

INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue Room N642 Indianapolis, Indiana 46204-2216 (317) 232-5348 FAX: (317) 233-4929

Mitchell E. Daniels, Jr., Governor Michael B. Cline, Commissioner

Date: August 28, 2012

- To: Hazardous Materials Unit Environmental Services Indiana Department of Transportation 100 N Senate Avenue, Room N642 Indianapolis, IN 46204
- From: (Requestor's Name) (District) (Address) (City, State) (e-mail)
- Re: RED FLAG INVESTIGATION DES # 1297651 Husky Trail Rd: From Mariner Dr to Warsaw City limits (0.2 mi S of CR 200N) Husky Trail Rd Warsaw, Kosciusko County, Indiana

NARRATIVE

The purpose of the project is to improve pedestrian and vehicular safety along the Husky Trail corridor. Husky Trail is functionally classified as a minor arterial. The proposed project will involve adding left and right turn lanes and wider drive lanes to accommodate turn movements where Husky Trail intersects Mariner Drive and North Point Drive. The project will also add turn lanes at Nature View Drive, Canterbury Lane and Whitetail Run, curb and gutter improvements connecting with the existing infrastructure improvements south of Mariner Drive, sidewalks, and street lights to resolve clearance and visibility issues.

SUMMARY

Infrastructure					
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:					
within the ½ mile radius w	/iii/will not impact the pro	ject. If there are no items,	please indicate N/A:		
Other road projects	0	Airports	0		
Cemeteries	0	Hospitals	1		
Railroads	0	Recreational Facilities	1		
Religious Facilities	0	Schools	1		
Trails	2	Pipelines	0		
Managed Lands	0				

Explanation:

Harrison Elementary School is located along Husky Trail just east of where North Pointe Drive intersects with Husky Trail. This location was marked as a recreational facility, not a school, on the GIS Red Flag Investigation Map. I marked it as both a recreational facility and a school here.

Water Resources Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:						
Canal Routes – Historic	0	Canal Structures – Historic	0			
NWI Wetland Lines	10	Floodplain-DFIRM	6			
NWI Wetland Polygons	37	NWI Wetland Points	0			
Rivers & Streams	5	Lakes	6			
IDEM 303d Listed Rivers and Streams	0	IDEM 303d Listed Lakes	0			
Cave Entrance Density	0	Sinkhole Areas	0			
Karst Springs	0	Sinking-Stream Basins	0			

Explanation: (Please provide a separate paragraph for each item.)

Mining/Mineral Exploration				
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:				
Petroleum Wells	0	Petroleum Fields	0	
Mines – Surface	0	Mines – Underground	0	

Explanation: (Please provide a separate paragraph for each item.)

Ecological Information

The <u>Kosciusko</u> County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached with ETR species highlighted.

If Early Coordination is completed prior to submission of the red flag for review and IDNR has commented, those comments can be included in place of the above process.

Cultural Resources

Information from County Interim Reports and/or response from the Cultural Resource Section.

No Historic Places in Kosciusko County's Interim report that lie within the 0.5 mile project buffer.

Hazmat Concerns Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:

Brownfield Sites	0	Corrective Action Sites (RCRA)	0
State Cleanup Sites	0	Superfund Sites	0
Voluntary Remediation Program	0	Institutional Control Sites	0
Manufactured Gas Plant Sites	0	Industrial Waste Sites (RCRA Generators)	0
Underground Storage Tanks (USTs)	1	Leaking Underground Storage Tanks (LUSTs)	1
Confined Feeding Operations	0	Septage Waste Sites	0
Construction Demolition Waste	0	Infectious/Medical Waste Sites	
Lagoon/Surface Impoundments		Open Dump Sites	0
Restricted Waste Sites	0	Solid Waste Landfills	1
Tire Waste Sites	0	Waste Transfer Stations	0
Waste Treatment, Storage, and Disposal Sites (TSDs)	0	NPDES Facilities	0
NPDES Pipe Locations	2		

Explanation: (Please provide a separate paragraph for each item.)

RECOMMENDATIONS

Include recommendations from each section. If there are no recommendations, please indicate N/A:

INFRASTRUCTURE:

WATER RESOURCES:

MINING/MINERAL EXPLORATION: N/A

ECOLOGICAL INFORMATION:

CULTURAL RESOURCES: N/A

HAZMAT CONCERNS:

INDOT Environmental Services concurrence:

(Signature)

Prepared by: Jennifer Weizeorick Regional Planner Michiana Area Council of Governments

Graphics:

A map for each report section with a ½ mile radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

GENERAL SITE MAP SHOWING PROJECT AREA: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: YES





HuskyTrail_Phase1









Coordinate grid is based on Indiana East State Plane Coordinate System 1983 North American Datum.

Information shown on this map is not warranted for accuracy or merchantability. Further reproduction or distribution of this material is not authorized without the expressed written permission of MACOG.

Date Printed: 8/28/2012

Source: Map Source, date of validity,

F:\ABC\MPO\WORKPLAN\2013\w311tiptp_Kosciusko County\Warsaw\1297651- Husky Trail\Documentation\Red Flag Investigation\Red Flag Investigation.mxd

Page 1 of 4 06/01/2010

Indiana County Endangered, Threatened and Rare Species List

Species Name		Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)						
Epioblasma obliquata perobliqua		White Cat's Paw Pearlymussel	LE	SE	G1T1	SX
Epioblasma torulosa rangiana		Northern Riffleshell	LE	SE	G2T2	SX
ampsilis fasciola		Wavyrayed Lampmussel		SSC	G5	S3
Pleurobema clava		Clubshell	LE	SE	G2	S1
tychobranchus fasciolaris		Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica		Rabbitsfoot	С	SE	G3G4T3	S1
oxolasma lividus		Purple Lilliput		SSC	G3	S2
íillosa fabalis		Rayed Bean	С	SSC	G2	S1
'illosa lienosa		Little Spectaclecase		SSC	G5	S3
asect: Lepidoptera (Butterflies & Moths) Capis curvata		A Noctuid Moth		ST	G4	8283
atocala praeclara					G5	S2S3
Chortodes inquinata		Praeclara Underwing		SR ST	G5 GNR	S1S2
		Tufted Sedge Moth			GNK G4	S1S2
asychira cinnamomea		A Moth		SR	G4 G4	S1 S2
uphydryas phaeton uphyes bimacula		Baltimore		SR ST	G4 G4	S2 S2
		Two-spotted Skipper				S2 S1S2
xyra rolandiana ixsenia favonius		Pitcher Window Moth		SE	G4	
		Northern Hairstreak		SR	G4	S1S2
emileuca sp. 3		Midwestern Fen Buckmoth		ST	G5T3T4	S1?
esperia leonardus		Leonard's Skipper	No Status	SR	G4	S2
odopepla u-album		A Noctuid Moth		SR	G5	S2
eucania multilinea				SR	G5	S1S2
ycaena helloides		Purplish Copper		SR	G5	S2S4
ytrosis permagnaria		A Lytrosis Moth		ST	G3G4	S2
lacrochilo absorptalis		A Moth		SR	G4G5	S2S3
apaipema appassionata		The Pitcher Plant Borer Moth		SE	G4	S1
apaipema speciosissima		The Royal Fern Borer Moth		ST	G4	S2S3
ieris oleracea		Eastern Veined White		SE	G4G5	S1
` ish \cipenser fulvescens		Lake Sturgeon		SE	G3G4	S1
coregonus artedi		Cisco		SSC	G5	S1 S2
ercina evides					G3 G4	S1
		Gilt Darter		SE	04	51
.mphibian mbystoma laterale		Blue-spotted Salamander		SSC	G5	S2
lemidactylium scutatum		Four-toed Salamander		SE	G5	S2
lecturus maculosus		Common mudpuppy		SSC	G5	S2
ana pipiens		Northern Leopard Frog		SSC	G5	82
Reptile						
Clemmys guttata		Spotted Turtle		SE	G5	82
ndiana Natural Heritage Data Center Division of Nature Preserves ndiana Department of Natural Resources 'his data is not the result of comprehensive county urveys.	Fed: State: GRANK: SRANK:	LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G7 = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked				

Page 2 of 4 06/01/2010

Indiana County Endangered, Threatened and Rare Species List

Species Name		Common Name	FED	STATE	GRANK	SRANK
Clonophis kirtlandii		Kirtland's Snake		SE	G2	S2
Emydoidea blandingii		Blanding's Turtle		SE	G4	S2
Nerodia erythrogaster neglecta		Copperbelly Water Snake	PS:LT	SE	G5T3	S2
Sistrurus catenatus catenatus		Eastern Massasauga	С	SE	G3G4T3T4Q	S2
Bird						
Botaurus lentiginosus		American Bittern		SE	G4	S2B
Chlidonias niger		Black Tern		SE	G4	S1B
Circus cyaneus		Northern Harrier		SE	G5	S2
Cistothorus palustris		Marsh Wren		SE	G5	S3B
Cistothorus platensis		Sedge Wren		SE	G5	S3B
Dendroica cerulea		Cerulean Warbler		SE	G4	S3B
Falco peregrinus		Peregrine Falcon	No Status	SE	G4	S2B
Grus canadensis		Sandhill Crane	No Status	SSC	G5	S2B,S1N
Ixobrychus exilis		Least Bittern		SE	G5	S3B
Mniotilta varia		Black-and-white Warbler		SSC	G5	S1S2B
Nycticorax nycticorax		Black-crowned Night-heron		SE	G5	S1B
Pandion haliaetus		Osprey		SE	G5	S1B
Rallus elegans		King Rail		SE	G4	S1B
Rallus limicola		Virginia Rail		SE	G5	S3B
Vermivora chrysoptera		Golden-winged Warbler		SE	G4	S1B
Mammal				000	65	G29
Condylura cristata Lutra canadensis		Star-nosed Mole		SSC	G5 G5	\$2? \$2
ustela nivalis		Northern River Otter		SSC		
		Least Weasel	IF	SSC	G5 G2	S2? S1
Myotis sodalis Taxidea taxus		Indiana Bat or Social Myotis	LE	SE	G2 G5	S1 S2
		American Badger		SSC	05	52
Vascular Plant Actaea rubra		Red Baneberry		SR	G5	S2
Andromeda glaucophylla		Bog Rosemary		SR	G5	S2 S2
Arethusa bulbosa		Swamp-pink		SX	G4	SX
Aster borealis		Rushlike Aster		SR	G5	S11 S2
Bidens beckii		Beck Water-marigold		ST	G4G5	S1
Carex aurea		Golden-fruited Sedge		SR	G5	S1 S2
Carex bebbii		Bebb's Sedge		ST	G5	S2
Carex chordorrhiza		Creeping Sedge		SE	G5	S1
Carex disperma		Softleaf Sedge		SE	G5	S1
Carex echinata		Little Prickly Sedge		SE	G5	S1
Carex flava		Yellow Sedge		ST	G5 G5	S1 S2
Carex pseudocyperus		Cyperus-like Sedge		SE	G5	S2 S1
Cornus amomum ssp. amomum		Silky Dogwood		SE	G5T5	S1
Indiana Natural Heritage Data Center Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.	Fed: State: GRANK: SRANK:	LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked				

Page 3 of 4 06/01/2010

Indiana County Endangered, Threatened and Rare Species List

Species Name		Common Name	FED	STATE	GRANK	SRANK
Cornus canadensis		Bunchberry		SE	G5	S1
Cypripedium calceolus var. parviflorum		Small Yellow Lady's-slipper		SR	G5	S2
Cypripedium candidum		Small White Lady's-slipper		WL	G4	S2
Drosera intermedia		Spoon-leaved Sundew		SR	G5	S2
Eleocharis geniculata		Capitate Spike-rush		ST	G5	S2
Eriophorum angustifolium		Narrow-leaved Cotton-grass		SR	G5	S2
Eriophorum gracile		Slender Cotton-grass		ST	G5	S2
Eriophorum viridicarinatum		Green-keeled Cotton-grass		SR	G5	S2
Geranium robertianum		Herb-robert		ST	G5	S2
Juglans cinerea		Butternut		WL	G4	S3
Lathyrus ochroleucus		Pale Vetchling Peavine		SE	G4G5	S1
Lemna perpusilla		Minute Duckweed		SX	G5	SX
Lemna valdiviana		Pale Duckweed		SE	G5	S1
Malaxis unifolia		Green Adder's-mouth		SE	G5	S1
Matteuccia struthiopteris		Ostrich Fern		SR	G5	S2
Myriophyllum verticillatum		Whorled Water-milfoil		SR	G5	S2
Panax trifolius		Dwarf Ginseng		WL	G5	S2
Panicum boreale		Northern Witchgrass		SR	G5	S2
Platanthera psycodes		Small Purple-fringe Orchis		SR	G5	S2
Potamogeton epihydrus		Nuttall Pondweed		SE	G5	S 1
Potamogeton friesii		Fries' Pondweed		ST	G4	S1
Potamogeton oakesianus		Oakes Pondweed		SE	G4	S 1
Potamogeton praelongus		White-stem Pondweed		ST	G5	S1
Potamogeton pusillus		Slender Pondweed		WL	G5	S2
Potamogeton richardsonii		Redheadgrass		SR	G5	S2
Potamogeton strictifolius		Straight-leaf Pondweed		ST	G5	S1
Prunus pensylvanica		Fire Cherry		SR	G5	S2
Scirpus subterminalis		Water Bulrush		SR	G4G5	S2
Selaginella apoda		Meadow Spike-moss		WL	G5	S1
Sparganium androcladum		Branching Bur-reed		ST	G4G5	S1 S2
Spiranthes lucida		Shining Ladies'-tresses		SR	G5	82 82
Stenanthium gramineum		Eastern Featherbells		ST	G4G5	S1
Tofieldia glutinosa		False Asphodel		SR	G4G5	S1 S2
Utricularia resupinata		Northeastern Bladderwort		SE	G405 G4	S1
Vaccinium oxycoccos				SE	G5	S1 S2
Wolffiella gladiata		Small Cranberry		SE	G5 G5	S1
Zannichellia palustris		Sword Bogmat Horned Pondweed		SR	G5 G5	S2
Zigadenus elegans var. glaucus		White Camas		SR	G5 G5T4T5	S2 S2
High Quality Natural Community Forest - upland dry-mesic		Dry-mesic Upland Forest		SG	G4	S4
Indiana Natural Heritage Data Center Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.	Fed: State: GRANK: SRANK:	LE = Endangered; LT = Threatened; C = candida SE = state endangered; ST = state threatened; SR SX = state extirpated; SG = state significant; WL Global Heritage Rank: G1 = critically imperiled globally; G4 = widespread and abundant globally globally; G? = unranked; GX = extinct; Q = unc State Heritage Rank: S1 = critically imperiled in G4 = widespread and abundant in state but with 1 state; SX = state extirpated; B = breeding status; unranked	= state rare; SSC = watch list globally; G2 = imp but with long ter- ertain rank; T = ta state; S2 = imperi ong term concern	= state species periled globall m concerns; G xonomic subus led in state; S3 ; SG = state sig	s of special concer y; G3 = rare or un 5 = widespread an nit rank 8 = rare or uncomn gnificant; SH = his	common d abundant non in state; torical in

Indiana County Endangered, Threatened and Rare Species List

Common Name	FED	STATE	GRANK	SRANK
Mesic Upland Forest		SG	G3?	83
Lake		SG	GNR	S2
Marl Beach		SG	G3	S2
Acid Bog		SG	G3	S2
Circumneutral Bog		SG	G3	S3
Fen		SG	G3	S3
Forested Fen		SG	G3	S1
Marsh		SG	GU	S4
Sedge Meadow		SG	G3?	S1
Shrub Swamp		SG	GU	S2
	Mesic Upland Forest Lake Marl Beach Acid Bog Circumneutral Bog Fen Forested Fen Marsh Sedge Meadow	Mesic Upland Forest Lake Marl Beach Acid Bog Circumneutral Bog Fen Forested Fen Marsh Sedge Meadow	Mesic Upland ForestSGLakeSGMarl BeachSGAcid BogSGCircumneutral BogSGFenSGForested FenSGMarshSGSedge MeadowSG	Mesic Upland ForestSGG3?LakeSGGNRMarl BeachSGG3Acid BogSGG3Circumneutral BogSGG3FenSGG3Forested FenSGG3MarshSGGUSedge MeadowSGG3?

Fed:	LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State:	SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;
	SX = state extirpated; SG = state significant; WL = watch list
GRANK:	Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon
	globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant
	globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
SRANK:	State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state;
	G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in
	state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status
	unranked
	State: GRANK:

High Quality Natural Communities of Indiana

GRANK:G1=critically imperiled globally, G2=imperiled globally, G3=globally rare or uncommon, G4=globally widespread and apparently secure, G5=globally widespread and secure

SRANK:S1=critically imperiled in state, S2=imperiled in state, S3=rare or uncommon in state, S4=widespread and apparently secure in state, S5=widespread and secure in state.

SPECIES NAME	COMMON NAME	SRANK	GRANK
BARRENS - BARRENS	BARRENS	G2	S 1
BARRENS - BEDROCK LIMESTONE	LIMESTONE GLADE	G4	S2S3
BARRENS - BEDROCK SANDSTONE	SANDSTONE GLADE	G2	S 1
BARRENS - BEDROCK SILTSTONE	SILTSTONE GLADE	G2	S2
BARRENS - GRAVEL	GRAVEL SLOPE BARRENS	G3	S 1
BARRENS - SAND	SAND BARRENS	G3	S2
FOREST - FLATWOODS BLUEGRASS TILL PLAIN	BLUEGRASS TILL PLAIN FLATWOODS	G3	S2
FOREST - FLATWOODS BOREAL	BOREAL FLATWOODS	G2?	S2
FOREST - FLATWOODS CENTRAL TILL PLAIN	CENTRAL TILL PLAIN FLATWOODS	G3	S2
FOREST - FLATWOODS DRY	DRY FLATWOODS	G2?	S2
FOREST - FLATWOODS MESIC	MESIC FLATWOODS		S?
FOREST - FLATWOODS SAND	SAND FLATWOODS	G2?	S 1
FOREST - FLATWOODS SOUTHWESTERN LOWLAND MESIC	MESIC SOUTHWESTERN LOWLAND FLATWOODS	G2?	S 1
FOREST - FLOODPLAIN MESIC	MESIC FLOODPLAIN FOREST	G3?	S 1
FOREST - FLOODPLAIN WET	WET FLOODPLAIN FOREST	G3?	S 3
FOREST - FLOODPLAIN WET- MESIC	WET-MESIC FLOODPLAIN FOREST	G3?	S 3
FOREST - UPLAND DRY	DRY UPLAND FOREST	G4	S4
FOREST - UPLAND DRY- MESIC	DRY-MESIC UPLAND FOREST	<mark>G4</mark>	<mark>S4</mark>
FOREST - UPLAND MESIC	MESIC UPLAND FOREST	G3?	<mark>S3</mark>

LAKE - LAKE	LAKE		<mark>S2</mark>
LAKE - POND	POND		S?
LAKE - POND SINKHOLE	SINKHOLE POND	GU	S 1
MIGRATORY BIRD	MIGRATORY BIRD		
CONCENTRATION SITE	CONCENTRATION SITE		
MUSSEL BED	MUSSEL BED		
PRAIRIE - DRY-MESIC	DRY-MESIC PRAIRIE	G3	S2
PRAIRIE - MESIC	MESIC PRAIRIE	G2	S2
PRAIRIE - SAND DRY	DRY SAND PRAIRIE	G3	S2
PRAIRIE - SAND DRY-MESIC	DRY-MESIC SAND PRAIRIE	G3	S 3
PRAIRIE - SAND MESIC	MESIC SAND PRAIRIE		
PRAIRIE - SAND WET	WET SAND PRAIRIE	G3	S 3
PRAIRIE - SAND WET-MESIC	WET-MESIC SAND PRAIRIE	G1?	S2
PRAIRIE - WET	WET PRAIRIE	G3	S 1
PRIMARY - CAVE AQUATIC	AQUATIC CAVE		S?
PRIMARY - CAVE TERRESTRIAL	TERRESTRIAL CAVE		S?
PRIMARY - CLIFF ERODING	ERODING CLIFF	G4	S 1
PRIMARY - CLIFF LIMESTONE	LIMESTONE CLIFF	GU	S 1
PRIMARY - CLIFF OVERHANG	SANDSTONE OVERHANG	G4	S2
PRIMARY - CLIFF SANDSTONE	SANDSTONE CLIFF	GU	S 3
PRIMARY - DUNE LAKE	FOREDUNE	G3	S 1
PRIMARY - WASH GRAVEL	GRAVEL WASH	GU	S 1
SAVANNA - MESIC	MESIC SAVANNA		
SAVANNA - SAND DRY	DRY SAND SAVANNA	G2?	S2
SAVANNA - SAND DRY- MESIC	DRY-MESIC SAND SAVANNA	G2?	S2S3
SAVANNA - SAND MESIC	MESIC SAND SAVANNA		
WETLAND - BEACH MARL	MARL BEACH	G3	<mark>S2</mark>
WETLAND - BOG	BOG		S ?
WETLAND - BOG ACID	ACID BOG	G3	<mark>S2</mark>
WETLAND - BOG CIRCUMNEUTRAL	CIRCUMNEUTRAL BOG	G3	<mark>S3</mark>
WETLAND - FEN	FEN	<mark>G3</mark>	<mark>S3</mark>
WETLAND - FEN FORESTED	FORESTED FEN	G3	<mark>S1</mark>

WETLAND - FLAT MUCK	MUCK FLAT	G2	S 2
WETLAND - FLAT SAND	SAND FLAT	G2	S 1
WETLAND - MARSH	MARSH	<mark>GU</mark>	<mark>S4</mark>
<mark>WETLAND - MEADOW</mark> <mark>SEDGE</mark>	SEDGE MEADOW	<mark>G3?</mark>	<mark>S1</mark>
WETLAND - PANNE	PANNE	G2	S 1
WETLAND - SEEP ACID	ACID SEEP	GU	S 1
WETLAND - SEEP CALCAREOUS	CALCAREOUS SEEP		S?
WETLAND - SEEP CIRCUMNEUTRAL	CIRCUMNEUTRAL SEEP	GU	S 1
WETLAND - SWAMP FOREST	FORESTED SWAMP	G2?	S 2
WETLAND - SWAMP SHRUB	SHRUB SWAMP	<mark>GU</mark>	<mark>S2</mark>
WETLAND - SWAMP SINKHOLE	SINKHOLE SWAMP	G2?	S 1