

2014 – 2019 Surface Water Program Capital Improvement Plan



Oak Lodge Sanitary District
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Executive Summary

Limited resources, combined with increasing stormwater infrastructure performance demands, make Oak Lodge Sanitary District's 2014-2019 Surface



Water Capital Improvement Plan (SWCIP) essential to achieve the goals and objectives of the District's Surface Water Masterplan and MS4 Permit.

The SWCIP uses objective criteria to evaluate and prioritize surface water improvement projects. The SWCIP assigns available revenues to projects to achieve the District's goals to address regional water quality priorities, and to recognize the vision set by the community and the Board of Directors.

The 2014 – 2019 Capital Plan includes 12 capital projects with a total value over \$9,000,000. The average annual OLSD SWM capital expenditure (over the 6 year period between FY 14 and FY19) is \$530,000. The balance represents funding leveraging, such as securing project funding through grants and partner funding agreements.

Questions or comments regarding the content or development of this program can be directed to OLSD at (503) 653-1653.

WHAT IS IN THE STORMWATER CAPITAL IMPROVEMENT PLAN?

The remainder of this document includes:

- A description of SWM capital funding revenue
- The six-year program funding matrix.
- A summary of project identification and project development phases
- An index and map of the projects included in the program.
- Detail sheets for active surface water projects in the six-year program.

Introduction

The Oak Lodge Sanitary District is responsible for water quality improvement projects within the communities of Oak Grove and Jennings Lodge, Oregon. Although not formal cities, this portion of unincorporated Clackamas County is heavily urbanized with residential, commercial, and industrial development. A recent analysis of the District revealed



that the Total Impervious Area for OLSLD's total acreage is 80% -- that's about 2800 acres of paved surface, all of which contributes to increased water velocity and scour in local streams, and the majority of which contributes pollutants into the surface water system, including streams and rivers.

The Surface Water Capital Improvement Plan, and associated capital improvement projects, identifies large scale projects to address water quality improvement needs in the District. These projects are large in scale and expenditure, and are not maintenance projects (maintenance projects are captured elsewhere in OSLD's surface water program). Surface Water capital projects generally include a variety of complexities and require several years to develop. In some cases, the resulting project becomes a capitalized asset for OSLD.

This report summarizes the status of the capital plan and projects over a 6 year period, between 2014 and 2019.

Surface Water Capital Fund Balance

Oak Lodge Sanitary District charges customers a monthly surface water fee, which covers all surface water program operations. Annual revenue changes slightly (based on the number of customers), but is generally approximately \$1.1M annually. In FY14, \$1.13M of SWM fee revenue will be collected. Of this revenue, 74% (\$841,510) is budgeted to be used on administrative and operational costs of the surface water program. This includes salary/benefits, administrative overhead, and operational supplies and materials. The remaining 26% (\$295,089 for FY14) is revenue for the SWM Capital Fund (Account 300-300). If revenue is not fully utilized, any balance carries forward into the following fiscal year.

Currently, the District has a fund balance in the FY 2014 SWM CIP fund budget in the amount of \$2,308,891. This funding is specifically for capital projects, and independent of administrative

and operational SWM budget funds. Over the past 10 years, SWM capital funds have not been fully utilized, and a fund balance now exists.

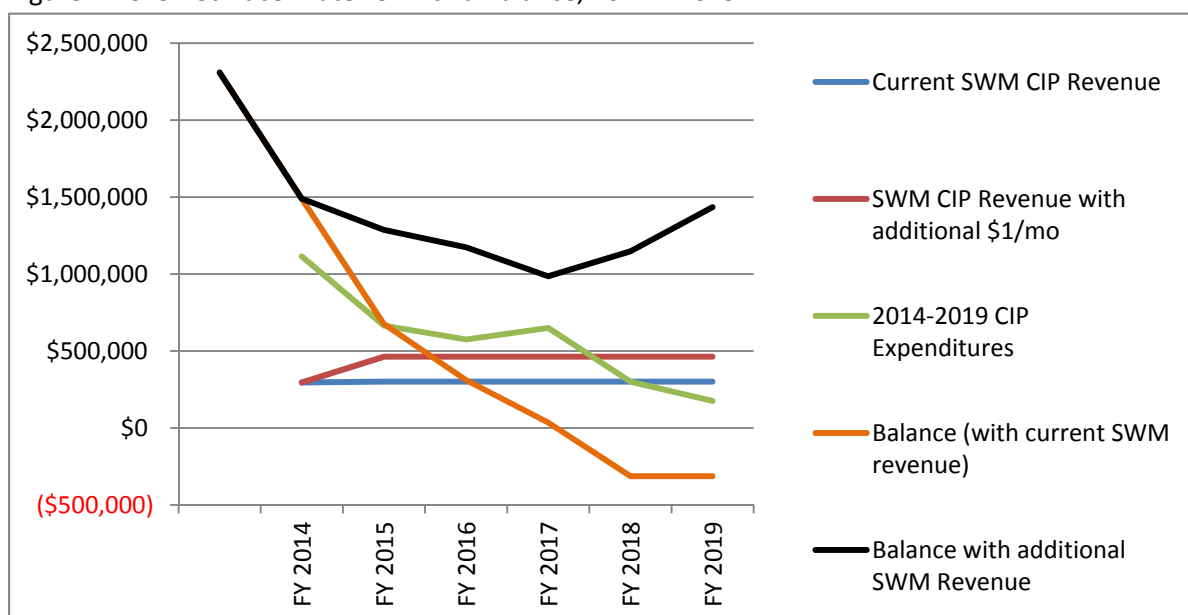
The chart below (Figure 1) shows projected expenditures over the course of this 6-year CIP based expenditures for multiple projects. In this chart, new revenue remains steady (in order to increase this line, the monthly SWM fee would need to increase, or the number of customers would need to increase). The expenditure line shows fund use over the years.

Generally, early project development phases are not successful in securing grant funds or outside agency funding sources to pay for the early analysis and studies, so the District is using CIP funds to get the project started; this shows up in the high expenditure numbers for FY 14 as several projects are in this beginning phase. However, the plan assumes use of grant funds and partner agency funds for construction phases, which is commonly when other agencies want to participate. This means OLSD's expenditure in these phases is less because of offsets from other sources of money (grants, partnering money, etc). Since many large capital projects are at or near the same phase, sequencing the expenditure over time is important to manage the overall capital budget, but keep projects developing toward construction (completion).

The current 6-year plan indicates a deficit of SWM CIP funds starting in FY 18. This means that assuming no new revenue is generated, all SWM Capital resources would be exhausted if the current expenditures occur completely according to this plan.

One option to avoid a negative fund balance is to increase SWM fee revenue by generating additional funds through transfer from the sanitary sewer revenue. Note that this is not increasing customer bills. Assigning \$1/mo that is already collected to the SWM program will result in an additional \$162,000/year of SWM capital revenue. If that scenario started in FY2015, then the additional revenue generated would maintain a positive fund balance while allowing all of the expenditures as planned for the current project list.

Figure 1: OLSD Surface Water CIP Fund Balance, 2014 – 2019



Capital Project Identification

Projects within the Surface Water Capital Improvement Program include new regional stormwater treatment facilities, retrofits of existing facilities, installation of roadside facilities, such as “rain gardens”, upgrades of existing storm lines and catchbasins, and natural resource restoration projects.

We collect suggestions or ideas for capital projects throughout the year, and then evaluate the projects annually through this process. Most surface water capital projects require multi-year funding in order to design and construct, which requires long term financial planning.

Project costs are projected over time, and by project phase. Capital projects generally have five phases:



Concept: activities in the conceptual phase of a project include early project scoping, baseline data collection, community input solicitation, and preliminary engineering design. Usually, after this phase, the District has a solid understanding of the project’s type, size and location, and a cost estimate.

Right of Way: This term, which is common to public agencies, reflects all uses associated with using and acquiring private property for public projects. This can include property research and appraisals, land acquisition, relocation of homeowners or businesses, and acquisition of easements (temporary construction access easements, conservation easements, etc).

Design: This phase covers all aspects of final engineering design, including civil, environmental, hydraulic and structural studies and engineering, acquisition of all required permits, and development of construction bidding and plan documents. A final construction cost estimate is also prepared in this phase.

Construction: All construction related activities are covered in this phase, generally this phase starts at the time when the District puts a project out for a construction contract bid, through the active construction, and is finalized when the construction contract is closed out.

Post Construction: Many activities occur as a part of a capital project after the end of construction; this includes site monitoring and long term maintenance, close out reports, and mitigation reporting (which can go for up to 10 years in some cases).

6-Year Capital Project Funding Matrix

After establishing the project list, available SWM program dollars are assigned to projects with consideration to the following:

- Regional stormwater priorities.
- Available SWM funds.
- Available Grant funds
- Available project partnership opportunities

The six-year program matrix (see Appendix A) displays only those projects that have funding in at least one phase of the project during the next six years. The funding matrix reconciles total program funding needs with projected fund availability based on current revenue estimates.

There are several funding sources available for engineering/design, right-of-way land purchases, and construction of surface water capital projects. The OLSL Surface Water Management Fund (specifically, the 300-300 SWM Line Extension/Replacement budget item) provides the principal source of dollars and leverages grants and developer funds. This local money is supplemented by federal, state and local dollars administered through different agencies.

The matrix also summarizes total annual capital planning costs. This includes costs for OLSL to cover, as well as the total project value.

Project Summaries

Each project identified in this plan has a project summary page (see Appendix B), which provides more information about the project purpose, schedule, and budget. As each project progresses, specific project details, such as report, plans, and specifications, emerge through the project management processes at OSLD. The status of all projects is updated annually when the Capital Improvement Plan is update. Specific project updates can be provided to the Board of Directors upon request or periodically throughout the year.

Appendix A: SWM CIP Funding Matrix



Appendix B: Capital Project Summaries



Oak Lodge Sanitary District

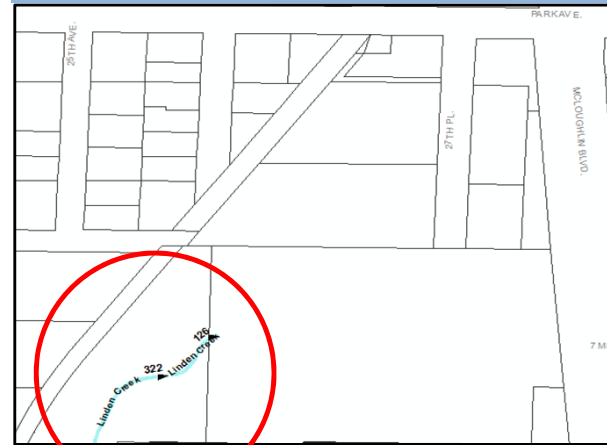
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

Project Number:	CS-01	Project Type:	SWM/Water Quality
Project Name:	Courtney Springs Riparian Restoration and Regional Stormwater Facility		
Project Manager:	TriMet		
Basis for Project:	Water Quality, Natural Resource Restoration		
Timeline:	2010 - 2014		
Project Description:	Reestablish riparian zone on Courtney Springs creek behind Elks Lodge, build regional stormwater facility to treat McLoughlin Corridor runoff south of facility to watershed boundary		
Notes:	OLSD is partnered with TriMet to perform long term site maintenance on reestablished riparian zone through Metro grant		

Vicinity Map



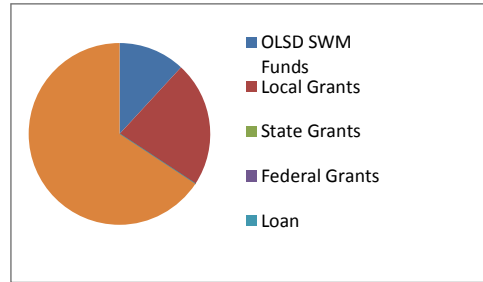
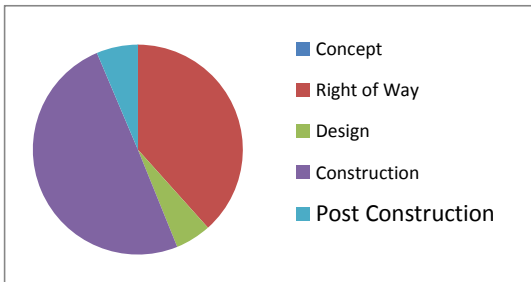
Status: December 2013: Active Construction

Project Cost Summary

Concept	\$ -
Right of Way	\$ 600,000
Design	\$ 86,000
Construction	\$ 776,942
Post Construction	\$ 100,000
Total	\$ 1,562,942

Funding Summary

OLSD SWM Funds	\$ 186,000
Local Grants	\$ 349,305
State Grants	\$ -
Federal Grants	\$ -
Loan	\$ -
Other (TriMet)	\$ 1,027,637
Total	\$ 1,562,942



Oak Lodge Sanitary District

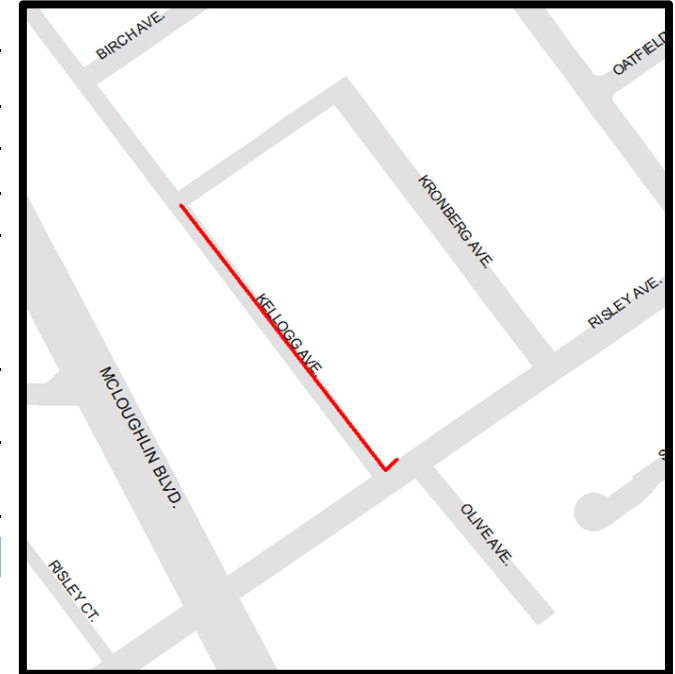
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

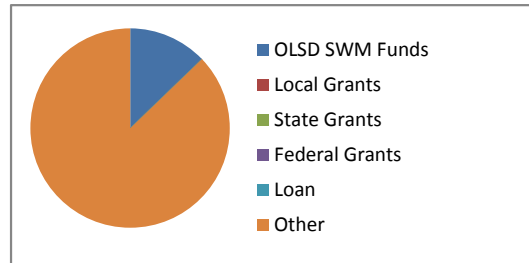
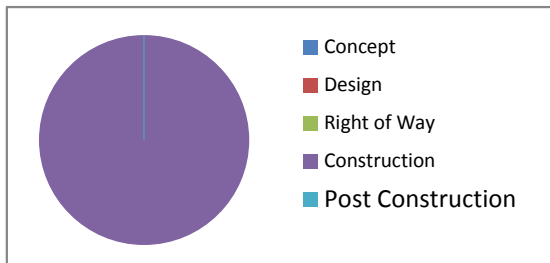
Project Number:	RF-31	Project Type:	SWM/Water Quality
Project Name:	Kellogg Avenue Sidewalk/ Stormwater Demonstration Project		
Project Manager:	Clackamas County		
Basis for Project:	Demonstration Stormwater Project, Pervious Pavement		
Timeline:	2013 - 2014		
Project Description:	Clackamas County is building a new sidewalk on Kellogg Avenue, a portion of which will be pervious pavement. OLSD is supporting Clackamas County in this project.		
Notes:	Design includes pervious pavement and a new bioswale along Kellogg Avenue		
Status:	December, 2013: Construction complete		

Vicinity Map



Project Cost Summary	
Concept	\$ -
Design	\$ -
Right of Way	\$ -
Construction	\$ 365,000
Post Construction	\$ -
Total	\$ 365,000

Funding Summary	
OLSD SWM Funds	\$ 25,000
Local Grants	\$ -
State Grants	\$ -
Federal Grants	\$ -
Loan	\$ -
Other	\$ 170,000
Total	\$ 195,000



Oak Lodge Sanitary District

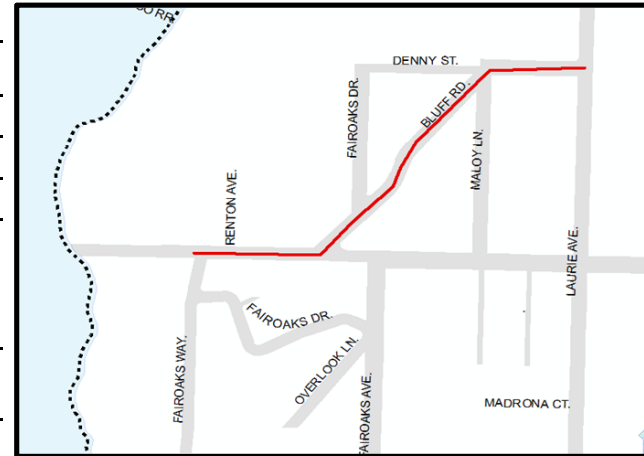
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

Project Number:	SR-16	Project Type:	SWM/Water Quality
Project Name:	Bluff Road Paving and Stormwater Infrastructure		
Project Manager:	Clackamas County		
Basis for Project:	New Stormwater Infrastructure		
Timeline:	2013		

Vicinity Map



Project Description: Through existing IGA, Clackamas County is repaving Bluff Road (Laurie to Fair Oaks) and adding stormwater infrastructure to address runoff problems.

Notes: OLSD is supporting NCPRD financially in this project through a 2013 IGA

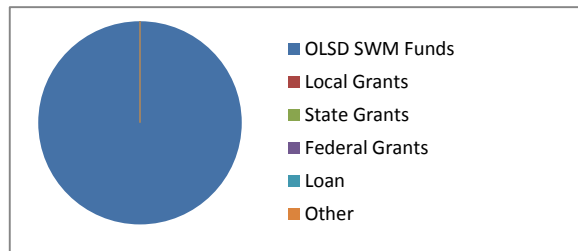
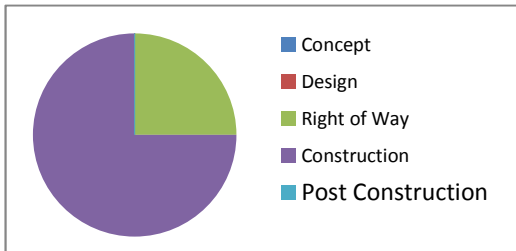
Status: December, 2013: Majority of paving completed in summer, 2013; small portion remaining in 2014 (good paving weather ran out)

Project Cost Summary

Concept	\$ -
Design	\$ -
Right of Way	\$ 15,000
Construction	\$ 45,000
Post Construction	\$ -
Total	\$ 60,000

Funding Summary

OLSD SWM Funds	\$ 60,000
Local Grants	\$ -
State Grants	\$ -
Federal Grants	\$ -
Loan	\$ -
Other	\$ -
Total	\$ 60,000



Oak Lodge Sanitary District

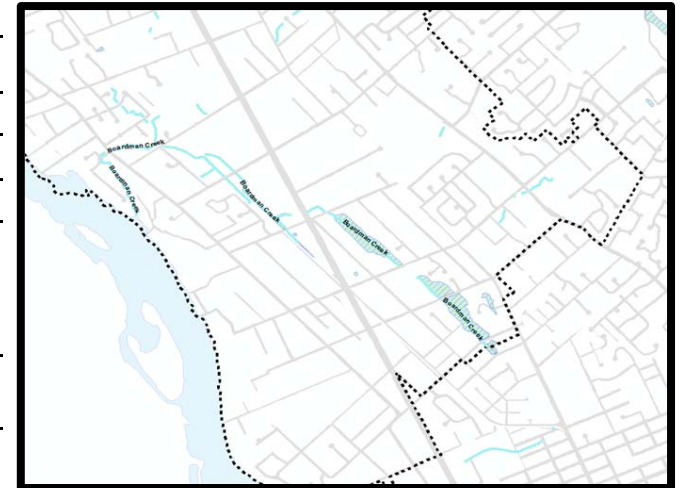
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

Project Number:	BB-01	Project Type:	SWM/Water Quality
Project Name:	Boardman Basin Watershed Hydraulic Modelling		
Project Manager:	OLSD		
Basis for Project:	Establish conditions under 2-, 5-, 10- and 25- year storm conditions		
Timeline:	Estimated state 2016		
Project Description:	Develop hydraulic model for the Boardman Basin; determine system performance under variable conditions and incorporating implementation function of CIP projects.		
Notes:	Need other project designs to develop sufficiently in order to pursue watershed modelling to evaluate project performance		
Status:	No activity currently		

Vicinity Map



Project Cost Summary

Concept	\$	-
Design	\$	-
Right of Way	\$	-
Construction	\$	-
Post Construction	\$	-
Total	\$	-

Funding Summary

OLSD SWM Funds	\$	-
Local Grants	\$	-
State Grants	\$	-
Federal Grants	\$	-
Loan	\$	-
Other	\$	-
Total	\$	-

	■ Concept
	■ Design
	■ Right of Way
	■ Construction
	■ Post Construction

	■ OLSD SWM Funds
	■ Local Grants
	■ State Grants
	■ Federal Grants
	■ Loan
	■ Other

Oak Lodge Sanitary District Surface Water Capital Improvement Program 2014 - 2019

Project Summary

Project Number:	BB-02	Project Type:	SWM/Water Quality
Project Name:	McLoughlin Corridor Regional Stormwater Facility		
Project Manager:	OLSD		
Basis for Project:	Water Quality Retrofits		
Timeline:	2014 - 2019		

Project Description: Identify location to acquire and construct a regional stormwater facility to provide water quality treatment to the McLoughlin Corridor and Boardman Basin developments.

Notes: Note: current scope includes site identification and feasibility analysis; design will need to be developed to determine construction cost

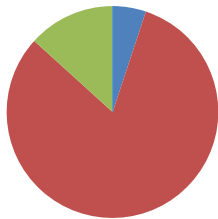
Status: Preliminary Scoping and Property Acquisition

Project Cost Summary

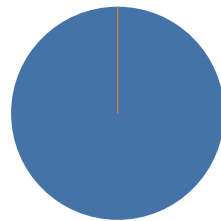
Feasibility/Concept	\$ 25,000
Right of Way	\$ 400,000
Design	\$ 65,000
Construction	\$ -
Post Construction	\$ -
Total	\$ 490,000

Funding Summary

OLSD SWM Funds	\$ 490,000
Local Grants	\$ -
State Grants	\$ -
Federal Grants	\$ -
Loan	\$ -
Other	\$ -
Total	\$ 490,000

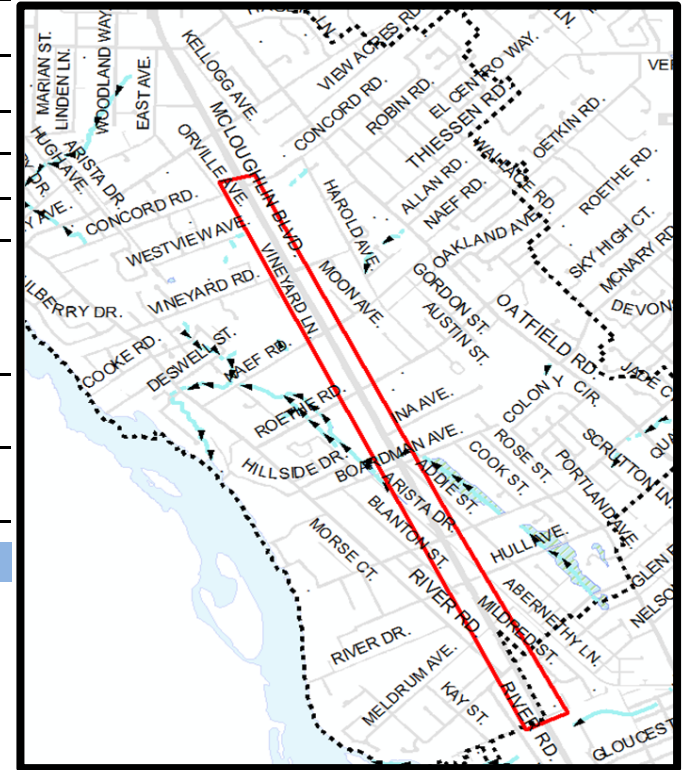


- Feasibility/Concept
- Right of Way
- Design
- Construction
- Post Construction



- OLSD SWM Funds
- Local Grants
- State Grants
- Federal Grants
- Loan
- Other

Vicinity Map



Oak Lodge Sanitary District

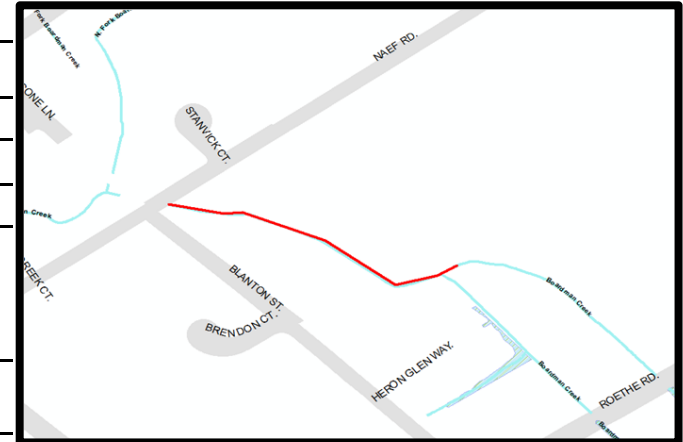
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

Project Number:	SB-03	Project Type:	SWM/Water Quality
Project Name:	Boardman Watershed Initiative: Phase 1 (Stringfield Park Improvements)		
Project Manager:	NCPRD		
Basis for Project:	Water Quality and Flow/Drainage Improvement		
Timeline:	2010 - 2014		

Vicinity Map



Project Description: Restore channel function and riparian zone in Stringfield Park.
Notes: OLSD is supporting NCPRD financially in this project through a 2010 IGA, OLSD participated in design, construction and post construction.

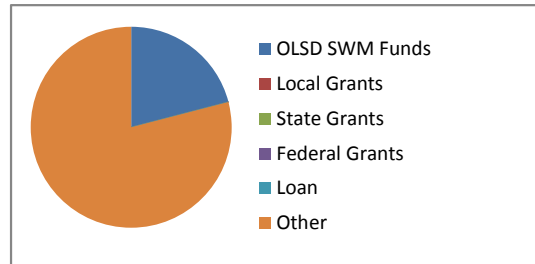
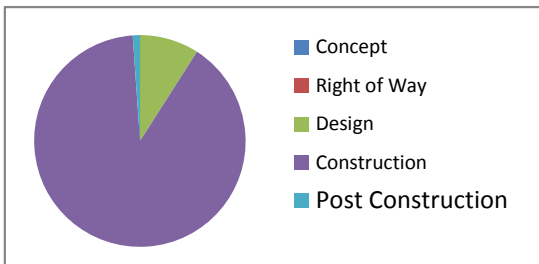
Status: Final year of OLSD participation

Project Cost Summary

Concept	\$ -
Right of Way	\$ -
Design	\$ 100,743
Construction	\$ 1,000,000
Post Construction	\$ 12,000
Total	\$ 1,112,743

Funding Summary

OLSD SWM Funds	\$ 233,400
Local Grants	\$ -
State Grants	\$ -
Federal Grants	\$ -
Loan	\$ -
Other	\$ 879,343
Total	\$ 1,112,743



Oak Lodge Sanitary District

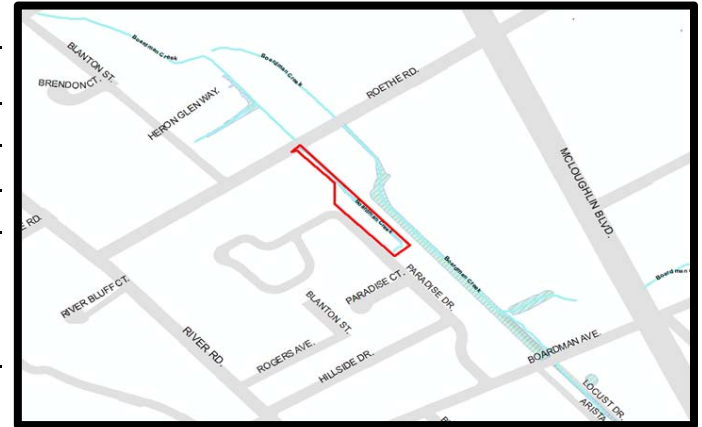
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

Project Number:	SB-01	Project Type:	Water Quality
Project Name:	Paradise Subdivision Stormwater Facility Retrofit		
Project Manager:	OLSD		
Basis for Project:	Water Quality and Detention Retrofit		
Timeline:	2017-2018		
Project Description:	Retrofit old/existing stormwater facility to meet current detention and water quality function standards.		
Notes:	Paradise Subdivision HOA is a willing partner on this project		

Vicinity Map



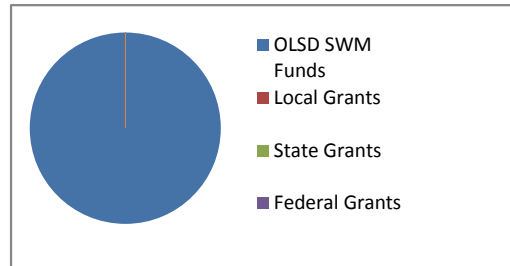
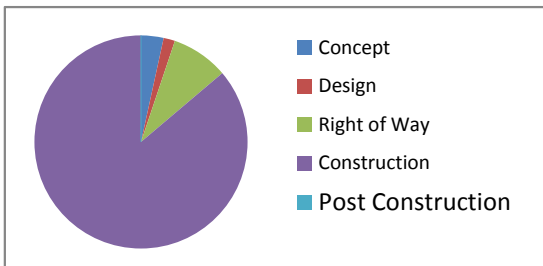
Status: No activity currently

Project Cost Summary

Concept	\$ 10,000
Design	\$ 5,000
Right of Way	\$ 25,000
Construction	\$ 250,000
Post Construction	\$ -
Total	\$ 290,000

Funding Summary

OLSD SWM Funds	\$ 207,966
Local Grants	\$ -
State Grants	\$ -
Federal Grants	\$ -
Loan	\$ -
Other	\$ -
Total	\$ 207,966



Oak Lodge Sanitary District

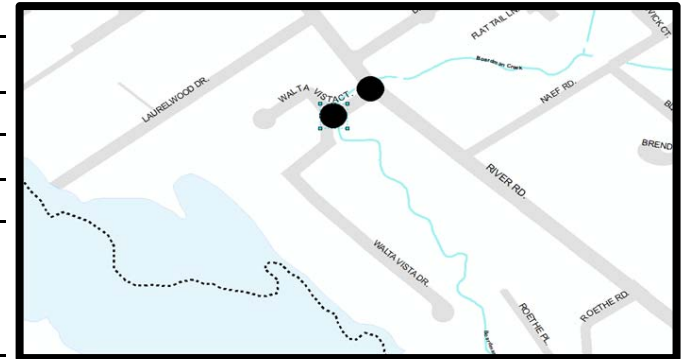
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

Project Number:	SB-08	Project Type:	SWM/Water Quality
Project Name:	Bridge Construction at Walta Vista Dr. and River Road		
Project Manager:	Clackamas County		
Basis for Project:	Flow/Drainage and Fish Passage Improvement		
Timeline:	2013 - 2018		

Vicinity Map



Project Description: Replace two undersized culverts with bridges, rebuild 520' of Boardman Creek to address hydraulic capacity, incorporate fish passage requirements

Notes: OLSD is supporting Clackamas County with funds for this project

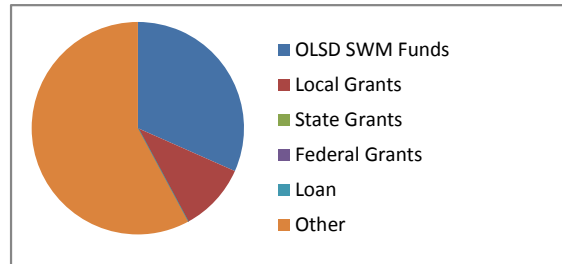
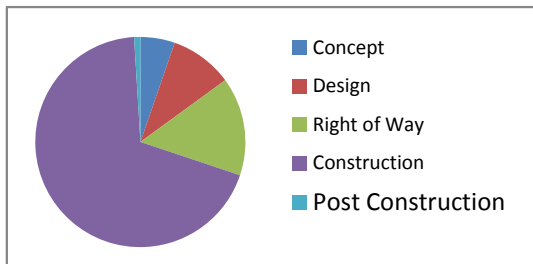
Status: December, 2013: 30% Design Complete, seeking funds

Project Cost Summary

Concept	\$ 193,000
Design	\$ 350,000
Right of Way	\$ 550,000
Construction	\$ 2,500,000
Post Construction	\$ 35,000
Total	\$ 3,628,000

Funding Summary

OLSD SWM Funds	\$ 1,203,000
Local Grants	\$ 400,000
State Grants	\$ -
Federal Grants	\$ -
Loan	\$ -
Other	\$ 2,200,000
Total	\$ 3,803,000



Oak Lodge Sanitary District

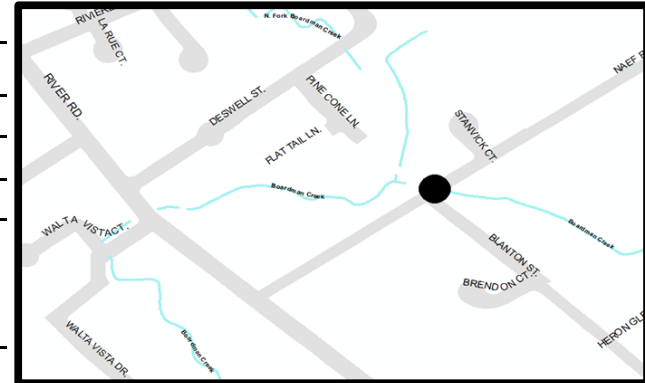
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

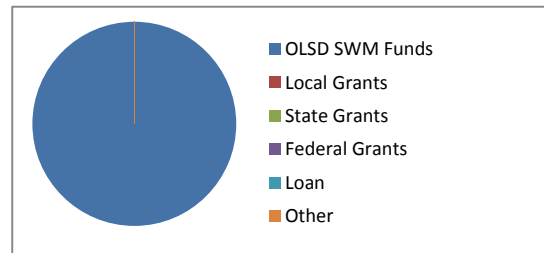
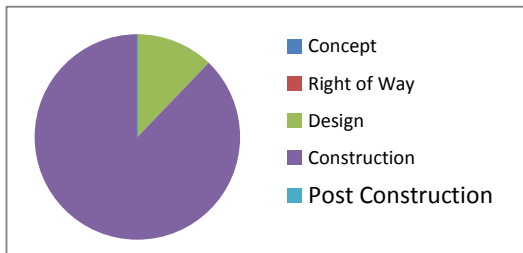
Project Number:	SB-16	Project Type:	SWM/Water Quality
Project Name:	Naef Road Culvert Replacement		
Project Manager:	OLSD		
Basis for Project:	Flow/Drainage and Fish Passage Improvement		
Timeline:	2013 - 2016		
Project Description:	Remove undersized 60" culvert, replace with correct size opening (18' box culvert or small bridge), remove 160' of piped stream channel and restore to natural channel (north of Naef road)		
Notes:	This project should be constructed in coordination with SB-08 to ensure maximum value is realized (hydraulics and fish passage), will also see cheaper construction costs.		

Vicinity Map



Status: December, 2013: 30% Design Complete

Project Cost Summary		Funding Summary	
Concept	\$ -	OLSD SWM Funds	\$ 569,333
Right of Way	\$ -	Local Grants	\$ -
Design	\$ 69,333	State Grants	\$ -
Construction	\$ 500,000	Federal Grants	\$ -
Post Construction	\$ -	Loan	\$ -
Total	\$ 569,333	Other	\$ -
		Total	\$ 569,333

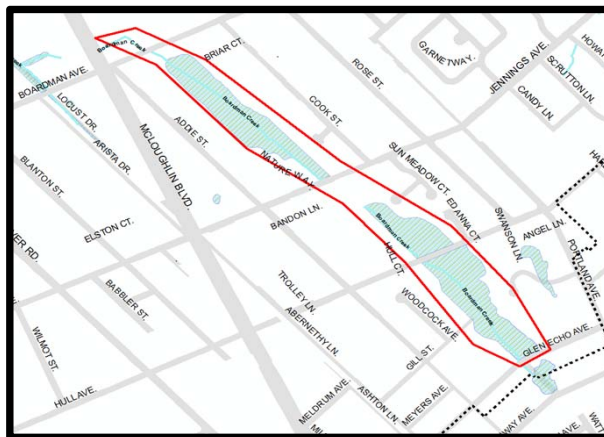


Oak Lodge Sanitary District Surface Water Capital Improvement Program 2014 - 2019

Project Summary

Project Number:	SB-17	Project Type:	SWM/Water Quality
Project Name:	Boardman-Rinearson Wetland Complex		
Project Manager:	OLSD		
Basis for Project:	Water Quality, Water Quantity, Wetland and Habitat Restoration		
Timeline:	2013 - 2018		
Project Description:	Enhance wetland function and water storage capacity, likely including some property acquisition		
Notes:	Strong community support for this project, stakeholders include JL CPO, NCPRD, ODFW, Clackamas County		

Vicinity Map



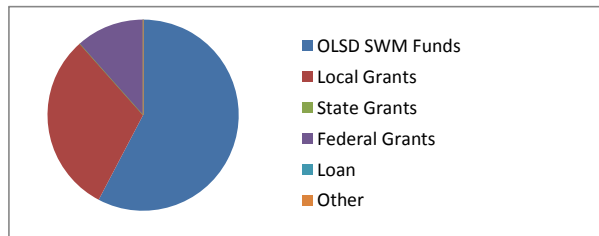
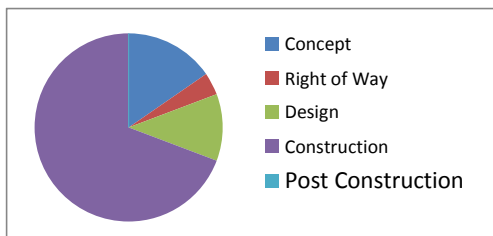
Status: December 2013: Baseline Data collection complete, starting Preliminary Design

Project Cost Summary

Concept	\$ 200,000
Right of Way	\$ 50,000
Design	\$ 150,000
Construction	\$ 900,000
Post Construction	\$ -
Total	\$ 1,300,000

Funding Summary

OLSD SWM Funds	\$ 750,037
Local Grants	\$ 400,000
State Grants	\$ -
Federal Grants	\$ 150,000
Loan	\$ -
Other	\$ -
Total	\$ 1,300,037



Oak Lodge Sanitary District

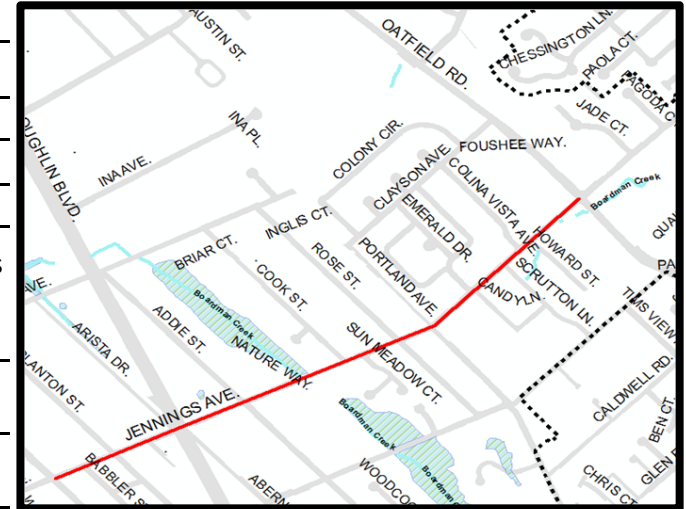
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

Project Number:	SB-18	Project Type:	SWM/Water Quality
Project Name:	Jennings Avenue Sidewalk Project/ Stormwater Demonstration		
Project Manager:	Clackamas County		
Basis for Project:	Water Quality Demonstration		
Timeline:	2013 - 2017		
Project Description:	Clackamas County is developing this project to build a new sidewalk on Jennings Avenue from Oatfield to River Road. Potential for LID BMP's such as bioswales, raingardens or pervious pavement.		
Notes:	OLSD is supporting CC DTD financially in this project		
Status:	Scoping		

Vicinity Map



Project Cost Summary

Concept	\$	-
Design	\$	-
Right of Way	\$	-
Construction	\$	-
Post Construction	\$	-
Total	\$	-

Funding Summary

OLSD SWM Funds	\$	-
Local Grants	\$	-
State Grants	\$	-
Federal Grants	\$	-
Loan	\$	-
Other	\$	-
Total	\$	-

	Concept
	Design
	Right of Way
	Construction
	Post Construction

	OLSD SWM Funds
	Local Grants
	State Grants
	Federal Grants
	Loan
	Other

Oak Lodge Sanitary District

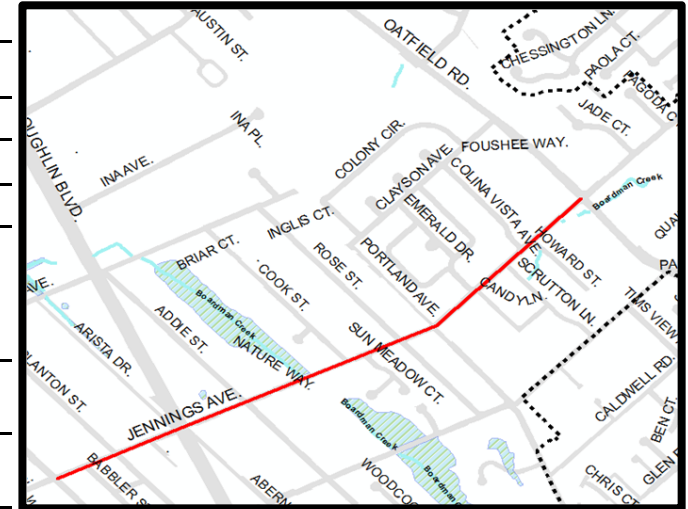
Surface Water Capital Improvement Program

2014 - 2019

Project Summary

Project Number:	SB-19	Project Type:	SWM/Water Quality
Project Name:	Boardman Creek Channel Rehabilitation		
Project Manager:	Oak Lodge Sanitary District		
Basis for Project:	Channel Restoration/ Water Quality		
Timeline:	2014-2015		
Project Description:	Project removes accumulated fine sediment and invasive plant species from Boardman Creek between Roethe Rd. and Boardman Avenue; this is the area with anoxic biological conditions due to extreme stagnation.		
Notes:	Project development requires private landowners to sign access agreements		
Status:	Permitting, Access Agreements		

Vicinity Map



Project Cost Summary

Concept	\$	-
Right of Way	\$	2,000
Design	\$	5,000
Construction	\$	20,000
Post Construction	\$	-
Total	\$	27,000

Funding Summary

OLSD SWM Funds	\$	27,000
Local Grants	\$	-
State Grants	\$	-
Federal Grants	\$	-
Loan	\$	-
Other	\$	-
Total	\$	27,000

