	2496.67	2490.01	17100.	20061.
275.000	-2.87	2497.42	2486.93	17100.	23725.
200.000	-0.18	2495.50	2487.82	17100.	17916.
150.000	0.40	2493.14	2486.60	17100.	21447.
100.000	-0.92	2492.20	2483.08	17100.	21735.

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TIME STEP # 9

* B

COMPUTING FROM TIME= 0.3472 DAYS TO TIME= 0.4302 DAYS IN 12

COMPUTATION STEPS

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ACCUMULATED TIME (yrs).... 0.001

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	11125.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
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DAYS	POINT *	INFLOW	OUTFLOW	TRAP EFF *
0.43	2100.000 *	0.00		*
TOTAL=	100.000 *	0.00	9.03*****	*

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	2236.12	VERY FINE GRAVEL..	173.37
FINE SAND.....	6716.88	FINE GRAVEL.....	61.38
MEDIUM SAND.....	5475.24	MEDIUM GRAVEL.....	16.54
COARSE SAND.....	1197.39	COARSE GRAVEL.....	3.29
VERY COARSE SAND..	130.26	VERY COARSE GRAVEL	0.33
			TOTAL = 16010.79

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.431 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.44	2547.78	2539.56	11125.	166.
2000.000	-0.05	2547.41	2539.95	11125.	181.
1900.000	-0.06	2547.01	2539.94	11125.	352.
1800.000	-0.05	2546.45	2539.95	11125.	362.
1700.000	-0.49	2545.98	2539.51	11125.	597.
1600.000	-0.60	2544.01	2539.40	11125.	2055.
1500.000	-0.47	2541.43	2531.53	11125.	2275.
1450.000	0.81	2539.48	2531.81	11125.	2859.
1400.000	0.01	2538.49	2530.01	11125.	3885.
1350.000	0.08	2537.63	2530.08	11125.	2549.
1300.000	-0.43	2536.87	2528.57	11125.	6060.
1230.000	0.00	2533.90	2529.00	11125.	6060.
1220.000	-2.98	2532.95	2524.02	11125.	20087.
1200.000	0.01	2530.42	2526.01	11125.	21736.
1120.000	-1.04	2530.59	2522.96	11125.	21392.
1110.000	0.01	2527.60	2523.01	11125.	20671.
1100.000	-2.10	2528.47	2517.90	11125.	20703.
1050.000	1.54	2526.19	2521.54	11125.	27231.
1010.000	0.00	2523.00	2519.00	11125.	27231.
1000.000	0.00	2519.02	2510.90	11125.	27227.
990.000	2.78	2517.12	2512.98	11125.	20054.
975.000	0.39	2516.01	2509.79	11125.	21038.

965.000	0.43	2515.59	2509.13	11125.	17688.
950.000	0.15	2515.26	2508.05	11125.	17080.
900.000	0.09	2514.20	2506.99	11125.	16836.
875.000	0.03	2513.34	2506.23	11125.	16816.
865.000	0.02	2512.17	2505.52	11125.	16828.
850.000	-1.12	2512.18	2503.68	11125.	17224.
825.000	-0.22	2510.46	2503.68	11125.	17711.
800.000	0.46	2509.42	2503.76	11125.	17254.
750.000	-1.01	2508.84	2500.99	11125.	17529.
700.000	1.23	2506.59	2502.03	11125.	14854.
650.000	0.08	2504.60	2499.48	11125.	15005.
600.000	0.07	2503.58	2498.37	11125.	14354.
550.000	0.06	2502.20	2496.96	11125.	14193.
500.000	0.06	2501.41	2496.16	11125.	14022.
450.000	0.05	2500.02	2494.65	11125.	13957.
400.000	0.05	2499.10	2493.25	11125.	14044.
350.000	0.05	2497.58	2492.05	11125.	13495.
325.000	0.04	2496.78	2491.54	11125.	13247.
300.000	-0.96	2496.90	2489.94	11125.	18690.
290.000	0.02	2495.09	2490.22	11125.	11953.
275.000	-3.00	2495.85	2486.80	11125.	13718.
200.000	0.21	2493.63	2488.21	11125.	19801.
150.000	0.40	2491.74	2486.60	11125.	15766.
100.000	-0.94	2490.90	2483.06	11125.	16011.

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TIME STEP # 10

* B

COMPUTING FROM TIME= 0.4305 DAYS TO TIME= 0.4472 DAYS IN 2

COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.001

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	5500.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.44	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	9.10***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
TOTAL =			0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	1088.60	VERY FINE GRAVEL..	119.27
FINE SAND.....	4212.49	FINE GRAVEL.....	52.43
MEDIUM SAND.....	3518.07	MEDIUM GRAVEL.....	15.36
COARSE SAND.....	650.12	COARSE GRAVEL.....	3.16
VERY COARSE SAND..	70.42	VERY COARSE GRAVEL	0.36
TOTAL =			9730.29

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.444 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.44	2545.51	2539.56	5500.	131.
2000.000	-0.05	2545.23	2539.95	5500.	134.
1900.000	-0.06	2544.90	2539.94	5500.	260.
1800.000	-0.05	2544.44	2539.95	5500.	267.
1700.000	-0.49	2544.03	2539.51	5500.	350.
1600.000	-0.60	2542.38	2539.40	5500.	1749.
1500.000	-0.46	2539.50	2531.54	5500.	796.
1450.000	0.80	2537.94	2531.80	5500.	1939.
1400.000	0.00	2536.78	2530.00	5500.	3363.
1350.000	0.09	2535.74	2530.09	5500.	1297.
1300.000	-0.45	2534.87	2528.55	5500.	5466.
1230.000	0.00	2532.20	2529.00	5500.	5465.
1220.000	-2.97	2530.79	2524.03	5500.	3419.
1200.000	0.01	2528.92	2526.01	5500.	3944.
1120.000	-1.04	2528.45	2522.96	5500.	3507.
1110.000	0.00	2525.95	2523.00	5500.	3696.
1100.000	-2.09	2526.12	2517.91	5500.	4039.
1050.000	1.47	2524.56	2521.47	5500.	16257.
1010.000	0.00	2521.64	2519.00	5500.	16257.
1000.000	0.01	2516.96	2510.91	5500.	16113.
990.000	2.78	2515.61	2512.98	5500.	16964.
975.000	0.35	2513.58	2509.75	5500.	21930.
965.000	0.51	2512.89	2509.21	5500.	13804.
950.000	0.16	2512.50	2508.06	5500.	12418.
900.000	0.10	2511.57	2507.00	5500.	11463.
875.000	0.04	2510.83	2506.24	5500.	11455.
865.000	0.03	2509.51	2505.53	5500.	10080.
850.000	-1.12	2509.51	2503.68	5500.	10369.

825.000	-0.27	2508.55	2503.63	5500.	13299.
800.000	0.46	2507.36	2503.76	5500.	13066.
750.000	-1.00	2506.60	2501.00	5500.	11426.
700.000	1.22	2504.92	2502.02	5500.	11389.
650.000	0.07	2502.85	2499.47	5500.	13085.
600.000	0.09	2501.78	2498.39	5500.	9497.
550.000	0.06	2500.41	2496.96	5500.	9155.
500.000	0.06	2499.60	2496.16	5500.	8953.
450.000	0.05	2498.07	2494.65	5500.	8453.
400.000	0.05	2496.99	2493.25	5500.	8382.
350.000	0.04	2495.70	2492.04	5500.	10245.
325.000	0.04	2494.65	2491.54	5500.	10250.
300.000	-1.01	2494.74	2489.89	5500.	15294.
290.000	-0.10	2493.22	2490.10	5500.	22619.
275.000	-2.91	2493.28	2486.89	5500.	14856.
200.000	0.24	2491.81	2488.24	5500.	9314.
150.000	0.40	2490.11	2486.60	5500.	9546.
100.000	-0.94	2489.30	2483.06	5500.	9730.

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TIME STEP # 11

* B

COMPUTING FROM TIME= 0.4444 DAYS TO TIME= 0.4694 DAYS IN 3

COMPUTATION STEPS

- - - - -

ACCUMULATED TIME (yrs)..... 0.001

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment #	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No.	(cfs)	(tons/day)	(deg F)
1	2050.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.47	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	9.16***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND.....	0.00	VERY FINE GRAVEL..	0.00

FINE SAND.....	0.00		FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00		MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00		COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00		VERY COARSE GRAVEL	0.00

TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)		GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	461.90		VERY FINE GRAVEL..	25.99
FINE SAND.....	3259.66		FINE GRAVEL.....	15.28
MEDIUM SAND.....	1924.92		MEDIUM GRAVEL.....	4.83
COARSE SAND.....	210.49		COARSE GRAVEL.....	1.04
VERY COARSE SAND..	31.26		VERY COARSE GRAVEL	0.31

TOTAL = 5935.69

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.465 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.44	2543.37	2539.56	2050.	47.
2000.000	-0.05	2543.18	2539.95	2050.	74.
1900.000	-0.06	2542.94	2539.94	2050.	276.
1800.000	-0.05	2542.57	2539.95	2050.	360.
1700.000	-0.49	2542.23	2539.51	2050.	295.
1600.000	-0.61	2541.02	2539.39	2050.	1008.
1500.000	-0.46	2537.50	2531.54	2050.	327.
1450.000	0.79	2536.29	2531.79	2050.	1212.
1400.000	-0.01	2534.95	2529.99	2050.	1985.
1350.000	0.10	2533.98	2530.10	2050.	973.
1300.000	-0.45	2533.22	2528.55	2050.	2307.
1230.000	0.00	2530.82	2529.00	2050.	2309.
1220.000	-2.96	2528.86	2524.04	2050.	837.
1200.000	0.01	2527.70	2526.01	2050.	1127.
1120.000	-1.04	2526.61	2522.96	2050.	858.
1110.000	0.00	2524.65	2523.00	2050.	902.
1100.000	-2.09	2524.04	2517.91	2050.	532.
1050.000	1.44	2523.13	2521.44	2050.	3078.
1010.000	0.00	2520.42	2519.00	2050.	3078.
1000.000	0.01	2515.06	2510.91	2050.	2764.
990.000	2.66	2514.27	2512.86	2050.	12970.
975.000	0.23	2512.03	2509.63	2050.	21769.
965.000	0.76	2510.99	2509.46	2050.	5610.
950.000	0.16	2510.35	2508.06	2050.	5415.
900.000	0.12	2509.43	2507.02	2050.	4183.
875.000	0.04	2508.81	2506.24	2050.	4247.
865.000	-0.05	2507.50	2505.45	2050.	10858.
850.000	-1.07	2507.15	2503.73	2050.	6682.
825.000	-0.33	2506.63	2503.57	2050.	8188.
800.000	0.43	2505.64	2503.73	2050.	10404.
750.000	-0.94	2504.62	2501.06	2050.	4649.
700.000	1.19	2503.50	2501.99	2050.	7535.
650.000	0.03	2501.35	2499.43	2050.	13988.
600.000	0.13	2500.28	2498.43	2050.	6302.

550.000	0.06	2498.90	2496.96	2050.	7747.
500.000	0.05	2498.05	2496.15	2050.	7875.
450.000	0.05	2496.49	2494.65	2050.	7752.
400.000	0.05	2495.19	2493.25	2050.	7281.
350.000	0.00	2494.09	2492.00	2050.	10798.
325.000	-0.04	2493.11	2491.46	2050.	14398.
300.000	-0.90	2492.72	2490.00	2050.	9748.
290.000	-0.19	2491.67	2490.01	2050.	12748.
275.000	-2.78	2491.11	2487.02	2050.	4199.
200.000	0.23	2490.26	2488.23	2050.	4848.
150.000	0.38	2488.48	2486.58	2050.	6756.
100.000	-0.92	2487.70	2483.08	2050.	5936.

\$\$ END

0 DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ = 11
TOTAL NO. OF WS PROFILES = 67
ITERATIONS IN EXNER EQ = 61640

COMPUTATIONS COMPLETED

RUN TIME = 0 HOURS, 0 MINUTES & 0.00 SECONDS

APPENDIX K.3
ALTERNATIVE 3 OUTPUT

Project Name Pantano Wash
 Project Number 07125-01 Made by jco Date 9/19/2008
 Reference COT SMDDFM Checked By Date

NOTES

General Scour $Z_{gs} = Y_{max} \left[\frac{0.0685V_m^{0.8}}{Y_n^{0.4} S_e^{0.3}} - 1 \right]$ General Scour is best estimated by performing a detailed sediment-transport analysis. When not practical this equation (Zeller, 1981) should be used.

Anti-Dune Scour $Z_a = 0.0137V_m^2$ The anti-dune trough depth can never exceed one-half the depth of flow. If the result is greater then one-half the depth of flow, change the results manually.

Low Flow Thawleg To be used when the ratio of the flow width to the flow depth is greater than 1.15 times the average velocity of flow for the 100-year discharge. If the flow width or flow depth exceeds the top width and bank height of the channel, use the topwidth and flow depth at bankfull conditions. If a low flow thawleg is to be used, it should be assumed at least 2 feet deep for regional watercourses and at least 1 foot deep for all other watercourses, unless field observations dictate otherwise.

Bend Scour **Bend scour is not applicable for this project**

Total Scour $Z_t = 1.3 (Z_{gs} + Z_a + Z_{bs} + Z_{lft})$ Total scour is the sum of general scour, anti-dune scour, bend scour and the low flow thawleg depths.

XS	Q	Channel Invert (ft)	WSE	Y_{max}	S_e^*	V_m	A	T_p	Y_n	Z_{gs}	Z_{mb}	Z_a	Z_{lft}	Z_t	Z_t
	Discharge (cfs)		Water Surface Elevation (ft)	Flow Depth (ft)	Energy Slope (ft/ft)	Flow Velocity (ft)	Flow Area (ft ²)	Top Width (ft)	Hydraulic Depth (ft)	General Scour (ft)	HEC-6 (1) (ft)	Anti-Dune Scour (ft)	Low Flow Thawleg (ft)	Total Scour (2) (ft)	Total Scour (3) (ft)
1600	32000	2540	2548.55	8.55	0.007049	14.81	2161.11	320.6	6.74	1.88	0.65	3.00	2.00	8.95	7.35
1500	32000	2532	2546.12	14.12	0.00289	10.8	2963.77	355.6	8.33	1.94	0.45	1.60	2.00	7.19	5.26
1450	32000	2531	2545.57	14.57	0.002511	10.69	2992.82	326.9	9.16	1.94	0	1.57	2.00	7.16	4.64
1400	32000	2530	2544.43	14.43	0.003389	12.13	2638.51	298.53	8.84	2.34	0	2.02	2.00	8.26	5.22
1350	32000	2530	2544.15	14.15	0.00236	10.9	2937.28	300.53	9.77	2.01	0.27	1.63	2.00	7.33	5.07
1300	32000	2529	2542.32	13.32	0.002846	11.96	2676.17	271.97	9.84	2.13	0.72	1.96	2.00	7.92	6.08
1230	32000	2529	2538.41	9.41	0.006575	16.7	1924.15	262.04	7.34	3.06	0	3.82	2.00	11.54	7.57
1220	32000	2527	2537.18	10.18	0.005447	15.23	2100.79	240.31	8.74	2.18	2.84	3.18	2.00	9.57	10.42
1200	32000	2526	2535.69	9.69	0.004262	13.69	2338.27	260.38	8.98	1.82	0	2.57	2.00	8.30	5.94
1120	32000	2524	2536.04	12.04	0.00258	11.76	2721.21	259.4	10.49	1.79	0.9	1.89	2.00	7.39	6.23
1110	32000	2523	2531.95	8.94	0.006788	16.6	1928.26	227.56	8.47	2.08	0	3.78	2.00	10.22	7.51
1100	32000	2520	2531.21	11.21	0.004588	14.98	2136.04	218.24	9.79	2.31	1.92	3.07	2.00	9.60	9.09
1050	32000	2520	2528.87	8.87	0.006744	16.31	1961.45	238.16	8.24	2.06	0	3.64	2.00	10.02	7.34
1010	32000	2519	2526.57	7.57	0.007003	15.08	2122.35	300.87	7.05	1.65	0	3.12	2.00	8.79	6.65
1000	32000	2510.9	2523.79	12.89	0.001187	8.87	3608.57	291	12.40	1.06	0	1.08	2.00	5.38	4.00
990	32000	2510.2	2523.29	13.09	0.001459	9.83	3255.86	263.84	12.34	1.40	0	1.32	2.00	6.13	4.32
975	32000	2509.4	2522.68	13.28	0.001742	10.8	2962.54	237.01	12.50	1.67	0	1.60	2.00	6.84	4.68
965	32000	2508.7	2522.35	13.65	0.001751	10.97	2915.9	228.57	12.76	1.76	0	1.65	2.00	7.03	4.74
950	32000	2507.9	2521.63	13.73	0.002132	12.08	2649.4	206.82	12.81	2.02	0	2.00	2.00	7.83	5.20
900	32000	2506.9	2517.83	10.93	0.006426	18.09	1769.07	172.49	10.26	2.67	0.99	4.48	2.00	11.90	9.72
875	32000	2506.2	2516.67	10.47	0.006572	17.9	1787.96	181.39	9.86	2.57	1.37	4.39	2.00	11.64	10.09
865	32000	2505.5	2514.67	9.17	0.006729	16.9	1893.11	215.12	8.80	2.16	0	3.91	2.00	10.49	7.69
850	32000	2504.8	2513.77	8.97	0.005213	14.79	2164.19	249.68	8.67	1.85	0	3.00	2.00	8.90	6.50
825	32000	2503.9	2513.39	9.48	0.003804	13.11	2441.64	266.91	9.15	1.69	0	2.35	2.00	7.86	5.66
800	32000	2503.3	2512.78	9.48	0.004041	13.49	2371.29	258.9	9.16	1.74	0	2.49	2.00	8.10	5.84
750	32000	2502	2510.68	8.68	0.005788	15.23	2100.66	251.87	8.34	1.87	0.78	3.18	2.00	9.16	7.75
700	32000	2500.8	2509.82	9.02	0.004612	13.98	2289.14	262.41	8.72	1.74	0	2.68	2.00	8.34	6.08
650	32000	2499.4	2508.60	9.20	0.004307	13.68	2339.19	262.92	8.90	1.72	0	2.56	2.00	8.17	5.93
600	32000	2498.3	2507.76	9.46	0.004012	13.43	2382.55	260.76	9.14	1.73	0	2.47	2.00	8.06	5.81
550	32000	2496.9	2506.90	10.00	0.003338	12.7	2519.95	259.25	9.72	1.66	0	2.21	2.00	7.63	5.47
500	32000	2496.1	2506.55	10.45	0.002832	12.02	2661.97	263.82	10.09	1.62	0	1.98	2.00	7.27	5.17
450	32000	2494.6	2506.04	11.44	0.002125	11.01	2906.24	263.82	11.02	1.52	0	1.66	2.00	6.73	4.76
400	32000	2493.2	2505.74	12.54	0.001607	10.12	3160.69	263.31	12.00	1.41	0	1.40	2.00	6.26	4.42
350	32000	2492	2505.32	13.32	0.0015	10.22	3132.03	248.92	12.58	1.53	0	1.43	2.00	6.45	4.46
325	32000	2491.5	2504.76	13.26	0.0019	11.27	2838.35	225.95	12.56	1.76	0	1.74	2.00	7.14	4.86
300	32000	2490.9	2503.69	12.79	0.0027	13.13	2438.06	204.67	11.91	2.17	0.05	2.36	2.00	8.50	5.74
290	32000	2490.2	2502.69	12.49	0.0028	13.09	2444.85	208.21	11.74	2.10	0.19	2.35	2.00	8.39	5.90
275	32000	2489.8	2499.95	10.14	0.0066	17.66	1812.47	188.81	9.60	2.47	2.5	4.27	2.00	11.36	11.40
200	32000	2488	2498.18	10.18	0.0066	17.63	1815.39	188.47	9.63	2.47	0	4.26	2.00	11.35	8.14
150	32000	2486.2	2497.02	10.82	0.0047	15.53	2061.02	201.31	10.24	2.29	0	3.20	2.00	9.87	6.90
100	32000	2484	2496	12.00	0.0050	14.39	2223.50	261.12	8.52	2.44	0.89	2.84	2.00	9.46	7.44

- (1) Cross-sections reporting aggradation were given a value of zero for the purpose of scour calculations
- (2) Includes COT General Scour Value
- (3) Includes HEC-6 value for mobile bed adjustment at Q_{100}

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*****
*   SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS   *   *   U.S. ARMY CORPS OF
ENGINEERS   *
*   Version: 4.2   -   May 2004   *   *   HYDROLOGIC
ENGINEERING CENTER   *
*   INPUT FILE:   alt375t.dat   *   *   609 SECOND STREET
*
*   OUTPUT FILE:   alt375.out   *   *   DAVIS, CALIFORNIA
95616-4687   *
*   RUN DATE: 19 SEP 08   RUN TIME: 14:19:34   *   *   (530) 756-1104
*
*****
*****

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          X      X  XXXXXXXX   XXXXX           XXXXX
          X      X  X          X      X       X      X
          X      X  X          X              X
          XXXXXXXX  XXXX   X          XXXXX  XXXXXXX
          X      X  X          X              X      X
          X      X  X          X      X       X      X
          X      X  XXXXXXXX   XXXXX           XXXXX

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*****
*   MAXIMUM LIMITS FOR THIS VERSION ARE:   *
*   10 Stream Segments (Main Stem + Tributaries)   *
*   500 Cross Sections   *
*   200 Elevation/Station Points per Cross Section   *
*   20 Grain Sizes   *
*   20 Control Points   *
*****

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T1
T2   Pantano-Sediment Transpo rt-alt2
T3   River #1,Reach #   1

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N values... Left   Channel   Right   Contraction   Expansion
            0.0450   0.0300   0.0400   1.1000   0.7000

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SECTION NO.   100.000
...ELEVATION of Model Bottom =   2474.000 ft.

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N values... Left   Channel   Right   Contraction   Expansion
            0.0500   0.0300   0.0500   1.1000   0.7000

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SECTION NO.   150.000
...ELEVATION of Model Bottom =   2476.200 ft.

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N values... Left   Channel   Right   Contraction   Expansion
            0.0450   0.0300   0.0400   1.1000   0.7000

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SECTION NO.   200.000
...ELEVATION of Model Bottom =   2478.000 ft.

```

```

N values... Left   Channel   Right   Contraction   Expansion
            0.0450   0.0300   0.0400   1.1000   0.7000

```

SECTION NO. 275.000
...ELEVATION of Model Bottom = 2479.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0450	0.0300	0.0400	1.1000	0.7000

SECTION NO. 290.000
...ELEVATION of Model Bottom = 2490.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 300.000
...ELEVATION of Model Bottom = 2480.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 325.000
...ELEVATION of Model Bottom = 2481.500 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 350.000
...ELEVATION of Model Bottom = 2482.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 400.000
...ELEVATION of Model Bottom = 2483.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 450.000
...ELEVATION of Model Bottom = 2484.600 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 500.000
...ELEVATION of Model Bottom = 2486.100 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 550.000
...ELEVATION of Model Bottom = 2486.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 600.000
...ELEVATION of Model Bottom = 2488.300 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 650.000
...ELEVATION of Model Bottom = 2489.400 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 700.000
...ELEVATION of Model Bottom = 2490.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 750.000
...ELEVATION of Model Bottom = 2492.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 800.000
...ELEVATION of Model Bottom = 2503.300 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 825.000
...ELEVATION of Model Bottom = 2493.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 850.000
...ELEVATION of Model Bottom = 2494.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 865.000
...ELEVATION of Model Bottom = 2495.500 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 875.000
...ELEVATION of Model Bottom = 2496.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 900.000
...ELEVATION of Model Bottom = 2496.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 950.000
...ELEVATION of Model Bottom = 2497.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 965.000
...ELEVATION of Model Bottom = 2498.700 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 975.000
...ELEVATION of Model Bottom = 2499.400 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 990.000
...ELEVATION of Model Bottom = 2500.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1000.000
...ELEVATION of Model Bottom = 2510.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1010.000
...ELEVATION of Model Bottom = 2519.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1050.000
...ELEVATION of Model Bottom = 2510.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1100.000
...ELEVATION of Model Bottom = 2510.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1110.000
...ELEVATION of Model Bottom = 2523.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1120.000
...ELEVATION of Model Bottom = 2514.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1200.000
...ELEVATION of Model Bottom = 2526.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1220.000
...ELEVATION of Model Bottom = 2517.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1230.000
...ELEVATION of Model Bottom = 2529.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1300.000
...ELEVATION of Model Bottom = 2519.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1350.000
...ELEVATION of Model Bottom = 2520.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1400.000
...ELEVATION of Model Bottom = 2520.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1450.000
...ELEVATION of Model Bottom = 2521.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1500.000
...ELEVATION of Model Bottom = 2522.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.5500	1.1000	0.7000

SECTION NO. 1600.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1700.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1800.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1900.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 2000.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 2100.000
...ELEVATION of Model Bottom = 2530.000 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 46
NO. OF INPUT DATA MESSAGES = 0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK = 46
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK= 1
END OF GEOMETRIC DATA

=====

T4	BED GRADATIONS FROM FIELD SAMPLE	S.				
T5	Use Full Range o f Sandsand Grav	els				
T6	SEDIMENT TRANSPO RT BYToffalet	i				
T7	SEDIMENT INFLOWBY toffaletis EQ	UATI	ON			
T8						

Pantano-Sediment Transpo rt-alt2
River #1,Reach # 1

SEDIMENT PROPERITES AND PARAMETERS

	SPI	IBG	MNQ	SPGF	ACGR	NFALL	IBSHER
I1	20.	0	1	1.000	32.174	2	1

SANDS - BOULDERS ARE PRESENT

I4	MTC 1	IASA 1	LASA 10	SPGS 2.650	GSF 0.667	BSAE 0.500	PSI 30.000	UWDLB 93.000
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USING TRANSPORT CAPACITY RELATIONSHIP # 1, TOFFALETI
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	VERY FINE GRAVEL..	2.828
FINE SAND.....	0.177	FINE GRAVEL.....	5.657
MEDIUM SAND.....	0.354	MEDIUM GRAVEL.....	11.314
COARSE SAND.....	0.707	COARSE GRAVEL.....	22.627
VERY COARSE SAND..	1.414	VERY COARSE GRAVEL	45.255

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

I5	DBI 0.000	DBN 1.000	XID 0.000	XIN 1.000	XIU 0.000	UBI 0.000	UBN 1.000	JSL 1
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SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

FLOW	1000.00	3000.00	6000.00	10000.0	15000.0	20000.0	25000.0	32000.0
------	---------	---------	---------	---------	---------	---------	---------	---------

VF SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
F SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
M SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
C SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VC SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VF GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
F GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
M GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
C GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VC GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19

TOTAL	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18
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REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS CHANNEL DISTANCE SECTION DOWNSTREAM NO. (miles)	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS			ACCUMULATED FROM (ft)
			LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	
-----	0.000					
100.000 0.000		457.380	2501.000	2484.000	2502.000	0.000
150.000 0.054	287.450	358.900	2502.000	2486.200	2502.000	287.450
200.000 0.110	293.940	914.950	2507.000	2488.000	2514.000	581.390
275.000 0.160	264.000	316.550	2509.000	2489.800	2507.000	845.390
290.000 0.176	85.000	313.580	2511.000	2490.200	2510.000	930.390
300.000 0.203	142.740	326.780	2511.000	2490.900	2512.000	1073.130
325.000 0.227	128.000	595.080	2513.000	2491.500	2512.000	1201.130
350.000 0.247	102.000	410.830	2512.000	2492.000	2507.000	1303.130
400.000 0.293	246.380	870.860	2512.000	2493.200	2510.000	1549.510
450.000 0.346	275.960	427.130	2513.000	2494.600	2510.000	1825.470
500.000 0.405	311.970	852.010	2515.000	2496.100	2515.000	2137.440
550.000 0.437	170.220	497.230	2515.000	2496.900	2513.000	2307.660
600.000 0.492	292.590	815.390	2516.000	2498.300	2516.000	2600.250
650.000 0.534	219.620	461.500	2516.000	2499.400	2516.000	2819.870
700.000 0.590	294.120	548.150	2518.000	2500.800	2518.000	3113.990
750.000 0.636	245.160	382.010	2518.000	2502.000	2519.000	3359.150
	259.430					

800.000		733.080	2522.000	2503.300	2522.000	3618.580
0.685						
	110.490					
825.000		357.950	2523.000	2503.900	2521.000	3729.070
0.706						
	201.980					
850.000		346.100	2524.000	2504.800	2523.000	3931.050
0.745						
	153.000					
865.000		584.460	2525.000	2505.500	2523.000	4084.050
0.773						
	143.000					
875.000		354.100	2525.000	2506.200	2530.000	4227.050
0.801						
	151.890					
900.000		431.720	2526.000	2506.900	2524.000	4378.940
0.829						
	206.230					
950.000		586.790	2527.000	2507.900	2536.000	4585.170
0.868						
	148.000					
965.000		347.990	2529.000	2508.700	2537.000	4733.170
0.896						
	151.000					
975.000		462.200	2529.000	2509.400	2538.000	4884.170
0.925						
	168.000					
990.000		764.810	2529.000	2510.200	2538.000	5052.170
0.957						
	147.000					
1000.000		655.410	2530.000	2510.900	2540.000	5199.170
0.985						
	71.920					
1010.000		733.300	2533.000	2519.000	2537.000	5271.090
0.998						
	162.000					
1050.000		813.150	2535.000	2520.000	2540.000	5433.090
1.029						
	294.000					
1100.000		527.910	2538.000	2520.000	2537.000	5727.090
1.085						
	36.390					
1110.000		450.960	2538.000	2523.000	2537.000	5763.480
1.092						
	443.730					
1120.000		638.130	2539.000	2524.000	2539.000	6207.210
1.176						
	56.560					
1200.000		443.870	2540.000	2526.000	2539.000	6263.770
1.186						
	411.790					
1220.000		351.910	2542.000	2527.000	2538.000	6675.560
1.264						
	47.440					
1230.000		522.090	2543.000	2529.000	2539.000	6723.000
1.273						
	383.380					

C GRVL 0.025	F SAND 0.084 VF GRVL 0.095
VC GRVL 0.005	M SAND 0.209 F GRVL 0.078
	C SAND 0.224
2100.000 32.000 0.328 0.210 0.997 0.997	VF SAND 0.028 VC SAND 0.193
M GRVL 0.054	F SAND 0.084 VF GRVL 0.095
C GRVL 0.025	M SAND 0.209 F GRVL 0.078
VC GRVL 0.005	C SAND 0.224

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1:

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME (cu.ft) (cu.yd)	
100.000	143.725	424.553	10.000	610189.	22599.6
150.000	290.695	468.840	10.000	0.136289E+07	50477.5
200.000	278.970	722.920	10.000	0.201673E+07	74693.7
275.000	174.500	467.195	10.000	815255.	30194.6
290.000	113.870	316.707	0.200	7212.69	267.137
300.000	135.370	366.742	10.000	496459.	18387.4
325.000	115.000	518.071	10.000	595782.	22066.0
350.000	174.190	537.259	10.000	935851.	34661.1
400.000	261.170	720.387	10.000	0.188144E+07	69682.8
450.000	293.965	571.706	10.000	0.168062E+07	62245.0
500.000	241.095	718.632	10.000	0.173259E+07	64169.9
550.000	231.405	607.773	10.000	0.140642E+07	52089.5
600.000	256.105	704.230	10.000	0.180357E+07	66798.8
650.000	256.870	528.464	10.000	0.135747E+07	50276.5
700.000	269.640	507.221	10.000	0.136767E+07	50654.5
750.000	252.295	469.083	10.000	0.118347E+07	43832.4
800.000	184.960	613.661	0.000	0.00000	0.00000
825.000	156.235	399.612	10.000	624334.	23123.5
850.000	177.490	382.593	10.000	679064.	25150.5
865.000	148.000	506.295	10.000	749317.	27752.5
875.000	147.445	404.663	10.000	596655.	22098.3
900.000	179.060	450.513	10.000	806688.	29877.4
950.000	177.115	523.439	10.000	927089.	34336.6
965.000	149.500	406.617	10.000	607892.	22514.5
975.000	159.500	497.302	10.000	793197.	29377.7
990.000	157.500	693.995	10.000	0.109304E+07	40483.0
1000.000	109.460	688.426	0.000	0.00000	0.00000
1010.000	116.960	743.751	0.000	0.00000	0.00000
1050.000	228.000	742.392	10.000	0.169265E+07	62690.9
1100.000	165.195	609.692	10.000	0.100718E+07	37303.0
1110.000	240.060	510.565	0.000	0.00000	0.00000
1120.000	250.145	575.473	10.000	0.143952E+07	53315.4
1200.000	234.175	424.738	0.000	0.00000	0.00000
1220.000	229.615	385.257	10.000	884607.	32763.2
1230.000	215.410	508.268	0.000	0.00000	0.00000
1300.000	330.310	480.725	10.000	0.158788E+07	58810.5

1350.000	244.195	442.797	10.000	0.108129E+07	40047.7	
1400.000	204.930	663.186	10.000	0.135907E+07	50335.8	
1450.000	206.620	541.885	10.000	0.111964E+07	41468.3	
1500.000	446.995	727.208	10.000	0.325058E+07	120392.	
1600.000	439.730	558.264	10.000	0.245485E+07	90920.5	
1700.000	200.000	449.020	10.000	898040.	33260.7	
1800.000	200.000	449.020	10.000	898040.	33260.7	
1900.000	200.000	449.020	10.000	898040.	33260.7	
2000.000	200.000	449.020	10.000	898040.	33260.7	
2100.000	100.000	449.020	10.000	449020.	16630.4	

NO. OF INPUT DATA MESSAGES= 0
 END OF SEDIMENT DATA

=====

\$H YD
 BEGIN COMPUTATIONS.
 COMPUTING FROM TIME= 0.0000 DAYS TO TIME= 0.0167 DAYS IN 2
 COMPUTATION STEPS

=====

TIME STEP # 2
 * B
 COMPUTING FROM TIME= 0.0139 DAYS TO TIME= 0.0969 DAYS IN 12
 COMPUTATION STEPS

- - - - -

ACCUMULATED TIME (yrs).... 0.000
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment #	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No.	(cfs)	(tons/day)	(deg F)
1	18200.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.10	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	2.35***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

-

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL =
			0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	9013.30	VERY FINE GRAVEL..	147.92
FINE SAND.....	20789.99	FINE GRAVEL.....	34.71
MEDIUM SAND.....	6210.79	MEDIUM GRAVEL.....	7.86
COARSE SAND.....	3124.36	COARSE GRAVEL.....	1.46
VERY COARSE SAND..	1089.49	VERY COARSE GRAVEL	0.14
			TOTAL =
			40420.04

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.097 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.05	2550.14	2539.95	18200.	129.
2000.000	-0.03	2549.81	2539.97	18200.	516.
1900.000	-0.03	2549.44	2539.97	18200.	705.
1800.000	-0.03	2548.97	2539.97	18200.	963.
1700.000	-0.27	2548.42	2539.73	18200.	41500.
1600.000	-0.05	2546.13	2539.95	18200.	41686.
1500.000	-0.05	2542.56	2531.95	18200.	43022.
1450.000	0.21	2541.78	2531.21	18200.	20875.
1400.000	0.00	2540.29	2530.00	18200.	17706.
1350.000	-0.04	2539.81	2529.96	18200.	19229.
1300.000	-0.06	2538.95	2528.94	18200.	20205.
1230.000	0.00	2535.61	2529.00	18200.	20205.
1220.000	-1.90	2535.46	2525.10	18200.	26378.
1200.000	0.45	2532.45	2526.45	18200.	40384.
1120.000	-0.86	2532.90	2523.14	18200.	47143.
1110.000	0.11	2529.44	2523.11	18200.	66452.
1100.000	-0.51	2530.38	2519.49	18200.	59219.
1050.000	1.46	2527.69	2521.46	18200.	38994.
1010.000	0.00	2524.38	2519.00	18200.	38994.
1000.000	0.00	2519.17	2510.90	18200.	38992.
990.000	0.43	2518.37	2510.63	18200.	30195.
975.000	0.12	2517.75	2509.52	18200.	28713.
965.000	0.08	2517.30	2508.78	18200.	27831.
950.000	0.05	2516.40	2507.95	18200.	28194.
900.000	-0.76	2513.75	2506.14	18200.	29258.
875.000	-1.37	2513.48	2504.83	18200.	30944.
865.000	0.25	2511.98	2505.75	18200.	22406.
850.000	0.55	2511.09	2505.35	18200.	22395.
825.000	0.15	2510.14	2504.05	18200.	23591.
800.000	0.00	2509.58	2503.30	18200.	23812.

750.000	-0.48	2508.63	2501.52	18200.	69182.
700.000	0.25	2507.26	2501.05	18200.	49370.
650.000	0.11	2505.83	2499.51	18200.	47246.
600.000	0.07	2504.79	2498.37	18200.	44427.
550.000	0.05	2503.44	2496.95	18200.	49323.
500.000	0.06	2502.79	2496.16	18200.	44341.
450.000	0.04	2501.82	2494.64	18200.	39525.
400.000	0.02	2501.29	2493.22	18200.	35985.
350.000	0.02	2500.78	2492.02	18200.	37146.
325.000	0.02	2500.26	2491.52	18200.	37270.
300.000	0.03	2499.04	2490.93	18200.	37075.
290.000	-0.17	2498.91	2490.03	18200.	37445.
275.000	-0.04	2497.23	2489.76	18200.	37348.
200.000	0.04	2495.11	2488.04	18200.	37860.
150.000	0.06	2493.56	2486.26	18200.	36952.
100.000	-0.72	2492.40	2483.28	18200.	40420.

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=====
TIME STEP #          3
*      B
COMPUTING FROM TIME=      0.0972 DAYS TO TIME=      0.1392 DAYS IN      6
COMPUTATION STEPS
-----

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ACCUMULATED TIME (yrs)....      0.000
FLOW DURATION (days).....      0.007

```

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	20850.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

```

*****
TIME          ENTRY *          SAND          *
DAYS         POINT *      INFLOW    OUTFLOW    TRAP EFF *
0.14        2100.000 *          0.00          3.16***** *
TOTAL=      100.000 *          0.00          3.16***** *
*****

```

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00

COARSE SAND.....	0.00		COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00		VERY COARSE GRAVEL	0.00

				TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)		GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	8866.66		VERY FINE GRAVEL..	197.24
FINE SAND.....	17025.78		FINE GRAVEL.....	46.58
MEDIUM SAND.....	8032.36		MEDIUM GRAVEL.....	10.49
COARSE SAND.....	1349.38		COARSE GRAVEL.....	1.94
VERY COARSE SAND..	1321.31		VERY COARSE GRAVEL	0.18

				TOTAL = 36851.92

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.139 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.05	2550.76	2539.95	20850.	156.
2000.000	-0.04	2550.41	2539.96	20850.	668.
1900.000	-0.03	2550.00	2539.97	20850.	888.
1800.000	-0.03	2549.49	2539.97	20850.	1056.
1700.000	-0.41	2549.06	2539.59	20850.	4249.
1600.000	-0.06	2546.63	2539.94	20850.	8871.
1500.000	-0.23	2543.36	2531.77	20850.	81804.
1450.000	0.44	2542.35	2531.44	20850.	38023.
1400.000	0.05	2540.80	2530.05	20850.	32487.
1350.000	-0.10	2540.37	2529.90	20850.	48960.
1300.000	-0.32	2539.66	2528.68	20850.	74535.
1230.000	0.00	2536.21	2529.00	20850.	74529.
1220.000	-1.95	2535.98	2525.05	20850.	77807.
1200.000	0.33	2532.80	2526.33	20850.	83427.
1120.000	-0.94	2533.73	2523.06	20850.	86235.
1110.000	0.19	2530.12	2523.19	20850.	115816.
1100.000	-0.56	2531.21	2519.44	20850.	110590.
1050.000	1.67	2528.38	2521.67	20850.	68805.
1010.000	0.00	2524.82	2519.00	20850.	68805.
1000.000	0.00	2520.07	2510.90	20850.	68790.
990.000	0.68	2519.12	2510.88	20850.	53808.
975.000	0.16	2518.57	2509.56	20850.	50733.
965.000	0.10	2518.12	2508.80	20850.	49103.
950.000	0.06	2517.19	2507.96	20850.	48122.
900.000	-0.82	2514.40	2506.08	20850.	49967.
875.000	-1.41	2514.49	2504.79	20850.	50398.
865.000	0.49	2512.95	2505.99	20850.	41352.
850.000	0.57	2511.64	2505.37	20850.	39389.
825.000	0.16	2510.73	2504.06	20850.	37966.
800.000	0.00	2510.00	2503.30	20850.	37504.
750.000	-0.65	2509.36	2501.35	20850.	40258.
700.000	0.24	2507.79	2501.04	20850.	39832.
650.000	0.09	2506.39	2499.49	20850.	40744.
600.000	0.06	2505.37	2498.36	20850.	42911.
550.000	0.06	2504.09	2496.96	20850.	43344.
500.000	0.06	2503.48	2496.16	20850.	42491.

450.000	0.06	2502.60	2494.66	20850.	40526.
400.000	0.06	2502.11	2493.26	20850.	38310.
350.000	0.04	2501.61	2492.04	20850.	36972.
325.000	0.02	2501.07	2491.52	20850.	37366.
300.000	0.03	2499.79	2490.93	20850.	35903.
290.000	-0.18	2499.70	2490.02	20850.	36081.
275.000	-0.04	2497.83	2489.76	20850.	36169.
200.000	0.04	2495.79	2488.04	20850.	36625.
150.000	0.07	2493.95	2486.27	20850.	35539.
100.000	-0.79	2492.90	2483.21	20850.	36852.

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=====
TIME STEP #          4
*      B
COMPUTING FROM TIME=      0.1389 DAYS TO TIME=      0.1809 DAYS IN      6
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....      0.000
FLOW DURATION (days).....      0.007

```

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	26200.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

```

*****
TIME          ENTRY *          SAND          *
DAYS          POINT *    INFLOW    OUTFLOW    TRAP EFF *
0.18    2100.000 *        0.00          4.14***** *
TOTAL=    100.000 *        0.00          4.14***** *
*****

```

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
------------	-----------------	------------	-----------------

VERY FINE SAND.....	15127.90		VERY FINE GRAVEL..	234.16
FINE SAND.....	22245.31		FINE GRAVEL.....	54.82
MEDIUM SAND.....	17300.70		MEDIUM GRAVEL.....	12.01
COARSE SAND.....	1623.60		COARSE GRAVEL.....	2.18
VERY COARSE SAND..	1400.18		VERY COARSE GRAVEL	0.20

TOTAL = 58001.08

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.181 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.06	2551.79	2539.94	26200.	221.
2000.000	-0.05	2551.38	2539.95	26200.	276.
1900.000	-0.04	2550.89	2539.96	26200.	1200.
1800.000	-0.04	2550.25	2539.96	26200.	1586.
1700.000	-0.44	2549.71	2539.56	26200.	2961.
1600.000	-0.56	2547.22	2539.44	26200.	103704.
1500.000	-0.24	2545.14	2531.76	26200.	44931.
1450.000	0.81	2543.24	2531.81	26200.	46377.
1400.000	0.11	2541.76	2530.11	26200.	46771.
1350.000	-0.32	2541.64	2529.68	26200.	37604.
1300.000	-0.50	2541.04	2528.50	26200.	66572.
1230.000	0.00	2537.31	2529.00	26200.	66580.
1220.000	-2.00	2537.35	2525.00	26200.	67929.
1200.000	0.50	2533.86	2526.50	26200.	62068.
1120.000	-0.98	2535.11	2523.02	26200.	64649.
1110.000	0.30	2531.34	2523.30	26200.	68113.
1100.000	-0.60	2532.61	2519.40	26200.	68742.
1050.000	1.70	2529.56	2521.70	26200.	66972.
1010.000	0.00	2525.74	2519.00	26200.	66972.
1000.000	0.00	2521.80	2510.90	26200.	66972.
990.000	1.00	2520.64	2511.20	26200.	53114.
975.000	0.23	2520.18	2509.63	26200.	50880.
965.000	0.14	2519.76	2508.84	26200.	49954.
950.000	0.08	2518.78	2507.98	26200.	49903.
900.000	-0.84	2515.71	2506.06	26200.	51206.
875.000	-1.42	2515.88	2504.78	26200.	51874.
865.000	0.71	2514.29	2506.21	26200.	44892.
850.000	0.62	2512.72	2505.42	26200.	42857.
825.000	0.17	2511.78	2504.07	26200.	43870.
800.000	0.00	2511.09	2503.30	26200.	44664.
750.000	-0.68	2510.50	2501.32	26200.	48212.
700.000	0.27	2508.76	2501.07	26200.	44015.
650.000	0.08	2507.41	2499.48	26200.	43357.
600.000	0.05	2506.43	2498.35	26200.	43395.
550.000	0.04	2505.30	2496.94	26200.	45446.
500.000	0.05	2504.80	2496.15	26200.	47081.
450.000	0.07	2504.07	2494.67	26200.	48351.
400.000	0.08	2503.65	2493.28	26200.	48071.
350.000	0.08	2503.16	2492.08	26200.	47293.
325.000	0.04	2502.55	2491.54	26200.	47030.
300.000	0.04	2501.09	2490.94	26200.	46816.
290.000	-0.19	2501.04	2490.01	26200.	46905.

275.000	-0.28	2499.41	2489.52	26200.	71556.
200.000	0.16	2497.12	2488.16	26200.	63723.
150.000	0.09	2494.78	2486.29	26200.	56688.
100.000	-0.83	2493.90	2483.17	26200.	58001.

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=====
TIME STEP #          5
*      B
COMPUTING FROM TIME=      0.1805 DAYS TO TIME=      0.2225 DAYS IN      6
COMPUTATION STEPS
  
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- - - - -
ACCUMULATED TIME (yrs)....      0.001
FLOW DURATION (days).....      0.007
  
```

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	32000.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

```

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****
TIME          ENTRY *          SAND          *
DAYS         POINT *    INFLOW  OUTFLOW  TRAP EFF *
0.22      2100.000 *        0.00          *
TOTAL=     100.000 *        0.00      5.53***** *
*****
  
```

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	6069.47	VERY FINE GRAVEL..	272.90
FINE SAND.....	23332.61	FINE GRAVEL.....	62.56
MEDIUM SAND.....	28423.67	MEDIUM GRAVEL.....	13.17
COARSE SAND.....	2718.28	COARSE GRAVEL.....	2.34
VERY COARSE SAND..	1550.43	VERY COARSE GRAVEL	0.21

TOTAL = 62445.65

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.222 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.25	2552.97	2539.75	32000.	14442.
2000.000	-0.04	2552.50	2539.96	32000.	13171.
1900.000	-0.05	2551.97	2539.95	32000.	13302.
1800.000	-0.04	2551.25	2539.96	32000.	13870.
1700.000	-0.46	2550.64	2539.54	32000.	15391.
1600.000	-0.58	2548.00	2539.42	32000.	19398.
1500.000	-0.28	2546.42	2531.72	32000.	22662.
1450.000	0.68	2544.79	2531.68	32000.	28408.
1400.000	0.08	2543.17	2530.08	32000.	29086.
1350.000	-0.19	2542.93	2529.81	32000.	18779.
1300.000	-0.64	2542.44	2528.36	32000.	22065.
1230.000	0.00	2538.48	2529.00	32000.	22064.
1220.000	-2.02	2538.41	2524.98	32000.	23736.
1200.000	0.44	2535.12	2526.44	32000.	33408.
1120.000	-1.01	2536.32	2522.99	32000.	34227.
1110.000	0.20	2532.45	2523.20	32000.	38332.
1100.000	-0.62	2533.73	2519.38	32000.	39622.
1050.000	1.60	2530.59	2521.60	32000.	52689.
1010.000	0.00	2526.60	2519.00	32000.	52689.
1000.000	0.00	2523.52	2510.90	32000.	52687.
990.000	1.28	2522.19	2511.48	32000.	40182.
975.000	0.27	2521.81	2509.67	32000.	38921.
965.000	0.15	2521.40	2508.85	32000.	38295.
950.000	0.08	2520.39	2507.98	32000.	38303.
900.000	-0.89	2517.00	2506.01	32000.	40571.
875.000	-1.45	2517.14	2504.75	32000.	41720.
865.000	0.86	2515.57	2506.36	32000.	36576.
850.000	0.64	2513.76	2505.44	32000.	36244.
825.000	0.14	2512.92	2504.04	32000.	36470.
800.000	0.00	2512.12	2503.30	32000.	40196.
750.000	-0.74	2511.60	2501.26	32000.	42452.
700.000	0.30	2509.77	2501.10	32000.	37583.
650.000	0.08	2508.52	2499.48	32000.	38342.
600.000	0.05	2507.60	2498.35	32000.	38149.
550.000	0.05	2506.59	2496.95	32000.	38037.
500.000	0.05	2506.16	2496.15	32000.	38134.
450.000	0.05	2505.52	2494.65	32000.	39038.
400.000	0.07	2505.13	2493.27	32000.	40307.
350.000	0.07	2504.60	2492.07	32000.	40964.
325.000	0.04	2503.90	2491.54	32000.	41791.
300.000	0.04	2502.04	2490.94	32000.	42308.
290.000	-0.19	2502.02	2490.01	32000.	42358.
275.000	-1.16	2501.66	2488.64	32000.	70240.
200.000	0.34	2498.56	2488.34	32000.	61550.
150.000	0.11	2496.14	2486.31	32000.	61106.
100.000	-0.86	2494.90	2483.14	32000.	62446.

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=====
TIME STEP #          6
*      B
COMPUTING FROM TIME=      0.2222 DAYS TO TIME=      0.2642 DAYS IN      6
COMPUTATION STEPS
-----

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ACCUMULATED TIME (yrs)....      0.001
FLOW DURATION (days).....      0.007

```

UPSTREAM BOUNDARY CONDITIONS

```

-----
Stream Segment # 1      | DISCHARGE | SEDIMENT LOAD | TEMPERATURE
Section No.  2100.000 | (cfs)     | (tons/day)    | (deg F)
-----
                INFLOW |      29350.00 |      0.00 |      75.00

```

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

```

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****
TIME          ENTRY *          SAND          *
DAYS         POINT *          INFLOW      OUTFLOW  TRAP EFF *
0.26        2100.000 *          0.00              *
TOTAL=      100.000 *          0.00          6.84***** *
*****

```

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

```

-----
GRAIN SIZE          LOAD (tons/day) | GRAIN SIZE          LOAD (tons/day)
-----
VERY FINE SAND....      0.00 | VERY FINE GRAVEL..      0.00
FINE SAND.....          0.00 | FINE GRAVEL.....          0.00
MEDIUM SAND.....          0.00 | MEDIUM GRAVEL.....          0.00
COARSE SAND.....          0.00 | COARSE GRAVEL.....          0.00
VERY COARSE SAND..          0.00 | VERY COARSE GRAVEL          0.00
-----
TOTAL =                      0.00

```

SEDIMENT OUTFLOW from the Downstream Boundary

```

-----
GRAIN SIZE          LOAD (tons/day) | GRAIN SIZE          LOAD (tons/day)
-----
VERY FINE SAND....      9410.48 | VERY FINE GRAVEL..      280.28
FINE SAND.....          20183.40 | FINE GRAVEL.....          68.04
MEDIUM SAND.....          25816.55 | MEDIUM GRAVEL.....          14.87
COARSE SAND.....          3218.90 | COARSE GRAVEL.....          2.69
VERY COARSE SAND..          1023.84 | VERY COARSE GRAVEL          0.25
-----
TOTAL =                      60019.30

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TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.264 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.39	2552.47	2539.61	29350.	812.
2000.000	-0.04	2551.95	2539.96	29350.	1124.
1900.000	-0.05	2551.43	2539.95	29350.	1354.
1800.000	-0.05	2550.72	2539.95	29350.	1463.
1700.000	-0.48	2550.12	2539.52	29350.	1773.
1600.000	-0.60	2547.58	2539.40	29350.	3506.
1500.000	-0.32	2545.75	2531.68	29350.	15744.
1450.000	0.62	2544.21	2531.62	29350.	18407.
1400.000	0.08	2542.54	2530.08	29350.	18780.
1350.000	-0.14	2542.25	2529.86	29350.	18601.
1300.000	-0.67	2541.84	2528.33	29350.	22930.
1230.000	0.00	2537.94	2529.00	29350.	22929.
1220.000	-2.04	2537.81	2524.96	29350.	24326.
1200.000	0.36	2534.52	2526.36	29350.	27360.
1120.000	-1.02	2535.69	2522.98	29350.	27990.
1110.000	0.15	2532.15	2523.15	29350.	31393.
1100.000	-1.73	2533.52	2518.27	29350.	86545.
1050.000	1.81	2530.27	2521.81	29350.	66430.
1010.000	0.00	2526.23	2519.00	29350.	66430.
1000.000	0.00	2522.94	2510.90	29350.	66429.
990.000	1.63	2521.23	2511.83	29350.	50537.
975.000	0.32	2520.94	2509.72	29350.	48448.
965.000	0.20	2520.52	2508.90	29350.	46838.
950.000	0.09	2519.45	2507.99	29350.	46360.
900.000	-0.97	2516.60	2505.93	29350.	49196.
875.000	-1.44	2517.01	2504.76	29350.	48739.
865.000	0.95	2515.18	2506.45	29350.	49121.
850.000	0.60	2513.27	2505.40	29350.	51789.
825.000	0.19	2512.39	2504.09	29350.	51369.
800.000	0.01	2511.69	2503.31	29350.	56300.
750.000	-0.77	2511.25	2501.23	29350.	56669.
700.000	0.39	2509.28	2501.19	29350.	44684.
650.000	0.09	2508.03	2499.49	29350.	43273.
600.000	0.05	2507.08	2498.35	29350.	42044.
550.000	0.05	2506.03	2496.95	29350.	41337.
500.000	0.05	2505.57	2496.15	29350.	40754.
450.000	0.05	2504.90	2494.65	29350.	40410.
400.000	0.06	2504.50	2493.26	29350.	40400.
350.000	0.06	2503.98	2492.06	29350.	40596.
325.000	0.02	2503.33	2491.52	29350.	40653.
300.000	0.02	2501.58	2490.92	29350.	40485.
290.000	-0.19	2501.53	2490.01	29350.	40533.
275.000	-2.00	2501.65	2487.80	29350.	72689.
200.000	0.55	2498.18	2488.55	29350.	59443.
150.000	0.12	2495.59	2486.32	29350.	59115.
100.000	-0.90	2494.50	2483.10	29350.	60019.

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TIME STEP # 7

* B

COMPUTING FROM TIME= 0.2639 DAYS TO TIME= 0.3059 DAYS IN 6
 COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	22150.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.31	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	7.72***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	1930.38	VERY FINE GRAVEL..	247.25
FINE SAND.....	11564.90	FINE GRAVEL.....	66.02
MEDIUM SAND.....	17027.41	MEDIUM GRAVEL.....	15.44
COARSE SAND.....	2789.85	COARSE GRAVEL.....	2.89
VERY COARSE SAND..	287.92	VERY COARSE GRAVEL	0.27
			TOTAL = 33932.35

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.306 DAYS

SECTION	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
(tons/day)	(ft)	(ft)	(ft)	(cfs)	SAND
NUMBER 2100.000	-0.41	2550.87	2539.59	22150.	725.

2000.000	-0.04	2550.40	2539.96	22150.	1001.
1900.000	-0.05	2549.91	2539.95	22150.	1207.
1800.000	-0.05	2549.24	2539.95	22150.	1287.
1700.000	-0.48	2548.68	2539.52	22150.	1571.
1600.000	-0.61	2546.35	2539.39	22150.	3210.
1500.000	-0.38	2544.05	2531.62	22150.	10244.
1450.000	0.62	2542.58	2531.62	22150.	9789.
1400.000	0.08	2540.90	2530.08	22150.	10645.
1350.000	-0.13	2540.50	2529.87	22150.	11336.
1300.000	-0.70	2540.04	2528.30	22150.	13109.
1230.000	0.00	2536.47	2529.00	22150.	13108.
1220.000	-2.06	2536.12	2524.94	22150.	14041.
1200.000	0.19	2532.78	2526.19	22150.	12160.
1120.000	-1.00	2533.87	2523.00	22150.	12869.
1110.000	0.18	2530.64	2523.18	22150.	18161.
1100.000	-2.29	2531.97	2517.71	22150.	39104.
1050.000	1.79	2528.88	2521.79	22150.	46401.
1010.000	0.00	2525.07	2519.00	22150.	46401.
1000.000	0.00	2521.26	2510.90	22150.	46393.
990.000	1.93	2518.91	2512.13	22150.	34342.
975.000	0.34	2518.78	2509.74	22150.	33556.
965.000	0.23	2518.29	2508.93	22150.	32220.
950.000	0.10	2517.18	2508.00	22150.	31735.
900.000	-0.99	2515.54	2505.91	22150.	32764.
875.000	-1.43	2515.72	2504.77	22150.	32667.
865.000	1.02	2513.77	2506.52	22150.	30575.
850.000	0.56	2511.91	2505.36	22150.	30973.
825.000	0.18	2510.96	2504.08	22150.	31138.
800.000	0.01	2510.33	2503.31	22150.	37152.
750.000	-0.80	2509.93	2501.20	22150.	37782.
700.000	0.47	2507.94	2501.27	22150.	29251.
650.000	0.09	2506.62	2499.49	22150.	29769.
600.000	0.06	2505.59	2498.36	22150.	29046.
550.000	0.06	2504.34	2496.96	22150.	29202.
500.000	0.05	2503.74	2496.15	22150.	28705.
450.000	0.05	2502.88	2494.65	22150.	27939.
400.000	0.06	2502.38	2493.26	22150.	27852.
350.000	0.05	2501.86	2492.05	22150.	28017.
325.000	0.01	2501.29	2491.51	22150.	28168.
300.000	0.02	2499.74	2490.92	22150.	29373.
290.000	-0.19	2499.63	2490.01	22150.	29354.
275.000	-2.31	2499.91	2487.49	22150.	28589.
200.000	0.57	2496.64	2488.57	22150.	33488.
150.000	0.10	2494.01	2486.30	22150.	33637.
100.000	-0.90	2493.20	2483.10	22150.	33932.

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TIME STEP #      8
*      B
COMPUTING FROM TIME=      0.3055 DAYS TO TIME=      0.3475 DAYS IN      6
COMPUTATION STEPS
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ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	17100.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.35	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	8.27***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
TOTAL =			0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	3391.37	VERY FINE GRAVEL..	223.27
FINE SAND.....	8003.95	FINE GRAVEL.....	65.57
MEDIUM SAND.....	11668.03	MEDIUM GRAVEL.....	16.16
COARSE SAND.....	2199.46	COARSE GRAVEL.....	3.09
VERY COARSE SAND..	195.12	VERY COARSE GRAVEL	0.30
TOTAL =			25766.32

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.347 DAYS

SECTION	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
(tons/day)	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.43	2549.59	2539.57	17100.	625.
2000.000	-0.05	2549.16	2539.95	17100.	695.
1900.000	-0.05	2548.70	2539.95	17100.	870.
1800.000	-0.05	2548.07	2539.95	17100.	925.
1700.000	-0.49	2547.54	2539.51	17100.	1196.
1600.000	-0.62	2545.35	2539.38	17100.	2730.
1500.000	-0.42	2542.87	2531.58	17100.	4973.

1450.000	0.67	2541.42	2531.67	17100.	4409.
1400.000	0.07	2539.68	2530.07	17100.	5100.
1350.000	-0.15	2539.17	2529.85	17100.	6974.
1300.000	-0.72	2538.65	2528.28	17100.	7806.
1230.000	0.00	2535.39	2529.00	17100.	7807.
1220.000	-2.42	2534.83	2524.58	17100.	41410.
1200.000	0.11	2531.83	2526.11	17100.	45399.
1120.000	-0.96	2532.49	2523.04	17100.	43932.
1110.000	0.10	2529.06	2523.10	17100.	42577.
1100.000	-2.19	2530.43	2517.81	17100.	43286.
1050.000	1.64	2527.66	2521.64	17100.	44536.
1010.000	0.00	2524.18	2519.00	17100.	44536.
1000.000	0.00	2520.39	2510.90	17100.	44521.
990.000	2.32	2517.90	2512.52	17100.	27758.
975.000	0.44	2517.18	2509.84	17100.	24269.
965.000	0.15	2516.73	2508.85	17100.	25441.
950.000	0.08	2515.59	2507.98	17100.	25537.
900.000	-1.03	2514.60	2505.87	17100.	27026.
875.000	-1.44	2514.68	2504.76	17100.	27732.
865.000	1.11	2512.73	2506.61	17100.	24788.
850.000	0.55	2510.75	2505.35	17100.	24405.
825.000	0.17	2509.85	2504.07	17100.	25033.
800.000	0.00	2509.25	2503.30	17100.	26998.
750.000	-0.81	2508.87	2501.19	17100.	27580.
700.000	0.50	2506.95	2501.30	17100.	24322.
650.000	0.10	2505.56	2499.50	17100.	24670.
600.000	0.07	2504.51	2498.37	17100.	24580.
550.000	0.06	2503.16	2496.96	17100.	24349.
500.000	0.06	2502.46	2496.16	17100.	23757.
450.000	0.05	2501.42	2494.65	17100.	23257.
400.000	0.05	2500.83	2493.25	17100.	22875.
350.000	0.05	2500.28	2492.05	17100.	22879.
325.000	0.01	2499.76	2491.51	17100.	24267.
300.000	0.03	2498.21	2490.93	17100.	22090.
290.000	-0.19	2498.01	2490.01	17100.	22110.
275.000	-2.39	2498.33	2487.41	17100.	26363.
200.000	0.55	2495.34	2488.55	17100.	25841.
150.000	0.11	2493.11	2486.31	17100.	25482.
100.000	-0.91	2492.20	2483.09	17100.	25766.

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TIME STEP # 9

* B

COMPUTING FROM TIME= 0.3472 DAYS TO TIME= 0.4302 DAYS IN 12

COMPUTATION STEPS

- - - - -

ACCUMULATED TIME (yrs).... 0.001

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1 | DISCHARGE | SEDIMENT LOAD | TEMPERATURE

Section No.	2100.000	(cfs)	(tons/day)	(deg F)
	INFLOW	11125.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.43	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	8.87***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	1071.48	VERY FINE GRAVEL..	174.49
FINE SAND.....	4222.22	FINE GRAVEL.....	61.46
MEDIUM SAND.....	5983.93	MEDIUM GRAVEL.....	16.50
COARSE SAND.....	1190.70	COARSE GRAVEL.....	3.28
VERY COARSE SAND..	105.48	VERY COARSE GRAVEL	0.33
			TOTAL = 12829.86

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.431 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.44	2547.77	2539.56	11125.	168.
2000.000	-0.05	2547.40	2539.95	11125.	183.
1900.000	-0.06	2547.00	2539.94	11125.	365.
1800.000	-0.05	2546.43	2539.95	11125.	377.
1700.000	-0.49	2545.94	2539.51	11125.	616.
1600.000	-0.64	2543.95	2539.36	11125.	2077.
1500.000	-0.45	2541.30	2531.55	11125.	4001.
1450.000	0.70	2540.03	2531.70	11125.	3198.
1400.000	0.06	2538.09	2530.06	11125.	3414.
1350.000	-0.24	2537.45	2529.76	11125.	6340.
1300.000	-0.73	2536.82	2528.27	11125.	6710.
1230.000	0.00	2533.90	2529.00	11125.	6709.
1220.000	-2.85	2532.95	2524.15	11125.	18901.

1200.000	0.01	2530.41	2526.01	11125.	20241.
1120.000	-0.91	2530.60	2523.09	11125.	20118.
1110.000	0.01	2527.61	2523.01	11125.	19434.
1100.000	-1.96	2528.26	2518.04	11125.	19624.
1050.000	1.35	2526.01	2521.35	11125.	25016.
1010.000	0.00	2523.00	2519.00	11125.	25016.
1000.000	0.00	2519.07	2510.90	11125.	25001.
990.000	2.77	2517.09	2512.97	11125.	19394.
975.000	0.32	2515.36	2509.72	11125.	22253.
965.000	0.26	2514.78	2508.96	11125.	19466.
950.000	0.13	2513.79	2508.03	11125.	18475.
900.000	-1.03	2513.23	2505.87	11125.	18234.
875.000	-1.44	2513.24	2504.76	11125.	17389.
865.000	1.30	2511.41	2506.80	11125.	14835.
850.000	0.30	2509.67	2505.10	11125.	23072.
825.000	0.26	2508.42	2504.16	11125.	19471.
800.000	0.00	2507.79	2503.30	11125.	22041.
750.000	-0.82	2507.42	2501.18	11125.	22576.
700.000	0.59	2505.67	2501.39	11125.	16728.
650.000	0.12	2504.18	2499.52	11125.	16360.
600.000	0.08	2503.11	2498.38	11125.	15767.
550.000	0.07	2501.71	2496.97	11125.	15275.
500.000	0.07	2500.92	2496.17	11125.	14845.
450.000	0.06	2499.60	2494.66	11125.	14405.
400.000	0.05	2498.83	2493.25	11125.	14210.
350.000	0.04	2498.22	2492.04	11125.	14100.
325.000	0.02	2497.77	2491.52	11125.	13944.
300.000	0.03	2496.30	2490.93	11125.	13741.
290.000	-0.19	2495.93	2490.01	11125.	13682.
275.000	-2.61	2496.31	2487.19	11125.	15676.
200.000	0.65	2493.75	2488.65	11125.	12170.
150.000	0.11	2491.80	2486.31	11125.	12587.
100.000	-0.93	2490.90	2483.07	11125.	12830.

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TIME STEP #      10
*      B
COMPUTING FROM TIME=      0.4305 DAYS TO TIME=      0.4472 DAYS IN      2
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....      0.001
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

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Stream Segment # 1      |      DISCHARGE      |      SEDIMENT LOAD      |      TEMPERATURE
Section No.  2100.000  |      (cfs)          |      (tons/day)         |      (deg F)
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                        INFLOW |      5500.00      |      0.00      |      75.00

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TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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*****
TIME          ENTRY *          SAND          *
DAYS         POINT *    INFLOW    OUTFLOW    TRAP EFF *
0.44        2100.000 *        0.00
TOTAL=      100.000 *        0.00        8.94***** *
*****
    
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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	827.31	VERY FINE GRAVEL..	120.35
FINE SAND.....	3130.06	FINE GRAVEL.....	52.58
MEDIUM SAND.....	4836.49	MEDIUM GRAVEL.....	15.35
COARSE SAND.....	889.48	COARSE GRAVEL.....	3.16
VERY COARSE SAND..	77.26	VERY COARSE GRAVEL	0.36
			TOTAL = 9952.40

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.444 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.44	2545.52	2539.56	5500.	132.
2000.000	-0.05	2545.23	2539.95	5500.	136.
1900.000	-0.07	2544.90	2539.93	5500.	2149.
1800.000	-0.05	2544.43	2539.95	5500.	2153.
1700.000	-0.49	2544.00	2539.51	5500.	2238.
1600.000	-0.65	2542.31	2539.35	5500.	3045.
1500.000	-0.45	2539.40	2531.55	5500.	2851.
1450.000	0.70	2538.41	2531.70	5500.	3996.
1400.000	0.05	2536.53	2530.05	5500.	4428.
1350.000	-0.26	2535.51	2529.74	5500.	6950.
1300.000	-0.73	2534.76	2528.27	5500.	7142.
1230.000	0.00	2532.20	2529.00	5500.	7142.
1220.000	-2.84	2530.81	2524.16	5500.	6122.
1200.000	0.00	2528.90	2526.00	5500.	6702.
1120.000	-0.90	2528.48	2523.10	5500.	6680.
1110.000	0.00	2525.97	2523.00	5500.	6790.
1100.000	-1.94	2525.95	2518.06	5500.	4763.
1050.000	1.29	2524.38	2521.29	5500.	14760.
1010.000	0.00	2521.64	2519.00	5500.	14760.

1000.000	0.04	2516.91	2510.94	5500.	11949.
990.000	2.73	2515.54	2512.93	5500.	16612.
975.000	0.27	2513.32	2509.67	5500.	22864.
965.000	0.37	2512.55	2509.07	5500.	11870.
950.000	0.14	2511.52	2508.04	5500.	10746.
900.000	-1.05	2511.15	2505.85	5500.	12582.
875.000	-1.43	2511.11	2504.77	5500.	11196.
865.000	1.28	2509.70	2506.78	5500.	12878.
850.000	0.23	2508.34	2505.03	5500.	22909.
825.000	0.34	2506.95	2504.24	5500.	13036.
800.000	0.00	2505.97	2503.30	5500.	13321.
750.000	-0.82	2505.58	2501.18	5500.	13039.
700.000	0.61	2504.16	2501.41	5500.	9024.
650.000	0.11	2502.57	2499.51	5500.	11307.
600.000	0.09	2501.47	2498.39	5500.	9320.
550.000	0.07	2500.08	2496.97	5500.	9268.
500.000	0.07	2499.25	2496.17	5500.	9411.
450.000	0.06	2497.71	2494.66	5500.	9072.
400.000	0.06	2496.63	2493.26	5500.	7738.
350.000	0.05	2495.88	2492.05	5500.	7058.
325.000	0.01	2495.52	2491.51	5500.	7405.
300.000	0.01	2494.26	2490.91	5500.	9845.
290.000	-0.19	2493.32	2490.01	5500.	9780.
275.000	-2.60	2493.75	2487.20	5500.	8938.
200.000	0.65	2491.91	2488.65	5500.	7338.
150.000	0.10	2490.11	2486.30	5500.	9771.
100.000	-0.93	2489.30	2483.07	5500.	9952.

=====

TIME STEP # 11

* B

COMPUTING FROM TIME= 0.4444 DAYS TO TIME= 0.4694 DAYS IN 3

COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.001

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	2050.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.47	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	9.00***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00

TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	337.60	VERY FINE GRAVEL..	25.72
FINE SAND.....	2397.30	FINE GRAVEL.....	14.98
MEDIUM SAND.....	2580.86	MEDIUM GRAVEL.....	4.71
COARSE SAND.....	241.55	COARSE GRAVEL.....	1.02
VERY COARSE SAND..	31.19	VERY COARSE GRAVEL	0.32

TOTAL = 5635.27

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.465 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.44	2543.39	2539.56	2050.	44.
2000.000	-0.05	2543.20	2539.95	2050.	72.
1900.000	-0.08	2542.96	2539.92	2050.	1201.
1800.000	-0.05	2542.57	2539.95	2050.	1293.
1700.000	-0.49	2542.21	2539.51	2050.	1228.
1600.000	-0.65	2540.97	2539.35	2050.	1971.
1500.000	-0.45	2537.49	2531.55	2050.	1324.
1450.000	0.68	2536.64	2531.68	2050.	2240.
1400.000	0.05	2534.91	2530.05	2050.	2053.
1350.000	-0.27	2533.75	2529.73	2050.	3149.
1300.000	-0.72	2533.05	2528.28	2050.	2550.
1230.000	0.00	2530.82	2529.00	2050.	2550.
1220.000	-2.84	2528.89	2524.16	2050.	1909.
1200.000	0.00	2527.70	2526.00	2050.	2146.
1120.000	-0.90	2526.65	2523.10	2050.	2030.
1110.000	0.00	2524.65	2523.00	2050.	1917.
1100.000	-1.92	2523.88	2518.08	2050.	902.
1050.000	1.26	2522.94	2521.26	2050.	2706.
1010.000	0.00	2520.42	2519.00	2050.	2707.
1000.000	0.07	2514.96	2510.97	2050.	2254.
990.000	2.60	2514.21	2512.80	2050.	12427.
975.000	0.17	2511.84	2509.57	2050.	20834.
965.000	0.58	2511.04	2509.28	2050.	6971.
950.000	0.10	2509.67	2508.00	2050.	9863.
900.000	-0.99	2509.15	2505.91	2050.	6751.

875.000	-1.37	2509.11	2504.83	2050.	2887.
865.000	1.18	2508.24	2506.68	2050.	9314.
850.000	0.14	2506.95	2504.94	2050.	15611.
825.000	0.42	2505.76	2504.32	2050.	10680.
800.000	0.00	2504.68	2503.30	2050.	10709.
750.000	-0.78	2503.87	2501.22	2050.	6553.
700.000	0.60	2502.87	2501.40	2050.	6669.
650.000	0.08	2501.13	2499.48	2050.	10065.
600.000	0.10	2500.11	2498.40	2050.	7585.
550.000	0.07	2498.70	2496.97	2050.	7640.
500.000	0.07	2497.91	2496.17	2050.	8268.
450.000	0.06	2496.38	2494.66	2050.	8512.
400.000	0.06	2494.99	2493.26	2050.	8102.
350.000	0.06	2493.99	2492.06	2050.	6665.
325.000	0.02	2493.58	2491.52	2050.	6425.
300.000	-0.05	2492.90	2490.85	2050.	9269.
290.000	-0.19	2491.62	2490.01	2050.	9280.
275.000	-2.50	2491.50	2487.30	2050.	3734.
200.000	0.64	2490.34	2488.64	2050.	4583.
150.000	0.07	2488.42	2486.27	2050.	7238.
100.000	-0.89	2487.70	2483.11	2050.	5635.

 \$\$ END

0 DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ = 11
 TOTAL NO. OF WS PROFILES = 67
 ITERATIONS IN EXNER EQ = 61640

COMPUTATIONS COMPLETED
 RUN TIME = 0 HOURS, 0 MINUTES & 0.00 SECONDS

APPENDIX K.4
ALTERNATIVE 4 OUTPUT

Project Name Pantano Wash
 Project Number 07125-01 Made by jco Date 9/20/2008
 Reference COT SMDDFM Checked By Date

NOTES

General Scour $Z_{gs} = Y_{max} \left[\frac{0.0685 V_m^{0.8}}{Y_m^{0.4} S_e^{0.3}} - 1 \right]$ General Scour is best estimated by performing a detailed sediment-transport analysis. When not practical this equation (Zeller, 1981) should be used.

Anti-Dune Scour $Z_a = 0.0137 V_m^2$ The anti-dune trough depth can never exceed one-half the depth of flow. If the result is greater than one-half the depth of flow, change the results manually.

Low Flow Thawleg To be used when the ratio of the flow width to the flow depth is greater than 1.15 times the average velocity of flow for the 100-year discharge. If the flow width or flow depth exceeds the top width and bank height of the channel, use the topwidth and flow depth at bankfull conditions. If a low flow thawleg is to be used, it should be assumed at least 2 feet deep for regional watercourses and at least 1 foot deep for all other watercourses, unless field observations dictate otherwise.

Bend Scour **Bend scour is not applicable for this project**

Total Scour $Z_t = 1.3 (Z_{gs} + Z_a + Z_b + Z_{lf})$ Total scour is the sum of general scour, anti-dune scour, bend scour and the low flow thawleg depths.

XS	Q	Channel Invert	WSE Water Surface Elevation	Y _{max} Flow Depth	S _e [*] Energy Slope	V _m Flow Velocity	A Flow Area	T _w Top Width	Y _b Hydraulic Depth	Z _{gs} General Scour	Z _{mb} HEC-6 (1)	Z _a Anti-Dune Scour	Z _{lf} Low Flow Thawleg	Z _t Total Scour (2)	Z _t Total Scour (3)
	Discharge														
1600	32000	2540	2548.55	8.55	0.007049	14.81	2161.11	320.6	6.74	1.88	0.65	3.00	2.00	8.95	7.35
1500	32000	2532	2546.12	14.12	0.00289	10.8	2963.86	355.61	8.33	1.94	0.45	1.60	2.00	7.19	5.26
1450	32000	2531	2545.57	14.57	0.002511	10.69	2992.82	326.9	9.16	1.94	0	1.57	2.00	7.16	4.64
1400	32000	2530	2544.43	14.43	0.003389	12.13	2638.51	298.53	8.84	2.34	0	2.02	2.00	8.26	5.22
1350	32000	2530	2544.15	14.15	0.00236	10.9	2937.28	300.53	9.77	2.01	0.27	1.63	2.00	7.33	5.07
1300	32000	2529	2542.32	13.32	0.002847	11.96	2676.1	271.96	9.84	2.13	0.71	1.96	2.00	7.91	6.07
1230	32000	2529	2538.41	9.41	0.006575	16.7	1924.15	262.04	7.34	3.06	0	3.82	2.00	11.54	7.57
1220	32000	2527	2537.18	10.18	0.005453	15.24	2100.09	240.3	8.74	2.19	2.86	3.16	2.00	9.58	10.45
1200	32000	2526	2535.68	9.68	0.004279	13.7	2335.28	260.34	8.97	1.81	0	2.57	2.00	8.30	5.94
1120	32000	2524	2536.03	12.03	0.002587	11.77	2718.74	259.2	10.49	1.79	0.9	1.90	2.00	7.39	8.24
1110	32000	2523	2531.97	8.97	0.00673	16.55	1933.48	227.61	8.49	2.08	0	3.75	2.00	10.19	7.48
1100	32000	2520	2531.04	11.04	0.004842	15.24	2100.15	217.9	9.64	2.32	1.72	3.18	2.00	9.76	8.97
1050	32000	2520	2528.77	8.77	0.006835	16.33	1959.48	237.7	8.24	2.00	0	3.65	2.00	9.95	7.35
1010	32000	2519	2526.57	7.57	0.007003	15.08	2122.35	300.87	7.05	1.65	0	3.12	2.00	8.79	6.65
1000	32000	2510.9	2523.46	12.56	0.001293	9.11	3511.87	290.22	12.10	1.11	0	1.14	2.00	5.52	4.08
990	32000	2510.2	2522.91	12.71	0.001612	10.14	3154.68	263.06	11.99	1.44	0	1.41	2.00	6.31	4.43
975	32000	2509.4	2522.22	12.82	0.001957	11.21	2855.56	236.05	12.10	1.72	0	1.72	2.00	7.08	4.84
965	32000	2508.7	2521.84	13.14	0.001993	11.44	2797.61	227.42	12.30	1.83	0	1.79	2.00	7.31	4.93
950	32000	2507.9	2521.03	13.13	0.002453	12.62	2536.56	206.52	12.28	2.08	0	2.18	2.00	8.14	5.44
900	32000	2506.9	2517.54	10.64	0.006286	17.9	1819.13	188.47	9.65	2.91	1.05	4.39	2.00	12.09	9.67
875	32000	2506.2	2516.40	10.20	0.006317	17.59	1849.55	198.13	9.34	2.75	1.24	4.24	2.00	11.69	9.72
865	32000	2505.5	2514.56	9.06	0.006509	16.68	1942.08	231.26	8.40	2.34	0	3.81	2.00	10.60	7.56
850	32000	2504.8	2513.82	9.02	0.004795	14.37	2250.62	264.92	8.50	1.97	0	2.83	2.00	8.84	6.28
825	32000	2503.9	2513.30	9.40	0.003902	13.2	2424.05	266.98	9.08	1.68	0	2.39	2.00	7.89	5.70
800	32000	2503.3	2512.51	9.21	0.00445	14.9	2301.07	258.4	8.91	1.76	0	2.65	2.00	8.34	6.05
750	32000	2502	2510.75	8.75	0.005461	14.9	2148.3	249.3	8.62	1.74	0.76	3.04	2.00	8.82	7.54
700	32000	2500.8	2509.77	8.97	0.004689	14.05	2277.36	262.32	8.68	1.74	0	2.70	2.00	8.38	6.12
650	32000	2499.4	2508.48	9.08	0.004493	13.86	2308.58	262.71	8.79	1.73	0	2.63	2.00	8.27	6.02
600	32000	2498.3	2507.62	9.32	0.004173	13.57	2358.43	262.19	9.00	1.73	0.23	2.52	2.00	8.13	6.18
550	32000	2496.9	2506.49	9.59	0.003915	13.38	2391.77	258.09	9.27	1.74	0	2.45	2.00	8.05	5.79
500	32000	2496.1	2506.31	10.21	0.002835	12.01	2701.27	279.19	9.68	1.77	0	1.98	2.00	7.46	5.17
450	32000	2494.6	2505.80	11.20	0.002107	10.98	2953.76	279.72	10.56	1.71	0	1.65	2.00	6.97	4.75
400	32000	2493.2	2505.52	12.32	0.001558	10.03	3231.53	275.06	11.75	1.53	0	1.38	2.00	6.39	4.39
350	32000	2492	2505.16	13.16	0.0014	9.99	3246.54	265.81	12.21	1.71	0	1.37	2.00	6.61	4.38
325	32000	2491.5	2504.72	13.22	0.0017	10.80	3015.85	247.77	12.17	1.99	0	1.60	2.00	7.26	4.68
300	32000	2490.9	2503.82	12.92	0.0023	12.44	2627.70	227.28	11.56	2.47	0.04	2.12	2.00	8.57	5.41
290	32000	2490.2	2502.66	12.46	0.0028	13.16	2432.23	208.19	11.68	2.13	0.2	2.37	2.00	8.45	5.94
275	32000	2489.8	2499.95	10.14	0.0066	17.66	1812.47	188.81	9.60	2.47	1.84	4.27	2.00	11.36	10.55
200	32000	2488	2498.18	10.18	0.0066	17.63	1815.39	188.47	9.63	2.47	0	4.26	2.00	11.35	8.14
150	32000	2486.2	2497.02	10.82	0.0047	15.53	2061.02	201.31	10.24	2.29	0	3.30	2.00	9.87	6.90
100	32000	2484	2496	12.00	0.0050	14.39	2223.50	261.12	8.52	2.44	0.91	2.84	2.00	9.46	7.47

- (1) Cross-sections reporting aggradation were given a value of zero for the purpose of scour calculations
- (2) Includes COT General Scour Value
- (3) Includes HEC-6 value for mobile bed adjustment at Q₁₀₀

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*****
*****
* SCOUR AND DEPOSITION IN RIVERS AND RESERVOIRS * * U.S. ARMY CORPS OF
ENGINEERS * *
* Version: 4.2 - May 2004 * * HYDROLOGIC
ENGINEERING CENTER * *
* INPUT FILE: alt475t..dat * * 609 SECOND STREET
* * *
* OUTPUT FILE: alt475t.out * * DAVIS, CALIFORNIA
95616-4687 * *
* RUN DATE: 19 SEP 08 RUN TIME: 16:25:15 * * (530) 756-1104
*
*****
*****

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      X      X  XXXXXXXX  XXXXXX          XXXXXX
      X      X  X        X      X        X      X
      X      X  X        X              X
      XXXXXXXX  XXXX   X          XXXXX  XXXXXXXX
      X      X  X        X              X      X
      X      X  X        X      X        X      X
      X      X  XXXXXXXX  XXXXXX          XXXXXX

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*****
* MAXIMUM LIMITS FOR THIS VERSION ARE: *
* 10 Stream Segments (Main Stem + Tributaries) *
* 500 Cross Sections *
* 200 Elevation/Station Points per Cross Section *
* 20 Grain Sizes *
* 20 Control Points *
*****

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```

T1
T2 Pantano-Sediment Transpo rt-alt2
T3 River #1, Reach # 1

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```

N values... Left Channel Right Contraction Expansion
            0.0450 0.0300 0.0400 1.1000 0.7000

```

```

SECTION NO. 100.000
...ELEVATION of Model Bottom = 2474.000 ft.

```

```

N values... Left Channel Right Contraction Expansion
            0.0500 0.0300 0.0500 1.1000 0.7000

```

```

SECTION NO. 150.000
...ELEVATION of Model Bottom = 2476.200 ft.

```

```

N values... Left Channel Right Contraction Expansion
            0.0450 0.0300 0.0400 1.1000 0.7000

```

```

SECTION NO. 200.000
...ELEVATION of Model Bottom = 2478.000 ft.

```

```

N values... Left Channel Right Contraction Expansion
            0.0450 0.0300 0.0400 1.1000 0.7000

```

SECTION NO. 275.000
...ELEVATION of Model Bottom = 2479.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0450	0.0300	0.0400	1.1000	0.7000

SECTION NO. 290.000
...ELEVATION of Model Bottom = 2490.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 300.000
...ELEVATION of Model Bottom = 2480.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 325.000
...ELEVATION of Model Bottom = 2481.500 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 350.000
...ELEVATION of Model Bottom = 2482.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 400.000
...ELEVATION of Model Bottom = 2483.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 450.000
...ELEVATION of Model Bottom = 2484.600 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 500.000
...ELEVATION of Model Bottom = 2486.100 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 550.000
...ELEVATION of Model Bottom = 2486.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 600.000
...ELEVATION of Model Bottom = 2488.300 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 650.000
...ELEVATION of Model Bottom = 2489.400 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 700.000
...ELEVATION of Model Bottom = 2490.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 750.000
...ELEVATION of Model Bottom = 2492.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 800.000
...ELEVATION of Model Bottom = 2503.300 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 825.000
...ELEVATION of Model Bottom = 2493.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 850.000
...ELEVATION of Model Bottom = 2494.800 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 865.000
...ELEVATION of Model Bottom = 2495.500 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 875.000
...ELEVATION of Model Bottom = 2496.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 900.000
...ELEVATION of Model Bottom = 2496.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 950.000
...ELEVATION of Model Bottom = 2497.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 965.000
...ELEVATION of Model Bottom = 2498.700 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 975.000
...ELEVATION of Model Bottom = 2499.400 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 990.000
...ELEVATION of Model Bottom = 2500.200 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1000.000
...ELEVATION of Model Bottom = 2510.900 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1010.000
...ELEVATION of Model Bottom = 2519.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1050.000
...ELEVATION of Model Bottom = 2510.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1100.000
...ELEVATION of Model Bottom = 2510.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1110.000
...ELEVATION of Model Bottom = 2523.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1120.000
...ELEVATION of Model Bottom = 2514.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1200.000
...ELEVATION of Model Bottom = 2526.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1220.000
...ELEVATION of Model Bottom = 2517.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0500	0.0300	0.0500	1.1000	0.7000

SECTION NO. 1230.000
...ELEVATION of Model Bottom = 2529.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1300.000
...ELEVATION of Model Bottom = 2519.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1350.000
...ELEVATION of Model Bottom = 2520.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1400.000
...ELEVATION of Model Bottom = 2520.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1450.000
...ELEVATION of Model Bottom = 2521.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1500.000
...ELEVATION of Model Bottom = 2522.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.5500	1.1000	0.7000

SECTION NO. 1600.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1700.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1800.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 1900.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 2000.000
...ELEVATION of Model Bottom = 2530.000 ft.

N values...	Left	Channel	Right	Contraction	Expansion
	0.0550	0.0300	0.0550	1.1000	0.7000

SECTION NO. 2100.000
...ELEVATION of Model Bottom = 2530.000 ft.

NO. OF CROSS SECTIONS IN STREAM SEGMENT= 46
NO. OF INPUT DATA MESSAGES = 0

TOTAL NO. OF CROSS SECTIONS IN THE NETWORK = 46
TOTAL NO. OF STREAM SEGMENTS IN THE NETWORK= 1
END OF GEOMETRIC DATA

=====

T4	BED GRADATIONS FROM FIELD SAMPLE	S.				
T5	Use Full Range o f Sandsand Grav	els				
T6	SEDIMENT TRANSPO RT BYToffalet	i				
T7	SEDIMENT INFLOWBY toffaletis EQ	UATI	ON			
T8						

Pantano-Sediment Transpo rt-alt2
River #1,Reach # 1

SEDIMENT PROPERITES AND PARAMETERS

	SPI	IBG	MNQ	SPGF	ACGR	NFALL	IBSHER
I1	20.	0	1	1.000	32.174	2	1

SANDS - BOULDERS ARE PRESENT

I4	MTC 1	IASA 1	LASA 10	SPGS 2.650	GSF 0.667	BSAE 0.500	PSI 30.000	UWDLB 93.000
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USING TRANSPORT CAPACITY RELATIONSHIP # 1, TOFFALETI
GRAIN SIZES UTILIZED (mean diameter - mm)

VERY FINE SAND....	0.088	VERY FINE GRAVEL..	2.828
FINE SAND.....	0.177	FINE GRAVEL.....	5.657
MEDIUM SAND.....	0.354	MEDIUM GRAVEL.....	11.314
COARSE SAND.....	0.707	COARSE GRAVEL.....	22.627
VERY COARSE SAND..	1.414	VERY COARSE GRAVEL	45.255

COEFFICIENTS FOR COMPUTATION SCHEME WERE SPECIFIED

I5	DBI 0.000	DBN 1.000	XID 0.000	XIN 1.000	XIU 0.000	UBI 0.000	UBN 1.000	JSL 1
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SEDIMENT LOAD TABLE FOR STREAM SEGMENT # 1
LOAD BY GRAIN SIZE CLASS (tons/day)

FLOW	1000.00	3000.00	6000.00	10000.0	15000.0	20000.0	25000.0	32000.0
------	---------	---------	---------	---------	---------	---------	---------	---------

VF SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
F SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
M SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
C SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VC SAND	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VF GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
F GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
M GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
C GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19
VC GRVL	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19	0.100000E-19

TOTAL	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18	0.100000E-18
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REACH GEOMETRY FOR STREAM SEGMENT 1

CROSS CHANNEL DISTANCE SECTION DOWNSTREAM NO. (miles)	REACH LENGTH (ft)	MOVABLE BED WIDTH	INITIAL BED-ELEVATIONS			ACCUMULATED FROM (ft)
			LEFT SIDE (ft)	THALWEG (ft)	RIGHT SIDE (ft)	
	0.000					
100.000 0.000		457.380	2501.000	2484.000	2502.000	0.000
	287.460					
150.000 0.054		358.900	2502.000	2486.200	2502.000	287.460
	293.940					
200.000 0.110		914.950	2507.000	2488.000	2514.000	581.400
	264.000					
275.000 0.160		316.550	2509.000	2489.800	2507.000	845.400
	85.000					
290.000 0.176		313.580	2511.000	2490.200	2510.000	930.400
	142.740					
300.000 0.203		326.780	2511.000	2490.900	2512.000	1073.140
	128.000					
325.000 0.227		595.080	2513.000	2491.500	2512.000	1201.140
	102.000					
350.000 0.247		410.830	2512.000	2492.000	2509.000	1303.140
	246.400					
400.000 0.293		870.860	2512.000	2493.200	2510.000	1549.540
	275.940					
450.000 0.346		427.130	2513.000	2494.600	2510.000	1825.480
	311.990					
500.000 0.405		852.010	2515.000	2496.100	2515.000	2137.470
	170.240					
550.000 0.437		497.230	2515.000	2496.900	2513.000	2307.710
	292.560					
600.000 0.492		815.390	2516.000	2498.300	2516.000	2600.270
	219.600					
650.000 0.534		461.500	2516.000	2499.400	2516.000	2819.870
	294.120					
700.000 0.590		548.150	2518.000	2500.800	2518.000	3113.990
	245.150					
750.000 0.636		382.010	2518.000	2502.000	2519.000	3359.140
	259.440					

800.000 0.685		733.080	2522.000	2503.300	2522.000	3618.580
	110.490					
825.000 0.706		357.950	2523.000	2503.900	2521.000	3729.070
	202.000					
850.000 0.745		346.100	2524.000	2504.800	2523.000	3931.070
	153.000					
865.000 0.773		584.460	2525.000	2505.500	2523.000	4084.070
	143.000					
875.000 0.801		354.100	2525.000	2506.200	2530.000	4227.070
	151.880					
900.000 0.829		275.590	2526.000	2506.900	2530.000	4378.950
	206.250					
950.000 0.868		586.790	2527.000	2507.900	2536.000	4585.200
	148.000					
965.000 0.896		347.990	2529.000	2508.700	2537.000	4733.200
	151.000					
975.000 0.925		462.200	2529.000	2509.400	2538.000	4884.200
	168.000					
990.000 0.957		764.810	2529.000	2510.200	2538.000	5052.200
	147.000					
1000.000 0.985		655.410	2530.000	2510.900	2540.000	5199.200
	71.920					
1010.000 0.998		733.300	2533.000	2519.000	2537.000	5271.120
	162.000					
1050.000 1.029		564.090	2535.000	2520.000	2539.000	5433.120
	294.000					
1100.000 1.085		527.910	2538.000	2520.000	2537.000	5727.120
	36.390					
1110.000 1.092		506.220	2538.000	2523.000	2537.000	5763.510
	443.700					
1120.000 1.176		638.130	2539.000	2524.000	2539.000	6207.210
	56.560					
1200.000 1.186		443.870	2540.000	2526.000	2539.000	6263.770
	411.750					
1220.000 1.264		351.910	2542.000	2527.000	2538.000	6675.520
	47.440					
1230.000 1.273		522.090	2543.000	2529.000	2539.000	6722.960
	383.360					

1300.000		496.550	2545.000	2529.000	2546.000	7106.320
1.346						
	277.240					
1350.000		348.110	2544.000	2530.000	2549.000	7383.560
1.398						
	211.150					
1400.000		810.240	2547.000	2530.000	2548.000	7594.710
1.438						
	198.720					
1450.000		391.360	2546.000	2531.000	2547.000	7793.430
1.476						
	214.550					
1500.000		873.220	2552.000	2532.000	2550.000	8007.980
1.517						
	679.420					
1600.000		449.020	2560.000	2540.000	2555.000	8687.400
1.645						
	200.000					
1700.000		449.020	2560.000	2540.000	2555.000	8887.400
1.683						
	200.000					
1800.000		449.020	2560.000	2540.000	2555.000	9087.400
1.721						
	200.000					
1900.000		449.020	2560.000	2540.000	2555.000	9287.400
1.759						
	200.000					
2000.000		449.020	2560.000	2540.000	2555.000	9487.400
1.797						
	200.000					
2100.000		449.020	2560.000	2540.000	2555.000	9687.400
1.835						

BED MATERIAL GRADATION

SECNO	SAE	DMAX (ft)	DXPI (ft)	XPI	TOTAL BED	BED MATERIAL FRACTIONS per grain size			
100.000	32.000	0.328	0.210	0.997	0.997	VF SAND	0.042	VC SAND	0.190
M	GRVL	0.057							
						F SAND	0.088	VF GRVL	0.102
C	GRVL	0.025							
						M SAND	0.190	F GRVL	0.088
VC	GRVL	0.005							
						C SAND	0.206		
150.000	32.000	0.328	0.210	0.996	0.992	VF SAND	0.042	VC SAND	0.191
M	GRVL	0.057							
						F SAND	0.086	VF GRVL	0.104
C	GRVL	0.026							
						M SAND	0.187	F GRVL	0.090
VC	GRVL	0.006							
						C SAND	0.203		
200.000	32.000	0.328	0.210	0.996	0.991	VF SAND	0.042	VC SAND	0.193
M	GRVL	0.058							

C GRVL 0.025	F SAND 0.084 VF GRVL 0.095
VC GRVL 0.005	M SAND 0.209 F GRVL 0.078
	C SAND 0.224
2100.000 32.000 0.328 0.210 0.997 0.997	VF SAND 0.028 VC SAND 0.193
M GRVL 0.054	F SAND 0.084 VF GRVL 0.095
C GRVL 0.025	M SAND 0.209 F GRVL 0.078
VC GRVL 0.005	C SAND 0.224

BED SEDIMENT CONTROL VOLUMES

STREAM SEGMENT # 1:

SECTION NUMBER	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	VOLUME	
				(cu.ft)	(cu.yd)
100.000	143.730	424.553	10.000	610211.	22600.4
150.000	290.700	468.838	10.000	0.136291E+07	50478.3
200.000	278.970	722.920	10.000	0.201673E+07	74693.7
275.000	174.500	467.195	10.000	815255.	30194.6
290.000	113.870	316.707	0.200	7212.69	267.137
300.000	135.370	366.742	10.000	496459.	18387.4
325.000	115.000	518.071	10.000	595782.	22066.0
350.000	174.200	537.260	10.000	935907.	34663.2
400.000	261.170	720.387	10.000	0.188143E+07	69682.8
450.000	293.965	571.706	10.000	0.168061E+07	62245.0
500.000	241.115	718.632	10.000	0.173273E+07	64175.2
550.000	231.400	607.774	10.000	0.140639E+07	52088.4
600.000	256.080	704.230	10.000	0.180339E+07	66792.3
650.000	256.860	528.462	10.000	0.135741E+07	50274.4
700.000	269.635	507.221	10.000	0.136765E+07	50653.6
750.000	252.295	469.085	10.000	0.118348E+07	43832.5
800.000	184.965	613.661	0.000	0.00000	0.00000
825.000	156.245	399.609	10.000	624370.	23124.8
850.000	177.500	382.591	10.000	679099.	25151.8
865.000	148.000	506.295	10.000	749317.	27752.5
875.000	147.440	377.858	10.000	557114.	20633.9
900.000	179.065	346.429	10.000	620334.	22975.3
950.000	177.125	493.139	10.000	873473.	32350.8
965.000	149.500	406.617	10.000	607892.	22514.5
975.000	159.500	497.302	10.000	793197.	29377.7
990.000	157.500	693.995	10.000	0.109304E+07	40483.0
1000.000	109.460	688.426	0.000	0.00000	0.00000
1010.000	116.960	686.256	0.000	0.00000	0.00000
1050.000	228.000	576.352	10.000	0.131408E+07	48669.8
1100.000	165.195	537.845	10.000	888494.	32907.2
1110.000	240.045	547.405	0.000	0.00000	0.00000
1120.000	250.130	591.810	10.000	0.148029E+07	54825.7
1200.000	234.155	424.739	0.000	0.00000	0.00000
1220.000	229.595	385.257	10.000	884531.	32760.4
1230.000	215.400	508.267	0.000	0.00000	0.00000
1300.000	330.300	480.725	10.000	0.158783E+07	58808.7

1350.000	244.195	442.797	10.000	0.108129E+07	40047.7
1400.000	204.935	663.186	10.000	0.135910E+07	50337.1
1450.000	206.635	541.885	10.000	0.111972E+07	41471.3
1500.000	446.985	727.207	10.000	0.325051E+07	120389.
1600.000	439.710	558.262	10.000	0.245474E+07	90916.1
1700.000	200.000	449.020	10.000	898040.	33260.7
1800.000	200.000	449.020	10.000	898040.	33260.7
1900.000	200.000	449.020	10.000	898040.	33260.7
2000.000	200.000	449.020	10.000	898040.	33260.7
2100.000	100.000	449.020	10.000	449020.	16630.4

NO. OF INPUT DATA MESSAGES= 0
 END OF SEDIMENT DATA

=====
 \$H YD
 BEGIN COMPUTATIONS.

=====
 TIME STEP # 1
 * B
 COMPUTING FROM TIME= 0.0000 DAYS TO TIME= 0.0167 DAYS IN 2
 COMPUTATION STEPS

 ACCUMULATED TIME (yrs).... 0.000
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	8700.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.01	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	0.25***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

 SEDIMENT INFLOW at the Upstream Boundary:
 GRAIN SIZE LOAD (tons/day) | GRAIN SIZE LOAD (tons/day)

VERY FINE SAND....	0.00		VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00		FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00		MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00		COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00		VERY COARSE GRAVEL	0.00
				TOTAL =
				0.00
SEDIMENT OUTFLOW from the Downstream Boundary				
GRAIN SIZE	LOAD (tons/day)		GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	15486.58		VERY FINE GRAVEL..	107.52
FINE SAND.....	8474.41		FINE GRAVEL.....	23.18
MEDIUM SAND.....	5599.19		MEDIUM GRAVEL.....	4.90
COARSE SAND.....	3511.86		COARSE GRAVEL.....	0.90
VERY COARSE SAND..	917.41		VERY COARSE GRAVEL	0.11
				TOTAL =
				34126.06

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.014 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.03	2547.19	2539.97	8700.	1531.
2000.000	-0.02	2546.95	2539.98	8700.	3269.
1900.000	-0.01	2546.66	2539.99	8700.	4651.
1800.000	-0.01	2546.30	2539.99	8700.	7601.
1700.000	-0.01	2545.81	2539.99	8700.	10655.
1600.000	-0.02	2543.93	2539.98	8700.	17757.
1500.000	-0.01	2539.95	2531.99	8700.	22439.
1450.000	0.04	2539.24	2531.04	8700.	14785.
1400.000	-0.01	2537.83	2529.99	8700.	16685.
1350.000	0.00	2537.19	2530.00	8700.	17437.
1300.000	-0.01	2536.18	2528.99	8700.	19636.
1230.000	0.00	2533.20	2529.00	8700.	19633.
1220.000	-0.16	2532.66	2526.84	8700.	35984.
1200.000	0.01	2529.79	2526.01	8700.	32460.
1120.000	-0.07	2530.00	2523.93	8700.	47498.
1110.000	0.00	2526.93	2523.00	8700.	47368.
1100.000	-0.28	2526.28	2519.72	8700.	54041.
1050.000	0.26	2524.12	2520.26	8700.	22425.
1010.000	0.00	2522.33	2519.00	8700.	22426.
1000.000	0.00	2515.71	2510.90	8700.	22494.
990.000	0.10	2515.10	2510.30	8700.	26618.
975.000	0.06	2514.49	2509.46	8700.	18591.
965.000	0.01	2514.03	2508.71	8700.	18559.
950.000	-0.01	2513.47	2507.89	8700.	21638.
900.000	-0.03	2511.91	2506.87	8700.	25533.
875.000	-0.07	2510.54	2506.13	8700.	29645.
865.000	-0.06	2509.45	2505.44	8700.	33060.
850.000	0.01	2508.87	2504.81	8700.	31523.
825.000	0.03	2507.99	2503.93	8700.	29277.
800.000	0.00	2507.40	2503.30	8700.	29072.
750.000	0.00	2506.08	2502.00	8700.	31053.
700.000	0.00	2504.89	2500.80	8700.	32644.

650.000	0.00	2503.48	2499.40	8700.	33114.
600.000	0.00	2502.46	2498.30	8700.	34606.
550.000	0.00	2500.90	2496.90	8700.	35935.
500.000	0.00	2500.14	2496.10	8700.	37129.
450.000	0.01	2498.68	2494.61	8700.	33787.
400.000	0.02	2497.80	2493.22	8700.	29429.
350.000	0.03	2497.18	2492.03	8700.	25736.
325.000	0.01	2496.81	2491.51	8700.	25547.
300.000	0.00	2496.03	2490.90	8700.	25521.
290.000	-0.04	2495.57	2490.16	8700.	28718.
275.000	-0.03	2494.37	2489.77	8700.	31983.
200.000	0.00	2492.67	2488.00	8700.	31567.
150.000	0.01	2492.10	2486.21	8700.	29887.
100.000	-0.05	2490.20	2483.95	8700.	34126.

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TIME STEP #          2
*      B
COMPUTING FROM TIME=      0.0139 DAYS TO TIME=      0.0969 DAYS IN      12
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....      0.000
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	18200.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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*****
TIME          ENTRY *          SAND          *
DAYS         POINT *      INFLOW  OUTFLOW  TRAP EFF *
0.10      2100.000 *          0.00          *
TOTAL=     100.000 *          0.00          2.44***** *
*****

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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00

SEDIMENT OUTFLOW from the Downstream Boundary				TOTAL =	0.00
GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)		
VERY FINE SAND....	9328.47	VERY FINE GRAVEL..	136.94		
FINE SAND.....	22932.68	FINE GRAVEL.....	32.03		
MEDIUM SAND.....	6464.78	MEDIUM GRAVEL.....	7.24		
COARSE SAND.....	3030.16	COARSE GRAVEL.....	1.34		
VERY COARSE SAND..	1017.72	VERY COARSE GRAVEL	0.13		
				TOTAL =	42951.50

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.097 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.05	2550.13	2539.95	18200.	128.
2000.000	-0.03	2549.81	2539.97	18200.	514.
1900.000	-0.03	2549.44	2539.97	18200.	702.
1800.000	-0.03	2548.97	2539.97	18200.	959.
1700.000	-0.27	2548.42	2539.73	18200.	41477.
1600.000	-0.05	2546.12	2539.95	18200.	41657.
1500.000	-0.05	2542.59	2531.95	18200.	42998.
1450.000	0.21	2541.79	2531.21	18200.	20731.
1400.000	0.00	2540.29	2530.00	18200.	17767.
1350.000	-0.04	2539.81	2529.96	18200.	19315.
1300.000	-0.06	2538.95	2528.94	18200.	20278.
1230.000	0.00	2535.62	2529.00	18200.	20278.
1220.000	-1.89	2535.46	2525.11	18200.	26042.
1200.000	0.44	2532.45	2526.44	18200.	40735.
1120.000	-0.86	2532.87	2523.14	18200.	47327.
1110.000	0.12	2529.24	2523.12	18200.	28338.
1100.000	-0.55	2530.40	2519.45	18200.	32685.
1050.000	1.49	2527.69	2521.49	18200.	38370.
1010.000	0.00	2524.36	2519.00	18200.	38370.
1000.000	0.00	2519.06	2510.90	18200.	38369.
990.000	0.41	2518.23	2510.61	18200.	29527.
975.000	0.12	2517.53	2509.52	18200.	28169.
965.000	0.07	2516.97	2508.77	18200.	27573.
950.000	0.05	2515.59	2507.95	18200.	26499.
900.000	-0.90	2513.85	2506.00	18200.	26101.
875.000	-1.34	2514.01	2504.86	18200.	26100.
865.000	0.50	2512.27	2506.00	18200.	20199.
850.000	0.48	2511.00	2505.28	18200.	23067.
825.000	0.14	2510.14	2504.04	18200.	22876.
800.000	0.00	2509.55	2503.30	18200.	23940.
750.000	-0.46	2508.74	2501.54	18200.	69097.
700.000	0.28	2507.25	2501.08	18200.	48926.
650.000	0.09	2505.80	2499.49	18200.	47244.
600.000	-0.06	2504.99	2498.24	18200.	49767.
550.000	0.12	2503.21	2497.02	18200.	41790.
500.000	0.06	2502.63	2496.16	18200.	45148.
450.000	0.05	2501.63	2494.65	18200.	44075.
400.000	0.03	2501.10	2493.23	18200.	42344.

350.000	0.03	2500.61	2492.03	18200.	41420.
325.000	0.02	2500.18	2491.52	18200.	41237.
300.000	0.03	2499.16	2490.93	18200.	41162.
290.000	-0.16	2498.85	2490.04	18200.	41659.
275.000	-0.07	2497.28	2489.73	18200.	41523.
200.000	0.07	2495.17	2488.07	18200.	39802.
150.000	0.06	2493.57	2486.26	18200.	39577.
100.000	-0.71	2492.40	2483.29	18200.	42951.

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TIME STEP #          3
*      B
COMPUTING FROM TIME=      0.0972 DAYS TO TIME=      0.1392 DAYS IN      6
COMPUTATION STEPS
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ACCUMULATED TIME (yrs)....      0.000
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	20850.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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*****
TIME          ENTRY *          SAND          *
DAYS          POINT *    INFLOW  OUTFLOW  TRAP EFF *
0.14    2100.000 *      0.00          *
TOTAL=    100.000 *      0.00    3.36***** *
*****

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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	11465.79	VERY FINE GRAVEL..	194.95

FINE SAND.....	20391.82		FINE GRAVEL.....	45.96
MEDIUM SAND.....	7535.82		MEDIUM GRAVEL.....	10.35
COARSE SAND.....	1188.87		COARSE GRAVEL.....	1.91
VERY COARSE SAND..	1322.14		VERY COARSE GRAVEL	0.18
-----			TOTAL =	42157.79

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.139 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.05	2550.76	2539.95	20850.	156.
2000.000	-0.04	2550.42	2539.96	20850.	669.
1900.000	-0.03	2550.01	2539.97	20850.	889.
1800.000	-0.03	2549.49	2539.97	20850.	1058.
1700.000	-0.41	2549.06	2539.59	20850.	4254.
1600.000	-0.06	2546.63	2539.94	20850.	9206.
1500.000	-0.23	2543.36	2531.77	20850.	82267.
1450.000	0.44	2542.36	2531.44	20850.	38471.
1400.000	0.05	2540.80	2530.05	20850.	32884.
1350.000	-0.10	2540.37	2529.90	20850.	49621.
1300.000	-0.31	2539.67	2528.69	20850.	74957.
1230.000	0.00	2536.19	2529.00	20850.	74950.
1220.000	-1.95	2535.97	2525.05	20850.	78239.
1200.000	0.32	2532.82	2526.32	20850.	84327.
1120.000	-0.94	2533.60	2523.06	20850.	87397.
1110.000	0.23	2530.09	2523.23	20850.	62100.
1100.000	-0.59	2531.22	2519.41	20850.	69215.
1050.000	1.66	2528.40	2521.66	20850.	63180.
1010.000	0.00	2524.85	2519.00	20850.	63180.
1000.000	0.00	2519.92	2510.90	20850.	63179.
990.000	0.65	2518.90	2510.85	20850.	50268.
975.000	0.16	2518.27	2509.56	20850.	47958.
965.000	0.09	2517.73	2508.79	20850.	46802.
950.000	0.05	2516.42	2507.95	20850.	46039.
900.000	-0.89	2514.62	2506.01	20850.	45432.
875.000	-1.33	2514.84	2504.87	20850.	44741.
865.000	0.67	2513.01	2506.17	20850.	38343.
850.000	0.48	2511.55	2505.28	20850.	38022.
825.000	0.15	2510.78	2504.05	20850.	36919.
800.000	0.00	2510.01	2503.30	20850.	36463.
750.000	-0.62	2509.49	2501.38	20850.	39549.
700.000	0.27	2507.77	2501.07	20850.	40082.
650.000	0.07	2506.39	2499.47	20850.	40458.
600.000	-0.46	2506.09	2497.84	20850.	36441.
550.000	0.32	2503.74	2497.22	20850.	51706.
500.000	0.10	2503.34	2496.20	20850.	53070.
450.000	0.10	2502.42	2494.70	20850.	50522.
400.000	0.08	2501.94	2493.28	20850.	46899.
350.000	0.07	2501.47	2492.07	20850.	44642.
325.000	0.04	2501.03	2491.54	20850.	43920.
300.000	0.03	2499.97	2490.93	20850.	43348.
290.000	-0.18	2499.68	2490.02	20850.	43560.
275.000	-0.08	2498.03	2489.72	20850.	46617.
200.000	0.14	2495.86	2488.14	20850.	43581.

150.000	0.06	2493.95	2486.26	20850.	40845.
100.000	-0.80	2492.90	2483.20	20850.	42158.

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TIME STEP # 4

* B

COMPUTING FROM TIME= 0.1389 DAYS TO TIME= 0.1809 DAYS IN 6

COMPUTATION STEPS

ACCUMULATED TIME (yrs).... 0.000

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment #	1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No.	2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	26200.00	0.00	75.00	

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.18	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	4.62***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	13801.58	VERY FINE GRAVEL..	230.18
FINE SAND.....	22198.07	FINE GRAVEL.....	53.51
MEDIUM SAND.....	23191.55	MEDIUM GRAVEL.....	11.70
COARSE SAND.....	2221.64	COARSE GRAVEL.....	2.13
VERY COARSE SAND..	1423.48	VERY COARSE GRAVEL	0.20
			TOTAL = 63134.04

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.181 DAYS

SECTION (tons/day)	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.06	2551.79	2539.94	26200.	221.
2000.000	-0.05	2551.38	2539.95	26200.	276.
1900.000	-0.04	2550.89	2539.96	26200.	1202.
1800.000	-0.04	2550.24	2539.96	26200.	1590.
1700.000	-0.44	2549.71	2539.56	26200.	2963.
1600.000	-0.56	2547.22	2539.44	26200.	103782.
1500.000	-0.24	2545.16	2531.76	26200.	45095.
1450.000	0.81	2543.24	2531.81	26200.	46491.
1400.000	0.11	2541.77	2530.11	26200.	46879.
1350.000	-0.32	2541.65	2529.68	26200.	37709.
1300.000	-0.49	2541.04	2528.51	26200.	66444.
1230.000	0.00	2537.30	2529.00	26200.	66452.
1220.000	-1.99	2537.19	2525.01	26200.	67828.
1200.000	0.47	2534.11	2526.47	26200.	56156.
1120.000	-0.98	2535.19	2523.02	26200.	58470.
1110.000	0.27	2531.20	2523.27	26200.	68321.
1100.000	-0.62	2532.58	2519.38	26200.	68988.
1050.000	1.73	2529.52	2521.73	26200.	66721.
1010.000	0.00	2525.72	2519.00	26200.	66721.
1000.000	0.00	2521.61	2510.90	26200.	66721.
990.000	0.98	2520.34	2511.18	26200.	53689.
975.000	0.23	2519.80	2509.63	26200.	51613.
965.000	0.13	2519.28	2508.83	26200.	50730.
950.000	0.08	2517.96	2507.98	26200.	50265.
900.000	-0.89	2515.81	2506.01	26200.	50107.
875.000	-1.32	2516.16	2504.88	26200.	49757.
865.000	0.84	2514.32	2506.34	26200.	44056.
850.000	0.51	2512.45	2505.31	26200.	42485.
825.000	0.15	2511.83	2504.05	26200.	42590.
800.000	0.00	2511.04	2503.30	26200.	42625.
750.000	-0.66	2510.54	2501.34	26200.	47951.
700.000	0.29	2508.71	2501.09	26200.	44757.
650.000	0.07	2507.38	2499.47	26200.	44527.
600.000	-0.43	2507.04	2497.87	26200.	44379.
550.000	0.25	2504.84	2497.15	26200.	47183.
500.000	0.08	2504.56	2496.18	26200.	48762.
450.000	0.10	2503.78	2494.70	26200.	50436.
400.000	0.10	2503.35	2493.30	26200.	50729.
350.000	0.10	2502.88	2492.10	26200.	49781.
325.000	0.06	2502.39	2491.56	26200.	49526.
300.000	0.05	2501.10	2490.95	26200.	49136.
290.000	-0.18	2500.80	2490.02	26200.	49251.
275.000	-0.54	2499.78	2489.26	26200.	70316.
200.000	0.23	2497.17	2488.23	26200.	62438.
150.000	0.08	2494.77	2486.28	26200.	61923.
100.000	-0.83	2493.90	2483.17	26200.	63134.

TIME STEP # 5
 * B
 COMPUTING FROM TIME= 0.1805 DAYS TO TIME= 0.2225 DAYS IN 6
 COMPUTATION STEPS

 ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

 Stream Segment # 1 | DISCHARGE | SEDIMENT LOAD | TEMPERATURE
 Section No. 2100.000 | (cfs) | (tons/day) | (deg F)

 INFLOW | 32000.00 | 0.00 | 75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

 TIME ENTRY * SAND *
 DAYS POINT * INFLOW OUTFLOW TRAP EFF *
 0.22 2100.000 * 0.00 *
 TOTAL= 100.000 * 0.00 5.96***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

 SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
		TOTAL =	0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	4558.25	VERY FINE GRAVEL..	265.30
FINE SAND.....	22824.78	FINE GRAVEL.....	60.51
MEDIUM SAND.....	27889.88	MEDIUM GRAVEL.....	12.73
COARSE SAND.....	2887.21	COARSE GRAVEL.....	2.26
VERY COARSE SAND..	1535.71	VERY COARSE GRAVEL	0.21
		TOTAL =	60036.83

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.222 DAYS

 SECTION BED CHANGE WS ELEV THALWEG Q TRANSPORT RATE
 (tons/day)

NUMBER	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.25	2552.97	2539.75	32000.	14481.
2000.000	-0.04	2552.50	2539.96	32000.	13204.
1900.000	-0.05	2551.97	2539.95	32000.	13336.
1800.000	-0.04	2551.25	2539.96	32000.	13909.
1700.000	-0.46	2550.64	2539.54	32000.	15433.
1600.000	-0.58	2548.00	2539.42	32000.	19466.
1500.000	-0.28	2546.42	2531.72	32000.	22817.
1450.000	0.69	2544.78	2531.69	32000.	28497.
1400.000	0.09	2543.18	2530.09	32000.	29176.
1350.000	-0.19	2542.94	2529.81	32000.	18846.
1300.000	-0.62	2542.45	2528.38	32000.	22017.
1230.000	0.00	2538.47	2529.00	32000.	22016.
1220.000	-2.02	2538.39	2524.98	32000.	23694.
1200.000	0.42	2535.10	2526.42	32000.	31696.
1120.000	-1.00	2536.29	2523.00	32000.	32513.
1110.000	0.20	2532.44	2523.20	32000.	36891.
1100.000	-0.63	2533.71	2519.37	32000.	37603.
1050.000	1.60	2530.48	2521.60	32000.	51776.
1010.000	0.00	2526.62	2519.00	32000.	51776.
1000.000	0.00	2523.30	2510.90	32000.	51774.
990.000	1.24	2521.83	2511.44	32000.	40153.
975.000	0.26	2521.38	2509.66	32000.	39058.
965.000	0.14	2520.88	2508.84	32000.	38511.
950.000	0.08	2519.57	2507.98	32000.	38474.
900.000	-0.96	2516.60	2505.94	32000.	42386.
875.000	-1.33	2517.15	2504.87	32000.	43274.
865.000	0.80	2515.39	2506.30	32000.	43009.
850.000	0.44	2513.51	2505.24	32000.	45569.
825.000	0.17	2512.96	2504.07	32000.	45189.
800.000	0.01	2512.19	2503.31	32000.	45043.
750.000	-0.68	2511.74	2501.32	32000.	48753.
700.000	0.35	2509.75	2501.15	32000.	43691.
650.000	0.09	2508.48	2499.49	32000.	42606.
600.000	-0.37	2508.12	2497.93	32000.	36945.
550.000	0.21	2506.07	2497.11	32000.	38342.
500.000	0.07	2505.89	2496.17	32000.	39583.
450.000	0.08	2505.22	2494.68	32000.	40362.
400.000	0.09	2504.84	2493.29	32000.	41619.
350.000	0.09	2504.37	2492.09	32000.	42322.
325.000	0.05	2503.80	2491.55	32000.	43048.
300.000	0.05	2502.33	2490.95	32000.	43398.
290.000	-0.19	2501.99	2490.01	32000.	43489.
275.000	-1.23	2501.77	2488.57	32000.	68419.
200.000	0.37	2498.56	2488.37	32000.	59470.
150.000	0.09	2496.10	2486.29	32000.	58698.
100.000	-0.87	2494.90	2483.13	32000.	60037.

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TIME STEP #           6
*           B
COMPUTING FROM TIME=  0.2222 DAYS TO TIME=  0.2642 DAYS IN      6
COMPUTATION STEPS

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 ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	29350.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.26	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	7.16***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	8157.58	VERY FINE GRAVEL..	270.98
FINE SAND.....	14611.64	FINE GRAVEL.....	65.41
MEDIUM SAND.....	23728.70	MEDIUM GRAVEL.....	14.28
COARSE SAND.....	3466.53	COARSE GRAVEL.....	2.59
VERY COARSE SAND..	1373.90	VERY COARSE GRAVEL	0.24
			TOTAL = 51691.84

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.264 DAYS

SECTION	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
(tons/day)	(ft)	(ft)	(ft)	(cfs)	SAND
NUMBER					
2100.000	-0.39	2552.46	2539.61	29350.	809.
2000.000	-0.04	2551.95	2539.96	29350.	1119.
1900.000	-0.05	2551.43	2539.95	29350.	1349.
1800.000	-0.05	2550.72	2539.95	29350.	1459.

1700.000	-0.48	2550.12	2539.52	29350.	1769.
1600.000	-0.60	2547.57	2539.40	29350.	3505.
1500.000	-0.33	2545.76	2531.67	29350.	15900.
1450.000	0.62	2544.20	2531.62	29350.	18471.
1400.000	0.08	2542.54	2530.08	29350.	18854.
1350.000	-0.14	2542.25	2529.86	29350.	18614.
1300.000	-0.66	2541.83	2528.34	29350.	22639.
1230.000	0.00	2537.95	2529.00	29350.	22639.
1220.000	-2.04	2537.84	2524.96	29350.	24019.
1200.000	0.35	2534.58	2526.35	29350.	26610.
1120.000	-1.01	2535.73	2522.99	29350.	27238.
1110.000	0.14	2531.82	2523.14	29350.	31583.
1100.000	-1.47	2533.28	2518.53	29350.	90548.
1050.000	1.69	2530.03	2521.69	29350.	70758.
1010.000	0.00	2526.21	2519.00	29350.	70758.
1000.000	0.00	2522.76	2510.90	29350.	70756.
990.000	1.56	2520.93	2511.76	29350.	54584.
975.000	0.30	2520.58	2509.70	29350.	52073.
965.000	0.18	2520.05	2508.88	29350.	50418.
950.000	0.09	2518.57	2507.99	29350.	49661.
900.000	-0.98	2516.41	2505.92	29350.	50190.
875.000	-1.32	2516.76	2504.88	29350.	49464.
865.000	0.84	2514.93	2506.34	29350.	47153.
850.000	0.44	2513.07	2505.24	29350.	47661.
825.000	0.16	2512.45	2504.06	29350.	47442.
800.000	0.01	2511.77	2503.31	29350.	46485.
750.000	-0.74	2511.39	2501.26	29350.	50445.
700.000	0.40	2509.30	2501.20	29350.	47126.
650.000	0.09	2507.97	2499.49	29350.	47043.
600.000	-0.26	2507.50	2498.04	29350.	36633.
550.000	0.19	2505.49	2497.09	29350.	37925.
500.000	0.06	2505.27	2496.16	29350.	38504.
450.000	0.07	2504.54	2494.67	29350.	39915.
400.000	0.08	2504.15	2493.28	29350.	40546.
350.000	0.08	2503.68	2492.08	29350.	41204.
325.000	0.02	2503.16	2491.52	29350.	41395.
300.000	0.02	2501.77	2490.92	29350.	41887.
290.000	-0.19	2501.43	2490.01	29350.	41972.
275.000	-1.61	2501.49	2488.19	29350.	39847.
200.000	0.40	2498.09	2488.40	29350.	47714.
150.000	0.08	2495.59	2486.28	29350.	50452.
100.000	-0.90	2494.50	2483.10	29350.	51692.

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TIME STEP #          7
*      B
COMPUTING FROM TIME=      0.2639 DAYS TO TIME=      0.3059 DAYS IN      6
COMPUTATION STEPS

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ACCUMULATED TIME (yrs)....      0.001
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	22150.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.31	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	7.87***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	2390.53	VERY FINE GRAVEL..	246.67
FINE SAND.....	9545.41	FINE GRAVEL.....	65.51
MEDIUM SAND.....	14780.72	MEDIUM GRAVEL.....	15.33
COARSE SAND.....	2632.05	COARSE GRAVEL.....	2.87
VERY COARSE SAND..	269.31	VERY COARSE GRAVEL	0.27
			TOTAL = 29948.66

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.306 DAYS

SECTION	BED CHANGE	WS ELEV	THALWEG	Q	TRANSPORT RATE
(tons/day)	(ft)	(ft)	(ft)	(cfs)	SAND
2100.000	-0.41	2550.87	2539.59	22150.	726.
2000.000	-0.04	2550.40	2539.96	22150.	1001.
1900.000	-0.05	2549.91	2539.95	22150.	1208.
1800.000	-0.05	2549.24	2539.95	22150.	1288.
1700.000	-0.48	2548.67	2539.52	22150.	1573.
1600.000	-0.61	2546.35	2539.39	22150.	3211.
1500.000	-0.38	2544.05	2531.62	22150.	10333.
1450.000	0.62	2542.58	2531.62	22150.	9754.
1400.000	0.08	2540.90	2530.08	22150.	10610.
1350.000	-0.13	2540.50	2529.87	22150.	11333.

1300.000	-0.69	2540.03	2528.31	22150.	13088.
1230.000	0.00	2536.49	2529.00	22150.	13087.
1220.000	-2.06	2536.13	2524.94	22150.	14020.
1200.000	0.20	2532.77	2526.20	22150.	12323.
1120.000	-1.00	2533.88	2523.00	22150.	12990.
1110.000	0.14	2530.33	2523.14	22150.	18494.
1100.000	-2.01	2531.76	2517.99	22150.	22199.
1050.000	1.65	2528.74	2521.65	22150.	43831.
1010.000	0.00	2525.06	2519.00	22150.	43831.
1000.000	0.00	2521.18	2510.90	22150.	43820.
990.000	1.85	2518.77	2512.05	22150.	33254.
975.000	0.31	2518.61	2509.71	22150.	32556.
965.000	0.20	2518.04	2508.90	22150.	31500.
950.000	0.10	2516.46	2508.00	22150.	30912.
900.000	-0.98	2515.36	2505.92	22150.	31189.
875.000	-1.32	2515.52	2504.88	22150.	31164.
865.000	0.91	2513.59	2506.41	22150.	29016.
850.000	0.44	2511.85	2505.24	22150.	29258.
825.000	0.16	2511.05	2504.06	22150.	29409.
800.000	0.02	2510.35	2503.32	22150.	26092.
750.000	-0.77	2510.01	2501.23	22150.	28705.
700.000	0.45	2507.97	2501.25	22150.	26575.
650.000	0.08	2506.63	2499.48	22150.	26949.
600.000	-0.17	2506.05	2498.13	22150.	20504.
550.000	0.18	2503.98	2497.08	22150.	22032.
500.000	0.05	2503.55	2496.15	22150.	22514.
450.000	0.05	2502.64	2494.65	22150.	23276.
400.000	0.06	2502.14	2493.26	22150.	25041.
350.000	0.06	2501.62	2492.06	22150.	25793.
325.000	0.01	2501.14	2491.51	22150.	26187.
300.000	0.02	2499.77	2490.92	22150.	26854.
290.000	-0.19	2499.39	2490.01	22150.	26933.
275.000	-1.63	2499.49	2488.17	22150.	28656.
200.000	0.35	2496.39	2488.35	22150.	29284.
150.000	0.07	2494.01	2486.27	22150.	29653.
100.000	-0.92	2493.20	2483.08	22150.	29949.

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TIME STEP # 8
 * B
 COMPUTING FROM TIME= 0.3055 DAYS TO TIME= 0.3475 DAYS IN 6
 COMPUTATION STEPS

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ACCUMULATED TIME (yrs).... 0.001
 FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment # 1	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No. 2100.000	(cfs)	(tons/day)	(deg F)
INFLOW	17100.00	0.00	75.00

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

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*****
TIME          ENTRY *          SAND          *
DAYS         POINT *          INFLOW      OUTFLOW    TRAP EFF *
0.35        2100.000 *          0.00          8.34***** *
TOTAL=      100.000 *          0.00          8.34***** *
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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	3106.97	VERY FINE GRAVEL..	222.65
FINE SAND.....	6955.23	FINE GRAVEL.....	64.93
MEDIUM SAND.....	12254.33	MEDIUM GRAVEL.....	15.99
COARSE SAND.....	1986.94	COARSE GRAVEL.....	3.06
VERY COARSE SAND..	198.83	VERY COARSE GRAVEL	0.30
			TOTAL = 24809.23

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.347 DAYS

SECTION NUMBER	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.43	2549.59	2539.57	17100.	623.
2000.000	-0.05	2549.15	2539.95	17100.	701.
1900.000	-0.05	2548.70	2539.95	17100.	876.
1800.000	-0.05	2548.07	2539.95	17100.	931.
1700.000	-0.49	2547.53	2539.51	17100.	1202.
1600.000	-0.62	2545.35	2539.38	17100.	2737.
1500.000	-0.42	2542.90	2531.58	17100.	5014.
1450.000	0.68	2541.45	2531.68	17100.	4378.
1400.000	0.07	2539.70	2530.07	17100.	5097.
1350.000	-0.15	2539.19	2529.85	17100.	6993.
1300.000	-0.71	2538.66	2528.29	17100.	8436.
1230.000	0.00	2535.36	2529.00	17100.	8437.
1220.000	-2.46	2534.84	2524.54	17100.	41199.
1200.000	0.12	2531.84	2526.12	17100.	45284.
1120.000	-0.96	2532.45	2523.04	17100.	43604.
1110.000	0.01	2529.03	2523.01	17100.	45574.

DAYS	POINT *	INFLOW	OUTFLOW	TRAP EFF *
0.43	2100.000 *	0.00		*
TOTAL=	100.000 *	0.00	8.88*****	*

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
			TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	1065.76	VERY FINE GRAVEL..	174.23
FINE SAND.....	4591.50	FINE GRAVEL.....	60.82
MEDIUM SAND.....	5684.13	MEDIUM GRAVEL.....	16.32
COARSE SAND.....	1084.27	COARSE GRAVEL.....	3.24
VERY COARSE SAND..	118.40	VERY COARSE GRAVEL	0.33
			TOTAL = 12798.99

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.431 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.44	2547.78	2539.56	11125.	169.
2000.000	-0.05	2547.41	2539.95	11125.	185.
1900.000	-0.06	2547.00	2539.94	11125.	368.
1800.000	-0.05	2546.43	2539.95	11125.	381.
1700.000	-0.49	2545.93	2539.51	11125.	622.
1600.000	-0.65	2543.94	2539.35	11125.	2087.
1500.000	-0.46	2541.31	2531.54	11125.	3937.
1450.000	0.71	2540.04	2531.71	11125.	3197.
1400.000	0.06	2538.09	2530.06	11125.	3413.
1350.000	-0.25	2537.46	2529.75	11125.	6358.
1300.000	-0.72	2536.83	2528.28	11125.	6726.
1230.000	0.00	2533.89	2529.00	11125.	6726.
1220.000	-2.88	2532.95	2524.12	11125.	18621.
1200.000	0.02	2530.42	2526.02	11125.	20319.
1120.000	-0.90	2530.63	2523.10	11125.	19876.
1110.000	0.00	2527.58	2523.00	11125.	20905.
1100.000	-1.76	2528.17	2518.24	11125.	19286.
1050.000	1.33	2525.92	2521.33	11125.	23971.
1010.000	0.00	2522.99	2519.00	11125.	23971.
1000.000	0.00	2518.95	2510.90	11125.	23954.
990.000	2.65	2516.96	2512.85	11125.	18918.
975.000	0.27	2515.33	2509.67	11125.	21949.

965.000	0.24	2514.70	2508.94	11125.	19155.
950.000	0.12	2513.53	2508.02	11125.	18279.
900.000	-1.07	2513.07	2505.83	11125.	17966.
875.000	-1.30	2513.05	2504.90	11125.	16988.
865.000	1.20	2511.25	2506.70	11125.	14714.
850.000	0.26	2509.70	2505.06	11125.	22379.
825.000	0.25	2508.47	2504.15	11125.	19374.
800.000	0.00	2507.81	2503.30	11125.	19087.
750.000	-0.80	2507.49	2501.20	11125.	19635.
700.000	0.59	2505.68	2501.39	11125.	15536.
650.000	0.10	2504.10	2499.50	11125.	14615.
600.000	-0.18	2503.45	2498.12	11125.	15884.
550.000	0.23	2501.54	2497.13	11125.	14932.
500.000	0.06	2500.83	2496.16	11125.	14013.
450.000	0.07	2499.45	2494.67	11125.	13798.
400.000	0.05	2498.64	2493.25	11125.	13669.
350.000	0.04	2498.02	2492.04	11125.	13639.
325.000	0.03	2497.59	2491.53	11125.	13485.
300.000	0.03	2496.40	2490.93	11125.	13251.
290.000	-0.20	2495.86	2490.00	11125.	13260.
275.000	-1.90	2496.10	2487.90	11125.	13721.
200.000	0.47	2493.63	2488.47	11125.	12205.
150.000	0.07	2491.79	2486.27	11125.	12559.
100.000	-0.94	2490.90	2483.06	11125.	12799.

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TIME STEP #          10
*      B
COMPUTING FROM TIME=      0.4305 DAYS TO TIME=      0.4472 DAYS IN      2
COMPUTATION STEPS
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ACCUMULATED TIME (yrs)....      0.001
FLOW DURATION (days).....      0.007

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UPSTREAM BOUNDARY CONDITIONS

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Stream Segment # 1      |      DISCHARGE      |      SEDIMENT LOAD      |      TEMPERATURE
Section No.  2100.000  |      (cfs)          |      (tons/day)         |      (deg F)
-----
                        INFLOW |      5500.00 |      0.00 |      75.00

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TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

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ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT
*****
TIME          ENTRY *          SAND          *
DAYS         POINT *      INFLOW  OUTFLOW  TRAP EFF *
0.44      2100.000 *          0.00          *
TOTAL=     100.000 *          0.00          8.95***** *
*****

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TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	0.00	VERY FINE GRAVEL..	0.00
FINE SAND.....	0.00	FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00	MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00	COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00	VERY COARSE GRAVEL	0.00
TOTAL =			0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	830.67	VERY FINE GRAVEL..	120.65
FINE SAND.....	3730.23	FINE GRAVEL.....	52.01
MEDIUM SAND.....	4621.58	MEDIUM GRAVEL.....	15.16
COARSE SAND.....	798.00	COARSE GRAVEL.....	3.12
VERY COARSE SAND..	85.59	VERY COARSE GRAVEL	0.36
TOTAL =			10257.35

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.444 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.44	2545.50	2539.56	5500.	132.
2000.000	-0.05	2545.21	2539.95	5500.	136.
1900.000	-0.07	2544.88	2539.93	5500.	2287.
1800.000	-0.05	2544.41	2539.95	5500.	2291.
1700.000	-0.49	2543.98	2539.51	5500.	2375.
1600.000	-0.65	2542.35	2539.35	5500.	3772.
1500.000	-0.45	2539.40	2531.55	5500.	3251.
1450.000	0.70	2538.42	2531.70	5500.	4071.
1400.000	0.05	2536.53	2530.05	5500.	4488.
1350.000	-0.26	2535.51	2529.74	5500.	7031.
1300.000	-0.72	2534.76	2528.28	5500.	7223.
1230.000	0.00	2532.20	2529.00	5500.	7224.
1220.000	-2.87	2530.81	2524.13	5500.	6164.
1200.000	0.01	2528.91	2526.01	5500.	6920.
1120.000	-0.90	2528.50	2523.10	5500.	6733.
1110.000	0.00	2525.95	2523.00	5500.	7333.
1100.000	-1.73	2525.90	2518.27	5500.	4626.
1050.000	1.27	2524.29	2521.27	5500.	14168.
1010.000	0.00	2521.64	2519.00	5500.	14168.
1000.000	0.03	2516.79	2510.93	5500.	12012.
990.000	2.61	2515.41	2512.81	5500.	16059.
975.000	0.22	2513.34	2509.62	5500.	22238.
965.000	0.36	2512.55	2509.06	5500.	10801.
950.000	0.13	2511.34	2508.03	5500.	9532.
900.000	-1.10	2511.02	2505.80	5500.	12699.
875.000	-1.28	2510.96	2504.92	5500.	11241.
865.000	1.19	2509.56	2506.69	5500.	12327.
850.000	0.19	2508.29	2504.99	5500.	22061.

825.000	0.32	2506.91	2504.22	5500.	12885.
800.000	0.01	2505.92	2503.31	5500.	12571.
750.000	-0.80	2505.57	2501.20	5500.	12423.
700.000	0.60	2504.19	2501.40	5500.	9588.
650.000	0.09	2502.37	2499.49	5500.	10883.
600.000	-0.20	2501.65	2498.10	5500.	14755.
550.000	0.25	2500.02	2497.15	5500.	10829.
500.000	0.05	2499.24	2496.15	5500.	12921.
450.000	0.08	2497.69	2494.68	5500.	9859.
400.000	0.06	2496.55	2493.26	5500.	8324.
350.000	0.05	2495.75	2492.05	5500.	6978.
325.000	0.02	2495.38	2491.52	5500.	7165.
300.000	0.01	2494.33	2490.91	5500.	8852.
290.000	-0.20	2493.36	2490.00	5500.	8856.
275.000	-1.90	2493.64	2487.90	5500.	9094.
200.000	0.47	2491.71	2488.47	5500.	8720.
150.000	0.06	2490.09	2486.26	5500.	10078.
100.000	-0.94	2489.30	2483.06	5500.	10257.

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TIME STEP # 11

* B

COMPUTING FROM TIME= 0.4444 DAYS TO TIME= 0.4694 DAYS IN 3

COMPUTATION STEPS

- - - - -

ACCUMULATED TIME (yrs)..... 0.001

FLOW DURATION (days)..... 0.007

UPSTREAM BOUNDARY CONDITIONS

Stream Segment #	DISCHARGE	SEDIMENT LOAD	TEMPERATURE
Section No.	(cfs)	(tons/day)	(deg F)
1	2050.00	0.00	75.00
2100.000			

TABLE SA-1. TRAP EFFICIENCY ON STREAM SEGMENT # 1

ACCUMULATED AC-FT ENTERING AND LEAVING THIS STREAM SEGMENT

TIME	ENTRY *	SAND	*
DAYS	POINT *	INFLOW	OUTFLOW TRAP EFF *
0.47	2100.000 *	0.00	*
TOTAL=	100.000 *	0.00	9.01***** *

TABLE SB-1: SEDIMENT LOAD PASSING THE BOUNDARIES OF STREAM SEGMENT # 1

SEDIMENT INFLOW at the Upstream Boundary:

GRAIN SIZE	LOAD (tons/day)	GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND.....	0.00	VERY FINE GRAVEL..	0.00

FINE SAND.....	0.00		FINE GRAVEL.....	0.00
MEDIUM SAND.....	0.00		MEDIUM GRAVEL.....	0.00
COARSE SAND.....	0.00		COARSE GRAVEL.....	0.00
VERY COARSE SAND..	0.00		VERY COARSE GRAVEL	0.00

TOTAL = 0.00

SEDIMENT OUTFLOW from the Downstream Boundary

GRAIN SIZE	LOAD (tons/day)		GRAIN SIZE	LOAD (tons/day)
VERY FINE SAND....	260.46		VERY FINE GRAVEL..	26.39
FINE SAND.....	2978.21		FINE GRAVEL.....	14.81
MEDIUM SAND.....	2442.66		MEDIUM GRAVEL.....	4.63
COARSE SAND.....	221.13		COARSE GRAVEL.....	1.00
VERY COARSE SAND..	29.69		VERY COARSE GRAVEL	0.31

TOTAL = 5979.30

TABLE SB-2: STATUS OF THE BED PROFILE AT TIME = 0.465 DAYS

SECTION (tons/day)	BED CHANGE (ft)	WS ELEV (ft)	THALWEG (ft)	Q (cfs)	TRANSPORT RATE SAND
2100.000	-0.44	2543.39	2539.56	2050.	45.
2000.000	-0.05	2543.20	2539.95	2050.	77.
1900.000	-0.08	2542.96	2539.92	2050.	1188.
1800.000	-0.05	2542.58	2539.95	2050.	1286.
1700.000	-0.49	2542.22	2539.51	2050.	1221.
1600.000	-0.65	2540.96	2539.35	2050.	1974.
1500.000	-0.45	2537.49	2531.55	2050.	1313.
1450.000	0.69	2536.65	2531.69	2050.	2242.
1400.000	0.05	2534.91	2530.05	2050.	2055.
1350.000	-0.27	2533.76	2529.73	2050.	3170.
1300.000	-0.71	2533.06	2528.29	2050.	2560.
1230.000	0.00	2530.82	2529.00	2050.	2557.
1220.000	-2.86	2528.89	2524.14	2050.	1864.
1200.000	0.00	2527.68	2526.00	2050.	2156.
1120.000	-0.90	2526.70	2523.10	2050.	1991.
1110.000	0.00	2524.61	2523.00	2050.	1829.
1100.000	-1.72	2523.84	2518.28	2050.	964.
1050.000	1.22	2522.85	2521.22	2050.	6227.
1010.000	0.00	2520.42	2519.00	2050.	6227.
1000.000	0.10	2514.86	2511.00	2050.	2463.
990.000	2.49	2514.11	2512.69	2050.	12222.
975.000	0.12	2511.82	2509.52	2050.	19665.
965.000	0.56	2511.04	2509.26	2050.	6608.
950.000	0.11	2509.67	2508.01	2050.	10214.
900.000	-1.05	2509.05	2505.85	2050.	6353.
875.000	-1.24	2509.00	2504.96	2050.	3190.
865.000	1.10	2508.15	2506.60	2050.	8867.
850.000	0.11	2506.88	2504.91	2050.	15026.
825.000	0.38	2505.77	2504.28	2050.	10527.
800.000	0.01	2504.66	2503.31	2050.	9268.
750.000	-0.76	2503.87	2501.24	2050.	6008.
700.000	0.59	2503.07	2501.39	2050.	8047.
650.000	0.09	2500.93	2499.49	2050.	8628.
600.000	-0.23	2500.18	2498.07	2050.	14015.

550.000	0.29	2498.68	2497.19	2050.	8258.
500.000	0.02	2497.83	2496.12	2050.	13020.
450.000	0.10	2496.33	2494.70	2050.	8636.
400.000	0.06	2495.00	2493.26	2050.	8490.
350.000	0.07	2493.95	2492.07	2050.	7037.
325.000	0.03	2493.56	2491.53	2050.	6610.
300.000	-0.04	2492.92	2490.86	2050.	9105.
290.000	-0.20	2491.61	2490.00	2050.	9094.
275.000	-1.84	2491.52	2487.96	2050.	6118.
200.000	0.47	2490.09	2488.47	2050.	5554.
150.000	0.04	2488.41	2486.24	2050.	7537.
100.000	-0.91	2487.70	2483.09	2050.	5979.

 \$\$ END

0 DATA ERRORS DETECTED.

TOTAL NO. OF TIME STEPS READ = 11
 TOTAL NO. OF WS PROFILES = 67
 ITERATIONS IN EXNER EQ = 61640

COMPUTATIONS COMPLETED

RUN TIME = 0 HOURS, 0 MINUTES & 1.00 SECONDS