APPENDIX E

RAPID STREAM ASSESSMENT PROTOCOL FIELD DATA SHEETS

FIELD RECONNAISSANCE DATA SHEETS

WATERSHED _____ REACH _____ INVESTIGATOR(S) _____

SUBWATERSHED _____ REACH LENGTH _____ DATE _____

DRAINAGE AREA _____ STREAM TYPE _____ WEATHER _____

HILLSLOPE CHARACTERISTICS

LANDFORM	SLOPE	GEOLOGY/SOILS	MASS WASTING FEATURES	SIZE	RELATED ACTIVITY	DELIVERY POTENTIAL

SURFACE EROSION	AREA	TYPE & DEGREE	PARTICLE SIZE	OVERLAND FLOW	RELATED ACTIVITY	DELIVERY POTENTIAL

VEGETATIVE COMMUNITY	STAND DENSITY	SENSITIVITY/POTENTIAL FOR FUTURE PROBLEMS

COMMENTS

HYDROLOGIC CHARACTERISTICS

LAND USE/ COVER TYPE	HYDROLOGIC CONDITION	HYDROLOGIC SOIL GROUP	FLOOD DAMAGE POTENTIAL	ROAD DRAINAGE	CULVERT/BRIDGE EFFECTS
COMMENTS					

RIPARIAN CHARACTERISTICS

VEGETATIVE COMMUNITY	STAND DENSITY	LENGTH/WIDTH OF RIPARIAN ZONE	BANK PROTECTION	LWD RECRUITMENT POTENTIAL
COMMENTS				

STREAM CHANNEL CHARACTERISTICS

BED FORM	BANK & BED MATERIALS	BED CONTROLS	DEPOSITIONAL FEATURES	ENTRENCHMENT
BANK STABILITY	BED STABILITY	WIDTH/DEPTH RATIO CONDITION	DEBRIS/CHANNEL OBSTRUCTIONS	SEDIMENT SUPPLY
COMMENTS				

FIELD RECONNAISSANCE DATA SHEETS

WATERSHED Any Watershed

SUBWATERSHED _____

DRAINAGE AREA _____

REACH #2

REACH LENGTH 2500

STREAM TYPE Bc, B, G1

INVESTIGATOR(S) _____

DATE _____

WEATHER Overcast and warm.

HILLSLOPE CHARACTERISTICS

LANDFORM	SLOPE	GEOLOGY/SOILS	MASS WASTING FEATURES	SIZE	RELATED ACTIVITY	DELIVERY POTENTIAL
U-shaped valley	15-80 %	Siltstone Sandstone	Shallow landslide Historic/recent	50x50x2 100x50x2	Hydraulic/gravity	High

SURFACE EROSION	AREA	TYPE & DEGREE	PARTICLE SIZE	OVERLAND FLOW	RELATED ACTIVITY	DELIVERY POTENTIAL
yes		Gullies - debris Flow channels	Gravel, cobbles, silt	Debris flow		High

VEGETATIVE COMMUNITY	STAND DENSITY	SENSITIVITY/POTENTIAL FOR FUTURE PROBLEMS
Decidious veg - mature	Moderate density	

COMMENTS

HYDROLOGIC CHARACTERISTICS

LAND USE/ COVER TYPE	HYDROLOGIC CONDITION	HYDROLOGIC SOIL GROUP	FLOOD DAMAGE POTENTIAL	ROAD DRAINAGE	CULVERT/BRIDGE EFFECTS
Forest - Deciduous, young	Fain - grod	Very rapid Runoff	Low	Trails and roads	N/A
COMMENTS					

RIPARIAN CHARACTERISTICS

VEGETATIVE COMMUNITY	STAND DENSITY	LENGTH/WIDTH OF RIPARIAN ZONE	BANK PROTECTION	LWD RECRUITMENT POTENTIAL
Decid - young and mature shrubs	sparce	east	Mod - high	Low
COMMENTS Ironwood, mt. Laurel, striped maple				

STREAM CHANNEL CHARACTERISTICS

BED FORM	BANK & BED MATERIALS	BED CONTROLS	DEPOSITIONAL FEATURES	ENTRENCHMENT
Debris flow/step pool	Cobble, gravel, silt	Bedrock @ 1200" Bottom/roots/logs 400-1800"	Log jams	entrenched
BANK STABILITY	BED STABILITY	WIDTH/DEPTH RATIO CONDITION	DEBRIS/CHANNEL OBSTRUCTIONS	SEDIMENT SUPPLY
BEHI - low - mod	stable		Log jams 1500", 1575"	Mod- high from debris flow channels
COMMENTS Prob 1 - 400" 2 - 600" 3 &4 - 200" 5 - 1400"				

FIELD RECONNAISSANCE DATA SHEETS

WATERSHED Any Watershed

SUBWATERSHED

DRAINAGE AREA

REACH #4

REACH LENGTH Downstream of Hill Road

STREAM TYPE C4

INVESTIGATOR(S)

DATE

WEATHER sunny, warm

HILLSLOPE CHARACTERISTICS

LANDFORM	SLOPE	GEOLOGY/SOILS	MASS WASTING FEATURES	SIZE	RELATED ACTIVITY	DELIVERY POTENTIAL
Broad U-shaped valley	15-80%	Siltstone Sandstone	None evident			

SURFACE EROSION	AREA	TYPE & DEGREE	PARTICLE SIZE	OVERLAND FLOW	RELATED ACTIVITY	DELIVERY POTENTIAL
Sheet & rill in pasture		Sheet - moderate	Grave/silt	Fields	Overgrazing	High

VEGETATIVE COMMUNITY	STAND DENSITY	SENSITIVITY/POTENTIAL FOR FUTURE PROBLEMS
Short grasses in pasture Grasses and scatter tree copse on hillside	Low density	

COMMENTS

Very heavy grazing in pasture

HYDROLOGIC CHARACTERISTICS

LAND USE/ COVER TYPE	HYDROLOGIC CONDITION	HYDROLOGIC SOIL GROUP	FLOOD DAMAGE POTENTIAL	ROAD DRAINAGE	CULVERT/BRIDGE EFFECTS
Grassland/old field/scattered tree copse	Fair - poor	Med - rapid Very rapid runoff	Low	N/A	n/a

COMMENTS

Ground compacted by overgrazing

RIPARIAN CHARACTERISTICS

VEGETATIVE COMMUNITY	STAND DENSITY	LENGTH/WIDTH OF RIPARIAN ZONE	BANK PROTECTION	LWD RECRUITMENT POTENTIAL
Grasses/wetlands seep, relatively undisturbed	Sparse except in wetland area mod - dense	0" L&R B/C	Poor	Low

COMMENTS

Pasture is heavily grazed in poor condition
Wetland area relatively undistrubed - old drainage ditch in disrepair

STREAM CHANNEL CHARACTERISTICS

BED FORM	BANK & BED MATERIALS	BED CONTROLS	DEPOSITIONAL FEATURES	ENTRENCHMENT
Riffle - prol	BC - cobble(gravel/silt) Bed - cobble(gravel/silt)	None Observed	Side channel and mid channel bars	Low
BANK STABILITY	**BED STABILITY**	**WIDTH/DEPTH RATIO CONDITION**	**DEBRIS/CHANNEL OBSTRUCTIONS**	**SEDIMENT SUPPLY**
Mod - high	Some Aggradation	Over wide	None Observed	mid - high

COMMENTS

This area has god recovery potential if grazing were limited in riparian area and revegetation allowed or promoted

FIELD RECONNAISSANCE DATA SHEETS

WATERSHED Any Watershed

SUBWATERSHED

DRAINAGE AREA

REACH #1

REACH LENGTH 2000 (0-2000)

STREAM TYPE Aa, A3/4

INVESTIGATOR(S)

DATE

WEATHER partly sunny

HILLSLOPE CHARACTERISTICS

LANDFORM	SLOPE	GEOLOGY/SOILS	MASS WASTING FEATURES	SIZE	RELATED ACTIVITY	DELIVERY POTENTIAL
Narrow V-shaped valley - Colluvium	15-80%	Siltstone Sandstone	Shaoolw land slide @185"	25x25x3	Hydraulic/gravity	High

SURFACE EROSION	AREA	TYPE & DEGREE	PARTICLE SIZE	OVERLAND FLOW	RELATED ACTIVITY	DELIVERY POTENTIAL
yes	300 +x2"x 31"	Gullies - debris flow channels		Debris flow Channels @ 1400' & 1900'	Clear cuts? Roads?	High

VEGETATIVE COMMUNITY	STAND DENSITY	SENSITIVITY/POTENTIAL FOR FUTURE PROBLEMS
Deciduous- young	Moderate dense	

COMMENTS

HYDROLOGIC CHARACTERISTICS

LAND USE/ COVER TYPE	HYDROLOGIC CONDITION	HYDROLOGIC SOIL GROUP	FLOOD DAMAGE POTENTIAL	ROAD DRAINAGE	CULVERT/BRIDGE EFFECTS
Forest - decid. Young - mature	good	Med - rapid Very rapid runoff	low	N/A	n/a

COMMENTS

RIPARIAN CHARACTERISTICS

VEGETATIVE COMMUNITY	STAND DENSITY	LENGTH/WIDTH OF RIPARIAN ZONE	BANK PROTECTION	LWD RECRUITMENT POTENTIAL
Decid - young & shaded Hemlock dense & very mature	sparse	300 +	Fair Fair/good hemlocks	Mod-high

COMMENTS

STREAM CHANNEL CHARACTERISTICS

BED FORM	BANK & BED MATERIALS	BED CONTROLS	DEPOSITIONAL FEATURES	ENTRENCHMENT
Riffle/pool Step/pool	Bed - cobble/gravel/boulder Banks - gravel/silt/cobble	Low bedrock - 2150-2250" 2600-2700 3850-3900 3000-3075 4500-4700 3250-3300 5000	Large evolsion @ 3500 3975	moderate
BANK STABILITY	**BED STABILITY**	**WIDTH/DEPTH RATIO CONDITION**	**DEBRIS/CHANNEL OBSTRUCTIONS**	**SEDIMENT SUPPLY**
BEHI - low/mod GI-VH BEHI - high 4000-4250	Stable Aggrad 2000-2300' Ineisedo degrad		Log jam – 2100'	

COMMENTS

FIELD RECONNAISSANCE DATA SHEETS

WATERSHED Any Watershed

SUBWATERSHED

DRAINAGE AREA

REACH #3

REACH LENGTH (5350)

STREAM TYPE Cb3, C4

INVESTIGATOR(S)

DATE

WEATHER sunny, warm

HILLSLOPE CHARACTERISTICS

LANDFORM	SLOPE	GEOLOGY/SOILS	MASS WASTING FEATURES	SIZE	RELATED ACTIVITY	DELIVERY POTENTIAL
U-shaped valley	15-80%	Siltstone Sand stone	Shallow land slide		Hydraulic/gravity	High

SURFACE EROSION	AREA	TYPE & DEGREE	PARTICLE SIZE	OVERLAND FLOW	RELATED ACTIVITY	DELIVERY POTENTIAL
Gully 1500-2000		Gully - severe		Debris flow channel	Roads & timber harvest	high

VEGETATIVE COMMUNITY	STAND DENSITY	SENSITIVITY/POTENTIAL FOR FUTURE PROBLEMS
Mixed - young mature	Mod. dense	

COMMENTS

HYDROLOGIC CHARACTERISTICS

LAND USE/ COVER TYPE	HYDROLOGIC CONDITION	HYDROLOGIC SOIL GROUP	FLOOD DAMAGE POTENTIAL	ROAD DRAINAGE	CULVERT/BRIDGE EFFECTS
Forest - dried Young - mature field	Good	Mod - rapid Very rapid runoff	Mod - high	Rt 28/92 Forest service roads	Calvert pipes Clog w/sediment on big streams

COMMENTS

Clear cut last 3-4 years on forest service land
Sediment routinely clogs culvert @ Rt 28/92

RIPARIAN CHARACTERISTICS

VEGETATIVE COMMUNITY	STAND DENSITY	LENGTH/WIDTH OF RIPARIAN ZONE	BANK PROTECTION	LWD RECRUITMENT POTENTIAL
Field - short grasses	mod	Scattered trees L&R BK	Fair - poor	Low

COMMENTS

STREAM CHANNEL CHARACTERISTICS

BED FORM	BANK & BED MATERIALS	BED CONTROLS	DEPOSITIONAL FEATURES	ENTRENCHMENT
Riffle - pool	Cobble gravel silt Bed - cobble grave/	Bedrock 6200,	Evolution Large point bars	Low
BANK STABILITY	**BED STABILITY**	**WIDTH/DEPTH RATIO CONDITION**	**DEBRIS/CHANNEL OBSTRUCTIONS**	**SEDIMENT SUPPLY**
Trees/moss	aggrad		Log jam	

COMMENTS