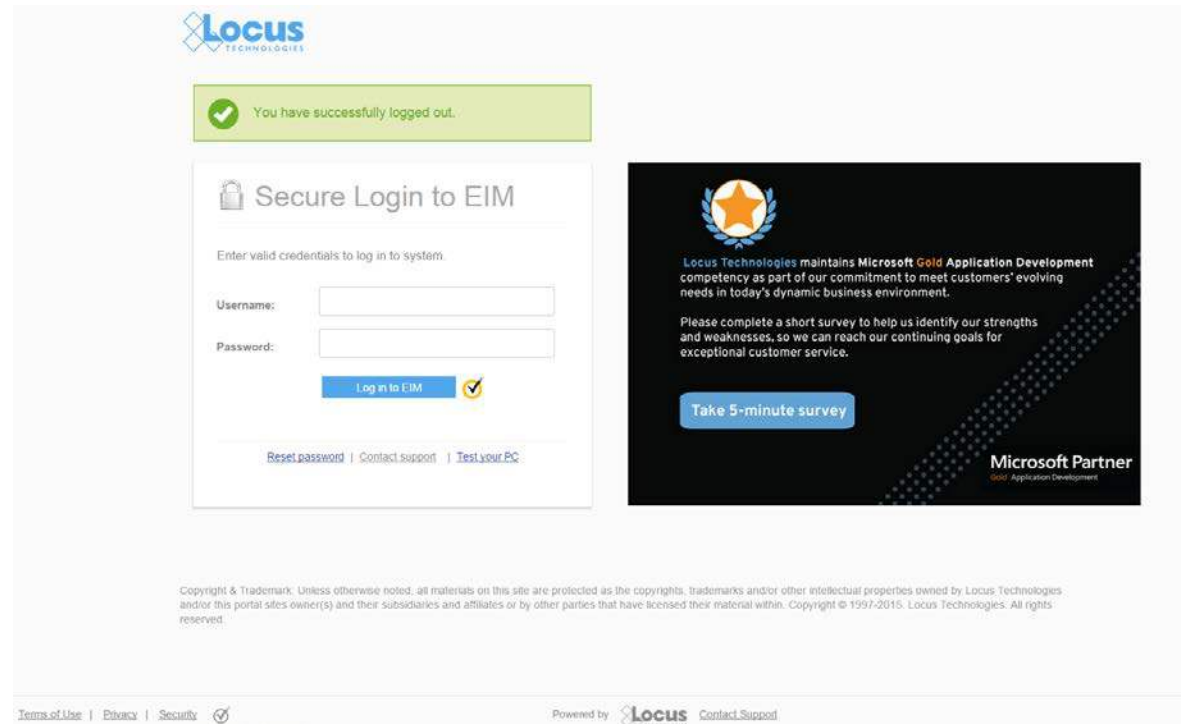


SRST Centralized Database Update

South River Science Team Meeting
October, 21, 2015

Agenda

- Objective
- Current state of data
- Proposal
- Schedule

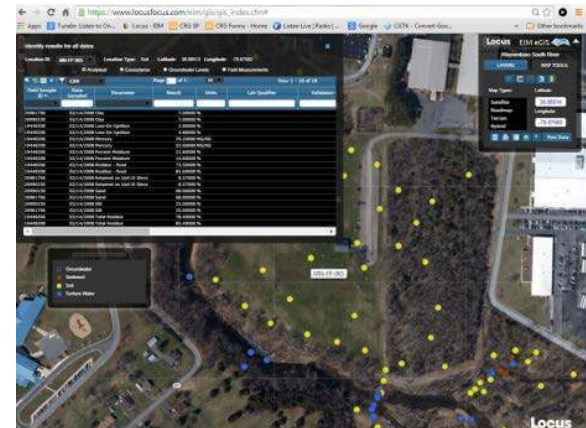


Central Database Objective

- Data repository for all project data
 - Analytical and field data from chemical, physical and biological sources, including metadata
 - Spatial data (floodplain outline, land use, etc.)
 - Documents (RDQA)
- Accessible to multiple stakeholders
- Flexible security (read only, read/write, etc.)

Current State of Data and Formats

- Chemical/Biological (tabular analytical data)
 - Majority of the data currently stored in Locus EIM and as flat-files with AECOM
 - Some data maintained by stakeholders
- Spatial data resides among different stakeholders that use GIS
 - AECOM maintains extensive spatial dataset in GIS, recently uploaded thousands of sample point coordinates into EIM
 - Shoreline boundary, floodplain and land cover layers will be incorporated into EIM's eGIS



Current State of Data and Formats (cont'd)

- Documents
 - SRST website (<http://southriverscienceteam.org/>) maintains and serves an extensive list of publications and project documents
 - Retrospective Data Quality Assessment (RDQA) completed - project “narratives”

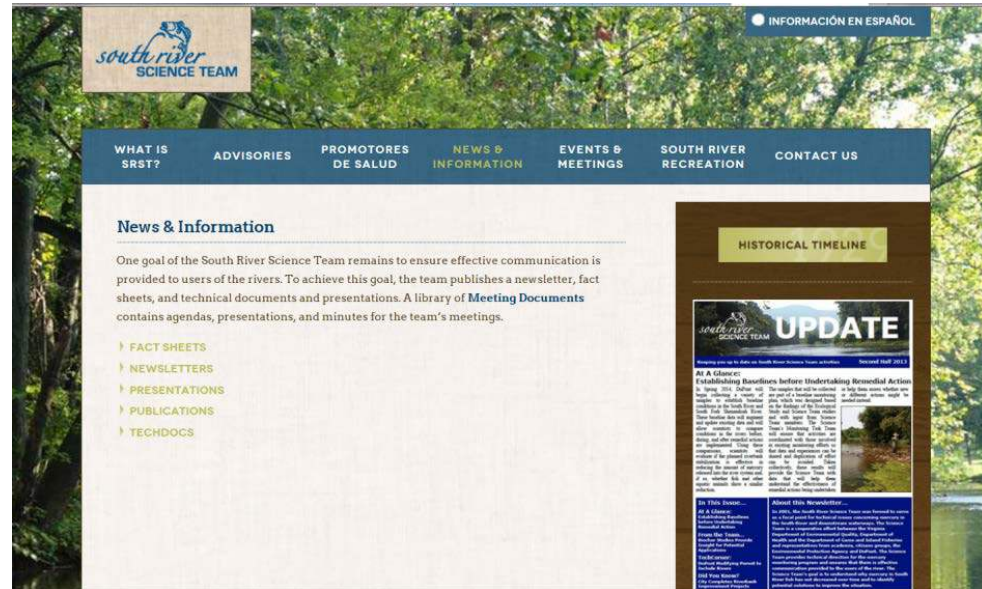
Project Name	2008 Floodplain Soil Investigation, Floodplain INV.2008-MOTOCROSS, YR II ECO WETLAND SAMPLING4/08, Floodplain INVEST 2008 ADD-ON
Relevance to Ecological Risk Assessment	THg concentrations within the 0-2, 2-5, and 5-62 year floodplains from each assessment reach were used for screening level evaluation and to calculate exposure point concentrations for terrestrial ecological receptors.
Sampling Program Objectives	1) Develop an understanding of the spatial distribution of mercury in floodplain soils, banks, historic accretions and tributary banks. 2) Determine to what extent the mercury concentration in floodplain soils changes spatially under similar and differing land-use conditions. 3) Further develop understanding of relationship between soil mercury concentrations and soil depth. 4) Further develop current understanding of relationship between mercury concentrations and particle size or associations with various size particles, including soil colloids. 5) Provide input to future risk and remedial decision making.
Sampling Design	Stratified random sampling approach. Sampling design included 90 sample stations randomly selected within each of six reaches of the South River divided by bridge crossings. Of those 90 locations, 10 sample stations were located in each of the 3 inundation areas (0-2 year, 2-5 year, and 5-62 year) and from each of the three primary land uses identified in each reach-floodplain combination. 618 sampling locations were sampled, including re-analysis of 20 samples to test effectiveness of compositing methods. Two intervals were analyzed; 0-6 inches and 6-30 inches. Sampling design rationale is detailed in DuPont CRG, 2008a.
Sampling Date	2/2008 - 4/2008
No. of Locations	638
No. of Samples¹	1232
Spatial Extent of Sampling (in Relative River Miles)	0.3 to 23.8

Proposal for SRST Database

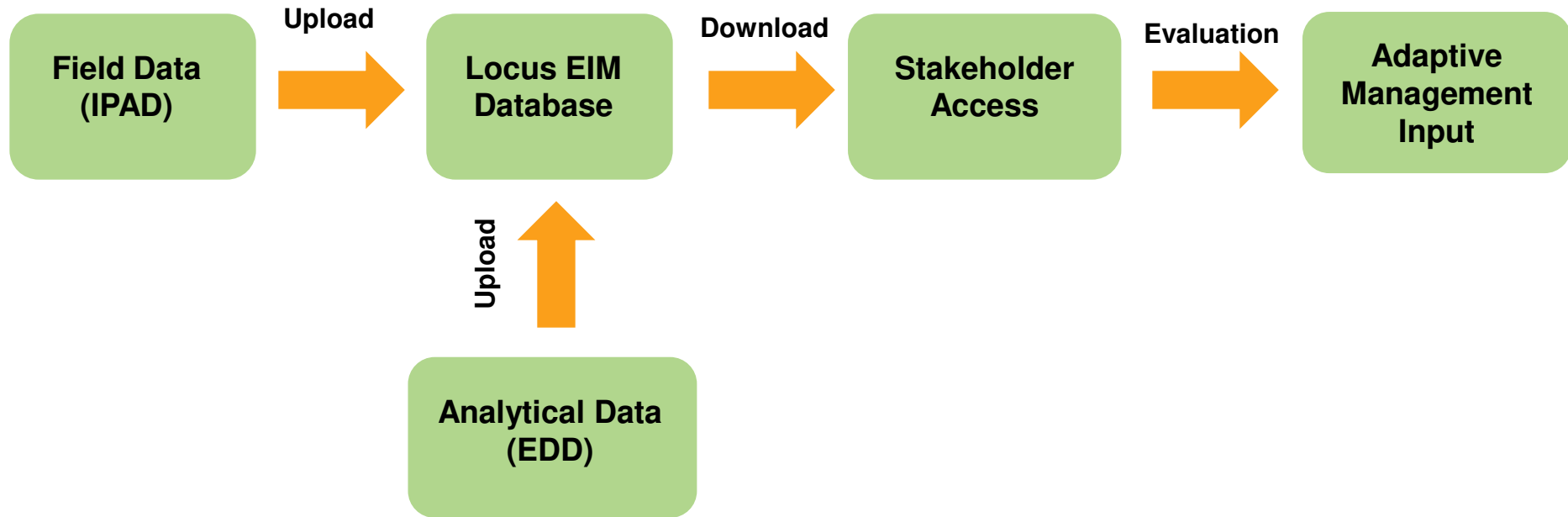
- Managing Data Going Forward
 - Chemical/Biological
 - Locus EIM
 - Migrate current flat-files to EIM (in progress)
 - Results of future data collection efforts will go into EIM
 - Spatial
 - Use EIM for point data display and key spatial layers (static)
 - Document
 - DuPont SharePoint system or existing SRST website
 - Link data to documents (i.e., metadata/RDQAs)

Proposal for SRST Database

- Link database through a common portal hosted on SRST website
- Incorporate stakeholder needs by conducting a testing period
- Three general stakeholders
 - Agencies
 - DuPont
 - Study teams (e.g., consultants)



Database End Use



EIM Schedule

Steps to Proceed with EIM	Proposed Schedule
Setup database administrators within DuPont and/or AECOM to manage and administer SRST data	Completed
Locus SM to make minor modifications to EIM schema modification to fully accommodate biological data	4 th Quarter 2015
Establish common user-interface web site	4 th Quarter 2015
Migrate remaining SRST data to EIM	4 th Quarter 2015
Post spatial data and metadata to common website	4 th Quarter 2015
SRST EIM database staging period before official release	4 th Quarter 2015
Test the efficacy of the data migration	1 st Quarter 2016
Determine user security for the new SRST EIM database (e.g., SRST scientists receive access to all data, general public has limited access)	1 st Quarter 2016
SRST EIM database staging period before official release	4 th Quarter 2015
SRST EIM database training	1 st Quarter 2016
Official release of SRST EIM database	1 st Quarter 2016

Questions?