

CHANNEL 1 - SHEAR STRESS 2			Date: 2/14/09	Start Time: 1:00 PM	End Time: 1:30 PM					
			Soil: Loam	Target Shear (psf): 10.00	Slope: 30%					
40 ft long flume	20 ft test section		Flexamat Permanent Channel Lining Mat							
1500 rpms	2 ft wide flume		TEST DATA							
1 2 3			1	2	3					
FLOW			Inlet Weir							
Weir width (ft) = 4			Water Depth, in							
0 ft A B C			Water Velocity, ft/s							
			Flow Rate, cfs							
2 ft	Cross-section 1		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		28	26.5	28			8		42.0
	To eroded Surface Elev, cm		28	26	28	Vavg (fps) =	8.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		0	-0.5	0	navg =	0.062			
	Clopper Soil Loss, cm		0	-0.5	0	Flow (cfs) =	7.70		8.87	5.77
	Avg Bottom Loss/Gain, in					-0.07			Avg Clopper Soil Loss, in	-0.07
	Avg Bottom Loss/Gain, in					-0.07			Avg Clopper Soil Loss, in	-0.07
4 ft	Cross-section 2		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		28.5	28	30			8.5		42.0
	To eroded Surface Elev, cm		28	28	30	Vavg (fps) =	8.50		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		-0.5	0	0	navg =	0.055			
	Clopper Soil Loss, cm		-0.5	0	0	Flow (cfs) =	7.44		8.07	5.25
	Avg Bottom Loss/Gain, in					-0.07			Avg Clopper Soil Loss, in	-0.07
	Avg Bottom Loss/Gain, in					-0.07			Avg Clopper Soil Loss, in	-0.07
6 ft	Cross-section 3		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		30	30	31			9		43.0
	To eroded Surface Elev, cm		30	30	31	Vavg (fps) =	9.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		0	0	0	navg =	0.050			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	7.48		7.66	4.99
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
8 ft	Cross-section 4		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		32	31	32			9		44.0
	To eroded Surface Elev, cm		32	30.5	32	Vavg (fps) =	9.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		0	-0.5	0	navg =	0.050			
	Clopper Soil Loss, cm		0	-0.5	0	Flow (cfs) =	7.38		7.56	4.92
	Avg Bottom Loss/Gain, in					-0.07			Avg Clopper Soil Loss, in	-0.07
	Avg Bottom Loss/Gain, in					-0.07			Avg Clopper Soil Loss, in	-0.07
10 ft	Cross-section 5		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		33	31	32			9		44.5
	To eroded Surface Elev, cm		33	31	32	Vavg (fps) =	9.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		0	0	0	navg =	0.050			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	7.38		7.56	4.92
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
12 ft	Cross-section 6		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		34	31	32			9		45.0
	To eroded Surface Elev, cm		34	31	32	Vavg (fps) =	9.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		0	0	0	navg =	0.050			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	7.48		7.66	4.99
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
14 ft	Cross-section 7		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		35.5	34.5	34.5			9		47.0
	To eroded Surface Elev, cm		34.5	34	34.5	Vavg (fps) =	9.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		-1	-0.5	0	navg =	0.050			
	Clopper Soil Loss, cm		-1	-0.5	0	Flow (cfs) =	7.48		7.66	4.99
	Avg Bottom Loss/Gain, in					-0.20			Avg Clopper Soil Loss, in	-0.20
	Avg Bottom Loss/Gain, in					-0.20			Avg Clopper Soil Loss, in	-0.20
16 ft	Cross-section 8		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		35	33.5	35			9.5		46.5
	To eroded Surface Elev, cm		35	33.5	35	Vavg (fps) =	9.50		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		0	0	0	navg =	0.046			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	7.48		7.26	4.72
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
18 ft	Cross-section 9		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		35	35	36			9.5		47.5
	To eroded Surface Elev, cm		35	35	36	Vavg (fps) =	9.50		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		0	0	0	navg =	0.046			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	7.58		7.36	4.79
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
20 ft	Cross-section 10		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		34	32	34.5			10		45.0
	To eroded Surface Elev, cm		34	32	34.5	Vavg (fps) =	10.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		0	0	0	navg =	0.042			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	7.55		6.96	4.53
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
	Avg Bottom Loss/Gain, in					0.00			Avg Clopper Soil Loss, in	0.00
	Cross-section 11		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		31.5	30	31			10		42.0
	To eroded Surface Elev, cm		31	30	31	Vavg (fps) =	10.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm		-0.5	0	0	navg =	0.042			
	Clopper Soil Loss, cm		-0.5	0	0	Flow (cfs) =	7.44		6.86	4.46
	Avg Bottom Loss/Gain, in					-0.07			Avg Clopper Soil Loss, in	-0.07
	Avg Bottom Loss/Gain, in					-0.07			Avg Clopper Soil Loss, in	-0.07
Soil Loss / Gain, in			-0.07	-0.05	0.00	Avg Bottom Loss/Gain per Cross-Section =			-0.04	
Clopper Soil Loss, in			-0.07	-0.05	0.00	Avg Clopper Soil Loss per Cross-Section =			-0.04	

CHANNEL 1 - SHEAR STRESS 3				Date: 2/14/09	Start Time: 2:00 PM	End Time: 2:30 PM					
				Soil: Loam	Target Shear (psf): 14.00	Slope: 30%					
40	ft long flume		20	ft test section		Flexamat Permanent Channel Lining Mat					
	rmps		2	ft wide flume		TEST DATA					
	1	2	3	Inlet Weir							
	FLOW			Water Depth, in							
	Weir width (ft) = 4			Water Velocity, ft/s							
0	A	B	C	Flow Rate, cfs							
2 ft	Cross-section 1			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			28	26	28		10.5		46.0	
	To eroded Surface Elev, cm			28	26	28	Vavg (fps) =	10.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	0	0	navg =	0.056			
	Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.86	11.29		7.35
	Avg Bottom Loss/Gain, in			0.00			Avg Clopper Soil Loss, in				0.00
4 ft	Cross-section 2			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			28	28	30		10.5		47.5	
	To eroded Surface Elev, cm			28	28	30	Vavg (fps) =	10.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	0	0	navg =	0.056			
	Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.98	11.39		7.41
	Avg Bottom Loss/Gain, in			0.00			Avg Clopper Soil Loss, in				0.00
6 ft	Cross-section 3			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			30	30	31		11		48.0	
	To eroded Surface Elev, cm			30	29	31	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	-1	0	navg =	0.052			
	Clopper Soil Loss, cm			0	-1	0	Flow (cfs) =	12.99	10.89		7.09
	Avg Bottom Loss/Gain, in			-0.13			Avg Clopper Soil Loss, in				-0.13
8 ft	Cross-section 4			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			32	30.5	32		11		49.0	
	To eroded Surface Elev, cm			32	29.5	32	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	-1	0	navg =	0.052			
	Clopper Soil Loss, cm			0	-1	0	Flow (cfs) =	12.87	10.79		7.02
	Avg Bottom Loss/Gain, in			-0.13			Avg Clopper Soil Loss, in				-0.13
10 ft	Cross-section 5			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			33	31	32		11		49.5	
	To eroded Surface Elev, cm			33	30.5	32	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	-0.5	0	navg =	0.051			
	Clopper Soil Loss, cm			0	-0.5	0	Flow (cfs) =	12.75	10.69		6.96
	Avg Bottom Loss/Gain, in			-0.07			Avg Clopper Soil Loss, in				-0.07
12 ft	Cross-section 6			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			34	31	32		11.5		49.5	
	To eroded Surface Elev, cm			34	31	32	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	0	0	navg =	0.048			
	Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.95	10.39		6.76
	Avg Bottom Loss/Gain, in			0.00			Avg Clopper Soil Loss, in				0.00
14 ft	Cross-section 7			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			34.5	34	34.5		11.5		50.5	
	To eroded Surface Elev, cm			34	33.5	34	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			-0.5	-0.5	-0.5	navg =	0.047			
	Clopper Soil Loss, cm			-0.5	-0.5	-0.5	Flow (cfs) =	12.58	10.08		6.56
	Avg Bottom Loss/Gain, in			-0.20			Avg Clopper Soil Loss, in				-0.20
16 ft	Cross-section 8			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			35	33.5	35		11.5		51.5	
	To eroded Surface Elev, cm			35	33	35	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	-0.5	0	navg =	0.048			
	Clopper Soil Loss, cm			0	-0.5	0	Flow (cfs) =	12.95	10.39		6.76
	Avg Bottom Loss/Gain, in			-0.07			Avg Clopper Soil Loss, in				-0.07
18 ft	Cross-section 9			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			35	35	36		11.5		51.5	
	To eroded Surface Elev, cm			35	34	36	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	-1	0	navg =	0.047			
	Clopper Soil Loss, cm			0	-1	0	Flow (cfs) =	12.45	9.98		6.50
	Avg Bottom Loss/Gain, in			-0.13			Avg Clopper Soil Loss, in				-0.13
20 ft	Cross-section 10			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			34	32	34.5		11.5		50.0	
	To eroded Surface Elev, cm			34	31.5	34.5	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			0	-0.5	0	navg =	0.047			
	Clopper Soil Loss, cm			0	-0.5	0	Flow (cfs) =	12.58	10.08		6.56
	Avg Bottom Loss/Gain, in			-0.07			Avg Clopper Soil Loss, in				-0.07
	Cross-section 11			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm			31	30	31		11.5		47.0	
	To eroded Surface Elev, cm			30.5	29.5	30.5	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm			-0.5	-0.5	-0.5	navg =	0.048			
	Clopper Soil Loss, cm			-0.5	-0.5	-0.5	Flow (cfs) =	12.70	10.18		6.63
	Avg Bottom Loss/Gain, in			-0.20			Avg Clopper Soil Loss, in				-0.20
Soil Loss / Gain, in				-0.04	-0.20	-0.04	Avg Bottom Loss/Gain per Cross-Section =			-0.09	
Clopper Soil Loss, in				-0.04	-0.20	-0.04	Avg Clopper Soil Loss per Cross-Section =			-0.09	

CHANNEL 1 - SHEAR STRESS 4				Date: 2/14/09	Start Time: 3:00 PM	End Time: 3:30 PM	
				Soil: Loam	Target Shear (psf): 18.00	Slope: 30%	
40 ft long flume		20 ft test section		Flexamat Permanent Channel Lining Mat			
1900 rpms		2 ft wide flume					
				TEST DATA			
				1	2	3	
Inlet Weir							
FLOW							
Weir width (ft) = 2.00							
C = #####							
0 ft A B C							
Water Depth, in							
Water Velocity, ft/s							
Flow Rate, cfs				#DIV/0!	0.00	#DIV/0!	
Cross-section 1				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				28	26	28	14
To eroded Surface Elev, cm				28	26	27	Vavg (fps) = 14.00
Soil Loss / Gain, cm				0	0	-1	navg = 0.058 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				0	0	-1	Flow (cfs) = 27.56 18.15 11.81
Avg Bottom Loss/Gain, in						-0.13	Avg Clopper Soil Loss, in -0.13
Cross-section 2				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				28	28	30	14.5
To eroded Surface Elev, cm				28	27.5	29.5	Vavg (fps) = 14.50
Soil Loss / Gain, cm				0	-0.5	-0.5	navg = 0.055 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				0	-0.5	-0.5	Flow (cfs) = 28.23 17.95 11.68
Avg Bottom Loss/Gain, in						-0.13	Avg Clopper Soil Loss, in -0.13
Cross-section 3				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				30	29	31	14.5
To eroded Surface Elev, cm				30	28.5	30.5	Vavg (fps) = 14.50
Soil Loss / Gain, cm				0	-0.5	-0.5	navg = 0.053 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				0	-0.5	-0.5	Flow (cfs) = 26.96 17.14 11.15
Avg Bottom Loss/Gain, in						-0.13	Avg Clopper Soil Loss, in -0.13
Cross-section 4				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				32	29.5	32	14.5
To eroded Surface Elev, cm				31.5	29	32	Vavg (fps) = 14.50
Soil Loss / Gain, cm				-0.5	-0.5	0	navg = 0.055 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				-0.5	-0.5	0	Flow (cfs) = 27.75 17.65 11.48
Avg Bottom Loss/Gain, in						-0.13	Avg Clopper Soil Loss, in -0.13
Cross-section 5				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				33	30.5	32	15
To eroded Surface Elev, cm				33	30	32	Vavg (fps) = 15.00
Soil Loss / Gain, cm				0	-0.5	0	navg = 0.050 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				0	-0.5	0	Flow (cfs) = 26.90 16.54 10.76
Avg Bottom Loss/Gain, in						-0.07	Avg Clopper Soil Loss, in -0.07
Cross-section 6				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				34	31	32	15.5
To eroded Surface Elev, cm				33.5	31	32	Vavg (fps) = 15.50
Soil Loss / Gain, cm				-0.5	0	0	navg = 0.048 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				-0.5	0	0	Flow (cfs) = 27.29 16.23 10.56
Avg Bottom Loss/Gain, in						-0.07	Avg Clopper Soil Loss, in -0.07
Cross-section 7				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				34	33.5	34	15.5
To eroded Surface Elev, cm				34	32.5	34	Vavg (fps) = 15.50
Soil Loss / Gain, cm				0	-1	0	navg = 0.048 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				0	-1	0	Flow (cfs) = 26.95 16.03 10.43
Avg Bottom Loss/Gain, in						-0.13	Avg Clopper Soil Loss, in -0.13
Cross-section 8				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				35	33	35	15.5
To eroded Surface Elev, cm				34.5	33	35	Vavg (fps) = 15.50
Soil Loss / Gain, cm				-0.5	0	0	navg = 0.048 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				-0.5	0	0	Flow (cfs) = 26.78 15.93 10.37
Avg Bottom Loss/Gain, in						-0.07	Avg Clopper Soil Loss, in -0.07
Cross-section 9				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				35	34	36	15.5
To eroded Surface Elev, cm				35	34	35	Vavg (fps) = 15.50
Soil Loss / Gain, cm				0	0	-1	navg = 0.048 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				0	0	-1	Flow (cfs) = 26.78 15.93 10.37
Avg Bottom Loss/Gain, in						-0.13	Avg Clopper Soil Loss, in -0.13
Cross-section 10				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				34	31.5	34.5	15.5
To eroded Surface Elev, cm				34	31	34	Vavg (fps) = 15.50
Soil Loss / Gain, cm				0	-0.5	-0.5	navg = 0.048 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				0	-0.5	-0.5	Flow (cfs) = 26.95 16.03 10.43
Avg Bottom Loss/Gain, in						-0.13	Avg Clopper Soil Loss, in -0.13
Cross-section 11				A	B	C	V @ 0.2d V @ 0.6d V @ 0.8d To Water Surf, cm
To original Surface Elev, cm				30.5	29.5	30.5	16
To eroded Surface Elev, cm				30	29.5	30	Vavg (fps) = 16.00
Soil Loss / Gain, cm				-0.5	0	-0.5	navg = 0.045 Bed Max Shear Stress (psf)
Clopper Soil Loss, cm				-0.5	0	-0.5	Flow (cfs) = 26.95 15.53 10.10
Avg Bottom Loss/Gain, in						-0.13	Avg Clopper Soil Loss, in -0.13
Soil Loss / Gain, in				-0.07	-0.13	-0.14	Avg Bottom Loss/Gain per Cross-Section = -0.11
Clopper Soil Loss, in				-0.07	-0.13	-0.14	Avg Clopper Soil Loss per Cross-Section = -0.11

CHANNEL 2 - SHEAR STRESS 1			Date: 2/14/09	Start Time: 12:00 PM	End Time: 12:30 PM					
			Soil: Loam	Target Shear (psf): 6.00	Slope: 30%					
40 ft long flume	20 ft test section		Flexamat Permanent Channel Lining Mat							
900 rpms	2 ft wide flume		TEST DATA							
1 2 3			1	2	3					
FLOW										
Weir width (ft) = 4										
0 ft A B C										
2 ft	Outlet Weir									
	Water Depth, in		12.00							
	Water Velocity, ft/s		3.00							
	Flow Rate, cfs		0.00	12.00	0.00					
	Cross-section 1		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
To original Surface Elev, cm		31	31	31	6		41.0			
To eroded Surface Elev, cm		31	31	30.5	Vavg (fps) =	6.00	Bed Max Shear Stress (psf)	Water Depth (in)		
Soil Loss / Gain, cm		0	0	-0.5	navg =	0.065				
Clopper Soil Loss, cm		0	0	-0.5	Flow (cfs) =	4.00	6.15	4.00		
		Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07		
4 ft	Cross-section 2		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		31	30	31	6		40.5		
	To eroded Surface Elev, cm		31	30	31	Vavg (fps) =	6.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	0	navg =	0.064			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	3.87	5.95	3.87	
		Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00		
6 ft	Cross-section 3		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		31	30	32	6		40.5		
	To eroded Surface Elev, cm		30.5	30	32	Vavg (fps) =	6.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		-0.5	0	0	navg =	0.063			
	Clopper Soil Loss, cm		-0.5	0	0	Flow (cfs) =	3.81	5.85	3.81	
		Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07		
8 ft	Cross-section 4		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		33	32	33	6.5		41.5		
	To eroded Surface Elev, cm		32.5	32	33	Vavg (fps) =	6.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		-0.5	0	0	navg =	0.056			
	Clopper Soil Loss, cm		-0.5	0	0	Flow (cfs) =	3.84	5.45	3.54	
		Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07		
10 ft	Cross-section 5		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		32	32	33	6.5		41.0		
	To eroded Surface Elev, cm		32	32	32.5	Vavg (fps) =	6.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	-0.5	navg =	0.055			
	Clopper Soil Loss, cm		0	0	-0.5	Flow (cfs) =	3.77	5.34	3.48	
		Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07		
12 ft	Cross-section 6		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		32.5	32	33	6.5		41.0		
	To eroded Surface Elev, cm		32.5	32	33	Vavg (fps) =	6.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	0	navg =	0.053			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	3.63	5.14	3.35	
		Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00		
14 ft	Cross-section 7		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		33	32	32.5	6.5		41.0		
	To eroded Surface Elev, cm		33	31.5	32.5	Vavg (fps) =	6.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	-0.5	0	navg =	0.054			
	Clopper Soil Loss, cm		0	-0.5	0	Flow (cfs) =	3.70	5.24	3.41	
		Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07		
16 ft	Cross-section 8		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		33	32	32	7		41.0		
	To eroded Surface Elev, cm		33	32	32	Vavg (fps) =	7.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	0	navg =	0.050			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	3.98	5.24	3.41	
		Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00		
18 ft	Cross-section 9		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		32	31	32	7		40.0		
	To eroded Surface Elev, cm		32	30.5	32	Vavg (fps) =	7.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	-0.5	0	navg =	0.050			
	Clopper Soil Loss, cm		0	-0.5	0	Flow (cfs) =	3.90	5.14	3.35	
		Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07		
20 ft	Cross-section 10		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		30	30	30	7		38.5		
	To eroded Surface Elev, cm		30	30	30	Vavg (fps) =	7.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	0	navg =	0.050			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	3.90	5.14	3.35	
		Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00		
		Cross-section 11		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
To original Surface Elev, cm		30	31	31	7.5		39.0			
To eroded Surface Elev, cm		30	31	31	Vavg (fps) =	7.50	Bed Max Shear Stress (psf)	Water Depth (in)		
Soil Loss / Gain, cm		0	0	0	navg =	0.046				
Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	4.10	5.04	3.28		
		Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00		
Soil Loss / Gain, in		-0.04	-0.04	-0.04	Avg Bottom Loss/Gain per Cross-Section =		-0.04			
Clopper Soil Loss, in		-0.04	-0.04	-0.04	Avg Clopper Soil Loss per Cross-Section =		-0.04			

CHANNEL 2 - SHEAR STRESS 2		Date: 2/14/09	Start Time: 1:00 PM	End Time: 1:30 PM					
		Soil: Loam	Target Shear (psf): 10.00	Slope: 30%					
40 ft long flume	20 ft test section	Flexamat Permanent Channel Lining Mat							
rpm	ft wide flume	TEST DATA							
1 2 3	Inlet Weir	1	2	3					
FLOW	Water Depth, in		15.00						
Weir width (ft) = 4	Water Velocity, ft/s		4.50						
0 ft A B C	Flow Rate, cfs	0.00	22.50	0.00					
2 ft	Cross-section 1	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	31	31	30.5		8		45.0	
	To eroded Surface Elev, cm	31	31	30.5	Vavg (fps) =	8.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	0	0	0	navg =	0.061			
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	7.44	8.57	5.58	
		Avg Bottom Loss/Gain, in		0.00	Avg Clopper Soil Loss, in		0.00		
4 ft	Cross-section 2	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	31	30	31		8.5		44.0	
	To eroded Surface Elev, cm	31	30	31	Vavg (fps) =	8.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	0	0	0	navg =	0.055			
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	7.44	8.07	5.25	
		Avg Bottom Loss/Gain, in		0.00	Avg Clopper Soil Loss, in		0.00		
6 ft	Cross-section 3	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	30.5	30	32		8.5		44.0	
	To eroded Surface Elev, cm	30.5	30	31.5	Vavg (fps) =	8.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	0	0	-0.5	navg =	0.055			
	Clopper Soil Loss, cm	0	0	-0.5	Flow (cfs) =	7.44	8.07	5.25	
		Avg Bottom Loss/Gain, in		-0.07	Avg Clopper Soil Loss, in		-0.07		
8 ft	Cross-section 4	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	32.5	32	33		8.5		45.5	
	To eroded Surface Elev, cm	32.5	32	32.5	Vavg (fps) =	8.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	0	0	-0.5	navg =	0.055			
	Clopper Soil Loss, cm	0	0	-0.5	Flow (cfs) =	7.34	7.97	5.18	
		Avg Bottom Loss/Gain, in		-0.07	Avg Clopper Soil Loss, in		-0.07		
10 ft	Cross-section 5	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	32	32	32.5		9		45.0	
	To eroded Surface Elev, cm	32	32	32	Vavg (fps) =	9.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	0	0	-0.5	navg =	0.051			
	Clopper Soil Loss, cm	0	0	-0.5	Flow (cfs) =	7.68	7.87	5.12	
		Avg Bottom Loss/Gain, in		-0.07	Avg Clopper Soil Loss, in		-0.07		
12 ft	Cross-section 6	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	32.5	32	33		9		45.5	
	To eroded Surface Elev, cm	32.5	32	33	Vavg (fps) =	9.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	0	0	0	navg =	0.051			
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	7.68	7.87	5.12	
		Avg Bottom Loss/Gain, in		0.00	Avg Clopper Soil Loss, in		0.00		
14 ft	Cross-section 7	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	33	31.5	32.5		9		45.0	
	To eroded Surface Elev, cm	33	31	32	Vavg (fps) =	9.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	0	-0.5	-0.5	navg =	0.051			
	Clopper Soil Loss, cm	0	-0.5	-0.5	Flow (cfs) =	7.68	7.87	5.12	
		Avg Bottom Loss/Gain, in		-0.13	Avg Clopper Soil Loss, in		-0.13		
16 ft	Cross-section 8	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	33	32	32		9		45.0	
	To eroded Surface Elev, cm	32.5	32	32	Vavg (fps) =	9.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	-0.5	0	0	navg =	0.051			
	Clopper Soil Loss, cm	-0.5	0	0	Flow (cfs) =	7.58	7.76	5.05	
		Avg Bottom Loss/Gain, in		-0.07	Avg Clopper Soil Loss, in		-0.07		
18 ft	Cross-section 9	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	32	30.5	32		9.5		43.5	
	To eroded Surface Elev, cm	31.5	30.5	31.5	Vavg (fps) =	9.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	-0.5	0	-0.5	navg =	0.047			
	Clopper Soil Loss, cm	-0.5	0	-0.5	Flow (cfs) =	7.69	7.46	4.86	
		Avg Bottom Loss/Gain, in		-0.13	Avg Clopper Soil Loss, in		-0.13		
20 ft	Cross-section 10	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm	30	30	30		9.5		42.5	
	To eroded Surface Elev, cm	30	30	30	Vavg (fps) =	9.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm	0	0	0	navg =	0.047			
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	7.79	7.56	4.92	
		Avg Bottom Loss/Gain, in		0.00	Avg Clopper Soil Loss, in		0.00		
		Cross-section 11	A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
		To original Surface Elev, cm	30	31	31		10		43.0
		To eroded Surface Elev, cm	30	31	31	Vavg (fps) =	10.00	Bed Max Shear Stress (psf)	Water Depth (in)
		Soil Loss / Gain, cm	0	0	0	navg =	0.045		
		Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	8.09	7.46	4.86
		Avg Bottom Loss/Gain, in		0.00	Avg Clopper Soil Loss, in		0.00		
		Soil Loss / Gain, in	-0.04	-0.02	-0.09	Avg Bottom Loss/Gain per Cross-Section =		-0.05	
		Clopper Soil Loss, in	-0.04	-0.02	-0.09	Avg Clopper Soil Loss per Cross-Section =		-0.05	

CHANNEL 2 - SHEAR STRESS 3			Date: 2/14/09	Start Time: 2:00 PM	End Time: 2:30 PM
			Soil: Loam	Target Shear (psf): 14.00	Slope: 30%
40 ft long flume	20 ft test section		Flexamat Permanent Channel Lining Mat		
rpm	2 ft wide flume				
			TEST DATA		
Inlet Weir			1	2	3
Water Depth, in				19.00	
Water Velocity, ft/s				6.00	
Flow Rate, cfs			0.00	38.00	0.00
Cross-section 1			A	B	C
To original Surface Elev, cm			31	31	30.5
To eroded Surface Elev, cm			31	31	30
Soil Loss / Gain, cm			0	0	-0.5
Clopper Soil Loss, cm			0	0	-0.5
Avg Bottom Loss/Gain, in			-0.07		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			10		50.5
Vavg (fps) =			10.00		Bed Max Shear Stress (psf)
navg =			0.061		Water Depth (in)
Flow (cfs) =			13.01		7.81
Cross-section 2			A	B	C
To original Surface Elev, cm			31	30	31
To eroded Surface Elev, cm			31	30	31
Soil Loss / Gain, cm			0	0	0
Clopper Soil Loss, cm			0	0	0
Avg Bottom Loss/Gain, in			0.00		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			10.5		49.5
Vavg (fps) =			10.50		Bed Max Shear Stress (psf)
navg =			0.056		Water Depth (in)
Flow (cfs) =			12.98		7.41
Cross-section 3			A	B	C
To original Surface Elev, cm			30.5	30	31.5
To eroded Surface Elev, cm			30	30	31.5
Soil Loss / Gain, cm			-0.5	0	0
Clopper Soil Loss, cm			-0.5	0	0
Avg Bottom Loss/Gain, in			-0.07		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			10.5		49.5
Vavg (fps) =			10.50		Bed Max Shear Stress (psf)
navg =			0.057		Water Depth (in)
Flow (cfs) =			13.09		7.48
Cross-section 4			A	B	C
To original Surface Elev, cm			32.5	32	32.5
To eroded Surface Elev, cm			32	32	32
Soil Loss / Gain, cm			-0.5	0	-0.5
Clopper Soil Loss, cm			-0.5	0	-0.5
Avg Bottom Loss/Gain, in			-0.13		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			11		50.0
Vavg (fps) =			11.00		Bed Max Shear Stress (psf)
navg =			0.052		Water Depth (in)
Flow (cfs) =			12.99		7.09
Cross-section 5			A	B	C
To original Surface Elev, cm			32	32	32
To eroded Surface Elev, cm			32	32	32
Soil Loss / Gain, cm			0	0	0
Clopper Soil Loss, cm			0	0	0
Avg Bottom Loss/Gain, in			0.00		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			11		49.5
Vavg (fps) =			11.00		Bed Max Shear Stress (psf)
navg =			0.051		Water Depth (in)
Flow (cfs) =			12.63		6.89
Cross-section 6			A	B	C
To original Surface Elev, cm			32.5	32	33
To eroded Surface Elev, cm			32	32	33
Soil Loss / Gain, cm			-0.5	0	0
Clopper Soil Loss, cm			-0.5	0	0
Avg Bottom Loss/Gain, in			-0.07		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			11		50.0
Vavg (fps) =			11.00		Bed Max Shear Stress (psf)
navg =			0.051		Water Depth (in)
Flow (cfs) =			12.75		6.96
Cross-section 7			A	B	C
To original Surface Elev, cm			33	31	32
To eroded Surface Elev, cm			33	31	32
Soil Loss / Gain, cm			0	0	0
Clopper Soil Loss, cm			0	0	0
Avg Bottom Loss/Gain, in			0.00		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			11		49.5
Vavg (fps) =			11.00		Bed Max Shear Stress (psf)
navg =			0.051		Water Depth (in)
Flow (cfs) =			12.63		6.89
Cross-section 8			A	B	C
To original Surface Elev, cm			32.5	32	32
To eroded Surface Elev, cm			32	32	32
Soil Loss / Gain, cm			-0.5	0	0
Clopper Soil Loss, cm			-0.5	0	0
Avg Bottom Loss/Gain, in			-0.07		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			11.5		48.0
Vavg (fps) =			11.50		Bed Max Shear Stress (psf)
navg =			0.046		Water Depth (in)
Flow (cfs) =			12.07		6.30
Cross-section 9			A	B	C
To original Surface Elev, cm			31.5	30.5	31.5
To eroded Surface Elev, cm			31	30.5	31.5
Soil Loss / Gain, cm			-0.5	0	0
Clopper Soil Loss, cm			-0.5	0	0
Avg Bottom Loss/Gain, in			-0.07		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			11.5		48.0
Vavg (fps) =			11.50		Bed Max Shear Stress (psf)
navg =			0.048		Water Depth (in)
Flow (cfs) =			12.83		6.69
Cross-section 10			A	B	C
To original Surface Elev, cm			30	30	30
To eroded Surface Elev, cm			30	30	30
Soil Loss / Gain, cm			0	0	0
Clopper Soil Loss, cm			0	0	0
Avg Bottom Loss/Gain, in			0.00		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			11.5		47.0
Vavg (fps) =			11.50		Bed Max Shear Stress (psf)
navg =			0.048		Water Depth (in)
Flow (cfs) =			12.83		6.69
Cross-section 11			A	B	C
To original Surface Elev, cm			30	31	31
To eroded Surface Elev, cm			30	31	30.5
Soil Loss / Gain, cm			0	0	-0.5
Clopper Soil Loss, cm			0	0	-0.5
Avg Bottom Loss/Gain, in			-0.07		Avg Clopper Soil Loss, in
V @ 0.2d			V @ 0.6d		V @ 0.8d
To Water Surf, cm			11.5		47.5
Vavg (fps) =			11.50		Bed Max Shear Stress (psf)
navg =			0.048		Water Depth (in)
Flow (cfs) =			12.83		6.69
Soil Loss / Gain, in			-0.09	0.00	-0.05
Clopper Soil Loss, in			-0.09	0.00	-0.05
Avg Bottom Loss/Gain per Cross-Section =			-0.05		
Avg Clopper Soil Loss per Cross-Section =			-0.05		

CHANNEL 2 - SHEAR STRESS 4			Date: 2/14/09	Start Time: 4:00 PM	End Time: 4:30 PM			
			Soil: Loam	Target Shear (psf): 18.00	Slope: 30%			
40 ft long flume	20 ft test section		Flexamat Permanent Channel Lining Mat					
rmps	2 ft wide flume							
<div style="display: flex; justify-content: space-around;"> 1 2 3 </div> <p style="text-align: center;">FLOW</p> <p>Weir width (ft) = 4 C = 0.00</p> <p style="text-align: center;">0 ft A B C</p>			TEST DATA					
Inlet Weir			1	2	3			
Water Depth, in			18.00					
Water Velocity, ft/s			4.50					
Flow Rate, cfs			0.00	27.00	0.00			
Cross-section 1			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			31	31	30		14	
To eroded Surface Elev, cm			30.5	31	30	Vavg (fps) =	14.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-0.5	0	0	navg =	0.057	
Clopper Soil Loss, cm			-0.5	0	0	Flow (cfs) =	27.10	17.85
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			-0.07			-0.07		
Cross-section 2			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			31	30	31		14	
To eroded Surface Elev, cm			30.5	30	30.5	Vavg (fps) =	14.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-0.5	0	-0.5	navg =	0.056	
Clopper Soil Loss, cm			-0.5	0	-0.5	Flow (cfs) =	26.33	17.34
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			-0.13			-0.13		
Cross-section 3			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			30	30	31.5		14.5	
To eroded Surface Elev, cm			29	29.5	31	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-1	-0.5	-0.5	navg =	0.053	
Clopper Soil Loss, cm			-1	-0.5	-0.5	Flow (cfs) =	26.32	16.74
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			-0.26			-0.26		
Cross-section 4			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			32	32	32		14.5	
To eroded Surface Elev, cm			32	32	32	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	0	navg =	0.052	
Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	26.16	16.64
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			0.00			0.00		
Cross-section 5			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			32	32	32		14.5	
To eroded Surface Elev, cm			32	31.5	32	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	-0.5	0	navg =	0.052	
Clopper Soil Loss, cm			0	-0.5	0	Flow (cfs) =	25.85	16.44
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			-0.07			-0.07		
Cross-section 6			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			32	32	33		15	
To eroded Surface Elev, cm			32	31.5	32	Vavg (fps) =	15.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	-0.5	-1	navg =	0.049	
Clopper Soil Loss, cm			0	-0.5	-1	Flow (cfs) =	25.75	15.83
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			-0.20			-0.20		
Cross-section 7			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			33	31	32		15	
To eroded Surface Elev, cm			32	31	32	Vavg (fps) =	15.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-1	0	0	navg =	0.050	
Clopper Soil Loss, cm			-1	0	0	Flow (cfs) =	26.41	16.23
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			-0.13			-0.13		
Cross-section 8			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			32	32	32		15	
To eroded Surface Elev, cm			32	32	32	Vavg (fps) =	15.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	0	navg =	0.049	
Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	25.59	15.73
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			0.00			0.00		
Cross-section 9			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			31	30.5	31.5		15.5	
To eroded Surface Elev, cm			31	30.5	31	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	-0.5	navg =	0.047	
Clopper Soil Loss, cm			0	0	-0.5	Flow (cfs) =	26.10	15.53
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			-0.07			-0.07		
Cross-section 10			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			30	30	30		15.5	
To eroded Surface Elev, cm			29	30	30	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-1	0	0	navg =	0.047	
Clopper Soil Loss, cm			-1	0	0	Flow (cfs) =	26.27	15.63
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			-0.13			-0.13		
Cross-section 11			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			30	31	30.5		15.5	
To eroded Surface Elev, cm			30	31	30.5	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	0	navg =	0.047	
Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	25.94	15.43
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in		
			0.00			0.00		
Soil Loss / Gain, in			-0.14	-0.05	-0.09	Avg Bottom Loss/Gain per Cross-Section =		
Clopper Soil Loss, in			-0.14	-0.05	-0.09	Avg Clopper Soil Loss per Cross-Section =		
						-0.10		
						-0.10		

CHANNEL 3 - SHEAR STRESS 1			Date: 2/14/09	Start Time: 12:00 PM	End Time: 12:30 PM	
			Soil: Loam	Target Shear (psf): 6.00	Slope: 30%	
40 ft long flume	20 ft test section		Flexamat Permanent Channel Lining Mat			
rpm	2 ft wide flume					
			TEST DATA			
Outlet Weir			1	2	3	
Water Depth, in				12.00		
Water Velocity, ft/s				3.50		
Flow Rate, cfs			0.00	14.00	0.00	
2 ft	Cross-section 1			A	B	C
	To original Surface Elev, cm			28	28	28
	To eroded Surface Elev, cm			28	28	27.5
	Soil Loss / Gain, cm			0	0	-0.5
	Clopper Soil Loss, cm			0	0	-0.5
4 ft	Cross-section 2			A	B	C
	To original Surface Elev, cm			30	30	30
	To eroded Surface Elev, cm			30	30	30
	Soil Loss / Gain, cm			0	0	0
	Clopper Soil Loss, cm			0	0	0
6 ft	Cross-section 3			A	B	C
	To original Surface Elev, cm			30	29	30
	To eroded Surface Elev, cm			30	29	29.5
	Soil Loss / Gain, cm			0	0	-0.5
	Clopper Soil Loss, cm			0	0	-0.5
8 ft	Cross-section 4			A	B	C
	To original Surface Elev, cm			28	28	29
	To eroded Surface Elev, cm			28	28	29
	Soil Loss / Gain, cm			0	0	0
	Clopper Soil Loss, cm			0	0	0
10 ft	Cross-section 5			A	B	C
	To original Surface Elev, cm			31	30.5	31
	To eroded Surface Elev, cm			30.5	30.5	31
	Soil Loss / Gain, cm			-0.5	0	0
	Clopper Soil Loss, cm			-0.5	0	0
12 ft	Cross-section 6			A	B	C
	To original Surface Elev, cm			31	32	33
	To eroded Surface Elev, cm			31	32	32.5
	Soil Loss / Gain, cm			0	0	-0.5
	Clopper Soil Loss, cm			0	0	-0.5
14 ft	Cross-section 7			A	B	C
	To original Surface Elev, cm			34	33.5	33
	To eroded Surface Elev, cm			34	33	33
	Soil Loss / Gain, cm			0	-0.5	0
	Clopper Soil Loss, cm			0	-0.5	0
16 ft	Cross-section 8			A	B	C
	To original Surface Elev, cm			33	33	34
	To eroded Surface Elev, cm			33	33	34
	Soil Loss / Gain, cm			0	0	0
	Clopper Soil Loss, cm			0	0	0
18 ft	Cross-section 9			A	B	C
	To original Surface Elev, cm			33	33	33.5
	To eroded Surface Elev, cm			32.5	33	33.5
	Soil Loss / Gain, cm			-0.5	0	0
	Clopper Soil Loss, cm			-0.5	0	0
20 ft	Cross-section 10			A	B	C
	To original Surface Elev, cm			33.5	34	35.5
	To eroded Surface Elev, cm			33	34	35.5
	Soil Loss / Gain, cm			-0.5	0	0
	Clopper Soil Loss, cm			-0.5	0	0
Cross-section 11			A	B	C	
To original Surface Elev, cm			34.5	34	34	
To eroded Surface Elev, cm			34	34	34	
Soil Loss / Gain, cm			-0.5	0	0	
Clopper Soil Loss, cm			-0.5	0	0	
Soil Loss / Gain, in			-0.07	-0.02	-0.05	
Clopper Soil Loss, in			-0.07	-0.02	-0.05	
			Avg Bottom Loss/Gain per Cross-Section =			
			Avg Clopper Soil Loss per Cross-Section =			

CHANNEL 3 - SHEAR STRESS 2			Date: 2/14/09	Start Time: 1:00 PM	End Time: 1:30 PM					
			Soil: Loam	Target Shear (psf): 10.00	Slope: 30%					
40 ft long flume rmps			Flexamat Permanent Channel Lining Mat							
20 ft test section 2 ft wide flume			TEST DATA							
1 2 3			Inlet Weir							
FLOW			1	2	3					
Weir width (ft) = 4			Water Depth, in							
0 ft A B C			Water Velocity, ft/s							
			Flow Rate, cfs							
2 ft	Cross-section 1		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		28	28	27.5		8		42.0	
	To eroded Surface Elev, cm		28	28	27	Vavg (fps) =	8.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	-0.5	navg =	0.062			
	Clopper Soil Loss, cm		0	0	-0.5	Flow (cfs) =	7.52	8.67	5.64	
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07	
4 ft	Cross-section 2		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		30	30	30		8.5		43.5	
	To eroded Surface Elev, cm		30	30	30	Vavg (fps) =	8.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	0	navg =	0.056			
	Clopper Soil Loss, cm		0	0	0	Flow (cfs) =	7.53	8.17	5.31	
			Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00	
6 ft	Cross-section 3		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		30	29	29.5		8.5		43.0	
	To eroded Surface Elev, cm		30	29	29	Vavg (fps) =	8.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	-0.5	navg =	0.056			
	Clopper Soil Loss, cm		0	0	-0.5	Flow (cfs) =	7.62	8.27	5.38	
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07	
8 ft	Cross-section 4		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		28	28	29		8.5		42.0	
	To eroded Surface Elev, cm		28	28	28.5	Vavg (fps) =	8.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	-0.5	navg =	0.057			
	Clopper Soil Loss, cm		0	0	-0.5	Flow (cfs) =	7.72	8.37	5.45	
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07	
10 ft	Cross-section 5		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		30.5	30.5	31		8.5		44.0	
	To eroded Surface Elev, cm		30	30.5	31	Vavg (fps) =	8.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		-0.5	0	0	navg =	0.056			
	Clopper Soil Loss, cm		-0.5	0	0	Flow (cfs) =	7.53	8.17	5.31	
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07	
12 ft	Cross-section 6		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		31	32	32.5		8.5		45.0	
	To eroded Surface Elev, cm		31	32	32	Vavg (fps) =	8.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	-0.5	navg =	0.055			
	Clopper Soil Loss, cm		0	0	-0.5	Flow (cfs) =	7.44	8.07	5.25	
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07	
14 ft	Cross-section 7		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		34	33	33		9		46.0	
	To eroded Surface Elev, cm		33.5	33	32.5	Vavg (fps) =	9.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		-0.5	0	-0.5	navg =	0.051			
	Clopper Soil Loss, cm		-0.5	0	-0.5	Flow (cfs) =	7.68	7.87	5.12	
			Avg Bottom Loss/Gain, in		-0.13		Avg Clopper Soil Loss, in		-0.13	
16 ft	Cross-section 8		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		33	33	34		9		46.0	
	To eroded Surface Elev, cm		33	33	33.5	Vavg (fps) =	9.00	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	-0.5	navg =	0.051			
	Clopper Soil Loss, cm		0	0	-0.5	Flow (cfs) =	7.58	7.76	5.05	
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07	
18 ft	Cross-section 9		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		32.5	33	33.5		9.5		45.0	
	To eroded Surface Elev, cm		32	33	33	Vavg (fps) =	9.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		-0.5	0	-0.5	navg =	0.047			
	Clopper Soil Loss, cm		-0.5	0	-0.5	Flow (cfs) =	7.69	7.46	4.86	
			Avg Bottom Loss/Gain, in		-0.13		Avg Clopper Soil Loss, in		-0.13	
20 ft	Cross-section 10		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
	To original Surface Elev, cm		33	34	35.5		9.5		46.0	
	To eroded Surface Elev, cm		33	34	35	Vavg (fps) =	9.50	Bed Max Shear Stress (psf)	Water Depth (in)	
	Soil Loss / Gain, cm		0	0	-0.5	navg =	0.046			
	Clopper Soil Loss, cm		0	0	-0.5	Flow (cfs) =	7.48	7.26	4.72	
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07	
		Cross-section 11		A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
		To original Surface Elev, cm		34	34	34		10		45.5
		To eroded Surface Elev, cm		33.5	34	34	Vavg (fps) =	10.00	Bed Max Shear Stress (psf)	Water Depth (in)
		Soil Loss / Gain, cm		-0.5	0	0	navg =	0.043		
		Clopper Soil Loss, cm		-0.5	0	0	Flow (cfs) =	7.66	7.06	4.59
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07	
			Soil Loss / Gain, in		-0.07		Avg Bottom Loss/Gain per Cross-Section =		-0.07	
			Clopper Soil Loss, in		-0.07		Avg Clopper Soil Loss per Cross-Section =		-0.07	

CHANNEL 3 - SHEAR STRESS 3			Date: 2/14/09	Start Time: 2:00 PM	End Time: 2:30 PM					
			Soil: Loam	Target Shear (psf): 14.00	Slope: 30%					
40 ft long flume	20 ft test section		Flexamat Permanent Channel Lining Mat							
rpm	2 ft wide flume		TEST DATA							
	1	2	3							
	FLOW									
Weir width (ft) = 4	A	B	C							
0 ft										
2 ft	Inlet Weir									
	Water Depth, in			19.00						
	Water Velocity, ft/s			6.00						
	Flow Rate, cfs			0.00	38.00	0.00				
Cross-section 1			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
To original Surface Elev, cm			28	28	27		10		46.0	
To eroded Surface Elev, cm			27.5	27.5	27	Vavg (fps) =	10.00	Bed Max Shear Stress (psf)	Water Depth (in)	
Soil Loss / Gain, cm			-0.5	-0.5	0	navg =	0.059			
Clopper Soil Loss, cm			-0.5	-0.5	0	Flow (cfs) =	12.25	11.29	7.35	
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.13	
4 ft	Cross-section 2			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			30	30	30		10.5		47.5
	To eroded Surface Elev, cm			30	30	30	Vavg (fps) =	10.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	0	0	navg =	0.054		
	Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.06	10.59	6.89
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			0.00	
6 ft	Cross-section 3			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			30	29	29		10.5		47.0
	To eroded Surface Elev, cm			30	29	29	Vavg (fps) =	10.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	0	0	navg =	0.054		
	Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.17	10.69	6.96
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			0.00	
8 ft	Cross-section 4			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			28	28	28.5		10.5		45.5
	To eroded Surface Elev, cm			28	28	28	Vavg (fps) =	10.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	0	-0.5	navg =	0.054		
	Clopper Soil Loss, cm			0	0	-0.5	Flow (cfs) =	12.06	10.59	6.89
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.07	
10 ft	Cross-section 5			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			30	30.5	31		10.5		48.0
	To eroded Surface Elev, cm			30	30	31	Vavg (fps) =	10.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-0.5	0	navg =	0.054		
	Clopper Soil Loss, cm			0	-0.5	0	Flow (cfs) =	12.17	10.69	6.96
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.07	
12 ft	Cross-section 6			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			31	32	32		11		48.5
	To eroded Surface Elev, cm			31	31.5	32	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-0.5	0	navg =	0.050		
	Clopper Soil Loss, cm			0	-0.5	0	Flow (cfs) =	12.27	10.29	6.69
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.07	
14 ft	Cross-section 7			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			33.5	33	32.5		11		49.5
	To eroded Surface Elev, cm			33	33	32	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			-0.5	0	-0.5	navg =	0.050		
	Clopper Soil Loss, cm			-0.5	0	-0.5	Flow (cfs) =	12.15	10.18	6.63
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.13	
16 ft	Cross-section 8			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			33	33	33.5		11		50.0
	To eroded Surface Elev, cm			33	33	33	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	0	-0.5	navg =	0.050		
	Clopper Soil Loss, cm			0	0	-0.5	Flow (cfs) =	12.27	10.29	6.69
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.07	
18 ft	Cross-section 9			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			32	33	33		11		49.0
	To eroded Surface Elev, cm			32	32	33	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-1	0	navg =	0.049		
	Clopper Soil Loss, cm			0	-1	0	Flow (cfs) =	12.03	10.08	6.56
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.13	
20 ft	Cross-section 10			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm			33	34	35		11.5		50.0
	To eroded Surface Elev, cm			33	33.5	35	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-0.5	0	navg =	0.046		
	Clopper Soil Loss, cm			0	-0.5	0	Flow (cfs) =	12.20	9.78	6.36
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.07	
Cross-section 11			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
To original Surface Elev, cm			33.5	34	34		12		50.0	
To eroded Surface Elev, cm			33	34	34	Vavg (fps) =	12.00	Bed Max Shear Stress (psf)	Water Depth (in)	
Soil Loss / Gain, cm			-0.5	0	0	navg =	0.045			
Clopper Soil Loss, cm			-0.5	0	0	Flow (cfs) =	12.86	9.88	6.43	
			Avg Bottom Loss/Gain, in			Avg Clopper Soil Loss, in			-0.07	
Soil Loss / Gain, in			-0.05	-0.11	-0.05	Avg Bottom Loss/Gain per Cross-Section =			-0.07	
Clopper Soil Loss, in			-0.05	-0.11	-0.05	Avg Clopper Soil Loss per Cross-Section =			-0.07	

CHANNEL 3 - SHEAR STRESS 4			Date: 2/14/09	Start Time: 5:00 PM	End Time: 5:30 PM
			Soil: Loam	Target Shear (psf): 18.00	Slope: 30%
40 ft long flume	20 ft test section		Flexamat Permanent Channel Lining Mat		
rmps	2 ft wide flume				
<div style="display: flex; justify-content: space-around;"> 1 2 3 </div> <p style="text-align: center;">FLOW</p> <p>Weir width (ft) = 4 C = 0.00</p> <p style="text-align: center;">0 ft A B C</p>			TEST DATA		
Inlet Weir			1	2	3
Water Depth, in			18.00		
Water Velocity, ft/s			4.50		
Flow Rate, cfs			0.00	27.00	0.00
Cross-section 1			A	B	C
To original Surface Elev, cm			27.5	27.5	27
To eroded Surface Elev, cm			27	27	27
Soil Loss / Gain, cm			-0.5	-0.5	0
Clopper Soil Loss, cm			-0.5	-0.5	0
Avg Bottom Loss/Gain, in			-0.13		
Avg Clopper Soil Loss, in			-0.13		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			14.5		
Vavg (fps) =			14.50		
navg =			0.054		
Bed Max Shear Stress (psf)			17.24		
Water Depth (in)			11.22		
Flow (cfs) =			27.12		
2 ft					
Cross-section 2			A	B	C
To original Surface Elev, cm			30	30	30
To eroded Surface Elev, cm			29	29	30
Soil Loss / Gain, cm			-1	-1	0
Clopper Soil Loss, cm			-1	-1	0
Avg Bottom Loss/Gain, in			-0.26		
Avg Clopper Soil Loss, in			-0.26		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			14.5		
Vavg (fps) =			14.50		
navg =			0.053		
Bed Max Shear Stress (psf)			17.04		
Water Depth (in)			11.09		
Flow (cfs) =			26.80		
4 ft					
Cross-section 3			A	B	C
To original Surface Elev, cm			30	29	29
To eroded Surface Elev, cm			29	29	28
Soil Loss / Gain, cm			-1	0	-1
Clopper Soil Loss, cm			-1	0	-1
Avg Bottom Loss/Gain, in			-0.26		
Avg Clopper Soil Loss, in			-0.26		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			14.5		
Vavg (fps) =			14.50		
navg =			0.053		
Bed Max Shear Stress (psf)			17.14		
Water Depth (in)			11.15		
Flow (cfs) =			26.96		
6 ft					
Cross-section 4			A	B	C
To original Surface Elev, cm			28	28	28
To eroded Surface Elev, cm			28	28	28
Soil Loss / Gain, cm			0	0	0
Clopper Soil Loss, cm			0	0	0
Avg Bottom Loss/Gain, in			0.00		
Avg Clopper Soil Loss, in			0.00		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			15		
Vavg (fps) =			15.00		
navg =			0.051		
Bed Max Shear Stress (psf)			16.94		
Water Depth (in)			11.02		
Flow (cfs) =			27.56		
8 ft					
Cross-section 5			A	B	C
To original Surface Elev, cm			30	30	31
To eroded Surface Elev, cm			30	30	30
Soil Loss / Gain, cm			0	0	-1
Clopper Soil Loss, cm			0	0	-1
Avg Bottom Loss/Gain, in			-0.13		
Avg Clopper Soil Loss, in			-0.13		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			15		
Vavg (fps) =			15.00		
navg =			0.051		
Bed Max Shear Stress (psf)			16.64		
Water Depth (in)			10.83		
Flow (cfs) =			27.07		
10 ft					
Cross-section 6			A	B	C
To original Surface Elev, cm			31	31.5	32
To eroded Surface Elev, cm			31	31	31.5
Soil Loss / Gain, cm			0	-0.5	-0.5
Clopper Soil Loss, cm			0	-0.5	-0.5
Avg Bottom Loss/Gain, in			-0.13		
Avg Clopper Soil Loss, in			-0.13		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			15		
Vavg (fps) =			15.00		
navg =			0.050		
Bed Max Shear Stress (psf)			16.54		
Water Depth (in)			10.76		
Flow (cfs) =			26.90		
12 ft					
Cross-section 7			A	B	C
To original Surface Elev, cm			33	33	32
To eroded Surface Elev, cm			32	33	32
Soil Loss / Gain, cm			-1	0	0
Clopper Soil Loss, cm			-1	0	0
Avg Bottom Loss/Gain, in			-0.13		
Avg Clopper Soil Loss, in			-0.13		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			15		
Vavg (fps) =			15.00		
navg =			0.050		
Bed Max Shear Stress (psf)			16.44		
Water Depth (in)			10.70		
Flow (cfs) =			26.74		
14 ft					
Cross-section 8			A	B	C
To original Surface Elev, cm			33	33	33
To eroded Surface Elev, cm			33	33	33
Soil Loss / Gain, cm			0	0	0
Clopper Soil Loss, cm			0	0	0
Avg Bottom Loss/Gain, in			0.00		
Avg Clopper Soil Loss, in			0.00		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			15.5		
Vavg (fps) =			15.50		
navg =			0.047		
Bed Max Shear Stress (psf)			15.73		
Water Depth (in)			10.24		
Flow (cfs) =			26.44		
16 ft					
Cross-section 9			A	B	C
To original Surface Elev, cm			32	32	33
To eroded Surface Elev, cm			32	32	32
Soil Loss / Gain, cm			0	0	-1
Clopper Soil Loss, cm			0	0	-1
Avg Bottom Loss/Gain, in			-0.13		
Avg Clopper Soil Loss, in			-0.13		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			15.5		
Vavg (fps) =			15.50		
navg =			0.047		
Bed Max Shear Stress (psf)			15.73		
Water Depth (in)			10.24		
Flow (cfs) =			26.44		
18 ft					
Cross-section 10			A	B	C
To original Surface Elev, cm			33	33.5	35
To eroded Surface Elev, cm			33	33	35
Soil Loss / Gain, cm			0	-0.5	0
Clopper Soil Loss, cm			0	-0.5	0
Avg Bottom Loss/Gain, in			-0.07		
Avg Clopper Soil Loss, in			-0.07		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			16		
Vavg (fps) =			16.00		
navg =			0.045		
Bed Max Shear Stress (psf)			15.33		
Water Depth (in)			9.97		
Flow (cfs) =			26.60		
20 ft					
Cross-section 11			A	B	C
To original Surface Elev, cm			33	34	34
To eroded Surface Elev, cm			33	33.5	33.5
Soil Loss / Gain, cm			0	-0.5	-0.5
Clopper Soil Loss, cm			0	-0.5	-0.5
Avg Bottom Loss/Gain, in			-0.13		
Avg Clopper Soil Loss, in			-0.13		
V @ 0.2d			V @ 0.6d		
V @ 0.6d			V @ 0.8d		
To Water Surf, cm			16		
Vavg (fps) =			16.00		
navg =			0.045		
Bed Max Shear Stress (psf)			15.53		
Water Depth (in)			10.10		
Flow (cfs) =			26.95		
Soil Loss / Gain, in			-0.13	-0.11	-0.14
Clopper Soil Loss, in			-0.13	-0.11	-0.14
Avg Bottom Loss/Gain per Cross-Section =			-0.13		
Avg Clopper Soil Loss per Cross-Section =			-0.13		

