

CHANNEL 1 - SHEAR STRESS 1				Date: 2/14/09	Start Time: 12:00 PM	End Time: 12:30 PM				
40 ft long flume				Soil: Loam	Target Shear (psf): 6.00	Slope: 30%				
20 ft test section				Flexamat Permanent Channel Lining Mat						
2 ft wide flume				TEST DATA						
1 2 3				1	2	3				
FLOW				Outlet 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	28.5	26.5	28				6		38.0
	To eroded Surface Elev, cm	28	26.5	28	Vavg (fps) =	6.00				
	Soil Loss / Gain, cm	-0.5	0	0	navg =	0.067				Water Depth (in)
	Clopper Soil Loss, cm	-0.5	0	0	Flow (cfs) =	4.13			6.35	4.13
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	30.5				6		39.0
	To eroded Surface Elev, cm	28.5	28	30	Vavg (fps) =	6.00				
	Soil Loss / Gain, cm	0	0	-0.5	navg =	0.065				Water Depth (in)
	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
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				6.5		40.0
	To eroded Surface Elev, cm	30	30	31	Vavg (fps) =	6.50				
	Soil Loss / Gain, cm	0	0	0	navg =	0.058				Water Depth (in)
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	4.12			5.85	3.81
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	32.5				6.5		41.5
	To eroded Surface Elev, cm	32	31	32	Vavg (fps) =	6.50				
	Soil Loss / Gain, cm	0	0	-0.5	navg =	0.059				Water Depth (in)
	Clopper Soil Loss, cm	0	0	-0.5	Flow (cfs) =	4.19			5.95	3.87
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	32.5				6.5		41.5
	To eroded Surface Elev, cm	33	31	32	Vavg (fps) =	6.50				
	Soil Loss / Gain, cm	0	0	-0.5	navg =	0.058				Water Depth (in)
	Clopper Soil Loss, cm	0	0	-0.5	Flow (cfs) =	4.05			5.75	3.74
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				7		41.5
	To eroded Surface Elev, cm	34	31	32	Vavg (fps) =	7.00				
	Soil Loss / Gain, cm	0	0	0	navg =	0.052				Water Depth (in)
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	4.21			5.55	3.61
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	36	35	34.5				7		44.0
	To eroded Surface Elev, cm	35.5	34.5	34.5	Vavg (fps) =	7.00				
	Soil Loss / Gain, cm	-0.5	-0.5	0	navg =	0.052				Water Depth (in)
	Clopper Soil Loss, cm	-0.5	-0.5	0	Flow (cfs) =	4.21			5.55	3.61
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	35	34	35				7		43.5
	To eroded Surface Elev, cm	35	33.5	35	Vavg (fps) =	7.00				
	Soil Loss / Gain, cm	0	-0.5	0	navg =	0.052				Water Depth (in)
	Clopper Soil Loss, cm	0	-0.5	0	Flow (cfs) =	4.13			5.45	3.54
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				7.5		44.0
	To eroded Surface Elev, cm	35	35	36	Vavg (fps) =	7.50				
	Soil Loss / Gain, cm	0	0	0	navg =	0.047				Water Depth (in)
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	4.27			5.24	3.41
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	35				7.5		42.0
	To eroded Surface Elev, cm	34	32	34.5	Vavg (fps) =	7.50				
	Soil Loss / Gain, cm	0	0	-0.5	navg =	0.046				Water Depth (in)
	Clopper Soil Loss, cm	0	0	-0.5	Flow (cfs) =	4.18			5.14	3.35
Avg Bottom Loss/Gain, in				-0.07			Avg Clopper Soil Loss, in			-0.07
20 ft	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				7.5		39.0
	To eroded Surface Elev, cm	31.5	30	31	Vavg (fps) =	7.50				
	Soil Loss / Gain, cm	0	0	0	navg =	0.045				Water Depth (in)
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	4.02			4.94	3.22
Avg Bottom Loss/Gain, in				0.00			Avg Clopper Soil Loss, in			0.00
Soil Loss / Gain, in				-0.04	-0.04	-0.07	Avg Bottom Loss/Gain per Cross-Section =			-0.05
Clopper Soil Loss, in				-0.04	-0.04	-0.07	Avg Clopper Soil Loss per Cross-Section =			-0.05

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				Flexamat Permanent Channel Lining Mat							
20 ft test section											
rmps											
2 ft wide flume				TEST DATA							
FLOW				1	2	3					
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	
2 ft	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	
Cross-section 2				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
4 ft	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	
Cross-section 3				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
6 ft	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	
Cross-section 4				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
8 ft	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	
Cross-section 5				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
10 ft	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	
Cross-section 6				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
12 ft	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	
Cross-section 7				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
14 ft	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	
Cross-section 8				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
16 ft	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	
Cross-section 9				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
18 ft	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	
Cross-section 10				A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm	
20 ft	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				
FLOW				Inlet Weir						
Water Depth, in										
Weir width (ft) = 2.00				C = #####						
Water Velocity, ft/s										
Flow Rate, cfs				#DIV/0!	0.00	#DIV/0!				
0 ft A B C										
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		14		57.0
	To eroded Surface Elev, cm			28	26	27	Vavg (fps) =	14.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	0	-1	navg =	0.058	18.15	11.81
	Clopper Soil Loss, cm			0	0	-1	Flow (cfs) =	27.56		
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
	Avg Bottom Loss/Gain, in						-0.13		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			28	28	30		14.5		58.0
	To eroded Surface Elev, cm			28	27.5	29.5	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-0.5	-0.5	navg =	0.055	17.95	11.68
	Clopper Soil Loss, cm			0	-0.5	-0.5	Flow (cfs) =	28.23		
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
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	31		14.5		58.0
	To eroded Surface Elev, cm			30	28.5	30.5	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-0.5	-0.5	navg =	0.053	17.14	11.15
	Clopper Soil Loss, cm			0	-0.5	-0.5	Flow (cfs) =	26.96		
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
	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	29.5	32		14.5		60.0
	To eroded Surface Elev, cm			31.5	29	32	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			-0.5	-0.5	0	navg =	0.055	17.65	11.48
	Clopper Soil Loss, cm			-0.5	-0.5	0	Flow (cfs) =	27.75		
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
	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	30.5	32		15		59.0
	To eroded Surface Elev, cm			33	30	32	Vavg (fps) =	15.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-0.5	0	navg =	0.050	16.54	10.76
	Clopper Soil Loss, cm			0	-0.5	0	Flow (cfs) =	26.90		
	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
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		15.5		59.0
	To eroded Surface Elev, cm			33.5	31	32	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			-0.5	0	0	navg =	0.048	16.23	10.56
	Clopper Soil Loss, cm			-0.5	0	0	Flow (cfs) =	27.29		
	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
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	33.5	34		15.5		60.0
	To eroded Surface Elev, cm			34	32.5	34	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-1	0	navg =	0.048	16.03	10.43
	Clopper Soil Loss, cm			0	-1	0	Flow (cfs) =	26.95		
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
	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			35	33	35		15.5		60.5
	To eroded Surface Elev, cm			34.5	33	35	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			-0.5	0	0	navg =	0.048	15.93	10.37
	Clopper Soil Loss, cm			-0.5	0	0	Flow (cfs) =	26.78		
	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
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	34	36		15.5		61.0
	To eroded Surface Elev, cm			35	34	35	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	0	-1	navg =	0.048	15.93	10.37
	Clopper Soil Loss, cm			0	0	-1	Flow (cfs) =	26.78		
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
	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	31.5	34.5		15.5		59.5
	To eroded Surface Elev, cm			34	31	34	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	-0.5	-0.5	navg =	0.048	16.03	10.43
	Clopper Soil Loss, cm			0	-0.5	-0.5	Flow (cfs) =	26.95		
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
	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		55.5
	To eroded Surface Elev, cm			30	29.5	30	Vavg (fps) =	16.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			-0.5	0	-0.5	navg =	0.045	15.53	10.10
	Clopper Soil Loss, cm			-0.5	0	-0.5	Flow (cfs) =	26.95		
	Avg Bottom Loss/Gain, in						-0.13		Avg Clopper Soil Loss, in	-0.13
	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							
Outlet Weir			1	2	3					
Water Depth, in				12.00						
Water Velocity, ft/s				3.00						
Flow Rate, cfs			0.00	12.00	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	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	
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	
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			25.5			-0.07		Avg Clopper Soil Loss, in	
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	
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	
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	
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	
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	
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	
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	
	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	
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					
FLOW		Inlet Weir					
Weir width (ft) = 4	Water Depth, in		15.00				
0 ft	Water Velocity, ft/s		4.50				
A	B	C	Flow Rate, cfs				
			0.00	22.50			
			0.00	0.00			
2 ft	Cross-section 1		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		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		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		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		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		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		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		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		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		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		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	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			31	31	30.5		10	To Water Surf, cm
To eroded Surface Elev, cm			31	31	30	Vavg (fps) =	10.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	-0.5	navg =	0.061	
Clopper Soil Loss, cm			0	0	-0.5	Flow (cfs) =	13.01	7.81
			Avg Bottom Loss/Gain, in		-0.07	Avg Clopper Soil Loss, in		-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		10.5	To Water Surf, cm
To eroded Surface Elev, cm			31	30	31	Vavg (fps) =	10.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	0	navg =	0.056	
Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.98	7.41
			Avg Bottom Loss/Gain, in		0.00	Avg Clopper Soil Loss, in		0.00
Cross-section 3			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			30.5	30	31.5		10.5	To Water Surf, cm
To eroded Surface Elev, cm			30	30	31.5	Vavg (fps) =	10.50	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) =	13.09	7.48
			Avg Bottom Loss/Gain, in		-0.07	Avg Clopper Soil Loss, in		-0.07
Cross-section 4			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			32.5	32	32.5		11	To Water Surf, cm
To eroded Surface Elev, cm			32	32	32	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-0.5	0	-0.5	navg =	0.052	
Clopper Soil Loss, cm			-0.5	0	-0.5	Flow (cfs) =	12.99	7.09
			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 original Surface Elev, cm			32	32	32		11	To Water Surf, cm
To eroded Surface Elev, cm			32	32	32	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	0	navg =	0.051	
Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.63	6.89
			Avg Bottom Loss/Gain, in		0.00	Avg Clopper Soil Loss, in		0.00
Cross-section 6			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			32.5	32	33		11	To Water Surf, cm
To eroded Surface Elev, cm			32	32	33	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-0.5	0	0	navg =	0.051	
Clopper Soil Loss, cm			-0.5	0	0	Flow (cfs) =	12.75	6.96
			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 original Surface Elev, cm			33	31	32		11	To Water Surf, cm
To eroded Surface Elev, cm			33	31	32	Vavg (fps) =	11.00	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	0	navg =	0.051	
Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.63	6.89
			Avg Bottom Loss/Gain, in		0.00	Avg Clopper Soil Loss, in		0.00
Cross-section 8			A	B	C	V @ 0.2d	V @ 0.6d	V @ 0.8d
To original Surface Elev, cm			32.5	32	32		11.5	To Water Surf, cm
To eroded Surface Elev, cm			32	32	32	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-0.5	0	0	navg =	0.046	
Clopper Soil Loss, cm			-0.5	0	0	Flow (cfs) =	12.07	6.30
			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 original Surface Elev, cm			31.5	30.5	31.5		11.5	To Water Surf, cm
To eroded Surface Elev, cm			31	30.5	31.5	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			-0.5	0	0	navg =	0.048	
Clopper Soil Loss, cm			-0.5	0	0	Flow (cfs) =	12.83	6.69
			Avg Bottom Loss/Gain, in		-0.07	Avg Clopper Soil Loss, in		-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		11.5	To Water Surf, cm
To eroded Surface Elev, cm			30	30	30	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	0	navg =	0.048	
Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	12.83	6.69
			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 original Surface Elev, cm			30	31	31		11.5	To Water Surf, cm
To eroded Surface Elev, cm			30	31	30.5	Vavg (fps) =	11.50	Bed Max Shear Stress (psf)
Soil Loss / Gain, cm			0	0	-0.5	navg =	0.048	
Clopper Soil Loss, cm			0	0	-0.5	Flow (cfs) =	12.83	6.69
			Avg Bottom Loss/Gain, in		-0.07	Avg Clopper Soil Loss, in		-0.07
Soil Loss / Gain, in			-0.09	0.00	-0.05	Avg Bottom Loss/Gain per Cross-Section =		-0.05
Clopper Soil Loss, in			-0.09	0.00	-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									
1 2 3			TEST DATA							
FLOW			Inlet Weir							
Weir width (ft) = 4 C = 0.00			Water Depth, in	18.00						
0 ft A B C			Water Velocity, ft/s	4.50						
			Flow Rate, cfs	0.00	27.00 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		14		60.0
	To eroded Surface Elev, cm			30.5	31	30	Vavg (fps) =	14.00	Bed Max Shear Stress (psf)	Water Depth (in)
	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	11.61
			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		14		59.0
	To eroded Surface Elev, cm			30.5	30	30.5	Vavg (fps) =	14.00	Bed Max Shear Stress (psf)	Water Depth (in)
	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	11.29
			Avg Bottom Loss/Gain, in		-0.13		Avg Clopper Soil Loss, in		-0.13	
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	31.5		14.5		57.5
	To eroded Surface Elev, cm			29	29.5	31	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)	Water Depth (in)
	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	10.89
			Avg Bottom Loss/Gain, in		-0.26		Avg Clopper Soil Loss, in		-0.26	
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	32	32		14.5		59.5
	To eroded Surface Elev, cm			32	32	32	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	0	0	navg =	0.052		
	Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	26.16	16.64	10.83
			Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00	
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		14.5		59.0
	To eroded Surface Elev, cm			32	31.5	32	Vavg (fps) =	14.50	Bed Max Shear Stress (psf)	Water Depth (in)
	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	10.70
			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	32	33		15		58.0
	To eroded Surface Elev, cm			32	31.5	32	Vavg (fps) =	15.00	Bed Max Shear Stress (psf)	Water Depth (in)
	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	10.30
			Avg Bottom Loss/Gain, in		-0.20		Avg Clopper Soil Loss, in		-0.20	
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	32		15		58.5
	To eroded Surface Elev, cm			32	31	32	Vavg (fps) =	15.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			-1	0	0	navg =	0.050		
	Clopper Soil Loss, cm			-1	0	0	Flow (cfs) =	26.41	16.23	10.56
			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			32	32	32		15		58.0
	To eroded Surface Elev, cm			32	32	32	Vavg (fps) =	15.00	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			0	0	0	navg =	0.049		
	Clopper Soil Loss, cm			0	0	0	Flow (cfs) =	25.59	15.73	10.24
			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			31	30.5	31.5		15.5		56.5
	To eroded Surface Elev, cm			31	30.5	31	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)	Water Depth (in)
	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	10.10
			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		15.5		55.5
	To eroded Surface Elev, cm			29	30	30	Vavg (fps) =	15.50	Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm			-1	0	0	navg =	0.047		
	Clopper Soil Loss, cm			-1	0	0	Flow (cfs) =	26.27	15.63	10.17
			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	31	30.5		15.5		56.0	
To eroded Surface Elev, cm			30	31	30.5	Vavg (fps) =	15.50	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) =	25.94	15.43	10.04	
			Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00	
Soil Loss / Gain, in			-0.14	-0.05	-0.09	Avg Bottom Loss/Gain per Cross-Section =			-0.10	
Clopper Soil Loss, in			-0.14	-0.05	-0.09	Avg Clopper Soil Loss per Cross-Section =			-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						
1	2	3	1	2	3				
			Outlet Weir 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	V @ 0.2d	V @ 0.6d	V @ 0.8d	To Water Surf, cm
	To original Surface Elev, cm	28	28	28			6		38.0
	To eroded Surface Elev, cm	28	28	27.5	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	30	30	30			6		39.5
	To eroded Surface Elev, cm	30	30	30	Vavg (fps) =	6.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm	0	0	0	navg =	0.062			
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	3.74	5.75		3.74
			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	30			6		39.0
	To eroded Surface Elev, cm	30	29	29.5	Vavg (fps) =	6.00		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) =	3.74	5.75		3.74
			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			6		38.0
	To eroded Surface Elev, cm	28	28	29	Vavg (fps) =	6.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm	0	0	0	navg =	0.063			
	Clopper Soil Loss, cm	0	0	0	Flow (cfs) =	3.81	5.85		3.81
			Avg Bottom Loss/Gain, in		0.00		Avg Clopper Soil Loss, in		0.00
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	31	30.5	31			6.5		39.0
	To eroded Surface Elev, cm	30.5	30.5	31	Vavg (fps) =	6.50		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm	-0.5	0	0	navg =	0.053			
	Clopper Soil Loss, cm	-0.5	0	0	Flow (cfs) =	3.55	5.04		3.28
			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	33			6.5		40.0
	To eroded Surface Elev, cm	31	32	32.5	Vavg (fps) =	6.50		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm	0	0	-0.5	navg =	0.052			
	Clopper Soil Loss, cm	0	0	-0.5	Flow (cfs) =	3.48	4.94		3.22
			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	33.5	33			6.5		41.5
	To eroded Surface Elev, cm	34	33	33	Vavg (fps) =	6.50		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm	0	-0.5	0	navg =	0.052			
	Clopper Soil Loss, cm	0	-0.5	0	Flow (cfs) =	3.48	4.94		3.22
			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	33	34			7		41.5
	To eroded Surface Elev, cm	33	33	34	Vavg (fps) =	7.00		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) =	3.75	4.94		3.22
			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	33	33	33.5			7		41.0
	To eroded Surface Elev, cm	32.5	33	33.5	Vavg (fps) =	7.00		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm	-0.5	0	0	navg =	0.048			
	Clopper Soil Loss, cm	-0.5	0	0	Flow (cfs) =	3.67	4.84		3.15
			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	33.5	34	35.5			7.5		42.0
	To eroded Surface Elev, cm	33	34	35.5	Vavg (fps) =	7.50		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm	-0.5	0	0	navg =	0.044			
	Clopper Soil Loss, cm	-0.5	0	0	Flow (cfs) =	3.85	4.74		3.08
			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	34.5	34	34			7.5		42.0
	To eroded Surface Elev, cm	34	34	34	Vavg (fps) =	7.50		Bed Max Shear Stress (psf)	Water Depth (in)
	Soil Loss / Gain, cm	-0.5	0	0	navg =	0.044			
	Clopper Soil Loss, cm	-0.5	0	0	Flow (cfs) =	3.94	4.84		3.15
			Avg Bottom Loss/Gain, in		-0.07		Avg Clopper Soil Loss, in		-0.07
Soil Loss / Gain, in			-0.07	-0.02	-0.05	Avg Bottom Loss/Gain per Cross-Section =			-0.05
Clopper Soil Loss, in			-0.07	-0.02	-0.05	Avg Clopper Soil Loss per Cross-Section =			-0.05

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	20 ft test section		Flexamat Permanent Channel Lining Mat		
rpm	2 ft wide flume				
			TEST DATA		
Inlet Weir			1	2	3
Water Depth, in				15.00	
Water Velocity, ft/s				4.50	
Flow Rate, cfs			0.00	22.50	0.00
Cross-section 1			A	B	C
To original Surface Elev, cm			28	28	27.5
To eroded Surface Elev, cm			28	28	27
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			-0.07		
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
Avg Bottom Loss/Gain, in			0.00		
Avg Clopper Soil Loss, in			0.00		
Cross-section 3			A	B	C
To original Surface Elev, cm			30	29	29.5
To eroded Surface Elev, cm			30	29	29
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			-0.07		
Cross-section 4			A	B	C
To original Surface Elev, cm			28	28	29
To eroded Surface Elev, cm			28	28	28.5
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			-0.07		
Cross-section 5			A	B	C
To original Surface Elev, cm			30.5	30.5	31
To eroded Surface Elev, cm			30	30.5	31
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			-0.07		
Cross-section 6			A	B	C
To original Surface Elev, cm			31	32	32.5
To eroded Surface Elev, cm			31	32	32
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			-0.07		
Cross-section 7			A	B	C
To original Surface Elev, cm			34	33	33
To eroded Surface Elev, cm			33.5	33	32.5
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			-0.13		
Cross-section 8			A	B	C
To original Surface Elev, cm			33	33	34
To eroded Surface Elev, cm			33	33	33.5
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			-0.07		
Cross-section 9			A	B	C
To original Surface Elev, cm			32.5	33	33.5
To eroded Surface Elev, cm			32	33	33
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			-0.13		
Cross-section 10			A	B	C
To original Surface Elev, cm			33	34	35.5
To eroded Surface Elev, cm			33	34	35
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			-0.07		
Cross-section 11			A	B	C
To original Surface Elev, cm			34	34	34
To eroded Surface Elev, cm			33.5	34	34
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			-0.07		
Soil Loss / Gain, in			-0.07	0.00	-0.14
Clopper Soil Loss, in			-0.07	0.00	-0.14
Avg Bottom Loss/Gain per Cross-Section =			-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							
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					
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		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						-0.13	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						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		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						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			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						-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	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						-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		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						-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			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						-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	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						-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	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						-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		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						-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			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						-0.07	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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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 @ 0.8d			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		

