Datashed 2.0

2012 PA Abandoned Mine Reclamation Conference

August 3, 2012

Presented by:

Shaun Busler, GISP

Stream Restoration Inc.

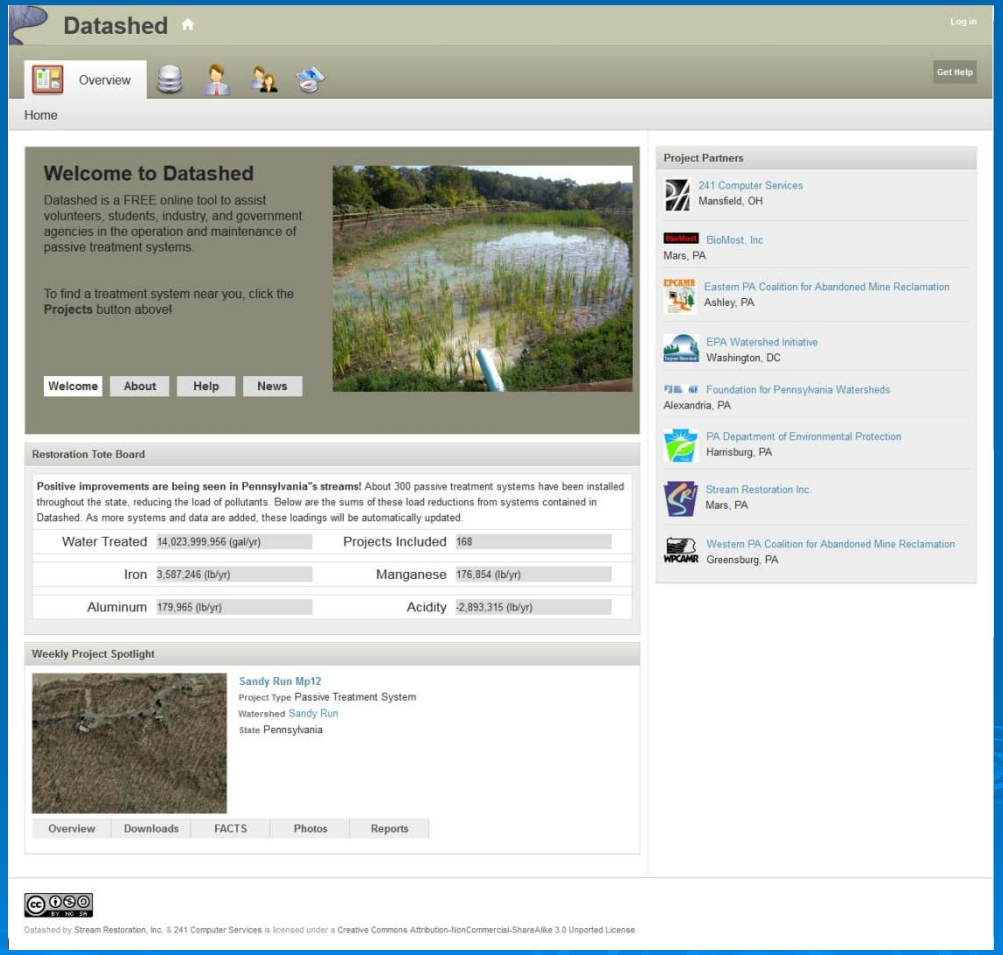
Presentation Outline

I. Datashed Intro/Background/History
II. Live Demo
    I. Using Datashed for Finding Information
    II. Creating an Account
    III. Adding and Editing Project information
III. Future Updates
IV. Additional Questions/Help

What is Datashed?

- Datashed is a
  - Web-based
  - GIS-enabled
  - Database

FREE



www.datashed.org

Purpose

- Facilitate O&M and monitoring of passive treatment systems
- Store information relating to watershed restoration efforts
- Assist local watershed groups to maintain & manage their efforts

Background/History

- Began development in 2002
  - 241 Computer Services & Stream Restoration Inc.
  - SRWC volunteers/interns (Grove City College)

- Partnered with:
  - WPCAMR -***F**unding **A**MD **C**hemistry for **T**reatment **S**ystems* (FACTS) Program
  - PADEP, BAMR – Snapshot and data of publicly-funded passive systems
  - EPCAMR – Education/outreach
  - Foundation for PA Watersheds - SIS-Datashed "Link"

What Can Datashed Do?

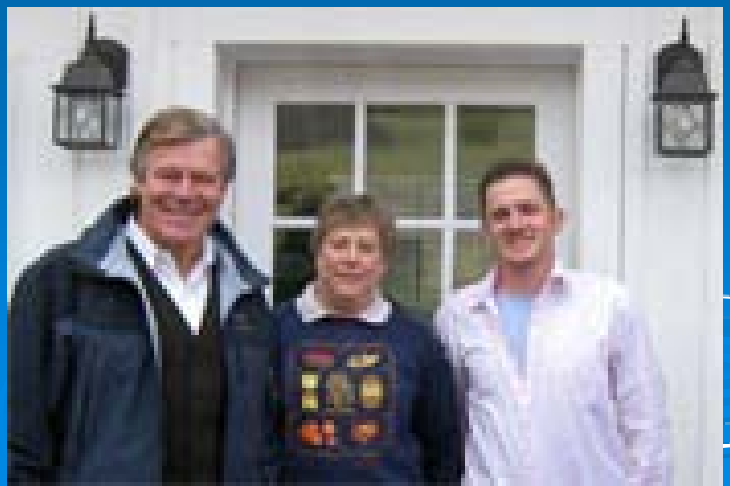
- Store project information
  - Water quality data
  - Important documents - site schematics/drawings, O&M plans, inspection forms, final reports, etc
  - Photos (limited number)
- Access to aerial views (Bing)
- Directions to site
- Limited GIS capabilities
- Triggers (email alerts)

What is the Value of Datashed?

- Watershed Groups
  - Provides database for groups to store their data
    - Don't have to "reinvent the wheel"
  - Easy access to data & documents
    - Not stored on someone's home computer
  - Data backed up daily
  - Education/Outreach
    - Each project has a web page
    - Community has access to info

What is the Value of Datashed?

- Government and Funding Agencies
  - Central location for the management of restoration projects and related data
  - "One-stop-shop" to gather data for reporting program success
    - GG, 319, Foundation for PA Watersheds



What is the Value of Datashed?

- Researchers, Students, Designers
  - Single, largest-known, publicly-available repository of data related to passive treatment systems
  - Searchable by treatment technology
  - World-wide access

Datashed 2.0

- Web architecture was outdated & needed updated to ensure stability
  - Originally all custom code
  - Converted to Drupal – Open Source Content Management System
    - Do not need to start from scratch
    - Large community of programmers providing updates
- Received Growing Greener Grant for updates, uploading of data, training workshops, and providing technical assistance

Datashed

Log in

Overview

Get Help

Home

Welcome to Datashed

Datashed is a FREE online tool to assist volunteers, students, industry, and government agencies in the operation and maintenance of passive treatment systems.

To find a treatment system near you, click the **Projects** button above!

Welcome | About | Help | News

Restoration Tote Board

Positive improvements are being seen in Pennsylvania"s streams! About 300 passive treatment systems have been installed throughout the state, reducing the load of pollutants. Below are the sums of these load reductions from systems contained in Datashed. As more systems and data are added, these loadings will be automatically updated.

Water Treated	14,023,999,956 (gal/yr)	Projects Included	168
Iron	3,587,246 (lb/yr)	Manganese	176,854 (lb/yr)
Aluminum	179,965 (lb/yr)	Acidity	-2,893,315 (lb/yr)

Weekly Project Spotlight

Sandy Run Mp12

Project Type Passive Treatment System

Watershed Sandy Run

State Pennsylvania

Overview | Downloads | FACTS | Photos | Reports

Project Partners

241 Computer Services
Mansfield, OH

BioMost, Inc
Mars, PA

Eastern PA Coalition for Abandoned Mine Reclamation
Ashley, PA

EPA Watershed Initiative
Washington, DC

Foundation for Pennsylvania Watersheds
Alexandria, PA

PA Department of Environmental Protection
Harrisburg, PA

Stream Restoration Inc.
Mars, PA

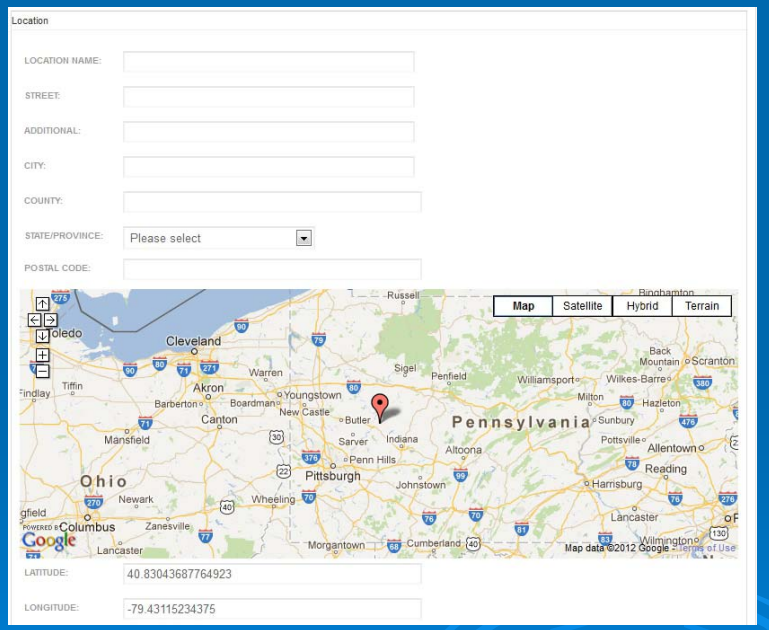
Western PA Coalition for Abandoned Mine Reclamation
Greensburg, PA

Features

- User-friendly
- 24/7 access to data
- Password-protected
  - Password needed only to upload data
- GIS-connected
  - No plug-ins needed to view GIS
- Free and Open Source Software (FOSS)

New Features

- Lots of bells and whistles
  - Customize member and organization pages
  - Dashboards
  - User Interface
- Location
  - PTS project sites
  - Sample points
  - Photos
- New fields
  - Quantity of components, funding, and designer
- Maintenance Log



Wiki

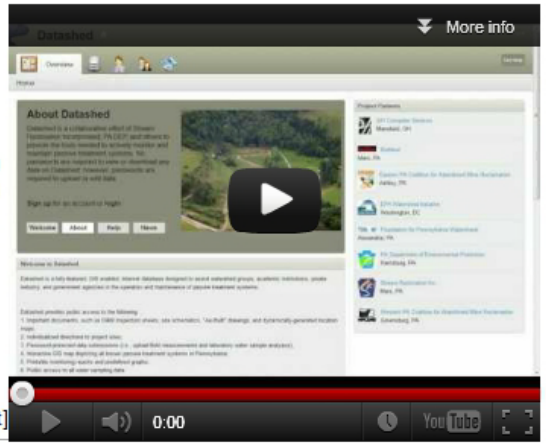
- Collection of web pages edited by users
- Datashed “How-To” Tutorials
- O&M Information
  - Video demonstrating water sampling techniques, O&M tasks, etc.

Set $wgLogo to the URL path to your own logo image.

Datashed Tutorials

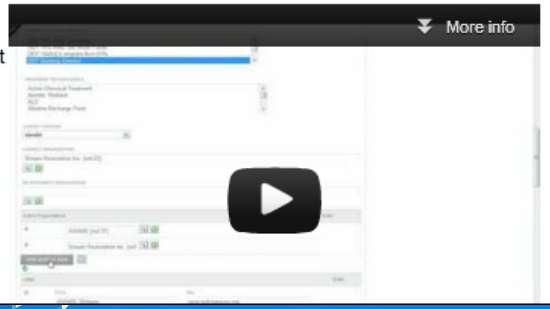
Contents [hide]

Creating a New Project / Stream [edit]



1. Log in
2. Click on the Projects Icon
3. Click on the "Add Project" button on the far right-hand side of the screen
4. A Create Project form will appear. Fill out as much information in this form as you can. Toward the bottom of the form you will see "Project Details" with a "+". Click on the "+" symbol to expand the form. This is where much of the project information is to be entered. Use the "Project Type" to distinguish between Active (Chemical) Treatment, Passive Treatment, Stream, and Site Assessment & Restoration Plan projects. If you don't know something, skip it for now, you can go back and edit it later.
5. Once you are done filling out the form, you need to click on the "Save" button to save your information.
6. IMPORTANT - Once you have created the project, you will need to notify Stream Restoration Inc. (sri@streamrestorationinc.org)so they can allow you access to maintain (edit and upload) additional project data.

Editing a Project / Stream [edit]



1. Log in
2. Find and select the Project or Stream, that you wish to edit. You can either choose your project from your "My Projects" list or find the project through the various search criteria.
3. Once you are on the Project Details page of the project, click on the Settings button with the wrench symbol.
4. Select Project Settings.
5. An edit form will appear with any information that was provided previously, fill out as much information in this form as you can. Only a limited amount of fields are initially displayed. You will need to click on the "+" sign next to "Project Details" to display all of the information fields available. WARNING - do not change the OSM ID for a Treatment System unless you are confident that the number is wrong, this number is used to uniquely identify a project and will be assigned to new projects by

Live Demo

www.datashed.org

Passive Treatment Snapshot

- Funded by PA DEP Growing Greener grants
- 3 Snapshots:
  - Fall 2009
  - Spring 2010
  - Spring/Summer 2012
- Data uploaded to Datashed

SIS-Datashed “Link”

- SIS – Sample Information System
  - PA DEP Water Quality Database
- Foundation for PA Watersheds
  - Provided funding to develop “link”
- Working with PA DEP
  - Live connection not possible – Security risks
  - Data transfer and upload program created
  - To be completed in the near future

Future Upgrades

- Help Section (Wiki)
  - Tutorials
- Online calculators
- i-Map
- Custom graphs, reports, data downloads
- Others? - Feel Free to make suggestions

Datashed Workshops

- First workshop was conducted at last years AMR conference
- Offering additional workshops:
  - Located throughout the state
  - Fall 2012 or Spring 2013

Stuck/Questions/Comments?

- Contact: Cliff Denholm or Shaun Busler
- Email: sri@streamrestorationinc.org
- Phone: (724) 776-0161

Datashed

Log in

Overview

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Welcome to Datashed

Datashed is a fully-featured, GIS enabled, Internet database designed to assist watershed groups, academic institutions, private industry, and government agencies in the operation and maintenance of passive treatment systems.

Datashed provides public access to the following:
1. Important documents, such as O&M inspection sheets, site schematics, "As-Built" drawings, and dynamically-generated location maps;
2. Individualized directions to project sites;
3. Password-protected data submissions (i.e., upload field measurements and laboratory water sample analyses);
4. Interactive GIS map depicting all known passive treatment systems in Pennsylvania;
5. Printable monitoring reports and predefined graphs;
6. Public access to all water sampling data.

No passwords are necessary to view any of the data stored within the data repository; however, passwords are required to upload or edit data. Sign up for an account if you wish to be able to add or edit projects, documents, and data.

For more information about Datashed, email sri@streamrestorationinc.org.

Project Partners

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Mansfield, OH

BioMost
Mars, PA

Eastern PA Coalition for Abandoned Mine Reclamation
Ashley, PA

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Restoration Tote Board

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Water Treated	13,992,282,342 (gal/yr)	Projects Included	164
Iron	3,606,535 (lb/yr)	Manganese	177,923 (lb/yr)
Aluminum	183,175 (lb/yr)	Acidity	-2,825,518 (lb/yr)

Weekly Project Spotlight

Overview | Downloads | FACTS | Photos | Reports

Title Glenwhite Run - Clearwater
Project Type Passive Treatment System
Watershed Glenwhite Run
State Pennsylvania

Overview | Downloads | FACTS | Photos | Reports

Title Alder Bog
Project Type Passive Treatment System
Watershed Little Mill Creek
State Pennsylvania

Construction Year 1992

Overview | Downloads | FACTS | Photos | Reports

Title AMD & Art Vintondale
Project Type Passive Treatment System
Watershed Blacklick Creek
City Vintondale
State Pennsylvania

Construction Year 2004

Overview | Downloads | FACTS | Photos | Reports

Title Argentine Central SR115
Project Type Passive Treatment System
Watershed Slippery Rock Creek
City Washington Township
State Pennsylvania

Construction Year 2002

Overview | Downloads | FACTS | Photos | Reports

Title Arnot #2 Discharge #1
Project Type Passive Treatment System
Watershed Tioga River
State Pennsylvania

Construction Year 2005

Project Type <Any>
Watershed <Any>
Active Organizations <Any>
County
State
Keywords

Search

Project Details

Project De Sale Phase I
Project Type Active Treatment System
Watershed Slippery Rock Creek
GPS No
City Venango Township
County Butler
State Pennsylvania
Treatment Technologies Aerobic Wetland
Anoxic Collection System
Forebay
Settling Ponds
VFP
Horizontal Flow Limestone Bed
Primary Funding Partners In-Kind Contributions from Project Partners
Watershed Restoration and Partnership Act Initiative
Stream Seaton Creek
Description A passive treatment system was installed to treat an abandoned mine discharge emanating from an abandoned surface mine following land reclamation with alkaline circulating fluidized bed coal ash.

Construction Year 2000
Latitude 41° 8' 33" N
Longitude 79° 49' 48" W

Location Links

Map & Directions
Aerial Photo
Download Map

External System IDs

ID	System
D1-23	Datashed 1.0
PA-113	OSM

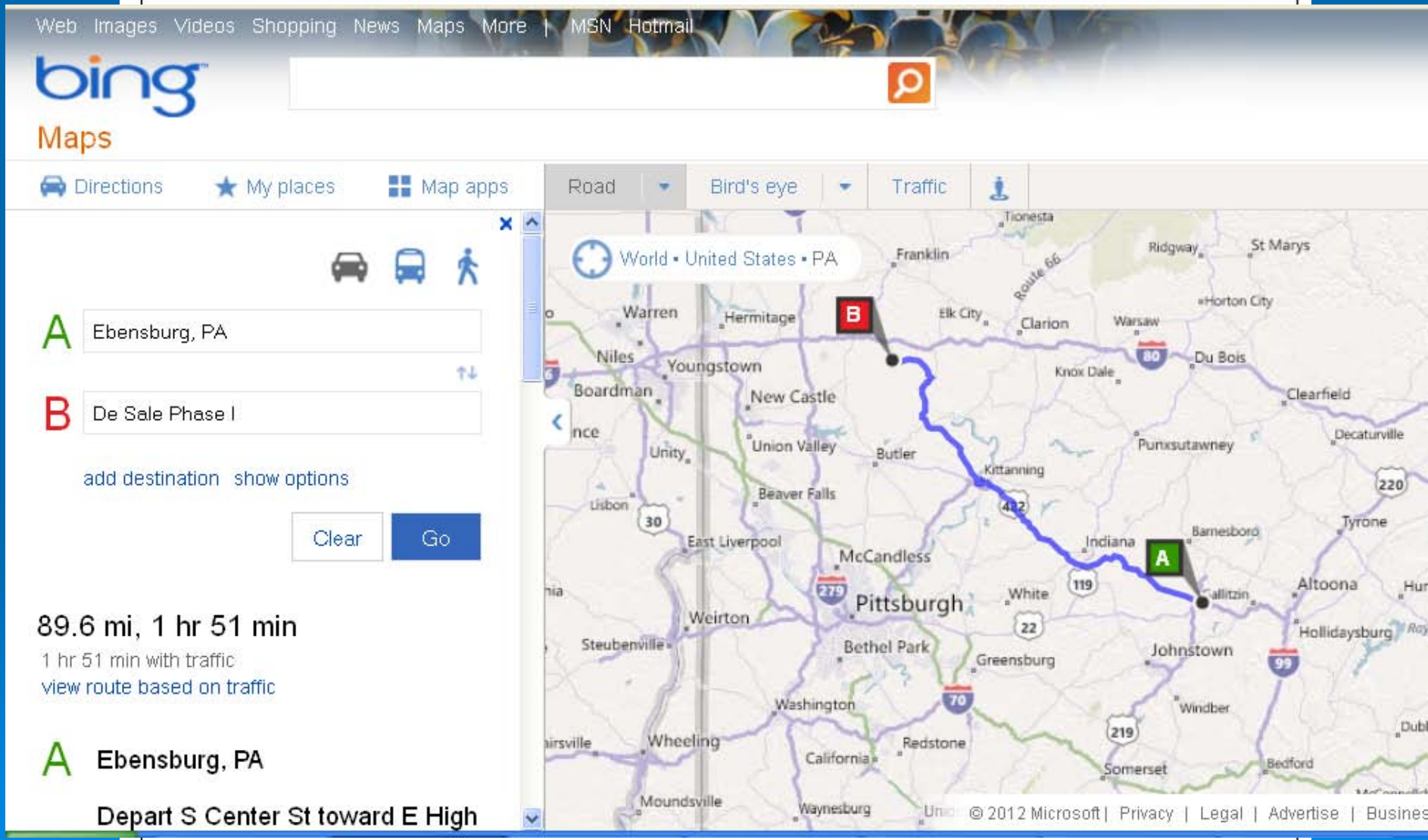
Project Performance

Water Treated	19,907,100 (gal/yr)
Alk. Loading	13 (lbs/yr)
Load Reductions	
Iron (Total)	12,225 (lb/yr)
Manganese (Total)	3,570 (lb/yr)
Aluminum (Total)	1,856 (lb/yr)
Acidity	45,445 (lb/yr)

Water Quality Data Summary

Sample Point	Acidity (mg/L) - Lab	Alkalinity (mg/L) - Field	Alkalinity (mg/L) - Lab	Aluminum (Dissolved) (mg/L) - Lab	Aluminum (Total) (mg/L) - Lab	Dissolved Oxygen (mg/L) - Field	Field Temperature (C) - Field	Flow (gal/min) - Field	Iron (Dissolved) (mg/L) - Lab	Iron (Total) (mg/L) - Lab	Manganese (Dissolved) (mg/L) - Lab	Manganese (Total) (mg/L) - Lab	ORP (mvolts) - Field	pH (S.U.) - Field	pH (S.U.) - Lab	Specific Conductance (umhos/cm) - Lab	Sulfate (mg/L) - Lab	Total Suspended Solids (mg/L) - Lab
RAW	319.59	0	10.99	15.96	12.47	0.38	11.49	38.9	87.95	82.45	53.03	55.48	273.67	4.12	3.8	1802.73	1235.95	55.19
HFLB	-2.14	47.92	80.46	0.15	0.83	6.85	13.04	47.88	0.14	1.09	32.6	31.66	160.38	6.75	6.69	1683.93	1158.83	8.83

Site Directions, Aerial Photos, & Topo



Project Details

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Sample Point	Acidity (mg/L) - Lab	Alkalinity (mg/L) - Field	Alkalinity (mg/L) - Lab	Aluminum (Dissolved) (mg/L) - Lab	Aluminum (Total) (mg/L) - Lab	Dissolved Oxygen (mg/L) - Field	Field Temperature (C) - Field	Flow (gal/min) - Field	Iron (Dissolved) (mg/L) - Lab	Iron (Total) (mg/L) - Lab	Manganese (Dissolved) (mg/L) - Lab	Manganese (Total) (mg/L) - Lab	ORP (mvolts) - Field	pH (S.U.) - Field	pH (S.U.) - Lab	Specific Conductance (umhos/cm) - Lab	Sulfate (mg/L) - Lab	Total Suspended Solids (mg/L) - Lab
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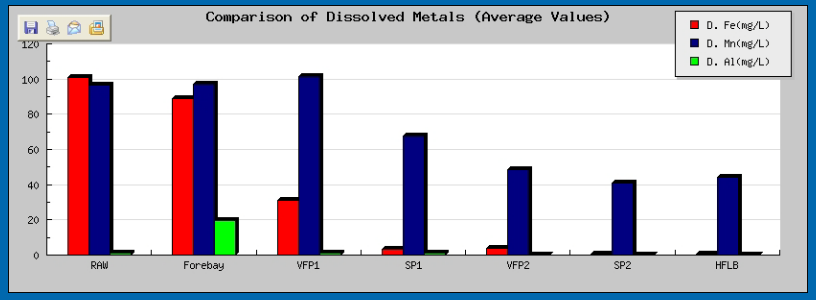
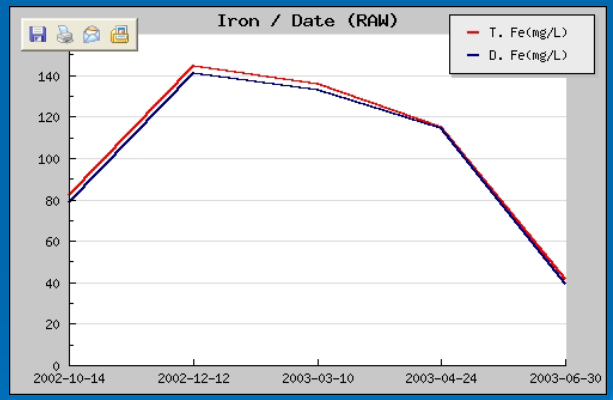
HFLB	-2.14	47.92	80.46	0.15	0.83	6.85	13.04	47.88	0.14	1.09	32.6	31.66	160.38	6.75	6.69	1683.93	1158.83	8.83

Output

- Dynamic analysis of most current dataset:
  - Reports
  - Statistics
  - Loading reductions
  - Graphs
  - CSV File





De Sale Phase III Water Quality Data

Sample Site	Date	Method of Flow Meas.	Flow (GPM)	Field pH	Lab pH	Spec. Cond. (umhos/cm)	Field Temp (C)	Alk. (F) (mg/L)	Alk. (L) (mg/L)	Acid (mg/L)	T. Fe (mg/L)	D. Fe (mg/L)	T. Mn (mg/L)	D. Mn (mg/L)	T. Al (mg/L)	D. Al (mg/L)	Sulfate (mg/L)	Susp. Solids (mg/L)	DO (mg/L)	HP Acid (mg/L)	TDS (mg/L)
Forebay	2002-12-12	Estimated	5	3.34	3.35	3411	1	0	0	599.99	167.82	148.67	145.53	141.09	29.67	25.92	2605	23	0		0
Forebay	2003-03-10	N/A	0	3.43	3.53	2737	1	0	0	505.81	124.67	116.28	105.8	102.89	21.55	19.85	2269	11	0		0
Forebay	2003-04-24	N/A	0	4	3.12	3380	10	0	0	534.49	109.74	107.22	123.46	121.59	30.76	28.82	3433	10	0		0
Forebay	2003-04-24	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Forebay	2003-06-30	N/A	0	2.85	2.99	3378	25	0	0	542.02	84.57	73.43	123.32	118.73	28.43	23.45	2749.3	6	0		0
		Minimum:	5	2.85	2.99	2737	1	--	--	505.81	84.57	73.43	105.8	102.89	21.55	19.85	2269	6	--	--	--
		Maximum:	5	4	3.53	3411	25	--	--	599.99	167.82	148.67	145.53	141.09	30.76	28.82	3433	23	--	--	--
		Average:	5	3.41	3.25	3226.5	9.25	--	--	545.58	121.7	111.4	124.53	121.08	27.6	24.51	2764.07	12.5	--	--	--
		Range:	0	1.15	0.54	674	24	--	--	94.18	83.25	75.24	39.73	38.2	9.21	8.97	1164	17	--	--	--
		Median:	5	3.39	3.24	3379	5.5	--	--	538.26	117.21	111.75	123.39	120.16	29.05	24.69	2677.15	10.5	--	--	--
		Loading (lb/day):	--	--	--	--	--	--	--	36	10.07	8.92	8.73	8.47	1.78	1.56	--	--	--	--	--

* Records with a value of 0 are not included in statistical calculations.

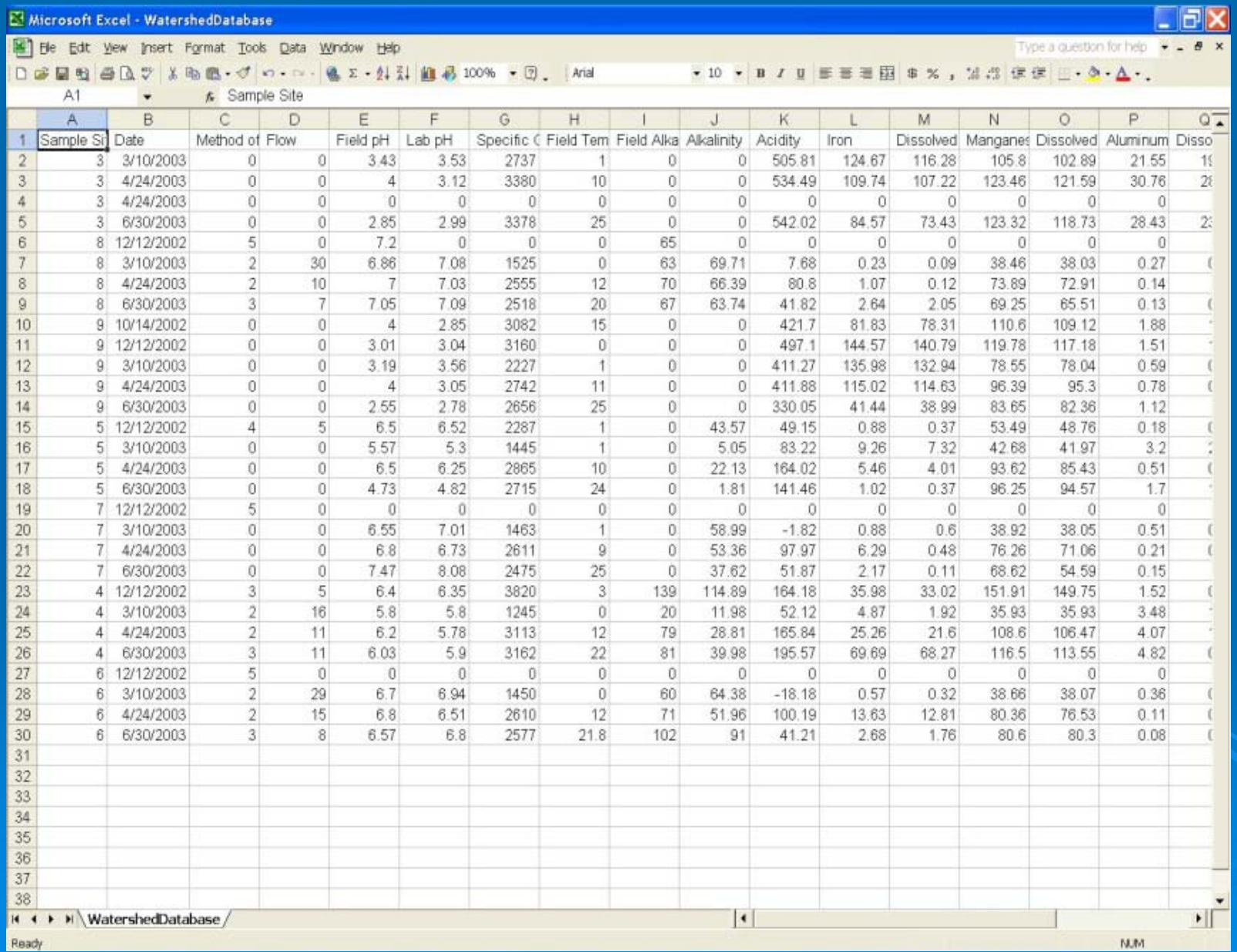
De Sale Phase I Water Quality Report - Forebay S

Date	Method of Flow (NA) - Metadata	Acidity (mg/L) - Lab	Alkalinity (mg/L) - Field	Alkalinity (mg/L) - Lab	Aluminum (Dissolved) (mg/L) - Lab	Aluminum (Total) (mg/L) - Lab	Dissolved Oxygen (mg/L) - Field	Field Temperature (C) - Field	Flow (gal/min) - Field	Iron (Dissolved) (mg/L) - Lab	Iron (Total) (mg/L) - Lab	Manganese (Dissolved) (mg/L) - Lab	Manganese (Total) (mg/L) - Lab	ORP (mvolts) - Field	pH (S.U.) - Field	pH (S.U.) - Lab	Specific Conductance (umhos/cm) - Lab	Sulfate (mg/L) - Lab	Total Suspended Solids (mg/L) - Lab
2006-02-09	--	187.13	--	--	10.84	11.2	--	3	--	54.41	54.82	42.64	42.7	--	3.88	3.57	1543	1182.4	10
2006-03-08	--	280.03	--	--	7.57	9.2	--	8	--	70.26	72.57	45.26	45.4	--	3.72	3.54	1622	1075.6	20
2008-08-06	--	255.71	0	0	--	14.79	7.54	24.8	15	--	21.73	--	49.45	507	3.14	3.03	1785	728.5	3
2008-11-12	--	344.55	0	0	--	11.02	10.85	6.5	12	--	68.37	--	52.62	--	3.17	3.10	2080	1562.2	16
2009-03-31	--	168.16	0	0	--	8.86	9.5	10.0	30	--	36.83	--	34.58	--	3.56	3.33	1561	775.2	1
2009-06-25	--	201.19	0	0	--	8.40	8.82	25.4	24	--	38.44	--	40.84	440	3.35	3.27	1645	853.3	10
2009-06-29	--	201.19	0	0	--	8.40	8.82	25.4	24	--	38.44	--	40.84	440	3.35	3.27	1645	853.3	10
2009-09-16	--	248.20	0	0	--	10.40	7.34	20.5	15	--	57.86	--	49.03	466	3.33	3.23	1881	1246.9	16
2009-12-14	--	275.97	0	0.00	--	10.19	9.58	7.6	17	--	71.00	--	46.79	452	3.52	3.08	1989	1237.9	14
2010-04-15	--	151.70	0	0	--	7.88	6.23	17.5	30	--	51.35	--	36.27	439	3.69	3.17	1676	1090.6	17
Minimum:		151.70	--	0	7.57	7.88	6.23	3	12	54.41	21.73	42.64	34.58	439	3.14	3.03	1543	728.5	1
Maximum:		344.55	--	0	10.84	14.79	10.85	25.4	30	70.26	72.57	45.26	52.62	507	3.88	3.57	2080	1562.2	20
Average:		231.383	--	0	9.205	10.034	8.585	14.87	20.9	62.335	51.141	43.95	43.852	457.333	3.4128	3.2274	1742.7	1060.59	11.7
Range:		192.85	--	0	3.27	6.91	4.62	22.4	18	15.85	50.84	2.62	18.04	68	0.74	0.54	537	833.7	19
Median:		224.695	--	0	9.205	9.695	8.82	13.75	20.5	62.335	53.085	43.95	44.05	446	--	--	1660.5	1083.1	12
Loading (lb/day):		53.4565	--	0	--	2.3831	--	--	--	--	11.5677	--	10.4848	--	--	--	--	--	--

Sample Point Description: Effluent of Forebay before flowing into southern Vertical Flow Pond (VFPS).

1. Records with no value are not included in statistical calculations.
2. Values lower than the minimum detection limit are assumed to be 0.
3. Median pH values are not shown because median pH is so easily misinterpreted.
4. Average pH is not calculated as a mean of pH values, but rather a mean of hydronium ion concentration.
5. Dissolved metals used for calculated acidity values when available. Acidities calculated from total metals may be exaggerated.

Download data as CSV spreadsheet



Microsoft Excel - WatershedDatabase

File Edit View Insert Format Tools Data Window Help

A1 Sample Site

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Sample Si	Date	Method of	Flow	Field pH	Lab pH	Specific C	Field Tem	Field Alka	Alkalinity	Acidity	Iron	Dissolved	Manganes	Dissolved	Aluminum	Disso
2	3	3/10/2003	0	0	3.43	3.53	2737	1	0	0	505.81	124.67	116.28	105.8	102.89	21.55	19
3	3	4/24/2003	0	0	4	3.12	3380	10	0	0	534.49	109.74	107.22	123.46	121.59	30.76	28
4	3	4/24/2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	3	6/30/2003	0	0	2.85	2.99	3378	25	0	0	542.02	84.57	73.43	123.32	118.73	28.43	23
6	8	12/12/2002	5	0	7.2	0	0	0	65	0	0	0	0	0	0	0	
7	8	3/10/2003	2	30	6.86	7.08	1525	0	63	69.71	7.68	0.23	0.09	38.46	38.03	0.27	(
8	8	4/24/2003	2	10	7	7.03	2555	12	70	66.39	80.8	1.07	0.12	73.89	72.91	0.14	
9	8	6/30/2003	3	7	7.05	7.09	2518	20	67	63.74	41.82	2.64	2.05	69.25	65.51	0.13	(
10	9	10/14/2002	0	0	4	2.85	3082	15	0	0	421.7	81.83	78.31	110.6	109.12	1.88	
11	9	12/12/2002	0	0	3.01	3.04	3160	0	0	0	497.1	144.57	140.79	119.78	117.18	1.51	
12	9	3/10/2003	0	0	3.19	3.56	2227	1	0	0	411.27	135.98	132.94	78.55	78.04	0.59	(
13	9	4/24/2003	0	0	4	3.05	2742	11	0	0	411.88	115.02	114.63	96.39	95.3	0.78	(
14	9	6/30/2003	0	0	2.55	2.78	2656	25	0	0	330.05	41.44	38.99	83.65	82.36	1.12	
15	5	12/12/2002	4	5	6.5	6.52	2287	1	0	43.57	49.15	0.88	0.37	53.49	48.76	0.18	(
16	5	3/10/2003	0	0	5.57	5.3	1445	1	0	5.05	83.22	9.26	7.32	42.68	41.97	3.2	2
17	5	4/24/2003	0	0	6.5	6.25	2865	10	0	22.13	164.02	5.46	4.01	93.62	85.43	0.51	(
18	5	6/30/2003	0	0	4.73	4.82	2715	24	0	1.81	141.46	1.02	0.37	96.25	94.57	1.7	
19	7	12/12/2002	5	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	7	3/10/2003	0	0	6.55	7.01	1463	1	0	58.99	-1.82	0.88	0.6	38.92	38.05	0.51	(
21	7	4/24/2003	0	0	6.8	6.73	2611	9	0	53.36	97.97	6.29	0.48	76.26	71.06	0.21	(
22	7	6/30/2003	0	0	7.47	8.08	2475	25	0	37.62	51.87	2.17	0.11	68.62	54.59	0.15	
23	4	12/12/2002	3	5	6.4	6.35	3820	3	139	114.89	164.18	35.98	33.02	151.91	149.75	1.52	(
24	4	3/10/2003	2	16	5.8	5.8	1245	0	20	11.98	52.12	4.87	1.92	35.93	35.93	3.48	
25	4	4/24/2003	2	11	6.2	5.78	3113	12	79	28.81	165.84	25.26	21.6	108.6	106.47	4.07	
26	4	6/30/2003	3	11	6.03	5.9	3162	22	81	39.98	195.57	69.69	68.27	116.5	113.55	4.82	(
27	6	12/12/2002	5	0	0	0	0	0	0	0	0	0	0	0	0	0	
28	6	3/10/2003	2	29	6.7	6.94	1450	0	60	64.38	-18.18	0.57	0.32	38.66	38.07	0.36	(
29	6	4/24/2003	2	15	6.8	6.51	2610	12	71	51.96	100.19	13.63	12.81	80.36	76.53	0.11	(
30	6	6/30/2003	3	8	6.57	6.8	2577	21.8	102	91	41.21	2.68	1.76	80.6	80.3	0.08	(
31																	
32																	
33																	
34																	
35																	
36																	
37																	
38																	

WatershedDatabase

Ready NUM

Project Details

Project De Sale Phase I
Project Type Active Treatment System
Watershed Slippery Rock Creek
GPS No
City Venango Township
County Butler
State Pennsylvania
Treatment Technologies Aerobic Wetland
Anoxic Collection System
Forebay
Settling Ponds
VFP
Horizontal Flow Limestone Bed
Primary Funding Partners In-Kind Contributions from Project Partners
Watershed Restoration and Partnership Act Initiative
Stream Seaton Creek
Description A passive treatment system was installed to treat an abandoned mine discharge emanating from an abandoned surface mine following land reclamation with alkaline circulating fluidized bed coal ash.

Construction Year 2000
Latitude 41° 8' 33" N
Longitude 79° 49' 48" W

Location Links

Map & Directions
Aerial Photo
Download Map

External System IDs

ID	System
D1-23	Datashed 1.0
PA-113	OSM

Project Performance

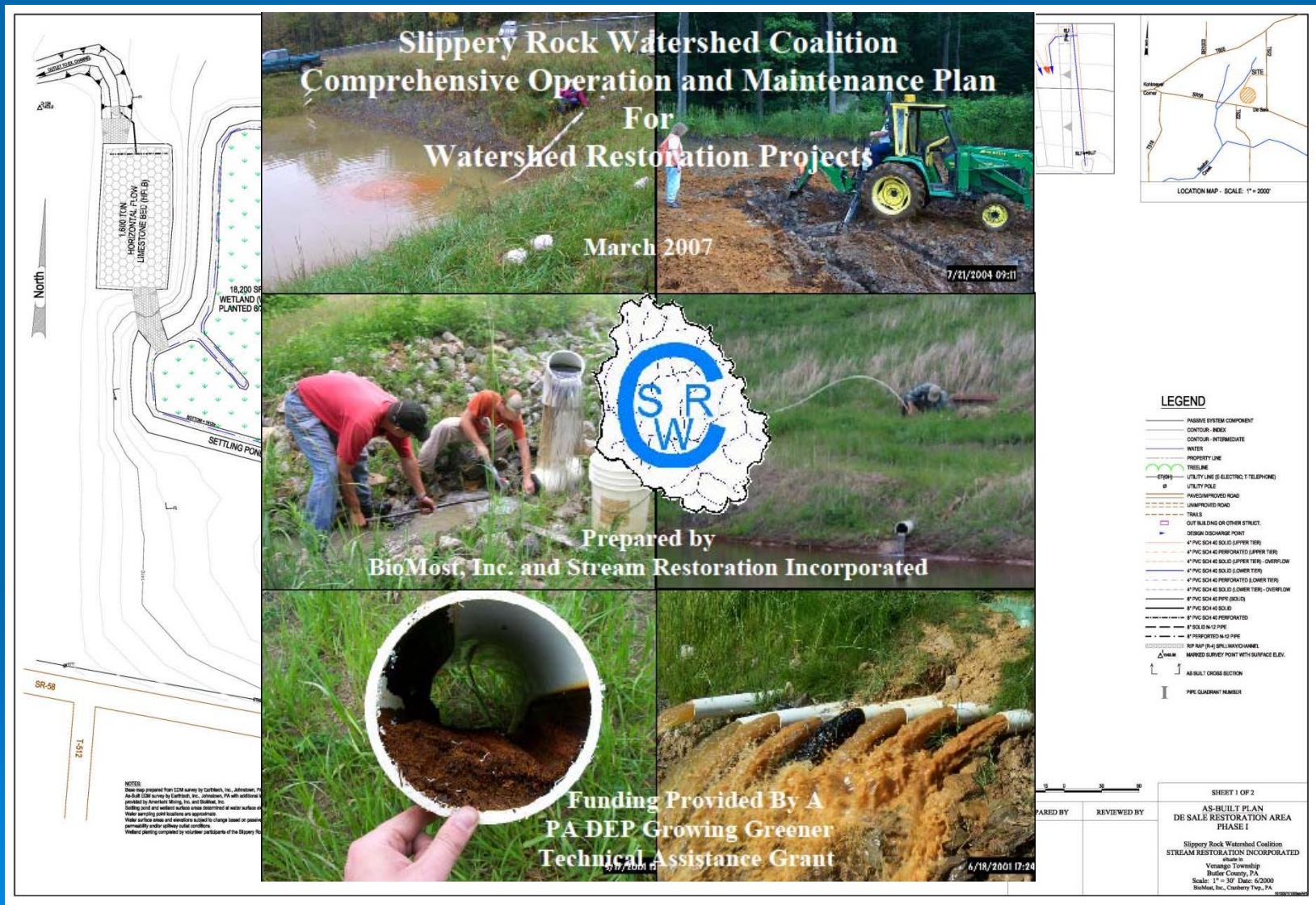
Water Treated	19,907,100 (gal/yr)
Alk. Loading	13 (lbs/yr)
Load Reductions	
Iron (Total)	12,225 (lb/yr)
Manganese (Total)	3,570 (lb/yr)
Aluminum (Total)	1,856 (lb/yr)
Acidity	45,445 (lb/yr)

Water Quality Data Summary

Sample Point	Acidity (mg/L) - Lab	Alkalinity (mg/L) - Field	Alkalinity (mg/L) - Lab	Aluminum (Dissolved) (mg/L) - Lab	Aluminum (Total) (mg/L) - Lab	Dissolved Oxygen (mg/L) - Field	Field Temperature (C) - Field	Flow (gal/min) - Field	Iron (Dissolved) (mg/L) - Lab	Iron (Total) (mg/L) - Lab	Manganese (Dissolved) (mg/L) - Lab	Manganese (Total) (mg/L) - Lab	ORP (mvolts) - Field	pH (S.U.) - Field	pH (S.U.) - Lab	Specific Conductance (umhos/cm) - Lab	Sulfate (mg/L) - Lab	Total Suspended Solids (mg/L) - Lab
RAW	319.59	0	10.99	15.96	12.47	0.38	11.49	38.9	87.95	82.45	53.03	55.48	273.67	4.12	3.8	1802.73	1235.95	55.19
HFLB	-2.14	47.92	80.46	0.15	0.83	6.85	13.04	47.88	0.14	1.09	32.6	31.66	160.38	6.75	6.69	1683.93	1158.83	8.83

Downloads

- Allows anyone to download:



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RAW	319.59	0	10.99	15.96	12.47	0.38	11.49	38.9	87.95	82.45	53.03	55.48	273.67	4.12	3.8	1802.73	1235.95	55.19
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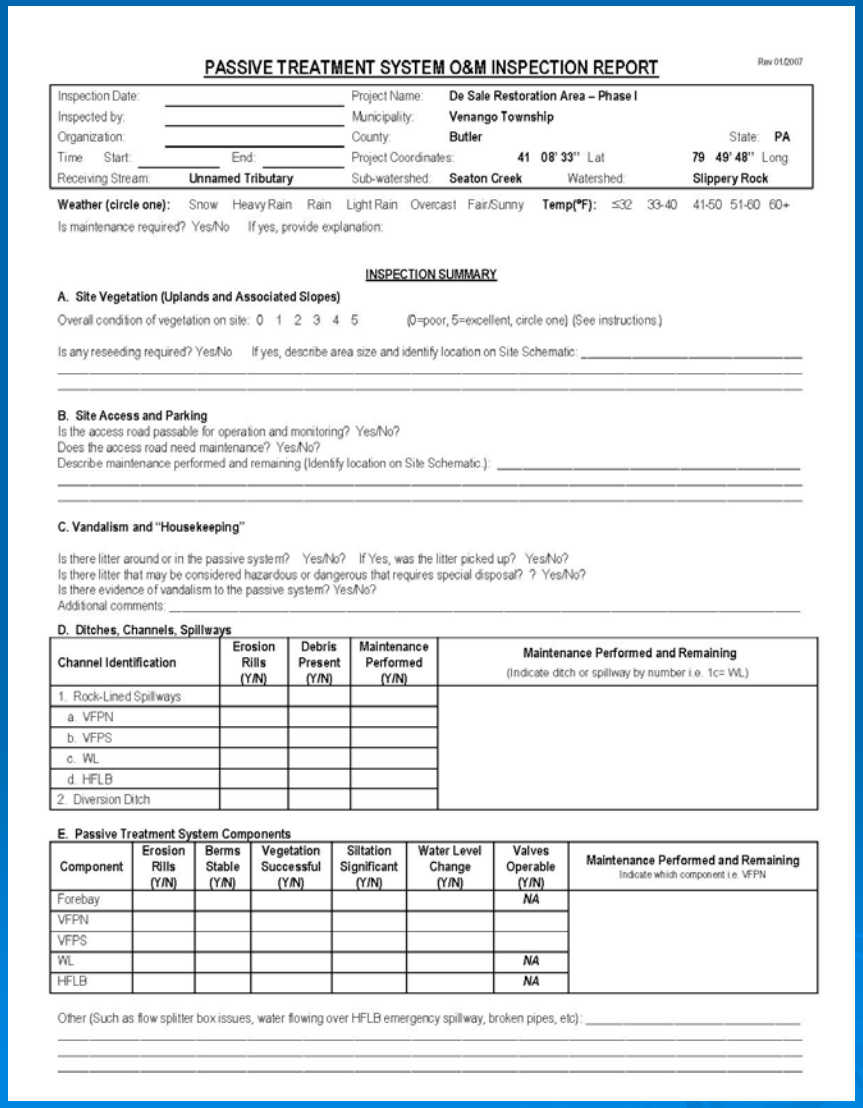
O&M Forms



PASSIVE TREATMENT SYSTEM O&M INSPECTION REPORT

Rev 01/2007

Inspection Date:		Project Name:	De Sale Restoration Area – Phase I
Inspected by:		Municipality:	Venango Township
Organization:		County:	Butler State: PA
Time Start:	End:	Project Coordinates:	41 08' 33" Lat 79 49' 48" Long
Receiving Stream:	Unnamed Tributary	Sub-watershed:	Seaton Creek Watershed: Slippery Rock

Weather (circle one): Snow Heavy Rain Rain Light Rain Overcast Fair/Sunny **Temp(°F):** ≤32 33-40 41-50 51-60 60+

Is maintenance required? Yes/No If yes, provide explanation:

INSPECTION SUMMARY

A. Site Vegetation (Uplands and Associated Slopes)

Overall condition of vegetation on site: 0 1 2 3 4 5 (0=poor, 5=excellent, circle one) (See instructions.)

Is any reseeding required? Yes/No If yes, describe area size and identify location on Site Schematic: _____

B. Site Access and Parking

Is the access road passable for operation and monitoring? Yes/No?
Does the access road need maintenance? Yes/No?
Describe maintenance performed and remaining (Identify location on Site Schematic.): _____

C. Vandalism and "Housekeeping"

Is there litter around or in the passive system? Yes/No? If Yes, was the litter picked up? Yes/No?
Is there litter that may be considered hazardous or dangerous that requires special disposal? ? Yes/No?
Is there evidence of vandalism to the passive system? Yes/No?
Additional comments: _____

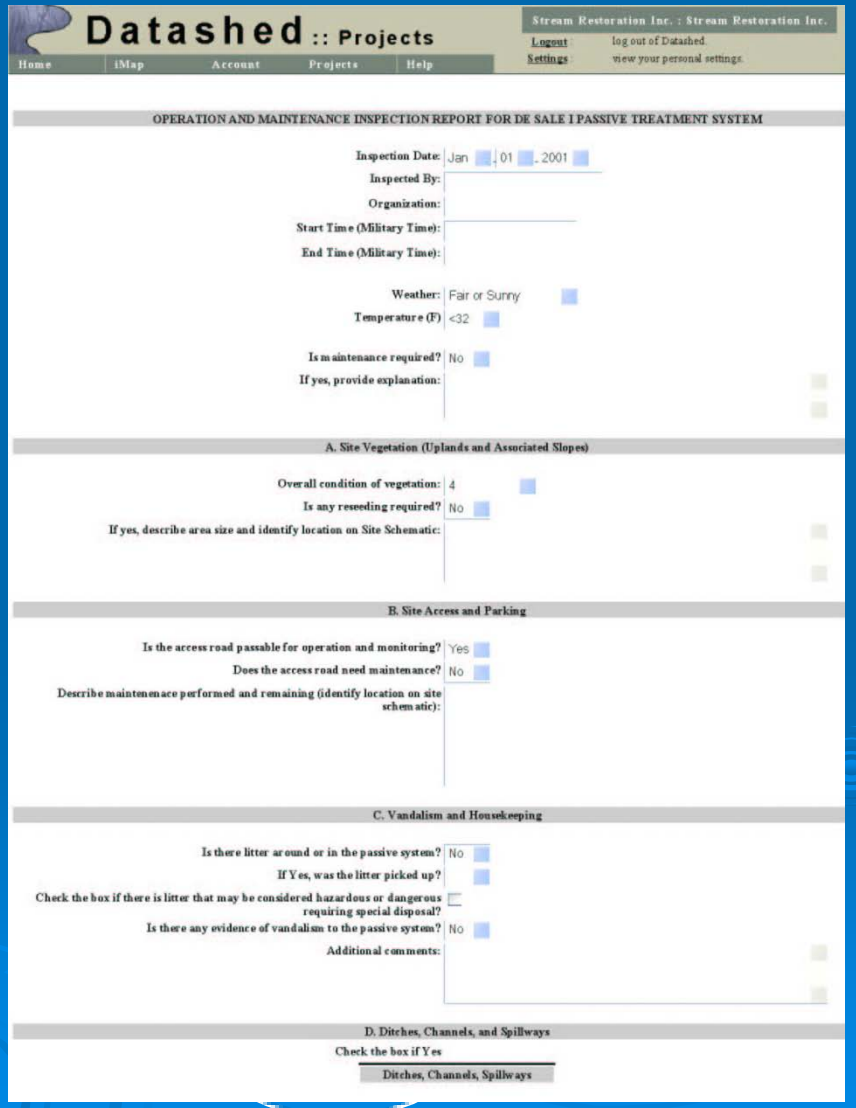
D. Ditches, Channels, Spillways

Channel Identification	Erosion Rills (Y/N)	Debris Present (Y/N)	Maintenance Performed (Y/N)	Maintenance Performed and Remaining (Indicate ditch or spillway by number i.e. 1c= WL)
1. Rock-Lined Spillways				
a. VFPN				
b. VFPS				
c. WL				
d. HFLB				
2. Diversion Ditch				

E. Passive Treatment System Components

Component	Erosion Rills (Y/N)	Berms Stable (Y/N)	Vegetation Successful (Y/N)	Siltation Significant (Y/N)	Water Level Change (Y/N)	Valves Operable (Y/N)	Maintenance Performed and Remaining (Indicate which component i.e. VFPN)
Forebay						NA	
VFPN							
VFPS							
WL						NA	
HFLB						NA	

Other (Such as flow splitter box issues, water flowing over HFLB emergency spillway, broken pipes, etc): _____



Datashed :: Projects

Stream Restoration Inc. : Stream Restoration Inc.

Logout log out of Datashed.
Settings view your personal settings.

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OPERATION AND MAINTENANCE INSPECTION REPORT FOR DE SALE I PASSIVE TREATMENT SYSTEM

Inspection Date: Jan 01 2001
Inspected By:
Organization:
Start Time (Military Time):
End Time (Military Time):

Weather: Fair or Sunny
Temperature (F) <32

Is maintenance required? No
If yes, provide explanation:

A. Site Vegetation (Uplands and Associated Slopes)

Overall condition of vegetation: 4
Is any reseeding required? No
If yes, describe area size and identify location on Site Schematic:

B. Site Access and Parking

Is the access road passable for operation and monitoring? Yes
Does the access road need maintenance? No
Describe maintenance performed and remaining (identify location on site schematic):

C. Vandalism and Housekeeping

Is there litter around or in the passive system? No
If Yes, was the litter picked up?
Check the box if there is litter that may be considered hazardous or dangerous requiring special disposal?
Is there any evidence of vandalism to the passive system? No
Additional comments:

D. Ditches, Channels, and Spillways

Check the box if Yes

Ditches, Channels, Spillways

Datashed

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Welcome to Datashed

Datashed is a fully-featured, GIS enabled, Internet database designed to assist watershed groups, academic institutions, private industry, and government agencies in the operation and maintenance of passive treatment systems.

Datashed provides public access to the following:
1. Important documents, such as O&M inspection sheets, site schematics, "As-Built" drawings, and dynamically-generated location maps;
2. Individualized directions to project sites;
3. Password-protected data submissions (i.e., upload field measurements and laboratory water sample analyses);
4. Interactive GIS map depicting all known passive treatment systems in Pennsylvania;
5. Printable monitoring reports and predefined graphs;
6. Public access to all water sampling data.

No passwords are necessary to view any of the data stored within the data repository; however, passwords are required to upload or edit data. Sign up for an account if you wish to be able to add or edit projects, documents, and data.

For more information about Datashed, email sri@streamrestorationinc.org.

Project Partners

241 Computer Services
Mansfield, OH

BioMost
Mars, PA

Eastern PA Coalition for Abandoned Mine Reclamation
Ashley, PA

EPA Watershed Initiative
,

Foundation for Pennsylvania Watersheds
,

PA Department of Environmental Protection
Harrisburg, PA

Stream Restoration Inc.
Mars, PA

Western PA Coalition for Abandoned Mine Reclamation
Greensburg, PA

Restoration Tote Board

Positive improvements are being seen in Pennsylvania"s streams! About 300 passive treatment systems have been installed throughout the state, reducing the load of pollutants. Below are the sums of these load reductions from systems contained in Datashed. As more systems and data are added, these loadings will be automatically updated.

Water Treated	13,992,282,342 (gal/yr)	Projects Included	164
Iron	3,606,535 (lb/yr)	Manganese	177,923 (lb/yr)
Aluminum	183,175 (lb/yr)	Acidity	-2,825,518 (lb/yr)

Weekly Project Spotlight

Overview | Downloads | FACTS | Photos | Reports

Title Glenwhite Run - Clearwater
Project Type Passive Treatment System
Watershed Glenwhite Run
State Pennsylvania

Datashed :: i-Map

Login

Email: sri@streamrestorationinc.org

Password: ******** Login

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Home > iMap

Layers | Tools | Info | ?

Data Sets

Passive Treatment Sys

Boundaries

- [ ] Cities
- [ ] Boroughs
- [x] PlaceNames
- [x] Counties
- [ ] Townships
- [ ] Quads
- [x] States

Projects

NAME	COUNTY	WATERSHED	ID
DE SALE PHASE III	BUTLER	SLIPPERY ROCK CREEK	117

Sample Point	Acidity (mg/L) - Lab	Alkalinity (mg/L) - Lab	Alkalinity (mg/L) - Field	Dissolved Aluminum (mg/L) - Lab	Dissolved Iron (mg/L) - Lab	Dissolved Manganese (mg/L) - Lab	Dissolved Oxygen (mg/L) - Lab	Field Temperature (C) - Field	Flow (gal/min) - Field	ORP (mvolts) - Lab	pH (S.U.) - Lab	pH (S.U.) - Field	Specific Conductance (umhos/cm) - Lab	Sulfate (mg/L) - Lab	Total Aluminum (mg/L) - Lab	Total Iron (mg/L) - Lab	Total Manganese (mg/L) - Lab	Total Suspended Solids (mg/L) - Lab
RAW	393.84	0	0	0.93	90.43	89.67	8.02	13.4	15.5	277	2.98	2.98	2651.7	1697.87	1.09	87.91	90.44	9.5
Forebay	544.95	0	0	23.67	112.91	119.39	8.47	14.88	15.5	250	3.2	3.2	3198.56	2673.02	23.96	115.8	119.01	10.14
HFLB	50.47	60.54	60.54	0.14	0.61	66.66	0.96	12.01	12.56	111	6.8	6.8	2177.5	1467.7	0.41	0.75	62.85	7.5

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Overview | Downloads | FACTS | Photos | Reports

Title Glenwhite Run - Clearwater
Project Type Passive Treatment System
Watershed Glenwhite Run
State Pennsylvania

Wiki

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FACTS

FACTS: Funding AMD Chemistry for Treatment Systems

The FACTS Program (*Funding AMD Chemistry for Treatment Systems*) provides free chemical analyses to monitor passive abandoned mine drainage treatment systems. The program uses **Datashed** to make the systems' data available to the public, and to streamline the transfer of analysis results from laboratories.

The FACTS Program is administered by the Western Pennsylvania Coalition for Abandoned Mine Reclamation (WPCAMR).

Nonprofit watershed groups, county conservation districts, local governments, and RC&D councils in Pennsylvania can apply to the Program online at www.wpcamr.org/facts.

Using Datashed with the FACTS Program to store sampling data

Upon admission to the FACTS Program, a passive treatment system is prescribed a **monitoring plan**, which includes sampling points, analytes, and sampling dates. These are managed on Datashed's **FACTS Sessions page**.

Watershed Groups and Volunteers

Upon collecting a water sample, a volunteer must send bottles to the laboratory and submit field data to Datashed:

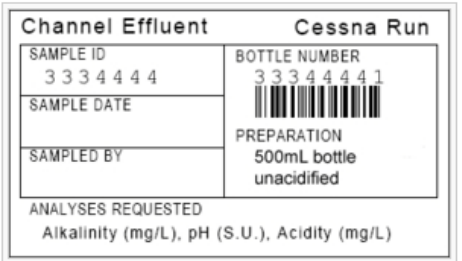
- Instructions for Field Volunteers

Laboratories

Under the FACTS Program, all water samples sent to laboratory are labeled on the bottle with a ***Bottle Number*** and ***Sample ID***. Datashed uses these numbers to track water samples through the laboratory analysis process.

When processing water samples, labs need to interact with Datashed at two points:

1. Mark bottles *received* when checked in by laboratory
2. Submit data after chemical tests



Example of a bottle label with Sample ID and Bottle Number

Datashed Basics

Contents [hide]

Creating a New Project / Stream [edit]

1. Log in

2. Click on the Projects Icon

3. Click on the "Add Project" button on the far right-hand side of the screen

4. A Create Project form will appear. Fill out as much information in this form as you can. Toward the bottom of the form you will see "Project Details" with a "+". Click on the "+" symbol to expand the form. This is where much of the project information is to be entered. Use the "Project Type" to distinguish between Active (Chemical) Treatment, Passive Treatment, Stream, and Site Assessment & Restoration Plan projects. If you don't know something, skip it for now, you can go back and edit it later.

5. Once you are done filling out the form, you need to click on the "Save" button to save your information.

6. IMPORTANT - Once you have created the project, you will need to notify Stream Restoration Inc. (sri@streamrestorationinc.org)so they can allow you access to maintain (edit and upload) additional project data.

Editing a Project / Stream [edit]

1. Log in

2. Find and select the Project or Stream, that you wish to edit. You can either choose your project from your "My Projects" list or find the project through the various search criteria.

3. Once you are on the Project Details page of the project, click on the Settings button with the wrench symbol.

4. Select Project Settings.

4. An edit form will appear with any information that was provided previously, fill out as much information in this form as you can. Only a limited amount of fields are initially displayed. You will need to click on the "+" sign next to "Project Details" to display all of the information fields available. WARNING - do not change the OSM ID for a Treatment System unless you are confident that the number is wrong, this number is used to uniquely identify a project and will be assigned to new projects by the site administrator.

5. Once you are finished, click on the Save button at the bottom of the form.

Uploading Project Related Files and Documents [edit]

1. Log in

2. Find and select the Project or Stream, that you wish to add project related files or documents. You can either choose your project from your "My Projects" list or find the project through the various search criteria.

3. Once you are on the Project Details page of the project, click on the Downloads Icon (disc drive with green arrow).