Developing PWD’s Online Technical Worksheet and Electronic Plan Submission
Planning

➢ Necessary Functions
  ➢ Document compliance
  ➢ Simple and efficient
  ➢ Error checking

➢ Future Features
  ➢ Online Plan Submission
  ➢ Online Payment
  ➢ User Portal

➢ Caveats/Limitations
  ➢ Work for 95% of all projects
  ➢ Users can submit forms with errors
Documentation

➢ Document existing worksheets
➢ Data fields
➢ Calculations/formulas
➢ Trigger logic
➢ Help tips

➢ “Final” Schema was over 8,000 cells
➢ Basis for programing worksheets
➢ Used to flush out calculations and trigger logic
➢ Not comprehensive enough to capture all requirements
Development

➢ Content Organization
➢ Wireframing
➢ Whiteboard sessions

➢ Walked through difficult concepts
➢ Brainstormed logic triggers
➢ Figuring out how to program complex features
➢ Translating from civil engineer to programmer

<table>
<thead>
<tr>
<th>Water Quality</th>
<th>Channel Protection</th>
<th>Flood Control</th>
<th>Public Health and Safety (PHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POA 1</td>
<td>POA 1</td>
<td>POA 1</td>
<td>POA 1</td>
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<tr>
<td>Slow-Release Rate</td>
<td>Pollutant Reduction</td>
<td>Pollutant Reduction</td>
<td>Located in Delaware River Watershed</td>
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<tr>
<td>POA 2</td>
<td></td>
<td></td>
<td>Schuylkill River Watershed Flood Management District A</td>
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<tr>
<td>Slow-Release Rate</td>
<td>Pollutant Reduction</td>
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<td></td>
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<tr>
<td></td>
<td>Combined Sewer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-Infiltrating</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compliant | Exempt | Non-Compliant | Exempt
Worksheet Design

➢ Design Questions:

➢ How to input SMP level information?
➢ Where should drainage area information be input?
➢ Which comes first SMP or POA?
➢ What should be input at the SMP level vs POA level?
Project Characteristics

PC1
Please give this worksheet set a name:

testtestestest

PC2
Development Type:
- Redevelopment

PC3
Watershed:
- Delaware Direct

PC4
Public Sewer Type:
- Combined

PC5
Flood Management District:
- A

PC6
Overall Limit of Disturbance (LOD):
- 1 SF

PC7
On-site Earth Disturbance:
- 50 SF

PC8
Channel Protection Requirement Applicability:
- Exempt - Located In Schuylkill River Or Delaware River Watershed

PC9
Flood Control Requirement Applicability:
- Exempt - Direct Discharge To Delaware River Or Schuylkill River Main Channel
Project Workspace

Key:  • Form Not Started  ● Form In Progress  ○ Form Complete
SMP/POA Data Entry

Please supply the following information about the selected element. Click any element on the left or any icon in the workspace on the right then scroll down to enter details about each POA, Drainage Area and SMP in your project.

Key:
- ● Form Not Started
- ○ Form In Progress
- ● Form Complete

SMP(s) and Bypass Drainage Area(s):
- New Subsurface
- Subsurface2
- New Blue Roof
- New Bioinfiltration/Bioretention
- New Cistern
- New Bypass

Point(s) of Analysis -
- New POA (POA 1)

POA 1
POA

POA 1.1
POA's Watershed: Delaware Direct

POA 1.2
POA's Public Sewer Type: Combined

POA 1.3
POA's Flood Management District: A
### New Blue Roof

**Blue Roof**

- **Footprint:** 10,000 SF
- **Orifice Diameter:** 1.00 in
- **Drain Down Time:** 72 hrs

### Drainage Area

- **Total:** 10,000 SF  
  - **DCIA:** 10,000 SF
- **Proprietary Low-Flow Device:** No
- **Top of Storage:** 101.00 ft
- **Peak Water Surface Elevation:** 100.90 ft

### New Bioinfiltration/Bioretention

**Bio**

- **System Type:** Retention System
- **Footprint:** 1,500 SF
- **Loading Ratio:** 13.3:1
- **Orifice Diameter:** 0.50 in

### Drainage Area

- **Total:** 20,000 SF  
  - **DCIA:** 20,000 SF
- **Drain Down Time:** 72 hrs
- **Top of Storage:** 103.00 ft
- **Peak Water Surface Elevation:** 102.00 ft

**Notes:**
Surprises

➢ Errors/holes in your planning
➢ New features you never though of
  ➢ User account management
  ➢ PWD admin portal
  ➢ Company leads
My User Profile

User Information

Alan

MI

Fody

Alan.Fody@Phila.gov

(215)-686-9718

Ext

Cell

Organization Information

Philadelphia Water Department

1101 Market Street

4th floor

Philadelphia

Pennsylvania

19107

Please enter your password to save these changes.

Password

SAVE CHANGES
### Active Projects

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tracking #</th>
<th>Last Updated</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>October '19 Test</td>
<td>FY20-OCTO-5748-01</td>
<td>10/04/2019</td>
<td>Submitted</td>
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<tr>
<td>Most Amazing Project</td>
<td>FY17-MOST-4748-01</td>
<td></td>
<td>In Progress</td>
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<tr>
<td>TEST TEST TEST</td>
<td>FY17-TEST-4580-01</td>
<td></td>
<td>In Progress</td>
</tr>
</tbody>
</table>

### Company Projects

Company Lead: Alan.Fody@Phila.gov

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tracking #</th>
<th>Last Updated</th>
<th>Status</th>
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<tbody>
<tr>
<td>Cornerstone Urban</td>
<td>FY18-CORN-5170-01</td>
<td>06/19/2018</td>
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<tr>
<td>FS Family LP</td>
<td>FY17-FSFA-4510-01</td>
<td>11/08/2016</td>
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### PCSMP Submission

<table>
<thead>
<tr>
<th>Worksheet Name</th>
<th>Date Created</th>
<th>Submission Type</th>
<th>Completion Status</th>
<th>Date Submitted</th>
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<tbody>
<tr>
<td>Oct 4 '19 Test_Resubmission</td>
<td>10/04/2019</td>
<td>Resubmission</td>
<td>In Progress</td>
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<tr>
<td>Oct 4 '19 Test</td>
<td>10/04/2019</td>
<td>Initial</td>
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<td>10/04/2019</td>
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#### Access Rights

The following is a list of all the users in your company. Place a check in the box next to someone's name to give them view and edit rights to this Project; remove the check to take those rights away. Only the Project Owner and the Company Lead can edit user rights on Projects.

- [x] Select All
- [x] Jeremy Chadwick
- [x] Megan OLeary
- [x] Victoria Lenoci
- [x] Ryan Blessing
- [x] James Pollum
- [x] David Snyder
- [x] Erin Hughes
Phase 2 – Online Plan Submission

➢ Leverage Existing Framework
➢ Revised duplicate feature to a resubmit button
➢ Added an upload page
Required Attachments - Resubmission

Plans (.pdf)

Upload

Narrative (.pdf, .hcp, .dwg)

Upload

Infiltration/Geotechnical Testing Report (.pdf)

Upload
### Project Basic Information

- **Tracking Number**: 2012-BAXT-1979-01
- **Project Name**: Baxter Water Treatment Plant Clear Water Basin Replacement Project

### Project Status by Phase of Review

#### PWD Conceptual Review Stage

<table>
<thead>
<tr>
<th>DATE RECEIVED</th>
<th>STATUS</th>
<th>DATE COMPLETED</th>
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</thead>
<tbody>
<tr>
<td>10/11/2012</td>
<td>Not Applicable</td>
<td>10/11/2012</td>
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#### PWD PCSMP Screening Stage

<table>
<thead>
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<th>DATE RECEIVED</th>
<th>STATUS</th>
<th>DATE COMPLETED</th>
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<tr>
<td>10/10/2012</td>
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#### PWD PCSMP Review Stage

<table>
<thead>
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<th>DATE RECEIVED</th>
<th>STATUS</th>
<th>DATE COMPLETED</th>
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</thead>
<tbody>
<tr>
<td>10/18/2012</td>
<td>Rejected</td>
<td>11/02/2012</td>
</tr>
<tr>
<td>12/10/2012</td>
<td>Complete-OM Pending</td>
<td>12/17/2012</td>
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</tbody>
</table>
Outreach

➢ Focus groups
  ➢ Listen to primary users
  ➢ Ask questions before presenting your ideas
  ➢ Test internal ideas

➢ User testing
  ➢ Confirm forms are intuitive

➢ Advanced public notice before launch
  ➢ Email blasts (PWD lists and Professional Organizations)
  ➢ Info Sessions

➢ Delayed mandatory rollout
  ➢ Give users time to learn new system before requiring use
  ➢ Early Adaptors help identify bugs
Phase 3/Future Directions

➢ Expanded Project Dashboard Options
   ➢ Project-based collaboration between companies
   ➢ Live Status view in the project portal
   ➢ Ability to schedule meetings and contact reviewer directly

➢ Launch ‘Reg Finder’
➢ Online Fee Payment
➢ Better Integration with Internal Compliance Tracking Database
Questions?

Sara Anderson  
(215) 685-6387  
Sara.Anderson@phila.gov

Alan Fody, PE  
(215) 686-9718  
Alan.Fody@phila.gov

Philadelphia Water Department: More Information and Contact List

Access Philadelphia Water’s Stormwater Management Guidance Manual online:

www.pwdplanreview.org

Contact Stormwater Plan Review with questions or to schedule a meeting:

PWD.PlanReview@phila.gov  
(215) 685-6387

Attend Stormwater Plan Review’s Walk-In Hours:

Held every Tuesday from 11:00 am – 1:00 pm,
1101 Market Street, 5th Floor