Appendix A

Overall Program Management and Legal Authority

ECONOMIC DEVELOPMENT/INFRASTRUCTURE STRATEGIC MANAGEMENT MEETING

PURPOSE: Provide multi-departmental strategic direction for infrastructure and planning projects to achieve the City's growth plans

February 25, 2014
1:30 - 4:00 PM
City Hall - Board Room

Facilitator:	*Russell Grayson*	Notes:	*Nancy Flannigan*

AGENDA

Activity / Topic	Person presenting/ leading	Time Allocated
1. **Review Action Items from February 18 meeting** 2. **Review upcoming calendar of events** 3. **Review Communications Projects**	Russ	15
4. Vendors - Rights-of-way **Objective**: Discussion	Carolyn	15
5. Stormwater Rate Model and Master Plan **Objective:** Provide a high-level review of the Stormwater Master Plan and Rate Model and get input re: how to move the process forward (2:00)	Wendy E.	45
6. Septics and extensions -(2:45)	Russ	45
7. New Growth Management Dept. LRP/Transport. (3:30)	Jon/Nick/Brian	30
8. **Department Roundtable** (5 minutes max for each department head to discuss current issues, if needed)	Everyone	10
9. **Wrap up** a. Review Action Items b. Review future agenda items and set agenda for March 4, 2014	Russ	5

Calendar of Events

1. Feb. 27/28 - OSU open house

Action Items from 2/18 Meeting

Action Items	Who	Date	Status
Mary/Russ/Mel/Patrick to discuss well hook-up requirements	Russ/Mary	2/25/14	
Review River's Edge Development Agreement	Russ/Mary	2/25/14	

Future Agenda Items

1. IGA with County on the Urban Area Reserved	Mel
2. Airport master plan	Brian
3. Stormwater PFP	Tom/Mary
4. SDC Agreements - master filing system	Russ/Mary
7. OSU Communications Group	Anne/Colin
9. CDD Fee Study - 3/4 - 30 mins.	Colin

Communications Projects

Short Term
1. Water Reclamation Expansion
2. Bridge Creek Pipeline Project/Water Treatment Advisory Group
3. SIAG/Sewer System Upgrades
4. Ongoing Street Maintenance Projects
5. Reed Market Road
Long Term
1. UGB
2. Bridge Creek Pipeline Project
3. Surface Water Treatment Project
4. Wastewater Collections System
5. OSU Cascades Land Use Solutions
6. Reed Market Road

ECONOMIC DEVELOPMENT/INFRASTRUCTURE STRATEGIC MANAGEMENT MEETING

PURPOSE: Provide multi-departmental strategic direction for infrastructure and planning projects to achieve the City's growth plans

April 8, 2014
1:30 - 3:30 PM
City Hall - Board Room

Facilitator:	*Brian Rankin*	Notes:	*Nancy Flannigan*

AGENDA

Activity / Topic	Person presenting/ leading	Time Allocated
1. **Review Action Items from the April 8 meeting** 2. **Review upcoming calendar of events** 3. **Review Communications Projects**	Brian	10
4. Review Stormwater Master Plan **Objective:** Review upcoming work session presentation/feedback	Wendy E.	45
5. Final results of Optimatics study **Objective**: Discussion	Tom/Jon	45
6. **Department Roundtable** (3 minutes max for each department head to discuss current issues, if needed)	Everyone	15
7. **Wrap up** a. Review Action Items b. Review future agenda items and set agenda for April 22, 2014	Brian	5

Calendar of Events

1. April 17 - Old Farm N.A. - Senior Ctr., Fire Levy Discussion w/Larry Langston
2. April 17 - SIAG meeting
3. April 19 - Earth Day (Justin, Mike B., Anne)
4. April 15 - Technical Meeting - rehearse presentation for exec. session re: Landwatch, et al.
5. April 22 - Staff and councilors to meet with Judge Coffin
6. April 28 - Extra-strength Charge meeting
7. May 1 - Boyd Acres N.A. - at Ponderosa Elementary - Fire Levy Discussion w/Larry Langston
8. May 5 - Mt. View N.A. - Fire Levy - someone from SIAG will present
9. May 5 - Groundbreaking for water treatment plant

Action Items from 4/8 Meeting

Action Items	Who	Date	Status
Un-sewered areas discussion: financial implications	Sonia		4/15/14

Future Agenda Items

1. Airport master plan	Brian
2. SDC Agreements - master filing system	Russ/Mary
3. Discuss well hook-up requirements. Include Crown Villa in this discussion	Russ/Tom
4. Extra-strength Charge	Sonia/Carolyn
5. Juniper Ridge	Jon
6. Septics and extensions - discuss at EDISM before the subject goes before Council in April	Russ/Tom
7. Juniper Utility – HOA, legal, and due diligence strategy, PIP/Charter	As determined
8. Revised ROW permitting process	Mel/new streets hire
9. Revisit the un-sewered areas (Kings Forest, etc.)	Tom/Russ
10. UGB Scope revisit at next week's meeting	Brian

Communications Projects

Short Term
1. Water Reclamation Expansion
2. Bridge Creek Pipeline Project/Water Treatment Advisory Group
3. SIAG/Sewer System Upgrades
4. Ongoing Street Maintenance Projects
5. Reed Market Road
Long Term
1. UGB
2. Bridge Creek Pipeline Project
3. Surface Water Treatment Project
4. Wastewater Collections System
5. OSU Cascades Land Use Solutions
6. Reed Market Road

ECONOMIC DEVELOPMENT/INFRASTRUCTURE STRATEGIC MANAGEMENT MEETING

PURPOSE: Provide multi-departmental strategic direction for infrastructure and planning projects to achieve the City's growth plans

April 29, 2014
1:30 - 4:00 PM
City Hall - Board Room

Facilitator:	*Russell Grayson*	Notes:	*Nancy Flannigan*

AGENDA

Activity / Topic	Person presenting/ leading	Time Allocated
1. **Review Action Items from the April 15 meeting** 2. **Review upcoming calendar of events** 3. **Review Communications Projects**	Russ	10
4. Review Stormwater Master Plan **Objective:** Review upcoming work session presentation/feedback	Wendy E.	45
5. Brief update on recent settlement discussion in Eugene	Mary	15
6. **Department Roundtable** (3 minutes max for each department head to discuss current issues, if needed)	Everyone	30
7. **Wrap up** a. Review Action Items b. Review future agenda items and set agenda for May 6th.	Russ	5

Calendar of Events

1. May 1 - Boyd Acres N.A. - at Ponderosa Elementary - Fire Levy Discussion w/Larry Langston
2. May 5 - Mt. View N.A. - Fire Levy - someone from SIAG will present
3. May 14 - **Transportation Services Director** - Reception at McMenamins
4. May 15 - **Transportation Services Director** - Interviews
5. May 16 - **Transportation Services Director** - Finish Interviews
6. May 30 - TENTATIVE - Groundbreaking for water treatment plant
7. June 5 - Potluck going away party for Sonia
8. June 6 - Department Head - Send Off for Sonia

Action Items from 4/15 Meeting

Action Items	Who	Date	Status
Un-sewered areas discussion: financial implications - call PFM and ask for a magic wand	Sonia	4/22/14	
Go over the communications project list to be sure it is current	Justin	4/22/14	
Set up meeting regarding Juniper Utilities and the RFP that is needed	Sonia/Tom/Mary	4/22/14	

Future Agenda Items

1. Airport master plan	Brian
2. SDC Agreements - master filing system	Russ/Mary
3. Discuss well hook-up requirements. Include Crown Villa in this discussion	Russ/Tom
4. Extra-strength Charge	Sonia/Carolyn
5. Juniper Ridge	Jon
6. Septics and extensions - discuss at EDISM before the subject goes before Council in April	Russ/Tom
7. Juniper Utility – HOA, legal, and due diligence strategy, PIP/Charter	As determined
8. Revised ROW permitting process	Mel/new streets hire
9. Revisit the un-sewered areas (Kings Forest, etc.)	Tom/Russ
10. UGB Scope revisit at next week's meeting	Brian

Communications Projects

Short Term
1. Water Reclamation Expansion
2. Bridge Creek Pipeline Project/Water Treatment Advisory Group
3. SIAG/Sewer System Upgrades
4. Ongoing Street Maintenance Projects
5. Reed Market Road
Long Term
1. UGB
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5. OSU Cascades Land Use Solutions
6. Reed Market Road

ECONOMIC DEVELOPMENT/INFRASTRUCTURE STRATEGIC MANAGEMENT MEETING

PURPOSE: Provide multi-departmental strategic direction for infrastructure and planning projects to achieve the City's growth plans

May 13, 2014
1:30 - 4:00 PM
City Hall - Board Room

Facilitator:	*Russell Grayson*	Notes:	*Nancy Flannigan*

AGENDA

Activity / Topic	Person presenting/ leading	Time Allocated
1. **Review Action Items from the April 29 meeting** 2. **Review upcoming calendar of events** 3. **Review Communications Projects**	Russ	10
4. Utility Rate Discussion **Objective:** Update on Rate Consultant and discussion on impacts of increases from all three utilities	Gillian	45
5. UGB Consultant Scope of Work Review **Objective:** Provide an overview of the Scope of Work in preparation to Chartering Session with consultant	Brian	45
6. LID Informational Update **Objective:** Update	Sonia	30
7. **Department Roundtable (3 minutes max)** for each department head to discuss current issues. If you need more time, please schedule the issue as an agenda item or a separate meeting.	Everyone	15
8. **Wrap up** a. Review Action Items b. Review future agenda items and set agenda for May 13th.	Russ	5

Calendar of Events

1. May 14 - Larkspur NA - 7:00 at Bend Senior Ctr. - David A. to discuss Reed Market
2. May 14 - **Transportation Services Director** - reception at McMenamins
3. May 15 - **Transportation Services Director** - interviews
4. May 16 - **Transportation Services Director** - finish interviews
5. May 15 - Summit West Pub Talk re: OSU and anticipated effects on traffic and parking - Nick will be present - Broken Top Bottle Shop - 5:30
6. May 19 - Extra-strength Charge meeting
7. May 21 – Council Work Session – SIAG Update, Planning Fees

8. May 23 – UGB Chartering Session
9. May 28 – Reed Market Informational Open House
10. May 29 – Taste of Leadership
11. May 30 - Groundbreaking for water treatment plant
12. June 5 - Potluck - going away party for Sonia
13. June 6 - Department Head send off for Sonia
14. June 19 – CIP Open House
15. June 23 - Old Bend NA – Carolyn – Vacation Rentals

Action Items from 5/6 Meeting

Action Items	Who	Date	Status
Send Jon top 3-5 issues your department expects over the next year	Jon	5/20	

Future Agenda Items

1. Airport master plan	Brian
2. SDC Agreements - master filing system	Russ/Mary
3. Discuss well hook-up requirements. Include Crown Villa in this discussion	Russ/Tom
4. Extra-strength Charge	Sonia/Carolyn
5. Juniper Ridge	Jon
6. Septics and extensions - discuss at EDISM before the subject goes before Council in April	Russ/Tom
7. Juniper Utility – HOA, legal, and due diligence strategy, PIP/Charter	As determined
8. Revised ROW permitting process	Mel/new streets hire
9. Revisit the un-sewered areas (Kings Forest, etc.)	Tom/Russ
10. UGB Scope revisit at next week's meeting (5/13) 45 mins.	Brian
11. Coordinate communications with the various City projects	Justin/Brian

Communications Projects

Short Term/Seasonal
1. Street preservation work
2. Newport/College Way roundabout closure
3. Community events/festivals

City of Bend Economic Development Infrastructure

Strategy Management (EDISM) Operating Principles

Developed November 30, 2012

EDISM Purpose

Provide multi-departmental strategic direction for infrastructure and planning projects to achieve the City's growth plans.

Roles

City Manager

In addition to participating as a Member, the City Manager makes decisions as needed when consensus cannot be reached.

Facilitator

In addition to participating as a Member, the Facilitator:

- Manages the group in accordance with these operating principles.
- Offers feedback or asks questions when the group appears to stray from the operating principles.
- Ensures the agenda is developed, including taking the lead in addressing last-minute agenda requests.
- Asks for support with facilitation and agenda development, as needed.
- Ensures that each Member has an opportunity to offer his or her opinions. Experiments with different ways to do this (round robin, asking quiet Members if they have something to offer, asking Members to raise hands when many want to speak, etc.).

Members

EDISM Members:

- Bring appropriate items for information, feedback, and decision.
- Fully participate in every discussion and decision, and encourage others to do the same.
- Ensure that decisions that come before the group are consistent with EDISM's purpose.
- Offer feedback or ask questions when the group appears to stray from the operating principles.
- Communicate EDISM decisions to staff.
- Offer suggestions and feedback beyond their departmental role.

Agendas

- Each agenda includes the purpose of the group at the top of the first page.
- Each agenda item includes the purpose or desired outcome, time allowed, and by when they need a response from the group.
  - The purpose could be information sharing, feedback requested, or a decision.
  - If a decision is requested, it is fully described on the agenda.
- Everyone participates in forming the agenda for the following week at the end of each meeting, during a standing agenda item.

City of Bend
Stormwater Liaisons Meeting

Proposed Agenda
October 15, 2013, 9:00 to 10:00 AM
Board Room, City Hall

Purpose: Coordinate Stormwater Activities Among Affected Departments

I. Welcome and Introductions (2.5 minutes)

Objective: Welcoming remarks. Review and accept minutes. Receive updates on previous action items. Review and modify agenda as needed.

II. Updates (2.5 minutes), Wendy Edde

Objective: Receive/provide updates regarding City's stormwater permits and related regulations, an APWA Stormwater Training module opportunity, and a City Edition on drill holes.

III. Review Draft FY2012-13 Annual Report (15 minutes), All

Objective: Provide comments on the initial draft FY2012-13 Annual Report, to be next reviewed by the Stormwater Quality Public Advisory Group and submitted to DEQ by November 1.

IV. Review Draft Enforcement Response Plan Flow Charts (20-25 minutes), All

Objective: The City is working to finalize a standard enforcement protocol to follow internally for effectively implementing Bend Code Title 16. Initial draft enforcement response flow charts will be distributed for initial review to improve coordination and understanding of coverage and areas needing improvement.

IV. Discussion: Uses of BendVoice and SeeClickAct (5-10 minutes)

Objective: With regards to illicit discharge reporting, discuss available tools, and how Bend Voice is being used.

VI. Roundtable Discussion (5-10 minutes)

Objective: Open discussion.

City of Bend
Stormwater Liaisons
Meeting Attendance Sheet
October 15, 2013

	Name:	Department/Division:
1.	Wendy Edde	Stormwater
2.	GARY FIRESTONE	LEGAL
3.	JOE McCLAY	Building Safety
4.	RYAN OSTER	ENGINEERING
5.	David Buchanan	Stormwater
6.	Craig Chenoweth	CDD
7.	Melanie Paule	Building
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

Stormwater Liaison's Meeting Summary
October 15, 2013

Attendees: Gary Firestone (Legal); Joseph McClay (Building Division); Melanie Paule Building Division); David Buchanan, Wendy Edde (Stormwater); Craig Chenoweth (Community Development Department); Ryan Oster (EIPD)

Key Items Discussed:

- Stormwater Updates
- Draft Annual Report
- Draft Enforcement Response Plan Flow Charts
- Uses of Bend voice and See Click Act

Key Decisions/Action Items

- Wendy provided an update on the status of stormwater permitting. The City received its first UIC permit, DEQ staff Changes have delayed the re-issuance of the NPDES permit. The current permit issued in 2005 has been administratively extended until a new permit is received. DEQ has also indicated they are going to move away from individual permits to a general permit.

- Wendy provided an overview on recent public outreach events including Streams stewardship day, munch n movies and bend film festival. Wendy and stormwater filed crews are also working on a City edition video on drill hole spill prevention and 3rd street UIC removal. Wendy is working with APWA on some new stormwater training modules that could potentially be incorporated into complee.

- The group reviewed the FY12-13 Annual Report. Tracking stormwater verbal warning completed by inspectors was a key topic. Both Ryan and Joseph are going to get estimated verbal warnings numbers from their staff and will report that information back to Wendy. Melamine is going to work on developing tracking processes for the building inspectors.

- The group briefly discussed the need for City staff to identify sites that need a 12000C permit. This topic was placed on hold until the next meeting when the City engineer is present.

- Joseph expressed concern that single family site plan reviews and inspection process needs additional work. He provided a recent example of how the lack of accurate contours made installing drainage per the plane not feasible. The plan modification created delays and impacted the sale of the property.

- The group was provided a copy of the performance standards for review.

- The group discussed the draft enforcement matrix. The question was raised about code enforcements involvement in the process. The need to seed the violation in progress and attending court hearings.

Stormwater Coordinator
Stormwater Master Plan
3.4.14

Name	Department
1. Wendy Eddle	PUW - Stormwater
2. Mr. Brian Thomas Ranlon	CDD
3. MARY A. WINTERS	Legal
4. Sharon Murray-Roberts	legal
5. GARY FIRESTONE	LEGAL
6. Tom Hickmann	Engineering

Stormwater Coordination

4.3.14

Name	Division
1. Wendy Edde	
[signature]	Streets
[signature]	Street / Storm
[signature]	Storm
Shannon Ostwaldt	Utilities

Pilot Butte
Corporation Yard Drainage Meeting
April 21, 2014

Name	Division
1. Wendy Eldred	Stormwater
2. Ken Vaughan	Safety
3. GRANT BURKE	FACILITIES
4. [illegible]	[illegible]
5 Kelly GRAHAM	DPP

Stormwater Billing
Coordination Meeting

Date: 4/8/2014
Time: 2:30 pm to 3:30pm
Location: Planning Conference Room

Attendees:
Wendy Edde; Kristine Trask; Colleen Miller; Craig Chenoweth; David Buchanan

Meeting Agenda

- Review and Finalize Stormwater Billing SOP
- Develop Impervious Surface Verification Process
- Discuss Process For Updating The Impervious Layer Moving Forward
- Review Impervious Update RFP Submittals

Stormwater Coordination Meeting:
Audit Work Group

September 12, 2013
1:00 PM – 2:00 PM
City Hall, Boardroom

Meeting Summary
Attending: Wendy Edde, David Buchanan, Craig Chenoweth, Kristine Trask, Colleen Miller

I. David and Wendy provided an overview on the purpose and goals of the audit project.

The following general comments were received:
Wendy expressed the need for the stormwater billing to be fair and equitable or it could potentially put the utility funding in jeopardy. Because the stormwater finances themselves are included in the annual financial audit, this audit should focus mainly on ensuring that impervious surface coverage is accurate.

Craig recommended adding an additional task for identifying the resources needed (staffing) to complete the project, including finding and or hiring volunteers and/or temporary employees.

Colleen recommended that a detailed schedule needs to be developed to determine what tasks are dependent on other tasks and to identify who is responsible for what task.

II. The team began reviewing the draft scope of work.

The majority of the meeting was spent discussing project task-1; Verifying that impervious surface is accurate.

Wendy and colleen discussed the need to relook at the entire impervious surface (for non-single family residential sites) layer for non-single family residential areas and not just specific sites known to the City that may have changed, in case unpermitted changes have occurred.

Colleen proposed several options on how to update the impervious surface layer. Some options include more advanced imaging techniques that may speed up the process but requires highly skilled consultants and higher cost. The other option was to hire a temp/ intern to draw polygons by hand using the Aerial photo and City database search results. Another option is purchasing the data directly from the Aerial photo company but this option may be cost prohibitive. Colleen noted. One challenge will be to ensure impervious surface adequately linked to the correct account. On the planning side partitions and subdivision should be reviewed.

Attendees discussed what would need to be checked as part of the audit and determined that final building permits for new commercial, industrial, MFR`s, additions and remodels.

Kirstin has already preformed a lot of work as part of the extra strength charge effort to determine whether residential customers are appropriately classified.

Colleen suggested that additional work needs to be done to identify sites that will need impervious surface updates. This includes developing the search criteria for both CDD and Building permit datasets.

Kirstin expressed concern that a significant amount of time may be needed to complete the potential changes to stormwater accounts and additional staff may be needed. She indicated that some accounts could take up to two hours in researching prior to correcting an account. The most time consuming task would be verifying that another LOC ID is not already getting billed for the impervious surface.

III. A smaller portion of the meeting was spent discussing project task (2), Verify that processes are in place.

Craig indicated that the SDC form is being phased out and this information will need to be moved to another location. Craig thought that maybe it should be included on the application submittal or checklist. Small projects that do not have architects or engineers involved may be challenging for the applicants to determine the impervious surface. As staff move to address potential problem areas, it may be appropriate for stormwater staff to perform an impervious surface check on final inspections.

IV. Other items

Colleen mentioned that the City is starting a long term process to change the billing software (i.e. The ERP Project). This project includes looking at how bills are attached to tax lots in the system. Wendy indicated that we should try to coordinate with that effort as much as practical.

The fire department is working to create pre-incident maps these may tie well into including data on private stormwater facility locations and types (UICs).

Action Items

- David will draft a detailed schedule and refine the scope of work.
- David with the assistance of Craig, Colleen and the Building Dept. will draft a list of criteria to identify tax lots that may have had impervious surface changes made to the site (e.g. what is involved in remodels opposed to additions).

- Wendy will review the quote Colleen provided and look for additional funding for the mapping portion of the project.

- Kirstin will check to determine to the degree to which notes have been entered into HTE for appeals and credits.

Stormwater Audit RFP Review &
Selection Meeting Summary

Date: 4/16/2014 Time: 10:00 am to 11:00am Location: Nimitz (Boyd Acres)

Attendees:
Wendy Edde; Colleen Miller; David Buchanan; Spencer Sanvitale; Nita Williams

Meeting Summary

- For the first few minutes attendees reviewed the RFPs.

- The group discussed whether to complete a full update or just a partial update of the City's impervious surface layer. A general consensus was reached and the group agreed that it would be best to develop a new impervious layer.

- Since the RFP with the lowest cost was also the preferred option, City staff did not score the RFPs. Nita was going to check with Gwen to verify that this was OK. Wendy provided some written notes as justification of the selection process.

- Spencer and Colleen are going to work on getting the needed GIS information pulled together for the selected consultant.

- Colleen recommended that the group coordinate with the billing department. The development of a new impervious layer will increase the project work load and could result in additional stormwater accounts needing to be changed.

- The group also discussed the need to develop a process for updating the impervious surface layer moving forward, considering the timing of the final inspection when the inspectors get all other infrastructure assets for upload. Colleen recommended a process similar to the existing as-built process. David will add this to the next stormwater billing coordination meeting agenda. Colleen and Spencer will also discuss GIS process approaches internally.

- Nita is going to draft the contract and send it out for signature. Wendy will provide the account numbers to Nita. David and Wendy recommended setting the completion date for June 30, 2014. But they recognize this is a tight timeline and it may need to be extended into next fiscal year.

City of Bend
Stormwater Coordination Meeting
June 11, 2014

Objective

The purpose of this meeting is to discuss the streets-related performance standards, provide an initial review on proposed educational outreach related to the topic, and determine invitees for specific trainings. Also, would like to discuss spill control trailer contents.

Agenda

I. Stormwater Performance Standards – Need and Overview

II. Training Topics Related to Streets—who involved; how best to reach
   a. Street Sweeping
   b. Winter Road Care
   c. Storm Drain Facilities
   d. Stormwater Pump Stations
   e. Litter Control
   f. Corporation Yards
   g. Road Repair and Maintenance

III. Review Training Materials

IV. Confirm Next Steps

V. Discuss Spill Trailer Contents and Purchase

VI. Roundtable Discussion

   a. Budget
   b. APWA CSM
   c. Other

June 12, 2014

Ops/ Stormwater Coordination Meeting

1. Wendy Edde [illegible] Stormwater
2. Chris B[illegible] Streets
3. T[illegible] Storm
4. [illegible] Streets

City of Bend
Stormwater Coordination Meeting: Residential Development
June 24, 2014

Invited: Craig Chenoweth, Joseph McClay (CDD), Russell Grayson, Nicolai Oltean (Private Engineering), Wendy Edde, David Buchanan (Public Works)

Purpose:

Following up on recent conversations especially with regards to single family residential infill, the purpose of this meeting is to work towards ensuring mutual understanding of how stormwater requirements will be addressed for residential developments.

Proposed Agenda:

I. Goals and Objectives (5 minutes)
   a. Long-term
   b. Short-term
   c. Needs

   Objective: Ensure mutual understanding of goals and objectives (e.g., of providing clear, consistent, sensible guidance to developers while ensuring that drainage is taken care of over the long-term project life cycle to protect the citizens). Discuss potential areas needing to be addressed to achieve this.

II. Grading and Drainage Requirements (10 minutes)
   a. Residential infill
   b. Residential subdivision

   Objective: Ensure mutual understanding of process desired and requirements needed to meet Bend Code Title 16 grading and drainage requirements for residential infill and subdivisions.

III. Drainage Design Requirements (10 minutes)
   a. Residential infill
   b. Residential subdivision

   Objective: Ensure mutual understanding of process desired and requirements needed to meet Bend Code Title 16 drainage design requirements for residential infill and subdivisions.

IV. Inspection processes (10 minutes)
   a. Residential infill
   b. Residential subdivision

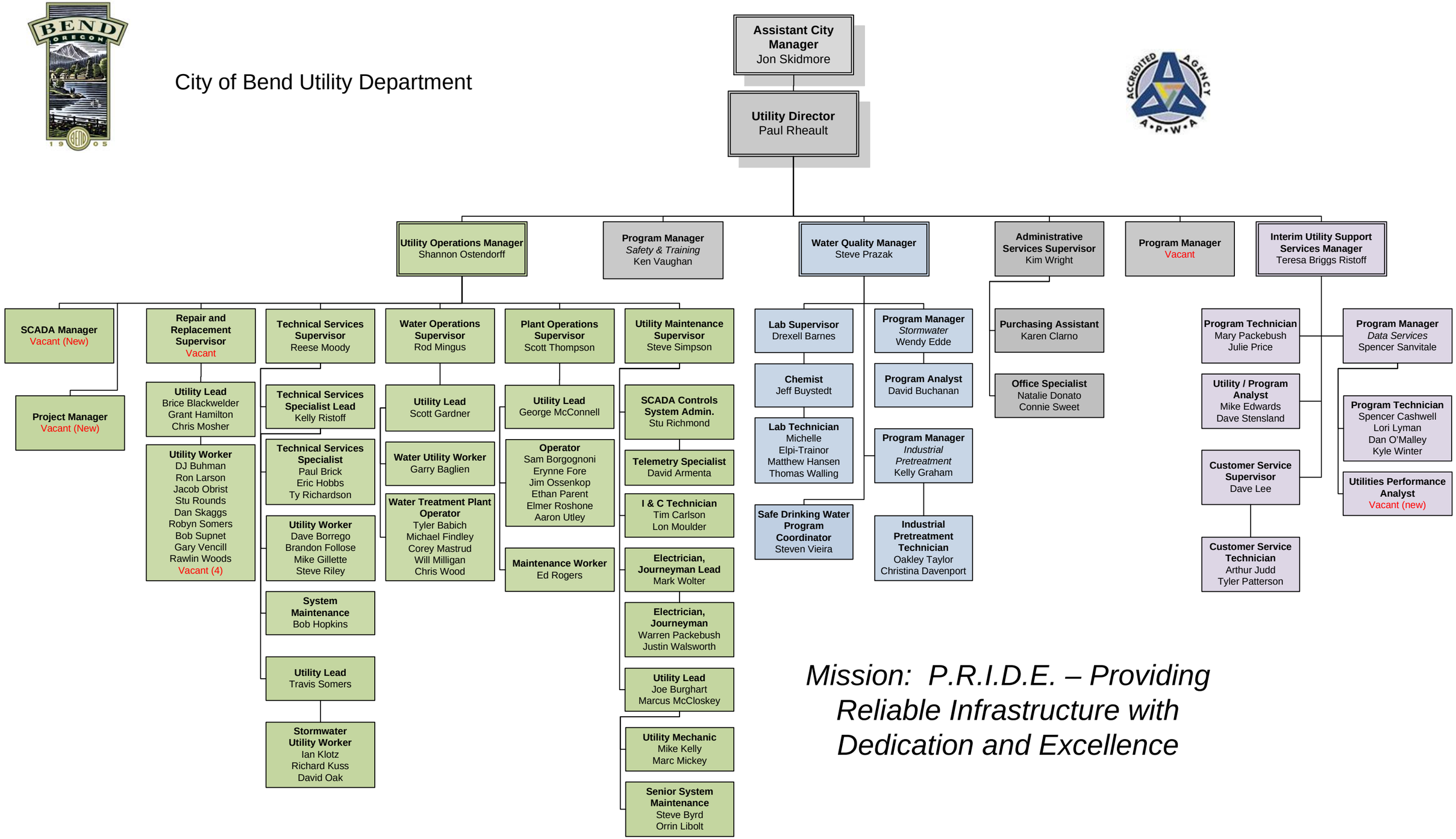
   Objective: Ensure mutual understanding of process desired and requirements needed to meet inspection needs to ensure Bend Code Title 16 requirements for residential infill and subdivisions are being met.

V. Stormwater Facility Maintenance Activities (10 minutes) (*if time available)*
   a. Requirements
   b. Infrastructure Inventory
   c. Verification Approach

City of Bend
Stormwater Coordination
Residential Development
June 24, 2014
Sign-in Sheet

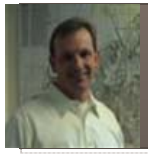
Name	Department
1. Wendy Edde	PW
2. Russell Grayson	City Engineer
3. Nick O Hean	City Engineer
4. David Buchanan	Storm
5. Craig Chenoweth	CDD

City of Bend Utility Department

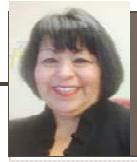


Mission: P.R.I.D.E. – Providing Reliable Infrastructure with Dedication and Excellence

City of Bend Utility Department Organizational Chart Updated: October 24, 2014



Tom Hickmann P. E.
EIPD Director
317-3029



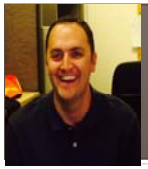
Adele McAfee
Executive .Assistant
317-3003

Jeff England
Assistant EIPD Director
693-2125

Dana Wilson
Program Manager
388-5566

Patrick Griffiths
Water Resource Manager
317-3008

Heidi Lansdowne PE
Principal Engineer
388-5538
Office at Outback



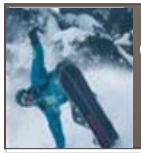
Ryan Oster P. E.
Project Engineer
Inspection Services
693-2134

Peggy Spencer
Engineering Tech II
388-5578

Michael Buettner
Program Manager
388-5569
Boyd Acre Campus

Eric Forster P.E.
Principal Engineer
317-3040

Chris Struck
Engineering Inspector
693-2188
Office at WRF



Oliver Murray
Engineering Tech II
693-2183

Vacant
Principal Engineer

Chad Towell
Engineering Inspector
388-5559

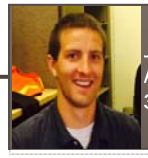
Cindy Hartman
Engineering Tech I
388-5558
Office at Outback

Aaron Collett P. E.
LTE Principal Eng.
693-2194

Bret Dalrymple
Engineering Inspector
388-5565

George Franklet P.E.
LTE Project Eng.
693-2182

John Umbarger
Engineering Inspector



Jason Suhr E.I.T.
Associate Engineer
317-3053

Engineering & Infrastructure Planning Dept.
10/7/2014

MEMORANDUM

710 WALL STREET
PO BOX 431
BEND, OR 97709
[541] 388-5505
TEL
[541] 388-5519
FAX
www.ci.bend.or.us

TO: **MAYOR AND CITY COUNCIL**

FROM: **ERIC KING**

SUBJECT: **WEEKLY REPORT**

DATE: **NOVEMBER 1, 2013**

Upcoming City Council Meetings and Other Events

- November 6, Work Session at 5:00 p.m., Regular Session at 7 p.m. at City Hall in the Council Chambers

Riverside Bike/Ped Project Celebration

Today we celebrated the completion of the Riverside Bike/Ped project with a ribbon cutting, short ceremony and a "thank you" to the community for its patience during the project.

CDD Releases 2013 Annual Report

The Annual Report is the product of one of CDD's Strategic Plan action item goal to communicate the benefits of what they do and promote the department's successes. The information in the report reflects the activity in the Department between June 31, 2012 and July 1, 2013. A copy of the report is attached.

Street Imagery

The City has entered into an agreement with Cartegraph to acquire high-resolution 360-degree street level imagery for City-maintained roads. The resulting imagery and software will primarily be used to develop a street sign asset inventory. Imagery collection efforts will begin next week and are expected to be completed in mid-November. The images are collected from a car with cameras mounted on the roof. The imagery and software tools will be delivered to the City in January. We expect that when people see this car driving around the city, they may call the media or the city with questions, so we wanted you to be aware. The media was invited to see the car and ask questions.

Flammable Vegetation Mitigation

As of this week, City of Bend Utilities Division has completed the last 10 acres of work on the 30 acre Overturf Butte Water Tank property. The property is used jointly by Bend Parks and Rec for a dog park and many walking trails. The work has been ongoing for several years and included work done by Bend Parks & Rec as well as the City's streets crews.

This is a good example of creating defensible space without making a huge impact to the land. The crew that did the work was able to keep the ground intact and did not make many ruts or create barren spots. This is important as those ruts and barren spots can allow noxious weeds to grow and lead to possible erosion. The work was done in a manner that can be used as an example for people in Bend and throughout Central Oregon.

WRF Construction Cameras

We now have two cameras online at the Water Reclamation Facility. These cameras allow City management, City Council, and the construction team to be able to see what's going on at the WRF Construction Site since it is remote and not visited very often. It's great for viewing during meetings with engineers and construction subs that may be out of the area located in the Valley, Portland or Kennewick and who need to see the site. Photos are updated every 15 minutes.

Camera 1 is on the north end of the site by the future UV Disinfection and sodium hypochlorite buildings. Only earthwork has been completed there to-date but activity should pick up soon. http://www.truelook.com/clients/bendoregon-webcam1/

Camera 2 is on the south end of the site looking north where most of the current work is occurring. We have the Camera #2 on the WRF City of Bend Website. http://www.truelook.com/clients/bendoregon-webcam2/

Stormwater Quality Annual Report Submitted

On November 1, the City submitted the Fiscal Year 2012-2013 Stormwater Quality Annual Report to the Oregon Department of Environmental Quality per the requirements of the City's National Pollutant Discharge Elimination System Permit and its Underground Injection Control Program requirements. The report covers the City's activities to minimize stormwater pollutants from impacting water resources during the period July 1, 2012 through June 30, 2013. It also provides a status report on implementation of the activities in the City's Integrated Stormwater Management Plans, and covers overall program administration, planning and financing; public education and involvement; illicit discharge detection and elimination; construction and post-construction stormwater management; municipal operations, monitoring, and drinking water protection from stormwater. A copy of the report is available on the City's website at: Bendoregon.gov/stormannualreport

League of Oregon Cities Report, "Where the Money Goes"
Here's a link to the LOC report featuring Bend and highlighting issues with Oregon's tax structure: http://www.orcities.org/portals/17/resources/Wheregoes_final.pdf

2013-2017 Oregon SCORP now available online
The 2013-2017 Oregon Statewide Outdoor Recreation Plan (SCORP), entitled Ensuring Oregon's Outdoor Legacy, has been officially approved by the National Park Service. The plan guides the use of Land and Water Conservation Fund (LWCF) funds that come into the state, provides guidance for other OPRD-administered grant programs, and provides recommendations to guide federal, state, and local units of government, as well as the private sector in making policy and planning decisions.

The plan and support documents are now available on the OPRD website at: http://tinyurl.com/k68w43v.

Letter of Appreciation
I'm pleased to share a letter of appreciation for Officer Scot Eliott.

Attachments:
- Future Council Schedule
- Appreciation Letter
- CDD Annual Report

MEMORANDUM

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www.ci.bend.or.us

TO: **MAYOR AND CITY COUNCIL**

FROM: **ERIC KING**

SUBJECT: **WEEKLY REPORT**

DATE: **DECEMBER 13, 2013**

Upcoming City Council Meetings and Other Events

- December 18, Work Session at 6:00 p.m., Regular Session at 7 p.m. at City Hall in the Council Chambers
- January meetings have been shifted to the 2nd and 4th Wednesday (January 8 and 22)
- Save the date for the Financial Retreat on Friday, February 7 (please let us know if you have a conflict with this date)

2013 Holiday Party Recap

Here's a quick recap of the 2013 employee holiday party held on Wednesday, at the Bend Elk's Lodge. I want to send my thanks to the Holiday Committee for all its contributions to create a successful and fun event for our employees. Approximately 220 people attended the event. Minimal public dollars were used for the facility and food ($846.13). I'm happy to report that $3,595 was raised through the raffle and donated to the Family Access Network. Thank you to everyone who generously donated items and purchased raffle tickets.

We've received a lot of great feedback from attendees. The Bend High Jazz Choir (The Dynamics) was a great addition and Nancy Childers from the Family Access Network enjoyed being part of the event. Thank you Sally, Mark and Jodie for attending.

TGM Grant Process

In response to OSU-Cascades' chosen location, the City requested a $150,000 Transportation Growth Management grant from the state and is asking other local public agencies to also provide additional funding. Each agency has projects on the Westside that can impact roads and land-use development.

City staff are meeting with representatives from OSU–Cascades, Bend Park & Recreation, Deschutes County and the State as the scope of the grant is getting written. The TGM study will model various transportation and land-use scenarios. A public engagement process will ask residents for input about their preferred scenarios, such as how wide roads should be, or where mixed-use developments should go, resulting in a community-backed land-use and transportation plan. The project would give public institutions and private development a clear consistent path for development. The outcomes from this project may also serve as potential examples for other areas of the city.

Expected timelines: Request for Proposal issued and a consultant selected by Spring 2014. The project, which includes public outreach and participation, scenario development and selection, data collection and analysis and resulting land-use and transportation performance measures, should be substantially completed by Fall 2015.

911 Operating Agreement

The Board of Commissioners approved the changes to the 911 Operating Agreement this week. Now that the E-Board structure is changed, the next step is to open the 911 Director recruitment. Chief Langston provided testimony on behalf of the City in support of the Agreement.

Fire/Water Collaboration

We utilized our Super Duty pickup, a firefighter and a Water Department employee to respond to water line breaks, as it was very predictable that we would have numerous calls. The unit, 395, responded to 7 calls in 9 hours. In addition, the personnel assisted the Facilities Manager in looking for pipe breaks at 301, and they assisted with a follow-up at the Outback, a prior call. The squad, 366/365, responded to 5 calls in the same time period (2 pipe breaks and 3 EMS/rescue). Total number of calls for the Dept. in that 10 hour time period was 20. The squad concept really proved out, and the collaborative effort with PW was a great first step.

Pile Burning around Phil's Trailhead

Over the past week, the Forest Service has been burned just over 380 acres worth of piles near Phil's Trailhead just west of Bend. They have about 20 acres to finish the East Tumbull Fuels Units. If you are in the area this weekend, there may be smoke visible both from Skyliner Ranch and Skyliner Road, Phil's Trailhead and KGB Bike Trail. The smoke is nothing to worry about and they are monitoring it. The smoke impact is very minimal to the trail system near Phil's Trailhead. They plan on finishing this project this Monday or Tuesday.

Watershed Model

The City continues to work with partners such as the Upper Deschutes Watershed Council to provide creative cost-effective outreach opportunities that meet regulatory requirements and help provide water quality education. The City's watershed diorama (see photo) is a useful three dimensional model to illustrate how water travels through a watershed, and the importance of and methods for keeping the water clean. Complete with model buildings, cars and construction vehicles, animals, spray bottle rain, pollutants comprised of

hot chocolate and kool aid, and felt and clay storm drainage facilities, the diorama is a welcoming hands-on interactive tool for sharing watershed science and pollution prevention messages.

Here's a note of thanks from the Upper Deschutes Watershed Council-

> Hi David,
> Thank you again for the use of the City of Bend Watershed Model. It is such a useful hands-on tool. We were able to use it with 6 different classes this year for our watershed curriculum. With each class having about 30 students, the model was used by about 180 kids this fall! It is a great way to help them understand how our watershed functions and how our streams are impacted by our actions.
> Thank you again,
> Kelly
> ---
> Kelly Beck | Education Assistant
> Upper Deschutes Watershed Council

Big THANK YOU from a happy little boy

Imagine being a four year old and hearing bagpipes outside your home. Then all of a sudden a big red fire truck pulls up (see note and photo attached).

Cruz Howitt was this year's winner of a bicycle & helmet drawing held at our Open House event. Thank you to bagpiper Dave Howe, Captain Russell, Captain Dyer and Engineer Ireland for making this a very special occasion for Cruz!

DEQ Material Recovery Report

We received information from the Department of Environmental Quality announcing its Material Recovery Report is available. Information on collection in Deschutes County is attached. Additional information is available at:
www.deq.state.or.us/lq/sw/recovery/materialrecovery.htm

Attachments:

- Future Council Schedule
- CDD Monthly Report
- DEQ Material Recovery Report
- Thank you note to Fire Dept.

Agenda
Bend City Council
May 7, 2014
City Council Chambers, Bend City Hall
710 NW Wall, Bend, Oregon

Light Meal, 4:30 p.m.

City Council Work Session Meeting, 5:00 p.m.

1. **Convene Work Session**

1. **Convene Work Session**

2. **Policy Objectives for Utility Rate Modernization**

3. **Stormwater Master Plan-Project Overview and Preferred Infrastructure Improvement Approach**

   Stormwater Approaches.pdf

   Public Input Summary

City Council Regular Meeting, 7:00 p.m.

1. **Roll Call: Mayor Jim Clinton, Councilor Jodie Barram, Councilor Scott Ramsay, Councilor Mark Capell, Councilor Victor Chudowsky, Councilor Doug Knight, Councilor Sally Russell**

2. **Pledge of Allegiance**

3. Good of the Order

A. Drinking Water Week Proclamation

Proclamation Drinking Water Week.pdf

B. Preservation Month Proclamation

Proclamation Preservation.pdf

C. Tower Theatre Proclamation

Proclamation Tower.pdf

D. Proclamation for Building Safety Month

Proclamation Buildng Safety.pdf

E. Days of Remembrance Proclamation

Proclamation Days of Remembrance.pdf

4. Visitor's Section- 3 minutes per person; when invited to the podium, please state your name and whether you live inside the City of Bend.

5. Consider a Motion to approve the Consent Agenda

A. Approval of Minutes: April 2, 2014 work session April 2, 2014 regular meeting

04-02-14 Bend City Council Work Session.pdf

04-02-14 Bend City Council Regular Session.pdf

B. OLCC Report

OLCC report.pdf

C. Authorize an agreement with Vertical Projects LLC for Supervisory Control and Data Acquisition (SCADA) System Improvements in the amount of $256,500. In December 2010, Vertical Projects was

selected to provide technical assistance and oversight of the work to develop SCADA standards, system analysis, design and implementation for improvements to the SCADA system. Phases I and II of the SCADA project are complete. This work begins the implementation phase of the SCADA work in over a dozen facilities; adding flow metering, pressure sensing, security, computer control, telemetry and other instrumentation to optimize the current water and sewer facilities.

5C IS Vertical Projects Amendment #3 SCADA.pdf

5C Contract Amendment #3.SCADA.Vertical Projects.pdf

End of Consent Agenda

6. **Subcommittee recommendation to appoint Municipal Judge A subcommittee of Councilors Barram, Capell and Chudowsky interviewed six candidates for Municipal Judge. Following initial interviews, three candidates were invited for a second interview. The committee unanimously recommends appointment of Bethany Powers Flint, J.D. to a two-year term as Municipal Judge.**

   Recommended motion: I move to appoint Bethany Powers Flint, J.D. to a two-year term as Municipal Judge, effective June 2, 2014.

   6 IS Muni Judge Rec.pdf

   6 City Charter Section 25 Municipal Court and Judge.pdf

   6 Employment Agreement.pdf

7. **Contract amendment with CH2M HILL for design update and engineering services during construction for the Southeast Interceptor (SEI) schedules F and G. The Southeast Interceptor (SEI) project is a multi-year sanitary sewer pipe line project with several phases. CH2M Hill is the engineer of record of the overall design as well as for the individual phased plan sets.**

   Recommended motion: I move to authorize a contract amendment with CH2M HILL for design update and engineering services during construction for the Southeast Interceptor (SEI) schedules F and G in the amount of $410,233.00 in substantially the form presented to Council.

   7 Issue Summary SEI Amend#7 CH2M Hill.pdf

7 SE Interceptor.PO89250.CH2M Hill Amendment #7.pdf

7 SEI Showing Phases map #1.pdf

7 SEI Schedules F&G map#2.pdf

8. **Agreement with Angelo Planning Group (APG) for planning services for Phase 1 of the Urban Growth Boundary Remand. The City Council developed new goals and an approach to the UGB Remand project in conjunction with the public. This approach was included in a Request for Proposal which was issued in early February. Two proposals were received on March 11. The scoring team selected, and issued a Notice of Intent to Award to Angelo Planning Group on March 21, 2014. Team members include Fregonese Associates, Mary Orton, Leland Consulting Group, ECONorthwest, DKS Associates, MIG, and MetroQuest.**

   Recommended Motion: I move to authorize a contract with Angelo Planning Group for planning services for the Urban Growth Boundary Remand in the amount of $1,100,059 in substantially the form presented to Council.

   8 IS for UGB Remand Contract.pdf

   8 Angelo Group Agreement.UGB Remand.pdf

   8 Notice of Intent to Award.UGB Remand.pdf

9. **Second reading of an ordinance to amend the Bend Code to extend the Affordable Housing Fee and Program Since its inception, this program has loaned out $5,862,817 for development of projects that have provided, preserved or created 371 units of affordable housing. This funding leveraged an additional amount of Federal, State and Private of approximately $ 39,624,000. In addition to the actual units created, the majority of funding has been for construction or renovation of housing, which has created hundreds of family wage jobs in the construction industry.**

   Recommended motion: I move for a roll call vote for the second reading of the Ordinance Amending Bend Code Section 9.40.050 to extend the Affordable Housing Fee for Five Years.

   9 IS aff housing extension.pdf

9 Ordinance aff housing 5 years.pdf

10. Council Action and Reports

A. Committee Reports

11. Receive City Manager's Report

12. Adjourn

Accessible Meeting/Alternate Format Notification

This meeting/event location is accessible. Sign and other language interpreter service, assistive listening devices, materials in alternate format such as Braille, large print, electronic formats, language translations or any other accommodations are available upon advance request at no cost. Please contact the City Recorder no later than 24 hours in advance of the meeting at rchristie@ci.bend.or.us, or fax 385-6676. Providing at least 2 days notice prior to the event will help ensure availability.

This is a past event.

Stormwater Master Plan Workshop

When: Wed., April 9, 5:15 p.m. 2014
Phone: 541-317-3000
www.bendoregon.gov/stormwatermp

The City of Bend is hosting a workshop to provide more information about the Stormwater Master Plan development, and to obtain your input on the infrastructure improvement approach options.

Bend Utilities Annex
60975 Boyd Acres Road
General Bend Area

☎ 541-317-3000
Be the first to review this location!

Tags: Meetings, User Submitted

REVIEWS/COMMENTS

Subscribe to this thread: By Email With RSS

Rating
Roll over stars and click to rate.

Subscribe to this thread

POST COMMENT

MASTER PLAN DRAFT

Your Input is Requested...

The City of Bend is working to complete its first formal Stormwater Master Plan. The 2008 public draft Stormwater Master Plan has undergone significant revision now that additional data has been analyzed and state and federal regulatory requirements have been clearly defined. The revised public draft was released in May and was open for public comment through Monday, June 30 2014. Revisions made as a result of the public comments were incorporated into the City Council draft. A public hearing will be held and City Council will consider adoption of the Stormwater Master Plan at the **August 6, 2014** City Council meeting.

- Bend Stormwater Master Plan (SMP), City Council Review Draft - July 23, 2014
  - Bend SMP, City Council Review Draft Appendices - July 23, 2014
- Response to Public Comments - July 2014
- Revised Public Draft Stormwater Master Plan (RPDSMP)
- RPDSMP Appendices
- Comment Form

Once comments are incorporated, the Stormwater Master Plan will be brought for Council review and decision, anticipated in July 2014. Check back to this website for updates.

Open House Workshops

Two identical workshops were held April 9 and 10, 2014 to provide more information about the Stormwater Master Plan development, and to obtain public input on the infrastructure improvement project approach options. Comments on the approaches that were received by Wednesday, April 30, 2014 were used to help inform the City Council when they provided input on their preferred approach at the May 7, 2014 City Council work session meeting.

- City Council Presentation - May 2014
- Open House Presentation - April 2014
- Stormwater Infrastructure Improvement Approaches

Stormwater Master Plan Draft - Background

In 2006, the City embarked on developing its first formal Stormwater Master Plan. The 2008 public

draft Stormwater Master Plan was rolled out for public review at two public workshops on January 29 and February 5, 2009. Public comments were taken and the comment period on the 2008 public draft was closed.

During the public comment period, members of the public expressed concerns with the high cost and necessity of the draft strategy that was proposed as a direct result of impending permit requirements for the City's dispersed system of drywells and drill holes (underground injection controls). The City anticipated receiving a permit for its underground injection controls (UICs) prior to finalization of the Master Plan. However, the City together with several municipalities throughout the state have collaboratively spent the last several years negotiating science-based permit conditions that have resulted in improved knowledge upon which to make sound requirements. The changes in the final permit requirements were enough to significantly affect the City's proposed strategy for addressing stormwater. The City was issued its UIC permit—one of the first in the country--in May 2013. For efficiency, the City had placed the Stormwater Master Plan project on hold as a prudent measure so that the final permit requirements were reasonable and known prior to adopting a final master plan strategy.

To ensure reasonability, staff have focused their efforts on obtaining a better understanding of the City's current system and processes to help scientifically inform long term policy with regards to meeting regulatory requirements and finalizing the master plan strategy.

Once completed, the Stormwater Master Plan will serve as the oversight plan for addressing stormwater quantity and quality issues. In addition to providing an overall strategy for addressing stormwater concerns, it will provide a delineation of drainage areas and runoff quantities throughout Bend, and programmatic goals for addressing quantity and quality concerns.

The first phase of the Master Plan development project, which included assistance in the development of the financing and utility structure to support the stormwater quantity and quality programs and improved understanding of the City's stormwater system, has been completed.

- Response to Public Comments
- Stormwater Master Plan - Public Draft 2008 - 7.1MB
- Stormwater Flooding Hot Spots
- Stormwater Infiltration Evaluation - GeoTech - 20MB
- Stormwater Problem Area Workshop Notes - January 2007
- Stormwater Master Plan Public Workshop Presentation - February 2007
- Fact Sheet - 2007

Please note, the Stormwater Master Plan should not be confused with the City's *Integrated Stormwater*

Management Plan, which is a separate stormwater-quality-only plan with specific tasks to meet stormwater quality requirements for drainage to surface waters and UICs.

Contact Information

Wendy Edde, Stormwater Program Manager
City of Bend
Public Works Department
575 NE 15th Street
Bend Oregon 97701
(541) 317-3000

NEWS

Stormwater Master Plan

Posted Date: 5/27/2014

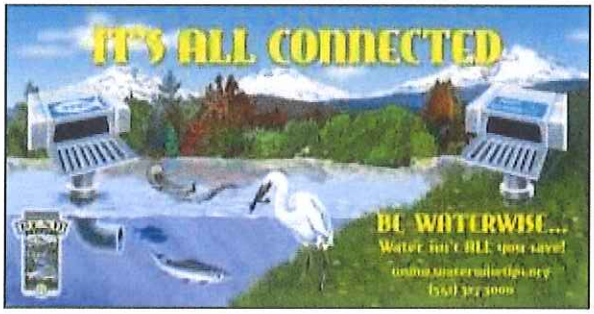
The revised draft Stormwater Master Plan is now available for review and comment. The City of Bend has been working this spring to finalize its first formal Stormwater Master Plan. The Stormwater Master Plan establishes goals and potential solutions to address stormwater quantity and quality issues and needs within the City.

Stormwater is the runoff from hard surfaces such as rooftops, walkways and the streets after a rain storm. In Bend, stormwater either flows to the Deschutes River through our storm drain system or into the ground towards our underground drinking water through dry wells and drill holes.

The City released a public draft of the Stormwater Master Plan in 2008 but decided not to finalize it until receiving an initial permit for underground injection controls (dry wells and drill holes) from the state Department of Environmental Quality in May 2013.

The revisions in the current draft are significant. The City is no longer proposing a piped system. The new, more flexible approaches proposed allow for more targeted improvements and significantly reduced up-front costs. Whereas the 2008 draft estimated 20-year improvement costs of $172-$214 Million in large part due to anticipated regulatory requirements, the revised draft anticipates improvements costs of $25 Million over the same time period.

The City held two public workshops in April to collect input on proposed infrastructure improvement approaches. The results were taken to the City Council in May for input on a preferred approach, and a full revised draft is now available for more public comment. The City Council is expected to consider the plan in July.



For more information on the Stormwater Master Plan including a copy of the revised draft for review and a comment form, please visit the City's website at: bendoregon.gov/stormwatermp, or contact Wendy Edde, Stormwater Program Manager at (541) 317-3018 or wedde@bendoregon.gov.

More News »

Spotlight

Are you a young adult, ages 15-19, who is considering a career as a firefighter/paramedic? **Camp Fire Axe** is waiting for you!

May 27 2014,
Mostly Cloudy, 50°
Bend, OR

News

Stormwater Master Plan
Revised draft is available for review and comment...

Crews to repair cracked pipe at surface water intake facility
Public may notice construction activity adjacent to Tumalo Falls parking area...

Notice of Public Meeting
Bend Airport Fly Friendly program update meeting Wednesday, June 18...

Holiday DUII Enforcement
Local Law Enforcement Agencies devoting time over holiday weekend for DUII enforcement.

Building Safety Division – Review Times
All plan review times vary depending on the scope of work and the quantity and quality of information provided in the plan design.

Safety Belt Enforcement
Local Law Enforcement dedicating time toward safety belt compliance.

Events

BEDAB Meeting
8:00 AM - 10:00 AM

Bend MPO Technical Advisory Committee
10:00 AM - 11:30 AM

City Council Meeting

USEPA Webcast

Building Green Infrastructure, Jobs and Health: The Prince George's County, Maryland Urban Stormwater Runoff Public Private Partnerships (P3) Model

January 13, 2014

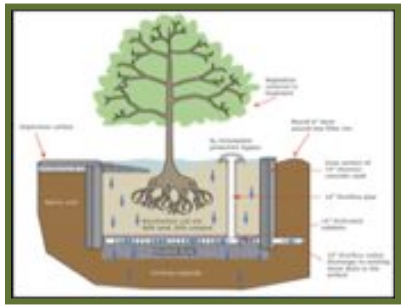
City of Bend

Attendees Sign-In.

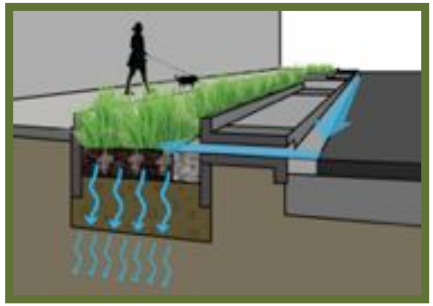
Name	Title
1. Wendy Edde	Stormwater Program Manager
2. Steve Pisarczyk	Water Quality Manager
3. Dull	Stormwater

Prince George's County, MD
Urban Retrofit Public Private Partnership Model
"Building Green Infrastructure, Jobs and Wealth"

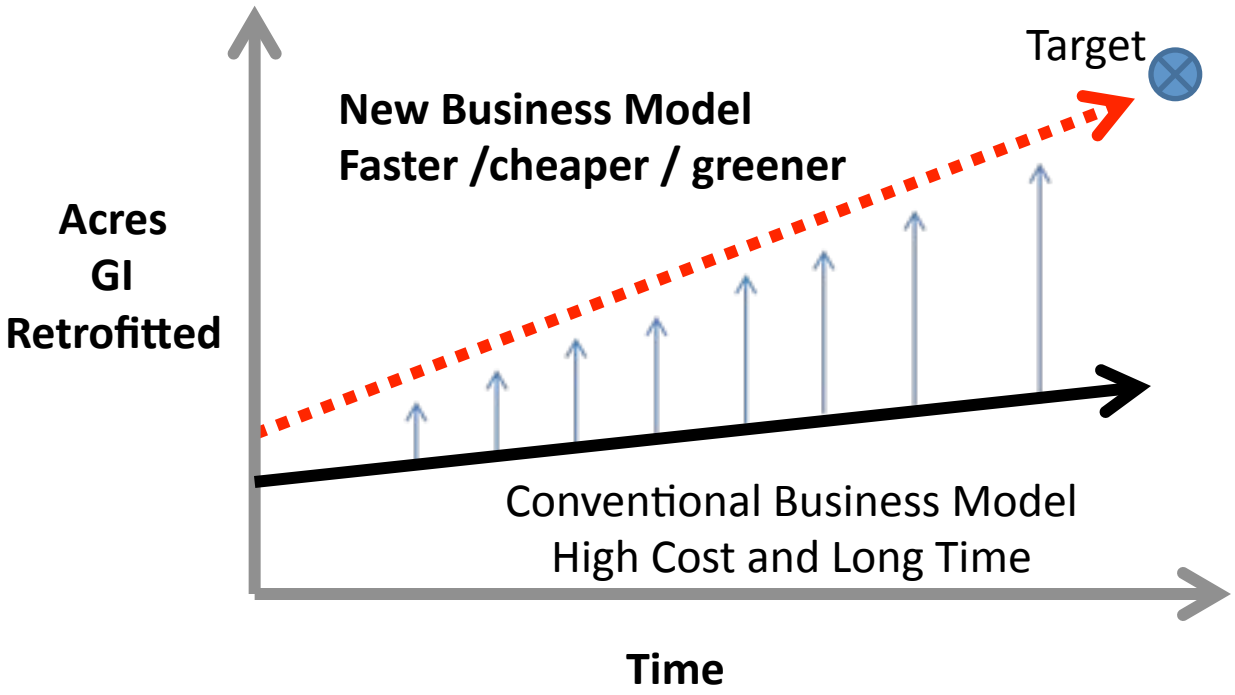
County Executive
Rushern L. Baker, III



- Chesapeake Bay TMDL
- Retrofit 8000 Acres by 2017
- 16,000 Acres by 2025
- $1.2 Billion
- EPA Region III Leadership
- Green Infrastructure (LID)
- Maximum Local Benefits
  - Business Development
  - Jobs
  - Community Wealth



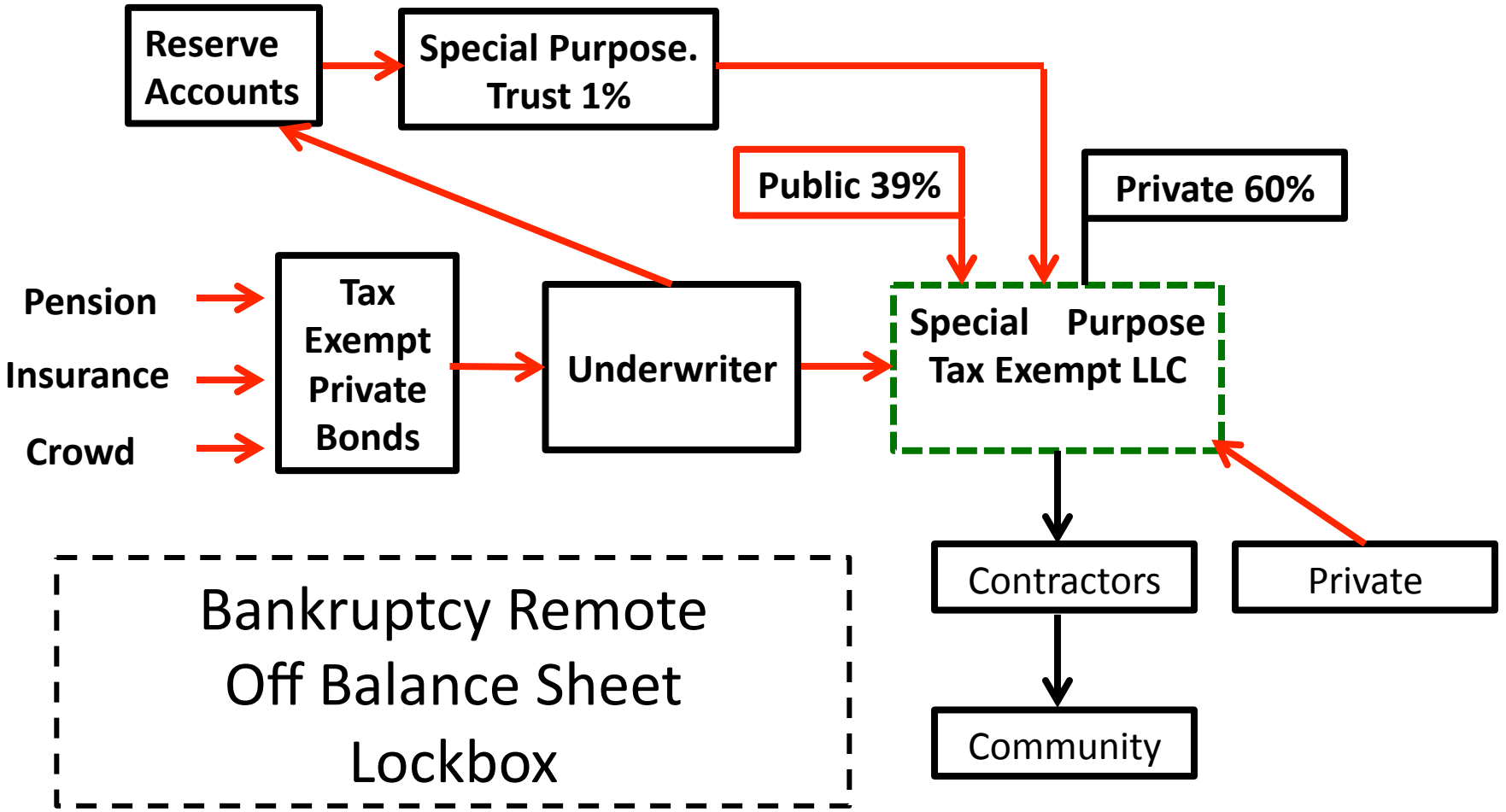
Chesapeake Bay TMDL
Urban Retrofit Cost / Time



Innovation

Financing
Technology
Planning
Procurement
Design
Permitting
Reviews
Construction
Management
Inspection
Enforcement
Tracking
Staffing

Prince George's County P3 Model Innovations



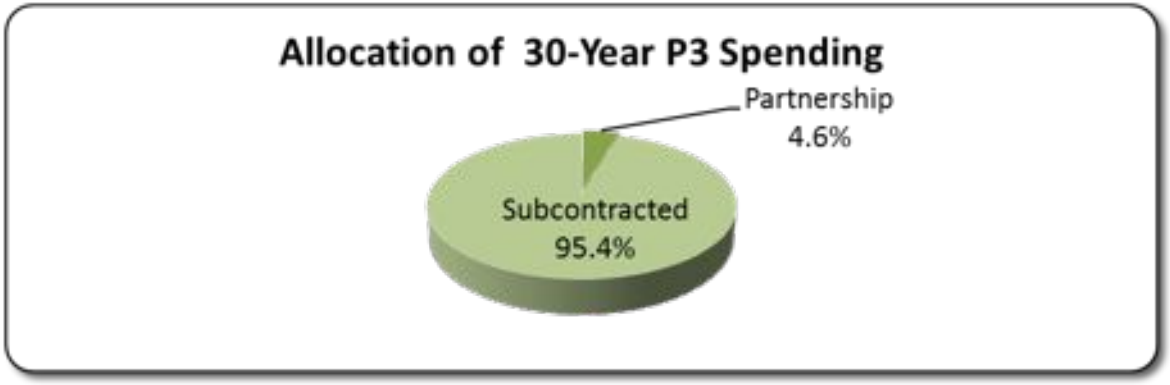
Prince George's County P3 Model Innovations

Government Private LLC

Outreach | Construction | Asset Manag. | Legal | R&D

Engineering | Suppliers | Utilities | Consultants | Nonprofits

Business Development | Community Wealth | Energy | County Programs



1. **Fair Market Fee for Services**
2. **Long-term Revenues**
3. **Grow Community Businesses & Wealth**

BENEFITS / LOCAL GOVERNMENT

- Economic Stimulus
- Community Wealth
- Lower Costs
- Less Staff
- Faster Procurement
- Financing Options
- Shift Risks
- Aligned Goals
- Added Values
- Sustainability

Sustainable Community Based Partnerships

Private

Faith Based Community *
Local Banks and Financing Institutions
Chamber of Commerce *
Professional Engineering Associations
Realtors
Property Manager Associations
Community Environmental Groups
Non-profits (Environmental)
Non-profits (Social)
Home Owner Associations *
Local Entrepreneurs
Contractors
Manufacturers *
Service Providers

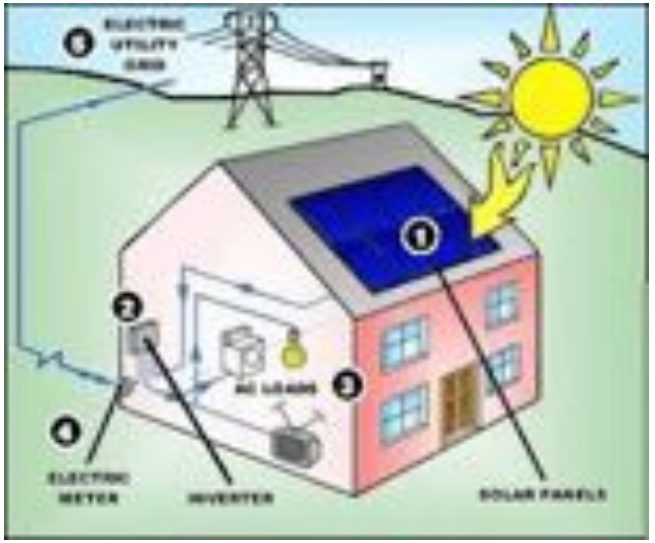
Public

Political Leaders
Central Services
Public Works
Environmental Resources
Management and Budget
Finance
Licenses & Permitting
Human Resources
Information Technology
Schools
Redevelopment Authority
Revenue Authority
State Government
EPA

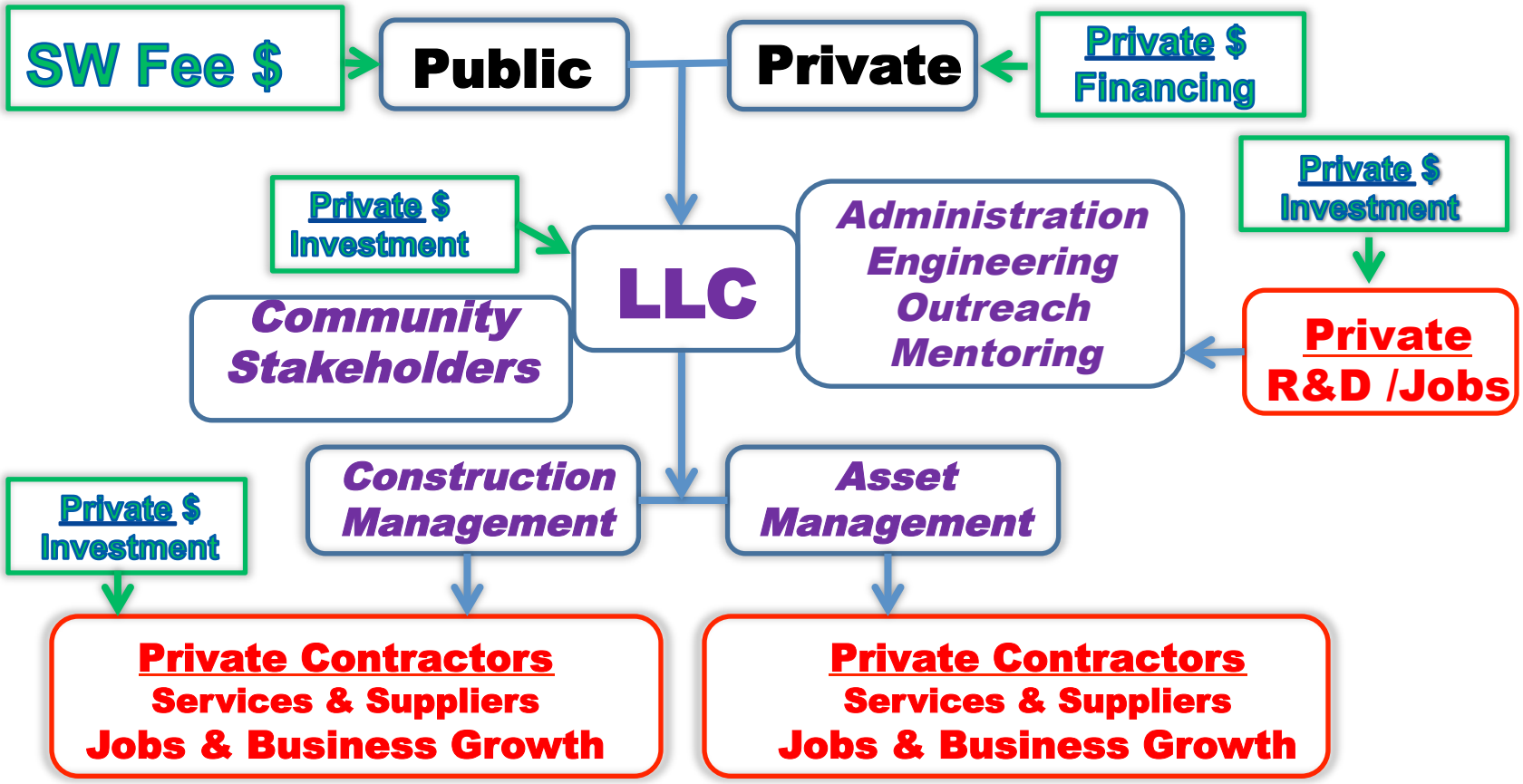
Other Programs Benefits

rain check

BGE SMART ENERGY savers PROGRAM



Prince George's County P3 Model Innovations



Fair Market Fee for Services / Alignment of Public & Private Objectives
Sustainable Long-term Revenues / Grow Community Businesses & Wealth
Stakeholder Transparency / Performance

Stormwater Management Incentives and Public Private Partnerships (Webcast)

February 25, 2014 - 10:00am – 12:00pm

	Name	Signature	Department
1	David Buckman		Storm
2	Wendy Edde	Wendy Edde	Storm
3			
4			
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USEPA's Faster-Cheaper-Greener Webcast Series

Building Successful Community-Based Public Private Partnerships for Affordable Green Infrastructure Urban Stormwater Retrofits

Stormwater Management Incentives and Public Private Partnerships in Philadelphia: Driving Affordable, Green Stormwater Infrastructure Retrofits on Private Properties

Tuesday, February 25, 2014

1:00 – 3:00 pm Eastern Time

Water Environment Federation
the water quality people

Moderator:
Dominique Lueckenhoff, Deputy Director, Water Protection Division, EPA Region 3

Instructors:
Howard Neukrug, Water Commissioner, City of Philadelphia
Erin Williams, Stormwater Credits Program Lead, Philadelphia Water Department

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Today's Webcast

- **Approaches of the City of Philadelphia to encourage green stormwater infrastructure**
  - Stormwater billing credits
  - Grant programs
  - Public Private Partnerships
- **Speakers from Philadelphia Water Department**
  - Howard Neukrug, Water Commissioner
  - Erin Williams, Stormwater Credits Program Lead

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USEPA's Faster-Cheaper-Greener Webcast Series

Building Successful Community-Based Public Private Partnerships for Affordable Green Infrastructure Urban Stormwater Retrofits

Background On The Faster, Cheaper, Greener Webcasts

Stormwater is a Large, Growing Source of Water Pollution

- ***Number one cause of beach closures***
- ***Causes thousands of waterbodies to be listed for impairments.***
- ***Increased volume and velocity of stormwater discharges cause stream bank erosion and loss of aquatic habitat.***
- ***Urban flooding on the rise with significant negative impacts to communities and economies.***
- ***Estimated costs of stormwater retrofits in Chesapeake Bay and around the country – 10's of Billions per year***

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Background On The Faster, Cheaper, Greener Webcasts

The <u>Problem</u> Drives Green <u>Solutions</u> & New Economic Engines!

- *Traditional approaches to treating stormwater runoff have had insufficient results.*
- *Growing local mandates for governments to accelerate implementation of stormwater control measures.*
- *Many communities are opting for more affordable Green Infrastructure (GI) practices, designed to treat & prevent runoff pollution, while assisting with flood management, water demand, urban heat island impacts, along with providing multiple community benefits.*

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Background On The Faster, Cheaper, Greener Webcasts

Definition – Public Private Partnership (P3)

Innovative involvement of the private sector through a "contractual agreement" between a public agency and a private sector entity that allows for the private sector participation in the financing, planning, design, construction, operation, maintenance, rehabilitation and replacement of urban retrofit facilities.

Can reduce costs to government from 20-50+ %

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USEPA's Faster-Cheaper-Greener Webcast Series

Building Successful Community-Based Public Private Partnerships for Affordable Green Infrastructure Urban Stormwater Retrofits

- No shortage of money

*NYC, Philadelphia, Chicago, DC, and hundreds of other municipalities around the U.S. pursuing GI as an alternate to constrained gray infrastructure

*Investment banks, financiers see innovation in stormwater as an emerging market

*Stormwater credit and contract trading markets being established

Good News!

*Areas for Cost Savings

*Procurement
*Permitting
*Design
*Construction
*Maintenance

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Background On The Faster, Cheaper, Greener Webcasts

The EPA Region 3's goal is to highlight partnership framework options with the private sector that support a green industry willing and able to assist local governments and their communities, in the spirit of collaboration, public welfare and trust, to finance, construct, and maintain urban wet weather retrofit programs using Low Impact Development's (LID) decentralized management approaches and sustainable Green Infrastructure (LID/GI) practices.

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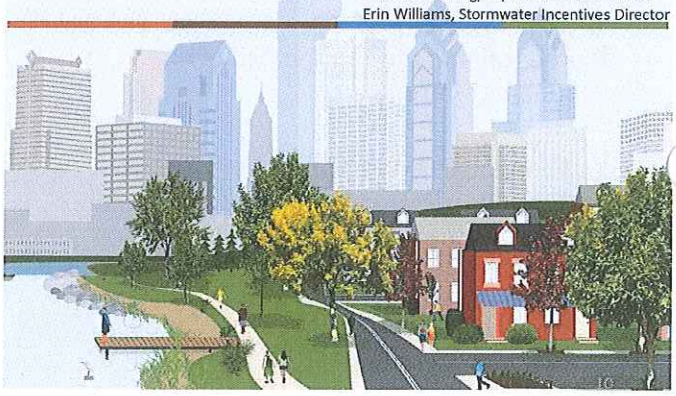
Finding and Funding 10,000 Greened Acres

EPA Webinar
February 25th, 2014

Howard Neukrug, PE, Water Commissioner
Erin Williams, Stormwater Incentives Director



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Philadelphia Water

"A Sustainable Utility in Support of a Sustainable City"

A regional utility:

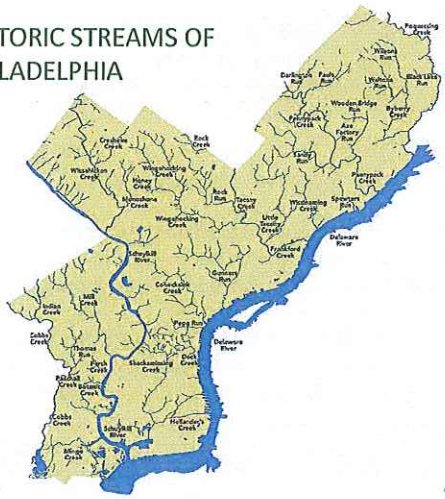
- 2,000 people serving 2 million customers over 200 square miles
- $700 million annual operating budget
- $300 million annual capital budget

Serving all of the region's water needs:

- Drinking water treatment, storage and distribution
- Waste water collection and treatment
- Stormwater management

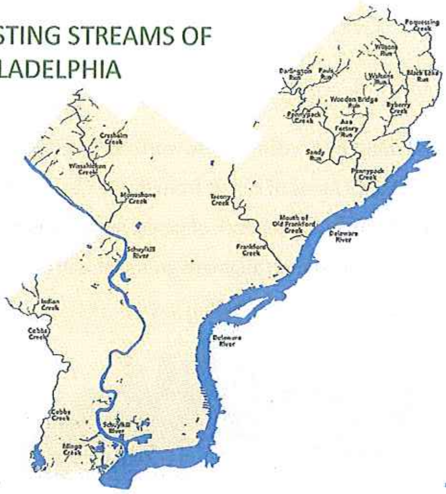
11 PWD

HISTORIC STREAMS OF PHILADELPHIA



12 PWD

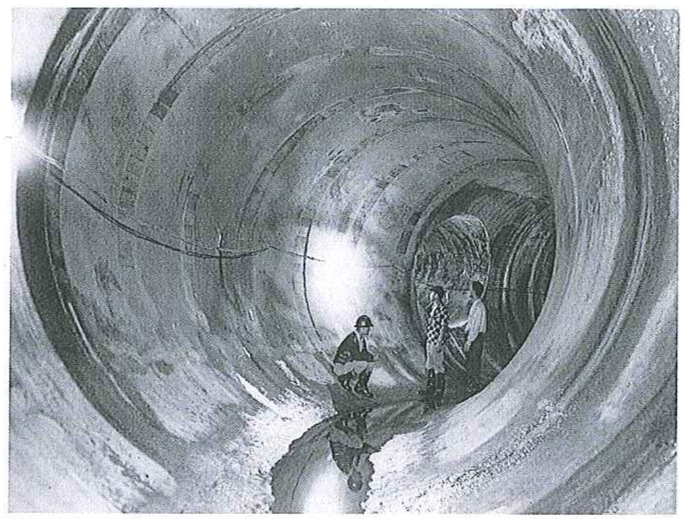
EXISTING STREAMS OF PHILADELPHIA



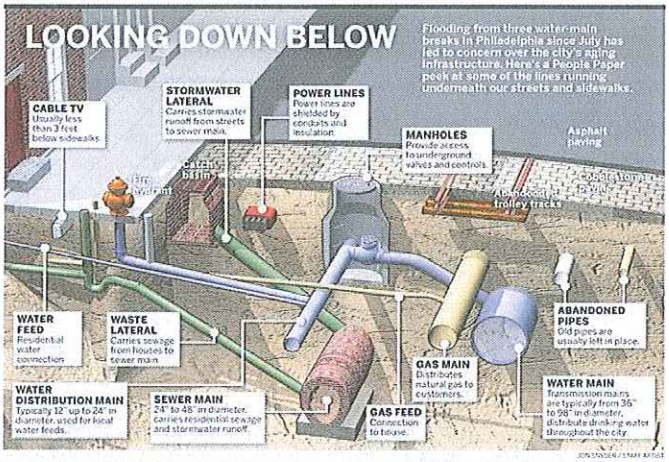
EXISTING STREAMS + MAIN SEWERS

City Sewer System
3000 miles
8" – 24' diameter
2/3 combined sewers
Three sewage treatment plants

Photo Credit: Philadelphia Water Department Historical Collection



Southeast Philadelphia (10th & Moyamensing), photo by Andrew Dobshinsky



Green City, Clean Waters

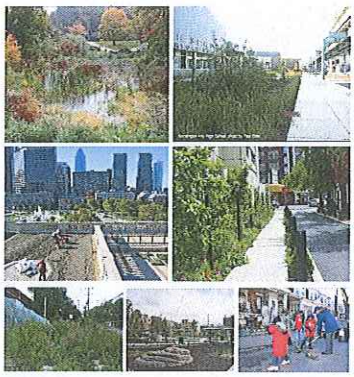
"Philly's cost-effective, multi-benefit approach to managing overflows"

- Turn rainwater into a commodity worth saving, trading, using
- Remove 10,000 Acres of runoff from the sewer system
- Optimize the existing network of pipes, pumps and plants
- Use grey investments to augment green infrastructure
- Achieve 85% Overflow Reduction over 25 years

Green City, Clean Waters
Combined Sewer Overflow (CSO) Long Term Control Plan

One Water, One City, Many Places

- Communities
- Transit
- Rivers & Streams
- Parks
- Schools
- Streets
- Businesses
- Parking lots
- Universities



Green City, Clean Waters
Combined Sewer Overflow (CSO) Long Term Control Plan

Accepted and endorsed by our partners:

- **Regulators:** PA DEP and EPA
- **Non-Profits:** NRDC, Sierra Club, Clean Water Action, The Nature Conservancy, Trust for Public Lands
- **Co-Funders:** US EPA, Rockefeller, Living Cities, and William Penn Foundations

Memorialized by:

- 2011 Consent Order and Agreement (COA) with the PA Department of Environmental Protection
- 2012 Landmark Partnership Agreement and Administrative Order for Compliance on Consent with the US Environmental Protection Agency

Removing 10,000 Acres of Runoff from the Sewer System

Year	Greened Acres	Square Miles	% Impervious cover managed
5	750	1	3%
10	2,100	3	8%
15	3,800	6	14%
20	6,400	10	23%
25	9,600	15	34%

$$GA = IC \times Wd$$

IC: Impervious cover; Wd: Water Depth

Multi-Benefits to Investing in Green Stormwater Infrastructure

- resilience to extreme weather / climate change
- provide green, open space
- advance livability and public health
- increase market values and attractiveness
- reduce stream pollutant loads
- create local, green economy
- support urban renewal
- enhance the infrastructure network
- advance City-wide sustainability programs
- transform river and stream corridors
- preserve and restore habitat
- maximize return on every dollar spent

Financing and Funding 10,000 Greened Acres

- **Traditional Financing**
- Stormwater Development Regulations
- Parcel Based Billing for Stormwater
- Business Incentives
- Green Homes Incentives
- Stormwater Planning Districts
- Small and Sustainable Business Development
- Other areas of interest

Traditional Financing for Green Infrastructure

- A Catalyst for Public Investment – above ground
- Innovate and demonstrate on Public lands and streets
- Set-asides for maintenance
- Funding Sources: Revenue Bonds, Operating Funds, Working Capital, SRF Funding
- Public-Public leveraging of sites, projects and funds
- Coordinated, integrated capital programming

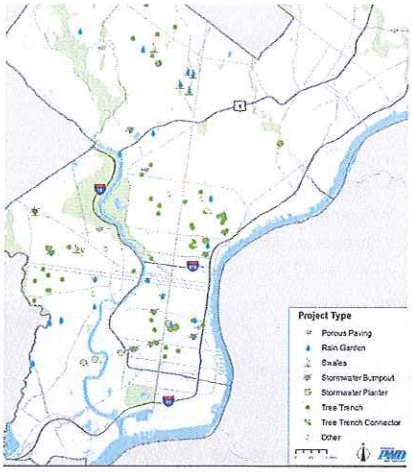
Coordination of Capital Projects

- Goal: marginalize GI costs into the re-design / re-build of public and quasi-public spaces
- Green Streets Manual
  - Water and Sewer Reconstruction
  - Other Public Works Projects in the streetway
- Schools, Parks, Universities, Hospitals
- Industrial Parks, Stadiums, Parking Lots
- Waterfront Development
- Vacant lots, redevelopment districts

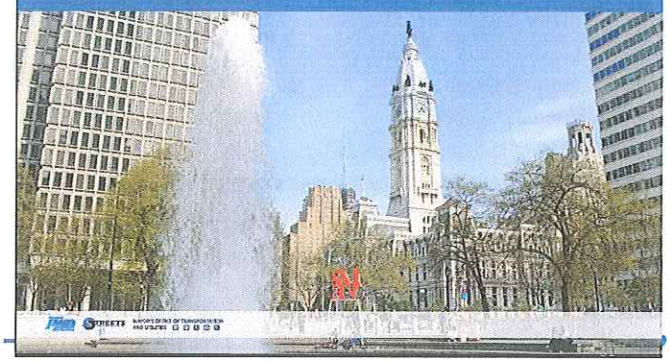
Photo Credit: Pennsylvania Horticultural Society

PennVest (SRF) Low Interest Loan

- $30M PennVest loan
- 5 phases between 2009 and 2014
- 93 Projects
- 200 Blocks
- 90 Greened Acres
- Construction costs $200k to >$1M
- Green Streets Manual
- Contractor Workshops

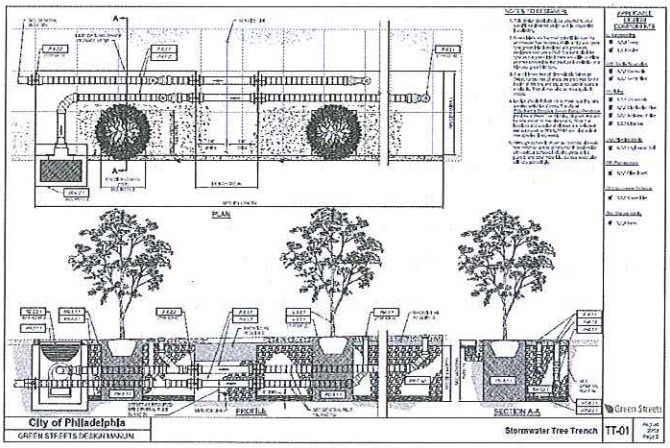


City of Philadelphia Green Streets Design Manual



Mid-block Stormwater Bump-out

Corner Stormwater Bump-out



Financing and Funding 10,000 Greened Acres

- Traditional Financing
- **Stormwater Development Regulations**
- Parcel Based Billing for Stormwater
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Stormwater Development Regulations

Privatizing the Responsibility

- 15K square feet trigger
- Capture of First Inch
- Water quality, quantity and channel protection provisions
- Changes are under consideration
- Goal is > 10 % of impervious cover is re-developed over 25 years

Stormwater Development Regulations

Since 2006,
nearly 500 development projects
have been approved

Managing over **1.5 billion gallons**
of rainfall annually

Financing and Funding 10,000 Greened Acres

- Traditional Financing
- Stormwater Development Regulations
- **Parcel Based Billing for Stormwater**
- Business Incentives
- Green Homes Incentives
- Stormwater Planning Districts
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- Other areas of interest

Parcel Based Billing for Stormwater

Gross Area Charge = $ 1.12 / 1000 sq ft /month
Impervious Cover = $ 9.00 / 1000 sq ft / month

http://www.phila.gov/water/swmap

Credits encourage retrofits

Example:

1 acre parking lot unmanaged = $447 /month

1 acre parking lot managed = $93 / month

($4,200 savings per year)

Financing and Funding 10,000 Greened Acres

- Traditional Financing
- Stormwater Development Regulations
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- **Business Incentives**
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Stormwater Management Incentives

- SW Mgmt Incentives Program :
  - **SMIP Grants** fund design and construction of SW retrofits on private property
- Business Improvement District :
  - **BID Grants** fund feasibility studies for SW management districts
- Project Aggregation

SMIP - SW Management Incentives Program

- Financial assistance for constructing systems that manage private property runoff
- Up to $10 million dollars in SMIP Grant funding is available annually for design and construction
- Grantees are eligible to receive SW billing credits
- Grantees are required to operate and maintain systems funded

- http://www.phillywatersheds.org/what_were_doing/SMIP_Grant

SMIP Facts & Figures

Total Cost to PWD	$10.5 million
Greened Acres	145.6
PWD Cost Per Acre (Not Including Billing Credits)	$69,000

SMIP Expansion

- Public-private partnerships (P3) or pay-for-performance (P4P)
- Expanded funding
- Targeted applications + competitive rounds
- Possible expansion to open enrollment or quarterly applications
- Focus is on developers, multiple parcels and pooled SW Mgmt



Financing and Funding 10,000 Greened Acres

- Traditional Financing
- Stormwater Development Regulations
- Parcel Based Billing for Stormwater
- Business Incentives
- **Green Homes Incentives**
- Stormwater Planning Districts
- Small and Sustainable Business Development
- Other areas of interest

Green Homes and Neighborhoods

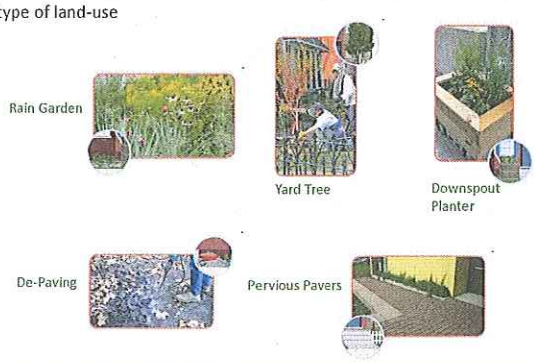
- Residential properties = 20% of the impervious cover
- Strong Civic Capacity/Strong Partners are key
- Pilot: Determine level of interest -> inform city-wide program, if successful
- Metrics and enforcement will be difficult to enforce - 500,000 accounts

rain check

Rain Check Pilot Snapshot

rain check

PWD selected green tools that can be easily installed; tools for every type of land-use



Financing and Funding 10,000 Greened Acres

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- **Stormwater Planning Districts**
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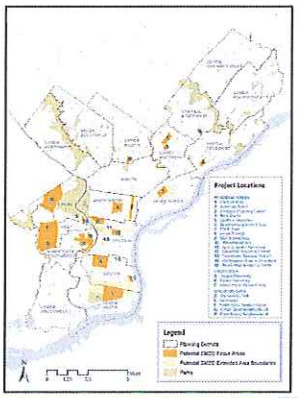
Stormwater Planning Districts

- Centralized Facilities for project clusters
- Leverage funding
- Criteria:
  - > 10 acres
  - multiple programs/partners
- 6 Contracts Awarded: $1.2M
- The Stadium District
- American Street Corridor
- Temple University



Financing and Funding 10,000 Greened Acres

- Traditional Financing
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- **Small and Sustainable Business Development**
- Other areas of interest

Sustainable and Small Business Development

- Outreach and education
- Stakeholder engagement
- Conceptual designs
- Engineering Designs
- Construction
- Inspection
- Operation
- Maintenance
- Reporting

Financing and Funding 10,000 Greened Acres

- Traditional Financing
- Stormwater Development Regulations
- Parcel Based Billing for Stormwater
- Business Incentives
- Green Homes Incentives
- Stormwater Planning Districts
- Small and Sustainable Business Development
- **Other areas of interest**
  - **Market Driven forces**
  - **Seed funding from federal / foundation grants**

IT MAY BE RISKIER TO CONTINUE DOING BUSINESS AS USUAL THAN IT IS TO CHANGE


Maintenance


Maintenance


Maintenance


Maintenance
58


Maintenance
59


Maintenance

Public Outreach and Participation

Public Outreach and Participation

Public Outreach and Participation

Public Outreach and Participation

Public Outreach and Participation

Public Outreach and Participation

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Speaker Contact Information

US EPA Moderator

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Philadelphia Water Department Speakers

Howard Neukrug
Water Commissioner, City of Philadelphia

Erin Williams
Stormwater Credits Program Lead
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Write to:
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ARAMark Tower - 5th Floor
1101 Market Street
Philadelphia, PA 19107-2994

USEPA's Faster-Cheaper-Greener Webcast Series

Building Successful Community-Based Public Private Partnerships for Affordable Green Infrastructure Urban Stormwater Retrofits

Next Faster-Cheaper-Greener Webcast
March 18, 2014, 1:00 – 3:00pm Eastern

Financing Perspectives on Using P3s for Green Infrastructure, Wealth, and Community Resiliency

Leading financing experts from the White House Council for Environmental Quality and successful Global and Local Lending Institutions have been invited to provide an overview of the "how-to's" and "benefits" of financing sustainable stormwater management through the use of innovative P3 market-based approaches to drive community revitalization, growth and development of local businesses and jobs, and improved quality of life.

Registration information will be posted soon at:
www.epa.gov/reg3wapd/watersheds.htm

Water Environment Federation
the water quality people

Waters of the U.S. Proposed Rule

Webcast sponsored by EPA's Watershed Academy

Monday, April 7, 2014
1:00pm – 3:00pm Eastern

Instructors:

Nancy Stoner, Acting Assistant Administrator, Office of Water, U.S. Environmental Protection Agency

Donna Downing, Jurisdiction Team Leader, Wetlands Division, U.S. Environmental Protection Agency

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Today's Webcast

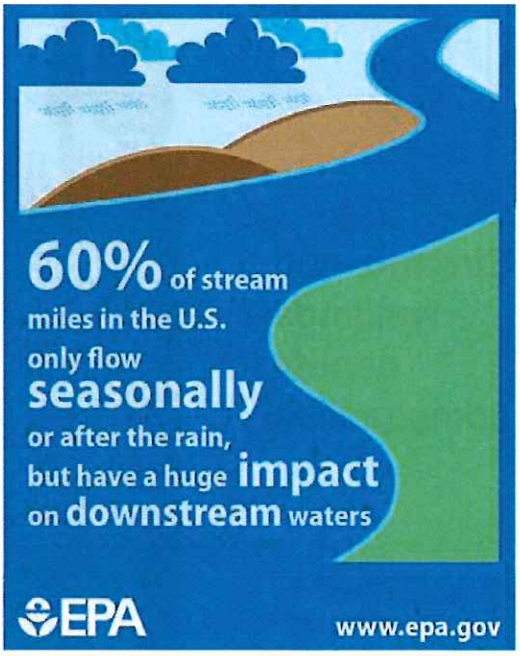
- **"Waters of the US" Proposed Rule**
  - Developed and released jointly by the US Environmental Protection Agency and the US Army Corps of Engineers
  - The proposed rule defines the term "waters of the United States," which describes waters protected by Clean Water Act programs
  - Clarifies protection under the Clean Water Act for streams and wetlands

4

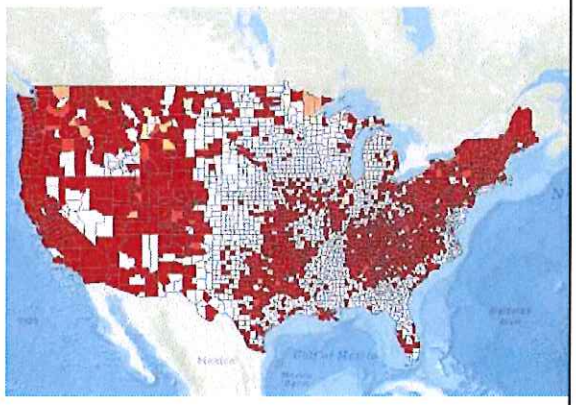
Streams and wetlands benefit communities

Streams and wetlands are economic drivers

Upstream waters impact downstream waters



Streams provide drinking water



Rulemaking was requested by many stakeholders

Congress Industry Public

State & local government Agriculture

Hunters & fishermen Environmental groups

Protection

under the law has been difficult

Drinking Water and Edwards Creek, Texas

Recreation in Lake Blackshear, Georgia

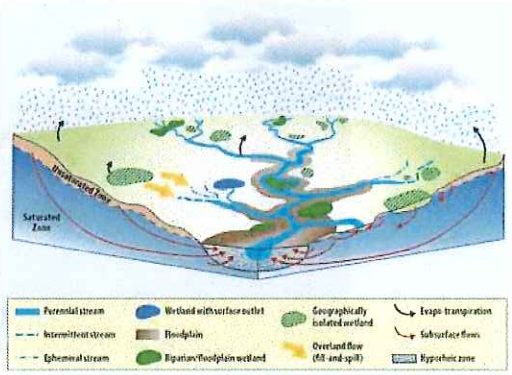
Pollution in San Pedro River, Arizona

Supported by latest peer-reviewed science

Scientific assessment of

1,000+

pieces of literature



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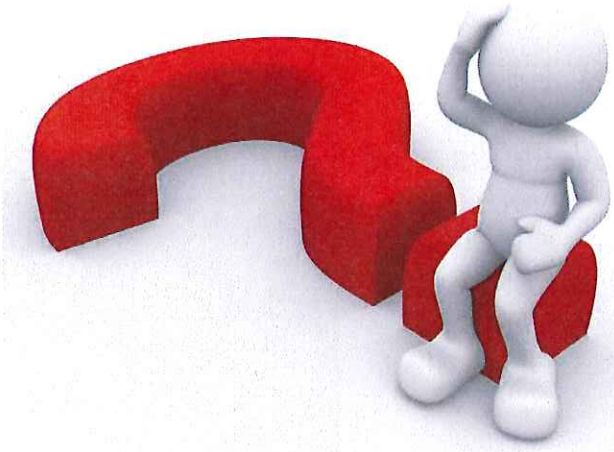
Reduces confusion about Clean Water Act protection



Stream systems are protected

Wetlands near rivers and streams are protected

Other types of waters will be evaluated on a case specific analysis.

Saves Time and Money

Provides More Benefits to Public Than Costs

BENEFITS	COSTS
$388 to $514 million	**$162 to $279 million**
Reducing flooding Filtering pollution Providing wildlife habitat Supporting hunting & fishing Recharging groundwater	Mitigating impacts to streams & wetlands from dredged or fill material Taking steps to reduce pollution to waterways.

Helps states to protect their waters

25

What the Rule Does **NOT** Do

Does **NOT** protect any new types of waters

Does **NOT** broaden historical coverage of the Clean Water Act

Does **NOT** regulate groundwater

Does **NOT** expand regulation of ditches

Does **NOT** remove any exemption currently in the statute or regulations

Input from agriculture community shaped the proposal

USDA

All Exemptions and Exclusions Preserved

- Normal farming, silviculture, and ranching practices.
- Upland soil and water conservation practices.
- Agricultural stormwater discharges.
- Return flows from irrigated agriculture.
- Construction/maintenance of farm or stock ponds or irrigation ditches on dry land.
- Maintenance of drainage ditches.
- Construction or maintenance of farm, forest, and temporary mining roads.
- Artificially irrigated areas that would revert to upland if irrigation stops.
- Artificial lakes or ponds created by excavating and/or diking dry land and used for purposes such purposes as rice growing, stock watering or irrigation.
- Artificial ornamental waters created for primarily aesthetic reasons.
- Water-filled depressions created as a result of construction activity.
- Pits excavated in upland for fill, sand, or gravel.
- Prior converted cropland.
- Waste treatment systems (including treatment ponds or lagoons).

56 conservation practices exempt from dredged or fill permitting

Conservation cover

Wildlife habitat restoration

Wetland enhancement

Riparian forest buffer

Tree/shrub establishment

Stream crossing

Permit not needed for the specific NRCS practices

NRCS
Natural Resources Conservation Service

Questions?

How we got here

The Clean Water Act, Supreme Court cases ,and calls for rulemaking

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The Clean Water Act

- The Clean Water Act covers "navigable waters," which the Act defines as "waters of the United States including the territorial seas."
- The scope of Clean Water Act jurisdiction affects all Clean Water Act programs, including pollutant permitting (§402), permitting for dredged or fill material (§404), and oil spill prevention (§311).
- The Clean Water Act's goal is to protect the physical, chemical, and biological integrity of the nation's waters
- The Act does not define "Waters of the United States," leaving it to the EPA and the Corps to give more detail to the term through rulemaking.
- The current regulatory definition is **essentially unchanged since the** late 1970s

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Supreme Court Decisions

- **Riverside Bayview Homes** (1985): Unanimous decision upholding agencies' regulatory definition including "adjacent wetlands" as waters of the U.S.
- **SWANCC** (2001): Use of waters by migratory birds not sufficient basis for jurisdiction.
- **Rapanos** (2006): Splintered decision provides relative permanence and significant nexus as standards for determining CWA protection.

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About the proposed rule

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WUS Proposal Overview

- Defines "waters of the US" (WUS) for all CWA programs in light of Supreme Court cases.
- Establishes bright line categories for:
  - Waters that are WUS and covered by the CWA.
  - Waters that are not WUS.
- **Retains** existing exemptions.
- For certain issues, poses questions to solicit public comment on options.

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Bright line categories of jurisdictional waters

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Traditional Navigable Waters (TNWs)

- Rule language is unchanged: categorically a water of the U.S.
- TNWs are waters that either carry or have potential to carry commercial navigation, including recreational navigation.
  - When deciding if water has potential for future commercial navigation, among relevant factors are the water's physical characteristics.
- Does not define or affect scope of waters for which states can assume responsibility for CWA section 404 permitting.

Interstate Waters

- Rule language is unchanged: categorically a water of the U.S.
- Proposal and its Appendix B discuss interstate waters, emphasizing they are jurisdictional even if the interstate water is neither a traditional navigable water (TNW) nor is connected to a TNW.
- Supports states' ability to protect against pollution from outside their borders

Territorial Seas

- Rule language is unchanged: categorically a water of the U.S.
- The CWA lists territorial seas as jurisdictional

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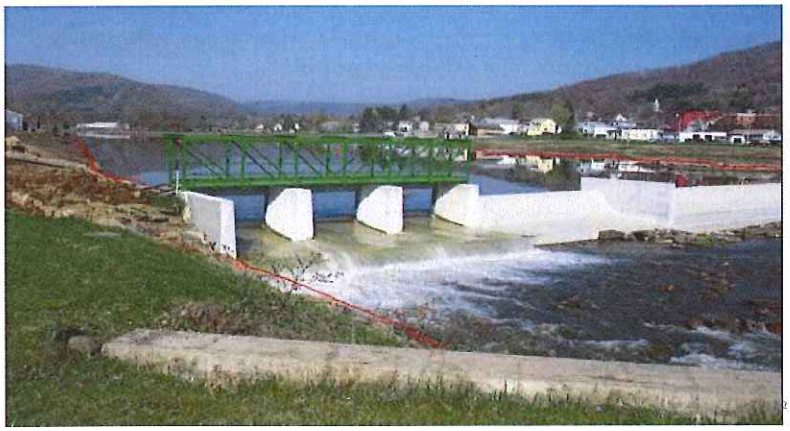
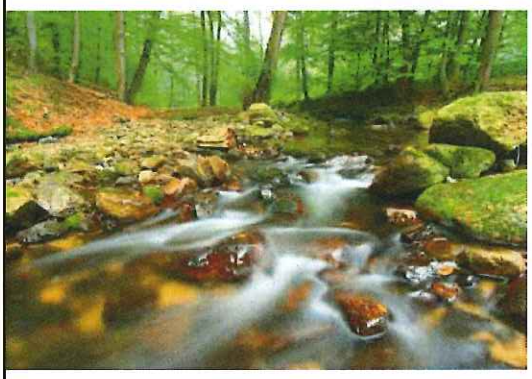
Impoundments

- Proposal indicates impoundments of TNWs, interstate waters, territorial seas, and tributaries are jurisdictional
- Current regulations provide that impoundments of waters of the US remain jurisdictional



Tributaries

- Existing regulations and proposal both consider tributaries to be waters of the U.S.
- Existing peer-reviewed scientific literature supports a conclusion that tributaries categorically have a significant nexus.



- Proposal for first time defines "tributary" –
  - Waters with "bed and banks" and an "ordinary high water mark" (OHWM) that contribute flow to TNW, interstate water, or territorial sea.
  - Wetlands can be a "tributary" if contribute flow even if lacking bed and banks and OHWM.

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Adjacent Waters

- Waters adjacent to TNW, interstate water, territorial sea, tributary or jurisdictional impoundment are waters of the U.S.
- Existing peer-reviewed scientific literature supports a conclusion that adjacent waters categorically have a significant nexus.
- Existing regulations define "adjacent" as "bordering, contiguous, or neighboring." That regulatory definition is unchanged, while proposal defines "neighboring" for the first time.
- Existing regulations include wetlands as "adjacent." Proposal applies adjacency to all waters, thereby clarifying the status of ponds and lakes adjacent to jurisdictional waters.

44

Questions?

45

Waters that require a case-specific evaluation

46

"Other Waters" Including Geographically Isolated Waters

- Waters that do not fall into the categories above are jurisdictional only where case-specific analysis shows that they have a significant nexus to a TNW, interstate water, or territorial sea.
  - "Significant nexus" is test for jurisdiction laid out in U.S. Supreme Court cases.
- A significant nexus analysis considers whether an "other water," either alone or in combination with similarly situated waters in the region, has a significant nexus that is more than speculative or insubstantial.
  - This language is based on Justice Kennedy's opinion in Rapanos
  - Which waters are aggregated during a significant nexus analyses depends on size of the "region" and which waters are "similarly situated."
  - The rule provides EPA's proposed definitions of "region" and "similarly situated"
- EPA's connectivity report suggests that there is a gradient of connection between categories of "other waters" and large rivers and other large waters downstream.

47

Bright line categories of non-jurisdictional waters

48

Waters Not Jurisdictional

- Retains exemptions in CWA or in existing regulations:
  - Prior converted cropland (PCC)
  - Waste Treatment Systems
- Does not affect how these exemptions are implemented

49

Waters Not Jurisdictional, cont.

- Adds to regulations several waters that ongoing practice has considered generally non-jurisdictional, providing additional certainty.
  - Irrigated areas that would revert to upland if irrigation ceased.
  - Artificial lakes or ponds created on dry land and used exclusively for stock watering, irrigation, settling basins, or rice growing
  - Artificial reflecting or swimming pools created on dry land
  - Small ornamental waters created on dry land
  - Water-filled depressions created incidental to construction activity
  - Groundwater, including groundwater drained through sub-surface drainage systems
  - Gullies and rills and non-wetland swales

50

Waters Not Jurisdictional, cont.

- Proposal narrows jurisdiction over ditches somewhat as compared to existing guidance and for the first time would exempt certain ditches by regulation:
- EXEMPTED ARE:
  - Ditches excavated wholly in uplands, draining only uplands, and that have less than perennial flow.
  - Ditches that do not contribute flow, either directly or through other waters, to a traditionally navigable water, interstate water, or territorial sea.

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Waters Not Jurisdictional – Important Points

- Waters listed as non-jurisdictional cannot become jurisdictional even if they have a significant nexus.
- Non-jurisdictional waters may serve as a hydrologic connection for purposes of determining adjacency or a significant nexus analysis.

52

Questions?

53

Comparison of Existing Regulations and Proposed Rule

Existing Regulatory Definition of WOUS	Draft Proposed Rule
Includes all traditional navigable waters	Same
Includes all interstate waters	Same – clarify that interstate waters are treated as TNW
Includes all tributaries	Tributaries that meet the regulatory definition of tributary are jurisdictional *per se. Explicitly recognizes non-jurisdictional ditches*

54

Comparison of Existing Regulations and Proposed Rule

Existing Regulatory Definition of WOUS	Draft Proposed Rule
Includes all wetlands adjacent to a jurisdictional tributary	All waters that meet the regulatory definition of "adjacent" are jurisdictional *per se*. Covers all adjacent waters, not just wetlands.
Includes "other waters" (e.g., geographically isolated wetlands) with an effect on interstate commerce (e.g. wetlands used for recreation, fishing, industrial purposes). Most "other waters" jurisdictional before 2001.	Other waters included where they have a significant nexus to a traditional navigable water. Other waters may be aggregated where they perform similar functions and located close together in the same watershed.

55

Comparison of Existing Regulations and Proposed Rule

Existing Regulatory Definition of WOUS	Draft Proposed Rule
Regulation does not define "tributary"	Defines "tributary" based on presence of bed and bank and "ordinary high water mark." Also defines "significant nexus," "neighboring," "floodplain," and "riparian area"
Regulation excludes jurisdiction over waste treatment systems and prior converted croplands	Same
Regulation does not identify features that are never jurisdictional	Includes list of features that are not jurisdictional including erosional features, upland ditches, rills, non-wetland swales

56

Costs and Benefits

57

Provides More Benefits to Public Than Costs

BENEFITS	COSTS
$388 to $514 million	$162 to $279 million
Reducing flooding	Mitigating impacts to streams & wetlands
Filtering pollution	Taking steps to reduce pollution to waterways.
Wildlife habitat	
Supporting hunting & fishing	
Recharging groundwater	

58

Costs and Benefits

- **The costs and benefits are indirect.** Any direct costs and benefits come as other Clean Water Act programs are implemented, not from changing the definition of "waters of the US."
- **All Clean Water programs affected by the rule are considered in the estimated costs and benefits.** These programs included 303, 311, 401, 402, and 404.
- **The analysis**
  - **Includes consideration of aggregation** – in other words, for considering the cumulative effects of similar other waters in a watershed on downstream waters.
  - **Accounts for the possibility that confusion has led some people not to apply for permits where in fact they must.**

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Benefits and Efficiencies Outweigh Costs

- Restores CWA protection to some water bodies
- More clearly and accurately implements the SWANCC and Rapanos decisions
- Benefits habitat overall, especially headwater and ephemeral water bodies, and some "other waters"
- Clearer requirements should help expedite some aspects of permit evaluations (JDs, impact assessment, compensatory mitigation planning)
- Establishing policy via regulatory revision best assures consistent national implementation/fairness
- Prevents costs of repairing damage caused by unchecked pollution (such as drinking water filtration and stream restoration)

60

Science runs through it

61

Science Report

- Review and synthesis of the published, peer reviewed scientific literature on the "connectivity" of waters
- Findings:
  - Following categories clearly demonstrate connections and effects on downstream waters:
    - All tributaries, regardless of size or flow
    - Wetlands and open waters in riparian areas and floodplains
  - Currently insufficient information exists to generalize about the connectivity or downstream effects of "geographically isolated" waters
- Status:
  - Peer-reviewed draft now undergoing additional SAB review
  - Recent release of SAB panel comments; teleconferences soon

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63

Public input was considered

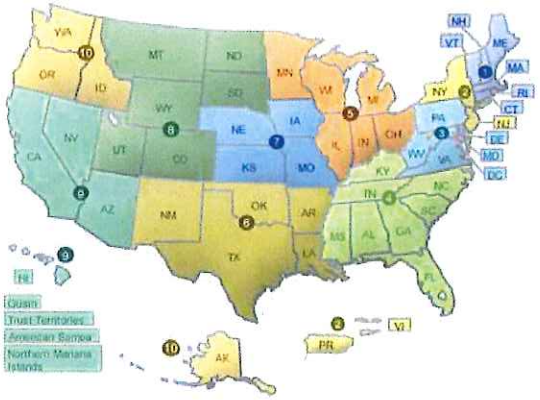
4+ years of dialogue

415,000 comments

Dozens of stakeholder meetings and listening sessions

64

Outreach is underway across the country



65

Want Comments and Input on Proposed Rule

90 day public comment period

66

For more, see

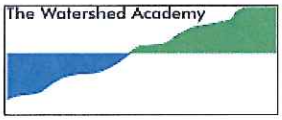
www.epa.gov/uswaters

67

Questions?

68

Next Watershed Academy Webcast



Living Shorelines
May 2014

Information will be posted at
www.epa.gov/watershedwebcasts

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Participation Certificate

If you would like to obtain participation certificates **type the link below into your web browser:**

http://water.epa.gov/learn/training/wacademy/upload/2014-04-07-certificate.pdf

You can type each of the attendees names into the PDF and print the certificates.

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ISWMP 2022 Performance Standards

Corporation Yards (See Chapter V.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
GENERAL STANDARDS/ TRAINING	1	Prepare and maintain a current Corporation Yard Stormwater Pollution Prevention Plan (SWPPP).				July 1, 2014	Developed 3/7/11 review and update scheduled in FY2014-15
	2	Prepare spill containment kits and store them in locations that have potential for spills (e.g., fueling areas, etc.). Conduct training annually, or as appropriate, on how to use the kits.				July 1, 2015	
	3	Mark or stencil inlets to the storm drainage system with a "protect our waters-no dumping"-type message.				July 1, 2015	
	4	Survey the facility annually for compliance with the performance standards. Any performance standard that has not been implemented will be identified in the annual report, along with a schedule for implementation.				July 1, 2016	
	5	Post educational materials about these performance standards and best management practices in appropriate areas.				July 1, 2016	
	6	For each corporation yard, assign one person the primary responsibility for ensuring that performance standards are implemented and that all persons using the facility are aware of these performance standards.				July 1, 2016	
	7	Describe activities conducted to educate staff regarding the performance standards in the annual report.				July 1, 2017	
GENERAL HOUSEKEEPING	1	Dispose of often, material removed from streets and storm drainage facilities to eliminate exposure to rainwater and runoff to the storm drain system.				July 1, 2014	
	2	Keep chemical storage areas neat and orderly				July 1, 2014	
	3	Inspect the yard at least semiannually to ensure that there are no illicit discharges to the storm drain system. Train employees to report potential pollutant discharges when noticed to ensure pollutant discharges are controlled to the MEP.				July 1, 2016	
	4	Sweep the corporation yard at least bimonthly				July 1, 2016	
	5	Stockpile materials away from streets, gutters, storm drain inlets, or water channels when possible.				July 1, 2019	
REFUSE HOLDING AREAS	1	When materials removed from storm drainage facilities are stored on site, store the materials on a concrete pad or other type of impermeable material away from storm drainage facilities. Use covers or other methods as appropriate to prevent blowing away of debris. Drain wastewater to the sanitary sewer, only upon approval from the local sanitary sewer agency, or allow to evaporate to prevent discharges to the storm drain system. Dispose of the material at an appropriate facility.				July 1, 2015	
AUXILIARY STORAGE AREAS/YARDS	1	Store chemicals in appropriate areas to prevent pollutant discharge to the storm drains.				July 1, 2014	
CHEMICAL STORAGE	1	Keep all containers containing hazardous materials or waste closed when not filling or emptying. Properly label containers using the NFPA or HMIS system (or other appropriate system as approved by City management). Protect the storage area from vandalism				July 1, 2014	
	2	Review the Spill Prevention Plan and/or other appropriate materials (e.g. MSDS) for hazardous materials storage requirements.				July 1, 2016	
	3	Store paint and other chemicals in an approved covered containment area. Design the floor so that spilled materials will be contained and easily removed.				July 1, 2017	
	4	If any material containers (not limited to hazardous material containers) are stored outside, keep the containers in a contained area that prevents discharge to the storm drain system from spills or exposure to rain. Ensure that all the containers are closed with tight-fitting lids. Design the area to prevent "run-on" of stormwater and runoff of spills.				July 1, 2017	
	5	When never-before-used materials are purchased, review the Material Safety Data Sheet (MSDS) to ensure that incompatible materials have the appropriate separation.				July 1, 2017	
CHEMICAL USAGE	1	Ensure that necessary safety equipment and spill containment kits are readily accessible in areas where chemicals are used. Inspect safety equipment (e.g., eye wash) regularly to ensure they are operational.				July 1, 2014	
	2	Review MSDSs.				July 1, 2014	The City subscribes to a MSDS website for quick access.
	3	Minimize use of chemicals. Use water-based paints and non-toxic chemicals as much as possible.				July 1, 2014	

ISWMP 2022 Performance Standards

Corporation Yards (See Chapter V.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
CHEMICAL USAGE	4	Recycle or dispose of excess chemicals at an approved local Household Hazardous Waste Facility or other approved location, or via an appropriate contractor who handles and disposes of materials properly.				July 1, 2014	
	5	Ensure chemical containers have secure lids and are secured properly to the vehicle during transport.				July 1, 2014	
	6	Properly remove any soils contaminated with spilled materials				July 1, 2014	
Oil-based Paints	1	Wipe paint out of brushes. Filter and reuse thinners or dispose of as hazardous waste. Dispose of the excess paint as hazardous waste or recycle. If there is too much paint to dry, recycle the paint or dispose of properly.				July 1, 2014	
Water-based Paints	1	Rinse paint out of brushes and discharge rinse water to the sanitary sewer. Recycle or dry excess paint in cans and dispose of the cans in the trash. If there is too much paint to dry, recycle the paint or dispose as hazardous waste.				July 1, 2014	
Automotive Fluids	1	Collect used fluids and recycle or dispose at an appropriate facility.				July 1, 2014	
Pesticides	1	Refer to the State of Oregon pesticide applicator requirements for pesticide mixing, application, storage and disposal requirements.				July 1, 2014	
	2	Consider using integrated pest management methods. Given a choice, use the least toxic pesticides and herbicides that will accomplish the job.				July 1, 2014	
	3	Apply pesticides at appropriate times to maximize their effectiveness and minimize their potential to run off.				July 1, 2014	
	4	Mix only as much pesticide as needed. Do not mix or load pesticides next to storm drain inlets or watercourses.				July 1, 2014	
Solvent/Cleaning Solutions	1	Properly recycle or dispose of used solvents/chemicals				July 1, 2014	
WASHING VEHICLES/ EQUIPMENT	1	Clean all vehicles/equipment on designated wash areas that discharges washwater to landscaping, the sanitary sewer or recycling system. (Wash areas might be off-site to ensure discharge to the sanitary sewer or recycling system.)				July 1, 2015	
	2	Ensure wash area and sump (if applicable) are large enough so that all washwater drains to the sanitary sewer or recycling system. If necessary, re-grade area or install dikes to convey the washwater.				July 1, 2015	
	3	Visually monitor the wash area to make sure it is consistently used.				July 1, 2015	
FUEL DISPENSING AREAS	1	Store spill containment kits nearby. If spill occurs, use dry methods to clean and follow procedures in the Hazardous Materials Business Plan and/or Spill Prevention Plan.				July 1, 2014	
	2	Train employees in proper fueling, cleaning, and spill response procedures				July 1, 2014	
	3	Discourage mobile fueling. If mobile equipment is fueled with a mobile fuel truck, have spill kits available and choose an area away from storm drain facilities, sanitary sewer systems, and waterbodies for fueling.				July 1, 2014	
	4	Design new fueling area(s) to prevent "run-on" of stormwater and runoff of spills				July 1, 2014	
	5	Install signs reminding people not to "top off" tanks				July 1, 2018	
	6	Consider covering fuel dispensing areas. Prohibit fueling over open ground; ground should be covered by concrete or asphalt protected with a sealant.				July 1, 2018	
FLEET MAINTENANCE/VEHICLE PARKING AREAS	1	Inspect equipment for leaks on a regular basis. Use drip pans under leaking vehicles. Repair vehicles with significant leaks.				July 1, 2014	
	2	Drain and replace motor oil and other fluids in a covered shop area. If fluids are changed outdoors, designate an area where there are no connections to the storm drains, watercourses, or the sanitary sewer. Select a designated area where spills can be easily cleaned up or drain to a closed pan and return to shop for proper disposal.				July 1, 2014	
	3	Periodically dry sweep the area.				July 1, 2014	
	4	Schedule outdoor repair activities for dry weather, if possible. Prevent repair supplies or work material from entering storm drains or watercourses				July 1, 2014	
	5	Clean equipment as it comes in for repairs using proper collection and disposal methods when necessary. Inspect equipment as it comes in for routine maintenance and clean if needed.				July 1, 2015	

ISWMP 2022 Performance Standards

Illicit Discharge Control (See Chapter V.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
PREPARE FOR ILLICIT DISCHARGE SCREENING AND INVESTIGATIONS	1	Receive information on non-stormwater discharge reports;				July 1, 2014	
	2	Assure that needed follow-up, elimination, and cleanup of illicit discharges are conducted;				July 1, 2014	
	3	Provide other staff with information about the status of source identification and elimination. In particular, staff who identify an illicit discharge will be informed about its outcome;				July 1, 2014	
	4	Make sure required reporting is completed;				July 1, 2014	
	5	Distribute information to the City's management and elected officials, as requested, about the resources needed to implement these performance standards;				July 1, 2014	
	6	Facilitate the implementation of these performance standards; and				July 1, 2014	
	7	Be responsible for sharing activities and findings with the Stormwater Coordinators				July 1, 2014	
	8	Train at least biennially City staff who maintain and repair the municipal storm drain conveyance system. Train other municipal staff who conduct field work where illicit discharges are likely to occur, to recognize illicit discharges and the procedures for responding to these discharges. Train all new staff who fill positions as described above, about illicit discharge recognition and response procedures.				July 1, 2014	
	9	Keep maps of the completed municipal storm drain system sufficiently accurate to be used for tracing illicit discharges.				July 1, 2014	
	10	Train City staff assigned to conduct illicit discharge investigations on the knowledge and skills necessary to be effective. They will be familiar with guidance developed by the City and DEQ staff and these performance standards				July 1, 2015	
CONDUCT FIELD SCREENING	1	Begin program to identify evidence of illicit discharges to the municipal storm drain conveyance system, using municipal maintenance and other local field staff while they are conducting their routine work. Report any evidence of illicit discharges identified during these field screening activities to the Stormwater Program Manager or designee for follow-up.				July 1, 2015	
CONDUCT FIELD INVESTIGATIONS	1	Verify whether an illicit discharge has occurred, using information provided as part of field screening and complaints received from the public or other agencies. The goal will be to initiate follow-up activities within twenty-four business hours from the time the Stormwater Program Manager receives the report.				July 1, 2016	
	2	When an illicit discharge has occurred, find the source and eliminate it, as soon as possible. Trace the source(s) of the illicit discharge using storm drain maps, inspecting manholes, and making surface observations. Record and maintain findings, as appropriate.				July 1, 2016	
	3	Continue to inspect and follow-up illicit discharges until: a. The source of the illicit discharge is found and eliminated1; or b. The discharge has stopped and cannot be traced to a source				July 1, 2016	
	4	If the City identifies three or more illicit discharges in a fiscal year within an area served by any major outfall or a UIC within a two year time of travel or wellhead protection area, additional illicit discharge investigations will be conducted in the area(s) served by the major outfall(s)/UIC during the subsequent fiscal year or sooner. These additional investigations will include one or more of the following, as appropriate: a. Periodic above ground surveillance of the area for visual evidence of illicit discharges; b. Additional inspections of businesses, if appropriate; c. Additional periodic investigations of outfalls, UICs, waterbodies, and open channels for evidence of illicit discharges; and/or d. Additional targeted educational outreach in the area.				July 1, 2018	

ISWMP 2022 Performance Standards

Illicit Discharge Control (See Chapter V.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
FOLLOW-UP TO FIELD SCREENING AND INVESTIGATIONS	1	When a party responsible for an illicit discharge is found, provide the responsible party with: a. educational information about the impacts of his or her actions, b. the requirements of the local stormwater ordinance, c. options for proper discharge or disposal, and/or				July 1, 2014	
	2	If the discharge is traced to a business, the Stormwater Program Manager, or delegated staff, will distribute appropriate educational and BMP information.				July 1, 2014	
	3	The goal of follow-up investigations will be to stop the illicit discharge(s) as soon as practicable and protect water quality to the maximum extent practicable.				July 1, 2014	
	4	Begin enforcement procedures, if appropriate, as per the enforcement authorities as set forth in the City's municipal ordinances.				July 1, 2016	
	a	Investigate and record reported spill reports and/or complaints about incidents within the City.				July 1, 2014	
	b	Become familiar with existing spill prevention, containment, response, and clean-up programs that cover the city's jurisdiction.				July 1, 2014	
	c	Coordinate illicit discharge prevention, elimination, and clean-up activities with existing programs				July 1, 2016	
	d	Establish a mechanism for obtaining information about spill incidents from other agencies and departments within the municipality so that source identification and follow-up activities can be coordinated.				July 1, 2016	
DOCUMENT AND REPORT COMPLETION	1	Document the number and types of illicit discharge incidents reported and follow-up investigations conducted within the agency's jurisdiction. (This does not include information from fluid spills from automobile accidents.)				July 1, 2014	
	2	Collect information for annual reporting including: a. Number of illicit discharges identified as part of staff investigations; b. Number of illicit discharge reported by other city staff and the public; and c. Follow-up activities.				July 1, 2016	

ISWMP 2022 Performance Standards

Lifespan Operation and Maintenance Verification (See Chapter VII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
TARGETING INSPECTIONS TO ACHIEVE THE MOST BENEFIT	1	Develop and update as needed, an operation and maintenance review plan or standard operating procedure (SOP) that describes the following: a. The inspecting divisions/department. b. The division/department that will conduct the stormwater follow-up and/or enforcement. c. How information and resources will be coordinated among agencies/departments. d. Priorities for inspecting stormwater facilities. Identify target businesses, if any, with high potential to discharge pollutants to the municipal storm drains or within wellhead protection areas. e. Proper recordkeeping procedures.The O&M review plan or SOP shall be tailored to the amount of staffing and financial resources available given program priorities.				July 1, 2014	
	2	Educate business owners and operators about stormwater pollution prevention, separate from the inspection program.				July 1, 2015	
	3	Respond to complaints or referrals from others about a facility. The response may include actions such as: a. Interviewing the caller concerning the specific nature of the problem; b. Referring the caller to the DEQ staff for compliance questions concerning the State requirements (i.e., 1200 Z permit, etc.). c. Referring the caller to another agency if the facility is outside the City's jurisdiction; d. Calling the facility and providing appropriate BMP information. For substantive complaints not covered above, schedule a facility inspection or site visit as soon as possible.				July 1, 2015	
	4	Inspect and distribute appropriate BMP information to businesses per the operation and maintenance review plan priority. Frequency of inspection should be commensurate to the businesses' potential to flood or discharge pollutants to City facilities and available staffing levels.				July 1, 2016	
	5	Re-evaluate the City's priorities for operation and maintenance of permanent stormwater facilities. Update the operation and maintenance review plan as needed. Coordinate with other city inspectors (e.g,, IPP or fire) to coordinate and minimize the number of inspections per business.)				July 1, 2018	
PREPARING FOR INSPECTIONS	1	Train appropriate City facility inspectors so that each inspector possesses the knowledge and skill necessary to conduct effective stormwater inspections. This includes identifying potential pollutant sources that may be exposed to stormwater runoff and non-stormwater discharges to the storm drains.				July 1, 2015	
	2	The appropriate City's inspection staff will be responsible with being knowledgeable about the following: a. Stormwater regulations and requirements, including the City's ordinance and applicable state permits; b. Impacts of non-stormwater discharges to the river. surface water and groundwater; c. Inspection techniques and procedures; d. Follow-up and enforcement procedures; and e. Stormwater BMPs. The inspectors and managers will obtain periodic training to support inspection activities and to continue to improve program implementation.				July 1, 2015	
CONDUCTING INSPECTIONS	1	Inspectors will review the facility layout to locate the storm drain system and/or stormwater drainage path.				July 1, 2016	

ISWMP 2022 Performance Standards

Lifespan Operation and Maintenance Verification (See Chapter VII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
CONDUCTING INSPECTIONS	2	Inspectors will review/inspect the following areas, if access to the area is safe and drains to a stormwater management facility or area from which stormwater flow may ultimately leave the site. a. Outdoor process/manufacturing areas; b. Outdoor material storage areas; c. Outdoor waste storage/disposal areas; d. Outdoor vehicle and heavy equipment storage and maintenance areas; e. Outdoor parking areas and access roads; f. Outdoor wash areas; g. Surface discharge outlets from rooftop equipment; and h. Outdoor drainage from indoor areas. i. The status of onsite stormwater facilities. These areas will be inspected for 1) their need for maintenance; 2) their potential to discharge pollutants from non-stormwater discharges to public facilities, and 3) pollutant exposure to stormwater.				July 1, 2016	
	3	Inspectors will notify the Stormwater Program Manager of potential to discharge pollutants from non-stormwater discharges, and pollutant exposure to stormwater from a business.				July 1, 2016	
	4	When a business that impacts stormwater quality is identified, the City 's Stormwater Program Manager will either be responsible for conducting, or delegating, the following: a. Communicate stormwater requirements. b. Distribute facility representatives with appropriate stormwater BMP5 information, educational materials, and inter/intra-agency referrals as needed. Ask the facility representative whether employees have been trained about how to prevent stormwater pollution. c. Inform the facility representative of any problems or violations found. A schedule for correcting problems identified during the inspection, and a means for verifying their implementation will be discussed with the facility representative. This information will be noted and tracked. d. Document and track inspection activities, follow-up, and enforcement activities for reporting to the DEQ in annual reports.				July 1, 2016	
ACHIEVING FACILITY COMPLIANCE	1	If a problem is identified during an inspection, the Stormwater Program Manager will either be responsible for performing, or delegating a follow-up site visit or initiating a self-certification process where the facility representative certifies in writing that the problem has been remedied within the time specified by the Stormwater Program Manager.				July 1, 2019	
	2	Begin enforcement procedures, if appropriate, as per the enforcement authorities as set forth in the City's municipal ordinances.				July 1, 2019	

ISWMP 2022 Performance Standards

Litter Control (See Chapter VIII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
SERVICES	1	Pick up litter receptacles located on City-owned property on a frequent enough basis to minimize or prevent spillage.				July 1, 2014	
	2	Provide an adequate number of litter receptacles on City-owned property. The City will make every effort to contain litter in receptacles.				July 1, 2015	
EDUCATION AND ENFORCEMENT	1	Encourage participation in and assist with the litter removal activities associated with the Stream Stewardship Day or other similar clean-up event				July 1, 2014	
	2	Encourage public education efforts to include an anti-littering message				July 1, 2019	

ISWMP 2022 Performance Standards

Monitoring (See Chapter VIIII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
Facility Procedures	1	Maintain a NELAC accredited facility for stormwater-related laboratory testing.				July 1, 2014	
Preparing for and Conducting Monitoring Activities	1	Maintain sampling plans and quality assurance plans, as appropriate.				July 1, 2014	
	2	Conduct appropriate recordkeeping and reporting.				July 1, 2014	

ISWMP 2022 Performance Standards

Municipal Maintenance (See Chapter VIII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
STREET SWEEPING FREQUENCY	1	Clean streets according to the City's Sweeping Plan.				July 1, 2014	
PROBLEMS ASSOCIATED WITH EFFICIENT STREET CLEANING	1	Maintain a consistent sweeping schedule.				July 1, 2014	
	2	Obtain copies of garbage and recycling collection schedules and work with water utility personnel to understand schedules of major water line flushing effort to improve coordination (e.g., to prevent conflicts with sweeping on days when collection barrels are in the road or to sweep pollutants off streets prior to major water line flushing).				July 1, 2016	
	3	Take appropriate measures to keep curbed areas clear during street cleaning. Measures may include, but are not limited to, developing and distributing newsletters and/or other public education materials notifying residents and businesses of street sweeping schedules; setting out temporary or permanent street signs; sending announcements through neighborhood association chairs, or website postings.				July 1, 2018	
	4	Provide adequate staff for conveniently reporting trees interfering with street cleaning.				July 1, 2016	
STREET CLEANING OPERATION TO MAXIMIZE POLLUTANT REMOVAL	1	Provide a clean looking street. Conduct tandem driving in areas of heavy load to minimize dirt tracks, trails, or debris to degree practicable given weather and winter road safety measures.				July 1, 2014	
	2	Check street cleaning equipment for proper adjustment.				July 1, 2014	
	3	Operate street cleaning equipment at the speed specified by the manufacturer.				July 1, 2014	
STREET CLEANING MAINTENANCE TO MAXIMIZE POLLUTANT REMOVAL	1	Regularly inspect and maintain street cleaning equipment.				July 1, 2014	
	2	Replace worn components as required to maximize efficiency.				July 1, 2014	
SPILL RESPONSE	1	Report spills observed on streets immediately for quick response by appropriate personnel.				July 1, 2014	
	2	Respond to spills in accordance with appropriate response procedures. This includes appropriate measures to block storm drain inlets to prevent and minimize discharges from entering storm drainage facilities in the event of an accident, spill, or emergency fire-fighting activity.				July 1, 2014	
RECORD KEEPING	1	Track miles swept using a broom odometer or by tracking mileage.				July 1, 2014	
	2	Track volume or weight of material removed for street cleaning.				July 1, 2014	
	3	Report summary of sweeping data in annual report.				July 1, 2014	
	4	Document and track areas where spills were reported and coordinate with the City's illicit discharge control field surveys..				July 1, 2015	
	5	As needed, identify and target areas for: 1) more frequent cleaning throughout the year or just prior to the rainy season; 2) additional efforts to remove vehicles; 3) distribution of public education materials to discourage illegal dumping, etc.				July 1, 2018	
EDUCATION/TRAINING	1	Train annually, municipal staff, as appropriate, responsible for street sweeping to identify and report illicit discharges, and to comply with the other street sweeping performance standards.				July 1, 2014	

ISWMP 2022 Performance Standards

New Development, Redevelopment, and Construction Site Controls (See Chapter VI.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
DEVELOPMENT PLAN REVIEW AND PERMITTING	1	Obtain adequate legal authority to implement stormwater quality control measures for development, redevelopment, and construction activities as part of the development plan review and approval process.				July 1, 2014	
	2	Require developers and owner/builders of projects that include permanent stormwater facilities to ensure ongoing operation and maintenance of the facilities, as part of project approval documents.				July 1, 2015	
	3	Require developers and owner/builders of projects with potential for significant erosion and planned construction activity to plan, prepare for and implement effective erosion and sediment controls.				July 1, 2015	
	4	Ensure municipal capital improvement projects also include stormwater quality control measures during and after construction, as appropriate for each project.				July 1, 2015	
	5	Inform developers and owner/builders of projects that disturb a land area of one acre or more in an area that drains to a surface water body of the state requirement to obtain coverage under the DEQ 1200C permit.				July 1, 2016	
	6	Require developers and owner/builders to control stormwater quality impacts of their projects by using appropriate BMPs. Encourage projects with significant stormwater pollution potential to mitigate impacts through site planning or design practices and/or post construction controls4. For such projects, the developer and owner/builder will be encouraged to avoid, minimize, and mitigate, in that order, the potential adverse impacts to water quality.				July 1, 2017	
	7	Review and refine, if necessary, the stormwater ordinance requiring site planning or design practices and/or post construction controls to protect water quality.				July 1, 2018	
	8	Review, and as appropriate, incorporate policies and implementation measures into the General Plan and Development Code to help preserve and enhance water quality and protect sensitive areas. General Plan and Development Code amendments will be adopted periodically as part of the City's ongoing General Plan and Development Code updates.				July 1, 2019	
ADDITIONAL EROSION AND SEDIMENT CONTROL	1	Maintain an erosion and sediment control program that includes requirements for minimum performance standards, sufficient enforcement authority, training and tools for inspectors, and information for developers and contractors.				July 1, 2015	
	2	As a condition for issuing a grading permit, require developers and owner/builders to prepare, submit for review and approval, and implement effective erosion and sediment control measures as per City regulations.				July 1, 2016	
CONSTRUCTION INSPECTION	1	For development projects with significant erosion potential, require that erosion and sediment control measures are implemented through a construction inspection process. Measures will be implemented in accordance with local ordinances and project conditions of approval, including the approved erosion and sediment control plan. Measures will also be maintained as needed during construction.				July 1, 2014	
	2	Through a construction inspection process, require that construction contractors properly store, use, and dispose of construction materials, chemicals, and wastes from construction sites and prevent illicit discharges to the storm drains and watercourses.				July 1, 2016	
	3	As part of normal inspections, municipal inspectors will review construction sites for adequacy of stormwater quality control measures. The municipal inspectors will prioritize assistance and guidance to onsite inspectors based on the following criteria: a. Project's potential impact on stormwater quality; b. Size of the project; c. Site topography and soil characteristics; d. Season in which the construction phase occurs; and e. Nature of the construction activity.				July 1, 2016	
	4	Require that each active construction site either be stabilized or have supplies and roll-out plans for immediate stabilization to be deployed prior to a major storm to minimize erosion and discharges of sediment from disturbed areas. As part of normal inspections, municipal inspectors will review to make sure these requirements are being met.				July 1, 2018	
	5	Review the inspection of construction sites with erosion and sediment controls following complaints or reports of sediment or pollutants being discharged in the public right of way.				July 1, 2019	

ISWMP 2022 Performance Standards

New Development, Redevelopment, and Construction Site Controls (See Chapter VI.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
EDUCATION AND OUTREACH	1	Distribute appropriate educational and training materials to city staff, contractors, construction site operators, developers, and owner/builders such as: a. Construction BMPs including erosion and sediment controls; b. Available guidance on the DEQ 1200C permit, if applicable; c. Site planning or design measures and post construction controls; and d. Information provided by DEQ staff regarding State and Federal permit and approval requirements for related project activities. Distribute this information and guidance materials to developers and owner/builders early in the application or design review process, or have available on the City's website as appropriate for the type of project.				July 1, 2014	
	2	Train, at least biennially, appropriate construction inspection staff on inspection procedures, documentation, and enforcement related to stormwater pollution prevention.				July 1, 2015	
	3	Train, at least biennially, staff from planning, building, and public works staff on planning procedures, policies, design guidelines, and BMPs for stormwater pollution prevention and control.				July 1, 2015	
	4	Distribute appropriate educational and outreach materials provided by the DEQ to those utility contractors (water supply, cable, phone, electrical, etc.) seeking encroachment and/or grading permits from the municipality.				July 1, 2015	

ISWMP 2022 Performance Standards

Operation and Maintenance of Stormwater Pump Stations (See Chapter VIII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
VISUAL INSPECTIONS	1	Inspect wet wells or forebays once per month for oil spills or other noticeable pollutant discharge.				July 1, 2014	
MAXIMIZE REMOVAL OF POLLUTANTS PRIOR TO DISCHARGE	1	Conduct at least one comprehensive cleaning of wet wells annually to remove sediment prior to the start of the rainy season to minimize discharge of sediment. Clean wet wells with a vactor, if possible.				July 1, 2014	
	2	If there is a large potential for pollutant discharge, have a spill kit readily available.				July 1, 2014	
	3	If any spill is reported or observed, try to remove the material at the nearest access point. As practical, shut down the pump station if the material may reach it. (A storm event may necessitate operation of the pump station.) As possible, prevent spill from discharging.				July 1, 2014	
	4	Store oil absorbent materials in appropriate maintenance vehicles.				July 1, 2014	
	5	Track spills upstream to try and locate the source(s) of pollution. Document spill incidents as part of the illicit discharge program. Implement enforcement, as appropriate.				July 1, 2017	
	6	Conduct at least one comprehensive cleaning of wet wells annually to remove sediment prior to the start of the rainy season to minimize discharge of sediment. Clean wet wells with a vactor, if possible.				July 1, 2019	
DISPOSAL	1	Dispose of screenings at a landfill, sediment at a location that will not re-enter the storm drain system or receiving waters through erosion, and oil-absorbed materials at a site licensed to accept hazardous waste.				July 1, 2014	
EDUCATION/TRAINING	1	Educate all personnel responsible for maintaining stormwater pump stations about these performance standards. City staff will conduct or provide at least one training session annually to educate pump station personnel about these performance standards and illicit discharge identification and reporting.				July 1, 2015	
	2	Conduct drills as part of the training, as appropriate				July 1, 2017	

ISWMP 2022 Performance Standards

Public Information and Participation (See Chapter II & IIII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
Coordination with Existing Opportunities/ Activities	1	Stay sufficiently informed about the programs and materials being developed by Oregon Association of Clean Water Agencies (ACWA) and/or other suitable programs and groups by regularly attending or tracking ACWA or other appropriate stormwater, groundwater and public outreach committees.				July 1, 2014	
	2	Distribute and/or make readily available outreach and educational materials to appropriate audiences within the City. This includes, but is not limited to schools, volunteer committees, neighborhood associations, community groups, business groups and /or other environmental groups.				July 1, 2014	
City Staff and Officials	1	Identify, develop, and communicate at least annually, information about the City's stormwater quality program to city management and elected officials so that they are well informed about the requirements, their role in implementing the local stormwater program, and the City's progress.				July 1, 2014	
	2	Train new employees involved with stormwater pollution prevention activities on their role in implementing the local stormwater program.				July 1, 2014	
Procedures and Training for Handling Telephone Calls from the Public About Stormwater Pollution Prevention	1	Establish procedures for answering, tracking, and efficiently routing stormwater-related telephone calls to the appropriate staff for handling.				July 1, 2014	
	2	Train staff assigned to answering or responding to telephone calls on the established procedures.				July 1, 2014	
	3	Promote the use of a City telephone number to facilitate public reporting of illicit discharges.				July 1, 2014	
Storm Drain Inlet Stencils and Signs	1	The City will have an active program to install stencils/storm drain markers on publicly owned storm drain inlets. This includes installation by municipal staff, contractors, volunteers, and/or community groups.				July 1, 2014	
	2	As a goal, stencils and signs will be maintained sufficiently to be legible.				July 1, 2016	
COORDINATION WITH PUBLIC SCHOOLS (K-12)	1	The Stormwater Program Manager will either be responsible for distributing, or delegating the distribution of, information about school based outreach and educational materials to public schools within the City. This may include disseminating information on how to obtain copies of materials and providing lending opportunities for the watershed diorama, and may include working with outside groups who work directly with school children providing pollution prevention and water education				July 1, 2014	
Local Community Outreach Program	1	The City will participate in community outreach activities from the areas listed below for the purpose of communicating the general stormwater pollution prevention message, complementing regional or statewide coordinated specific messages for target audiences, and facilitating the proper management and disposal of targeted pollutants. The City will participate in at least three activities annually.				July 1, 2014	
	a	Distributing local, regional or statewide information through other venues (e.g., local newsletter, local magazine, mailing to target group, computer web site or network, local telephone directories, etc.).				July 1, 2014	
	b	Participating in existing community events such as fairs, festivals, exhibits, etc. This participation may include setting up a booth, kiosk display, or other creative means for communicating the general stormwater pollution prevention message; using a specific message to a target group; or making a presentation at a local community service group				July 1, 2014	
	c	Initiating new community events or playing a major role in planning and staging a community or city-wide event. Examples include, but are not limited to, Earth Day, Stream Stewardship Day, or other festival or fair, business mixer, seminar or workshop for a target group, contest, or coordination with businesses to provide pollution prevention discounts (e.g., recycled car wash discount).				July 1, 2014	
	d	Developing and raising watershed awareness				July 1, 2014	
	e	Coordinating with local volunteer groups to conduct outreach.				July 1, 2014	

ISWMP 2022 Performance Standards

Road Repair and Maintenance (See Chapter VII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
GENERAL PRACTICES/ TRAINING	1	Schedule excavation and road maintenance activities for dry weather, if feasible.				July 1, 2014	
	2	Equipment repairs and fueling or maintaining vehicles and equipment will be conducted in accordance with the Corporation Yard Performance Standards.				July 1, 2014	
	3	Recycle used motor oil, diesel oil, concrete, broken asphalt, etc. whenever possible.				July 1, 2014	
	4	Distribute educational and outreach materials, as appropriate, to those utility contractors (e.g., water supply, sewer, cable, phone, electrical, etc.) seeking encroachment and/or grading permits from the City.				July 1, 2016	
	5	Train at least biennially municipal staff and contractors conducting road repair and maintenance to comply with these performance standards.				July 1, 2016	
ASPHALT/CONCRETE REMOVAL	1	After breaking up old pavement, remove and recycle as much as possible to avoid contact with rainfall and stormwater runoff.				July 1, 2014	
	2	Take measures to protect storm drain inlets prior to asphalt breaking or concrete sawing operations (e.g., place sand bags or filtering barrier around inlets). Clean afterwards by sweeping or removing as much material as possible. Do not wash down to the storm drain.				July 1, 2016	
	3	During saw-cutting operations, block or berm around storm drain inlets using sand bags or an equivalent appropriate filter device, or absorbent materials such as pads, pillows, or socks to contain slurry, or wet/dry vacuum the slurry. If slurry enters the storm drain system, remove the material immediately.				July 1, 2016	
	4	Remove saw-cut slurry (e.g., with a shovel or vacuum) before leaving at the end of the day.				July 1, 2016	
PATCHING AND RESURFACING	1	To minimize runoff from patching and resurfacing activities, materials will not be stockpiled in streets, gutter areas, or near storm drain inlets or waterbodies unless these areas are protected (i.e., stockpiled material should be covered to minimize stormwater runoff.)				July 1, 2014	
	2	Cover and seal manholes and storm drain inlets before applying seal coat, slurry seal, etc				July 1, 2014	
	3	Never wash excess material from exposed aggregate concrete or similar treatments into a street or storm drain inlet. Designate an unpaved area for clean up and proper disposal of excess materials.				July 1, 2014	
	4	Use only as much water as necessary for dust control to avoid runoff.				July 1, 2014	
	5	Sweep up as much material as possible and dispose of properly.				July 1, 2014	
	6	Clean up spills and leaks from other equipment and work site areas using “dry” methods (absorbent materials and/or rags). Properly dispose of absorbent materials and rags. If spills occur on dirt areas, the contaminated soil will be removed properly and on a timely basis				July 1, 2014	
	7	After the job is complete, remove stockpiles (asphalt materials, sand, etc.) and other extra materials as soon as possible.				July 1, 2014	
	8	If it rains unexpectedly, take appropriate action to prevent pollution of stormwater runoff (e.g., divert runoff around work areas).				July 1, 2016	
	9	Wash down of streets is only permitted if runoff is controlled or contained, or appropriate best management practices are followed.				July 1, 2017	
SIGNING AND STRIPING	1	Have spill kits or store spill absorbent materials on trucks to be used in the event of a spill.				July 1, 2014	
	2	Contain and clean up waste materials and dispose of them properly according to the MSDS.				July 1, 2014	

ISWMP 2022 Performance Standards

Road Repair and Maintenance (See Chapter VII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
EQUIPMENT CLEAN UP/STORAGE	1	Clean sprayers, patch and paving equipment at the end of the day. Use approved collection methods and dispose or recycle waste materials at an approved facility.				July 1, 2014	
	2	If stored outdoors, cover sprayers, patch and paving equipment, if they contain pollutants, to prevent rainfall from transporting pollutants to the storm drain system.				July 1, 2014	
	3	Flush paint sprayer supply lines at the corporation yard. Use approved collection methods and dispose or recycle waste materials at an approved hazardous waste facility				July 1, 2015	

ISWMP 2022 Performance Standards

Storm Drain Facilities (See Chapter VIII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
ROUTINE INSPECTION AND CLEANING6	1	When cleaning storm drain inlets and lines, remove the maximum amount of material at the nearest access point to minimize the potential for discharges to watercourses.				July 1, 2014	
	2	Inspect and clean as necessary, storm drain facilities (catch basins, UICs, inlets, culverts, and v-ditches) at least biennially. The inspections and needed cleaning will preferably occur prior to winter.				July 1, 2017	
RECORD KEEPING	1	Report the amount of material removed when cleaning storm drainage facilities in monthly record keeping forms.				July 1, 2014	
	2	Document and track areas where spills were reported and coordinate with the City's illicit discharge control staff.				July 1, 2016	
	3	As needed, identify and target areas for: 1) more frequent cleaning throughout the year or just prior to the rainy season; and 2) distribution of public education materials to discourage illegal dumping, etc.				July 1, 2018	
SPILL RESPONSE (MULTIPLE AGENCIES INVOLVED)	1	If non-hazardous materials are spilled, maintenance staff will contain the spill area immediately and clean when practical to prevent additional release and discharge of pollutants into the storm drain system.				July 1, 2014	
	2	Maintenance staff will establish a response/removal procedure for non-hazardous materials after work hours (e.g., per spill plan).				July 1, 2014	
	3	Maintenance staff will coordinate to determine the most appropriate follow-up response (e.g., tracking the source of a spill, identifying product labels, contacting Building and Planning Departments, contacting Stormwater Program Analyst with records and for educational follow-up, sending a clean-up bill to the responsible party, etc.).				July 1, 2014	
	4	Work with local Fire and Police Departments to obtain summaries or copies of spill reports to the Stormwater Manager or his/her designee.				July 1, 2016	
	5	Maintenance staff will be aware and up to date on the City's around-the-clock immediate response/removal procedure for hazardous or unknown materials.				July 1, 2017	
DISPOSAL OF MATERIAL	1	Store material removed from storm drainage facilities on a concrete pad or other type of impermeable material away from storm drainage facilities. Drain wastewater to the sanitary sewer or allow to evaporate to prevent discharges to the storm drain system. Dispose of the material at an appropriate facility. Contact collections utility's staff prior to any new type of discharge in sanitary sewer.				July 1, 2017	

ISWMP 2022 Performance Standards

Winter Road Care (See Chapter VII.)

Subsection		Performance Standard	Implementation Status			Implementation Date	Comments
			Scheduled	Partial	Full		
WINTER ROAD CARE TO MINIMIZE POLLUTANT CONTRIBUTION	1	City will consider full long-term social costs and environmental/public safety risks when determining winter road care strategies.				July 1, 2014	
	2	The City will use alternative materials, such as basalt application, as much as possible and appropriate to minimize the use of chemical deicier (e.g., Mag Chloride), especially in sensitive areas.				July 1, 2015	
	3	Chemical deicers will be properly stored and handled per the chemical storage performance standards.				July 1, 2015	
	4	Any solid deicers used shall be properly covered to prevent contact with stormwater, and be stored outside of the 100 year floodplain.				July 1, 2017	
SPILL RESPONSE	1	Report spills observed on streets immediately for quick response by appropriate personnel.				July 1, 2014	
	2	Respond to spills in accordance with appropriate response procedures.				July 1, 2014	
RECORD KEEPING	1	Track amount of product used per month (chemical deicer and basalt sanding).				July 1, 2015	
EDUCATION/TRAINING	1	Train at least biennially, municipal staff and contractors, as appropriate, responsible for winter road care and chemical deicer (e.g., MgCl2) application to minimize overuse, to vary amounts to reflect site-specific characteristics, such as road width and design, traffic concentration, and proximity to surface waters and sensitive areas; to identify and report illicit discharges, and to comply with the other winter road care performance standards.				July 1, 2014	See FY2012-13 Annuak Report Appendix G