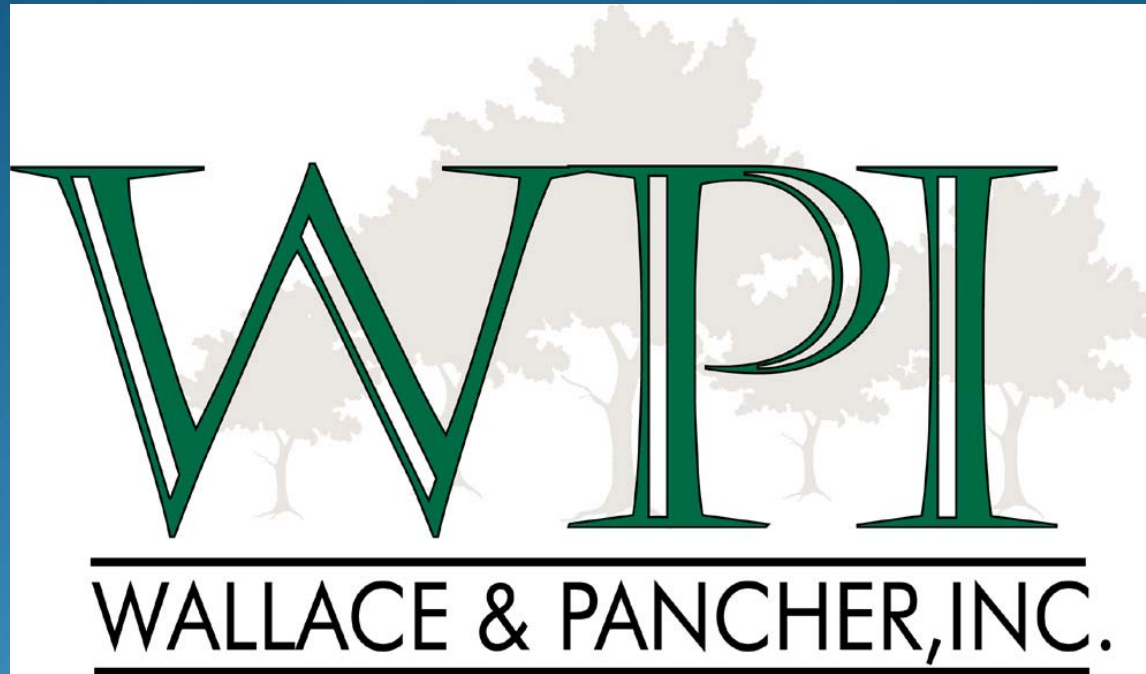




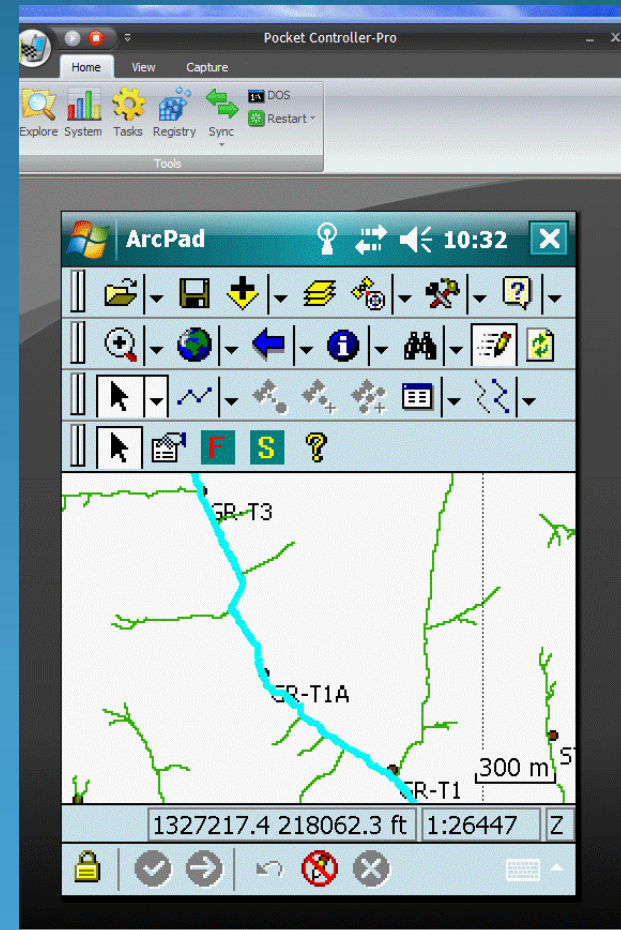
GIS Applications for Management of Environmental
Resources in the Coal Mining Industry

Josh Kelly, Assistant Environmental Scientist

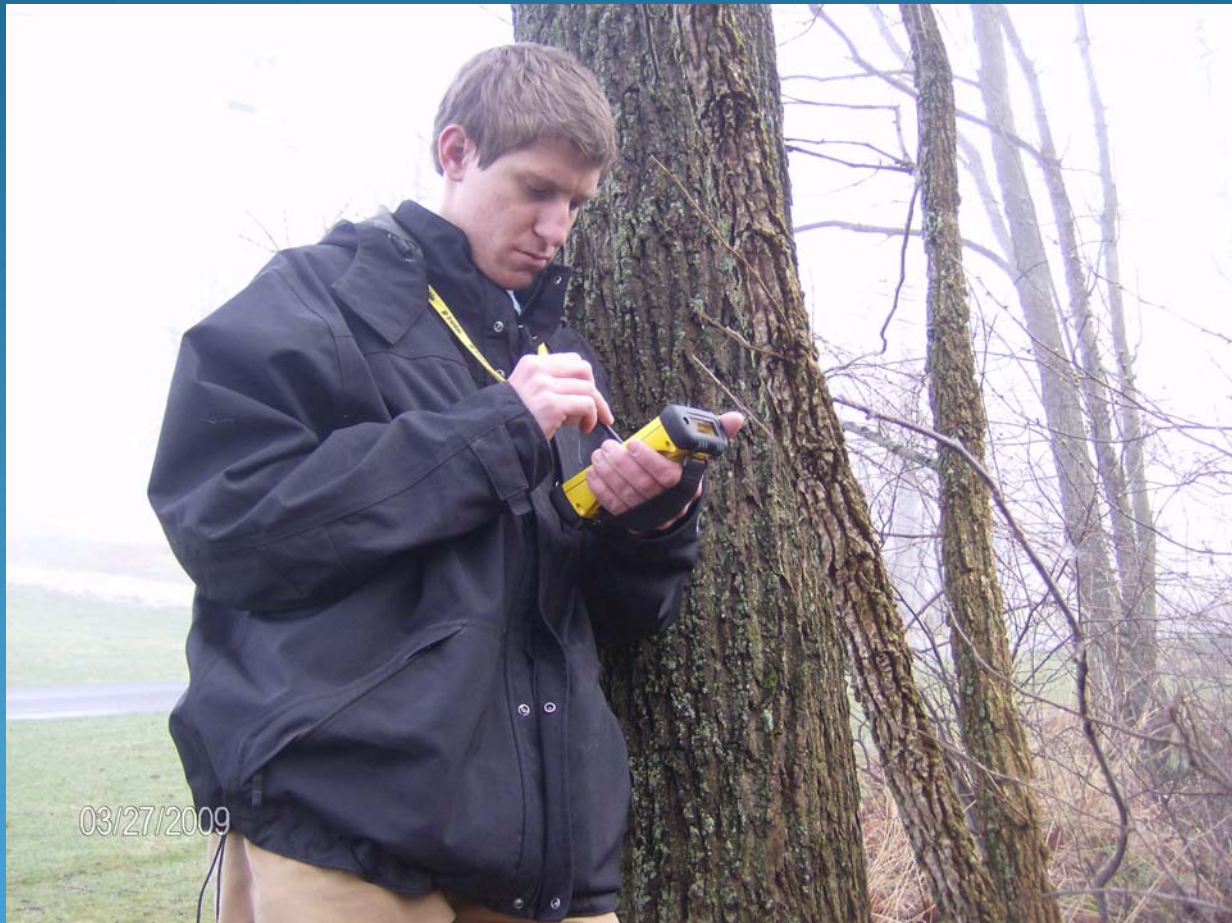
Mobile Work Force



Stream Condition Monitoring



Benefits



Drop Boxes

Pocket Controller-Pro

Home View Capture

Explore System Tasks Registry Sync Restart

ArcPad 10:33

All_Hydro

OBJECTID	691
GNIS_NAME	Grimes Run
WPI_NAME	
DEP_CODE	40426
ReachCode	05020005001353
wpi_stream	GRI
Shape_Length	

Page 1 STREAMCONDITION

ok X

Pocket Controller-Pro

Home View Capture

Explore System Tasks Registry Sync Restart

ArcPad 10:34

All_Hydro

Property	Value
abc NAME	<Null>
DATE_	3/26/09
abc CREW	jeff
SITE_DEP...	
abc FREQUENCY	DAILY
123 FROM_	0
123 TO_	500
CONDITION	POOLED
abc COMMENT	<Null>
abc GlobalID	<Null>
abc PHOTO	<Null>

Page 1 STREAMCONDITION 1/1

ok X

Calculations

Pocket Controller-Pro

Home View Capture

Explore System Tasks Registry Sync Restart

Tools

ArcPad 10:29

Method 1

Width of Stream (FT)

5

Average Depth (FT)

2.5

Average Velocity (FT/S)

.5

ok

Pocket Controller-Pro

Home View Capture

Explore System Tasks Registry Sync Restart

Tools

ArcPad 10:28

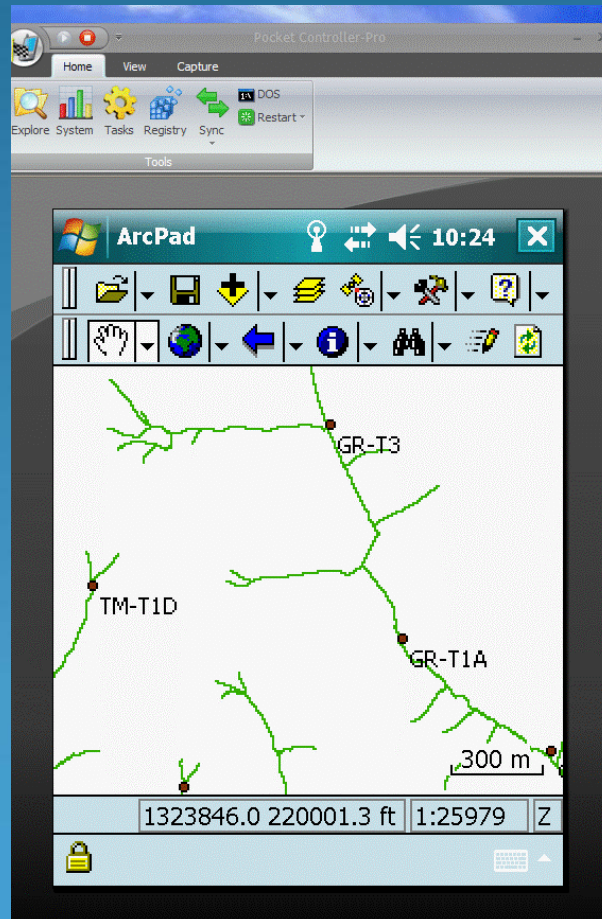
Flowmonpoint

OBJECTID	66
DATE_COLLE	3 /26/09
CREW	
SITE_ID	GR-T1A
FREQUENCY	MONTHLY
POINT_COND	FLOWING
FLOWMETHOD	METHOD 1
CFS	6.25

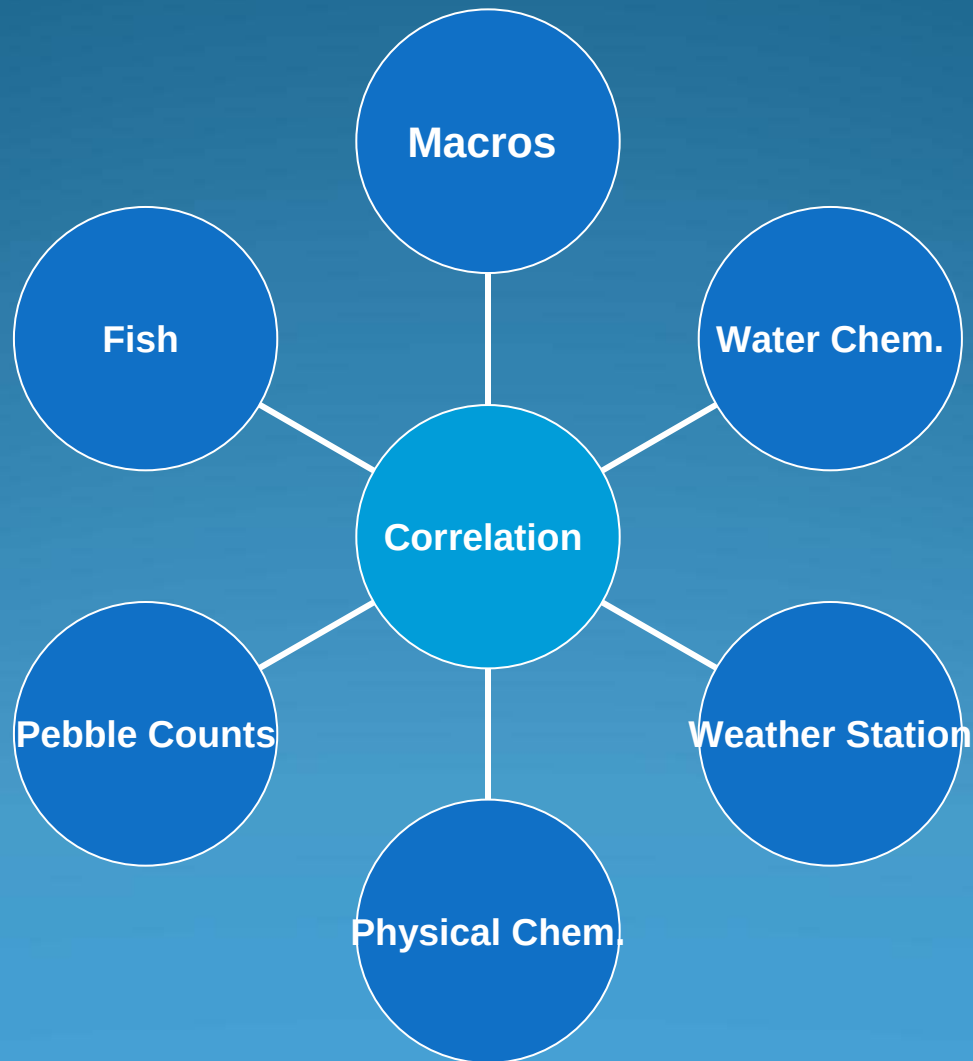
Page 1 Page 2 Picture

ok

Ability to be GIS Enabled



Future Possibilities



Macroinvertebrates



Macros

Shredders



Nemouridae



Leuctridae

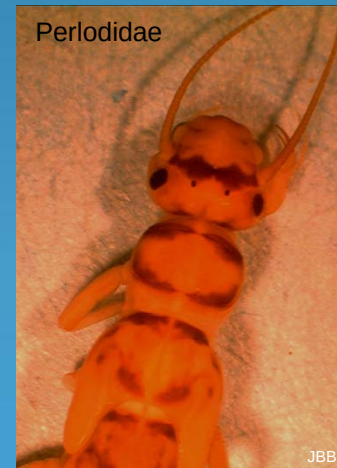


Isonychidae



Leptophlebiidae

Collector/Gatherer



Perlodidae



Aeshnidae

Predators

Questions?

