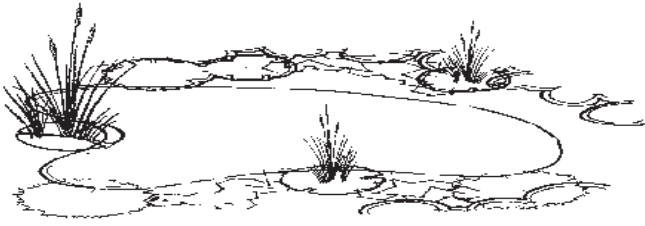

Storm Drainage



Background

An expanding population and increased land development have increased stormwater runoff problems. During this same time, federal, state and local governments have become increasingly aware of the need for improved management of stormwater runoff to protect water resources. Emerging and evolving federal and state regulations are requiring cities and counties to develop and implement stormwater management programs to mitigate existing water quality impacts and to lessen impacts from future development.

Stormwater runoff is the leading contributor to water pollution of urban waterways in Washington. It is a widespread, non-point source pollution. Non-point source pollutants include pathogens (such as bacteria and viruses), sediments (soil particles), nutrients (such as nitrogen and phosphorous), metallic elements (such as copper, lead and zinc) and toxicants (such as pesticides and petroleum products). Most pollutants originate on the land where they are picked up by rainwater and carried into surface waters. Urban land uses, as opposed to rural land uses, have much more impervious area which produces higher runoff volumes. In developed areas certain pollutants are more prevalent than in undeveloped areas. In addition to creating water quality problems, poorly managed stormwater can lead to flooding and erosion. Erosion from stormwa-

ter can cut away stream banks, degrade fish and wildlife habitat and cause considerable damage to property.

Increasing awareness of these problems lead the state Legislature to create the Puget Sound Water Quality Action Team (PSWQAT) in 1985. The PSWQAT was charged with preparing a comprehensive management plan for Puget sound and its related waterways. The Puget Sound Action Team published the "State of the Sound 2007" report and the "2007-2009 Puget Sound Conservation and Recovery Plan", both of which address stormwater as a key contributor to Puget Sound water quality problems. In more recent years, the Puget Sound Partnership has promoted Low Impact Development (LID) and the 2020 Action Agenda, a strategy for restoring the health of Puget Sound.

Consistent with the Growth Management Act, each local jurisdiction is required to cooperate with neighboring jurisdictions in stormwater basin or watershed planning. Jurisdictions sharing common watersheds must cooperate in analyzing the effects and control of stormwater runoff and adopt coordinated programs for stormwater management. Lacey has completed two comprehensive basin planning efforts, one for the Woodland and Woodard Creeks basins and another for the Chambers Creek basin. These basin plans together with the Chambers Lake Stormwater Management Plan and numerous stormwater outfall engineering reports formed the basis for the stormwater capital facilities projects listed in the 2007-2026 Capital Facilities Plan. In 2013, the first-ever Stormwater Comprehensive Plan (SCP) was completed, to provide guidance for Lacey's Storm and Surface Water Utility. The SCP includes an updated Capital Improvement Program (CIP), listing a variety

of projects to address water quality and flooding issues.

Lacey's Stormwater Management Program (SWMP) was established to prevent stormwater runoff problems through planning, regional coordination, public education and involvement, regulation of new development, improved operations and maintenance, and construction of stormwater treatment and control facilities. Since 2007, the National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Stormwater Permit has required Lacey to refine our SWMP and comply with specific program requirements on a specific schedule, for the purpose of controlling stormwater discharges to protect surface and ground waters. The proposed capital facilities will allow Lacey to correct water quality/quantity problems associated with existing stormwater discharges to local surface water bodies and to comply with regulatory requirements at the local, state and federal levels.

Overall Stormwater Management Program Goals

The objective of the City's overall Stormwater Management Program is to meet the following three goals:

- 1) Protect and enhance the quality and quantity of surface and groundwater resources to support beneficial use by humans, aquatic life, and wildlife.
- 2) Manage the storm drainage system to protect public safety and minimize property damage caused by flooding and erosion.
- 3) Provide adequate funding for the Stormwater Management Program through an equitable stormwater utility rate structure.

General Stormwater Management Program Policies

- 1) Continue to develop and implement a comprehensive stormwater management program consistent with requirements of the federal Clean Water Act, the NPDES Phase II Permit issued by the Washington State Department of Ecology, the state Growth Management Act, and the Puget Sound Action Agenda.
- 2) Improve public knowledge of stormwater runoff issues, encourage public involvement in stewardship activities, and encourage public support for the City's stormwater management program.
- 3) Ensure that new development, redevelopment, and City projects are in conformance with the City's adopted stormwater requirements.
- 4) Analyze proposed new development and redevelopment for potential impacts on the downstream storm drainage system and water quality as part of the stormwater plan review process.
- 5) Coordinate with other departments throughout the stormwater plan review, permitting, and project approval process to ensure that the process results in a functional stormwater system.
- 6) Construct new or improved stormwater facilities in accordance with the current CIP plan.
- 7) Review the CIP list annually to identify new projects, remove completed projects, refine planned projects, and reevaluate project prioritization.
- 8) Participate in the development and implementation of regional water quality manage-

ment plans, groundwater management plans, stormwater management plans, lake management plans, drainage basin plans, watershed action plans, and wellhead protection plans to ensure that Lacey's water resources are protected.

- 9) Continue to work cooperatively with other local governments through joint basin planning in shared drainage basins to provide regionally coordinated planning, construction, and maintenance for regional stormwater facilities.
- 10) Oversee construction and maintenance of privately owned stormwater facilities to ensure that they function as designed to protect private property, public property, and the environment.
- 11) Proactively maintain, repair, rehabilitate, and replace aging City stormwater facilities and minimize the need for costly and disruptive emergency repairs.
- 12) Revise the Stormwater Comprehensive Plan every 6 years, or sooner if needed, to ensure that it provides for effective long-term stormwater project planning, system maintenance, response to mandates, and program funding.

Level-of-Service Analysis

The level-of-service standards for Lacey's municipal storm drainage system are the same as those applied to private development projects for water quality treatment, flow control, and erosion and sediment control. Design criteria for stormwater facilities in Lacey's drainage manual applies to both public and private development projects. Since the early 1990s, Lacey has followed state standards in striving to achieve "zero direct discharge of untreated stormwater into surface

waters for all storm events of less than or equal to a 6-month, 24-hour storm." This water quality design storm was the minimum size needed to provide treatment of all runoff except that from relatively rare large storms. Under Lacey's 1994 Drainage Design and Erosion Control Manual, stormwater treatment facilities have specific design criteria that, when met, are presumed to achieve the water quality performance goal. For flow control, treated stormwater is infiltrated within the project site to the maximum extent feasible. These basic goals continue under more recent standards, although the standards and design criteria for stormwater management have become more stringent.

Lacey created and adopted the 2010 Stormwater Design Manual to replace the 1994 Drainage Design and Erosion Control Manual and to be technically equivalent to Ecology's 2005 Stormwater Management Manual for Western Washington, which provided the latest state guidance to counter the adverse impacts from stormwater. Among the changes, the treatment standard was revised to the 91st percentile runoff volume calculated by continuous-simulation modeling, which considers the long-term pattern of local rainfall rather than single "24-hour storm" events. Development projects initiated since 2010 in Lacey, both private and public, must meet the newer standards and design criteria of the 2010 Stormwater Design Manual for water quality treatment, flow control, construction-site erosion and sediment control, on-site infiltration, source control of pollutants, facilities maintenance, and other considerations.

Under the requirements of the 2013-2018 NPDES Phase II Municipal Stormwater Permit, Lacey's 2010 Stormwater Design Manual was updated in 2016 to be technically equivalent to Ecology's 2012 / 2014 Stormwater Management Manual for Western Washington. Also, all of our other development-related codes, standards and regula-

tions were updated in 2016 to fully integrate “low impact development” (LID) principles and practices as the “preferred and commonly-used approach” to all types of land-development projects. The code revisions were completed and made effective by December 31, 2016 as required by the permit.

Lacey is taking significant steps toward meeting its stormwater management program goals, through both physical and programmatic improvements. Capital projects are obvious solutions to specific water quality and quantity issues, but non-capital solutions such as updated regulations, operation and maintenance practices, and public education efforts are also necessary components of an effective Stormwater Management Program. Lacey will continue to pursue both capital and non-capital measures simultaneously to correct drainage-related problems and effectively manage stormwater in its watersheds.

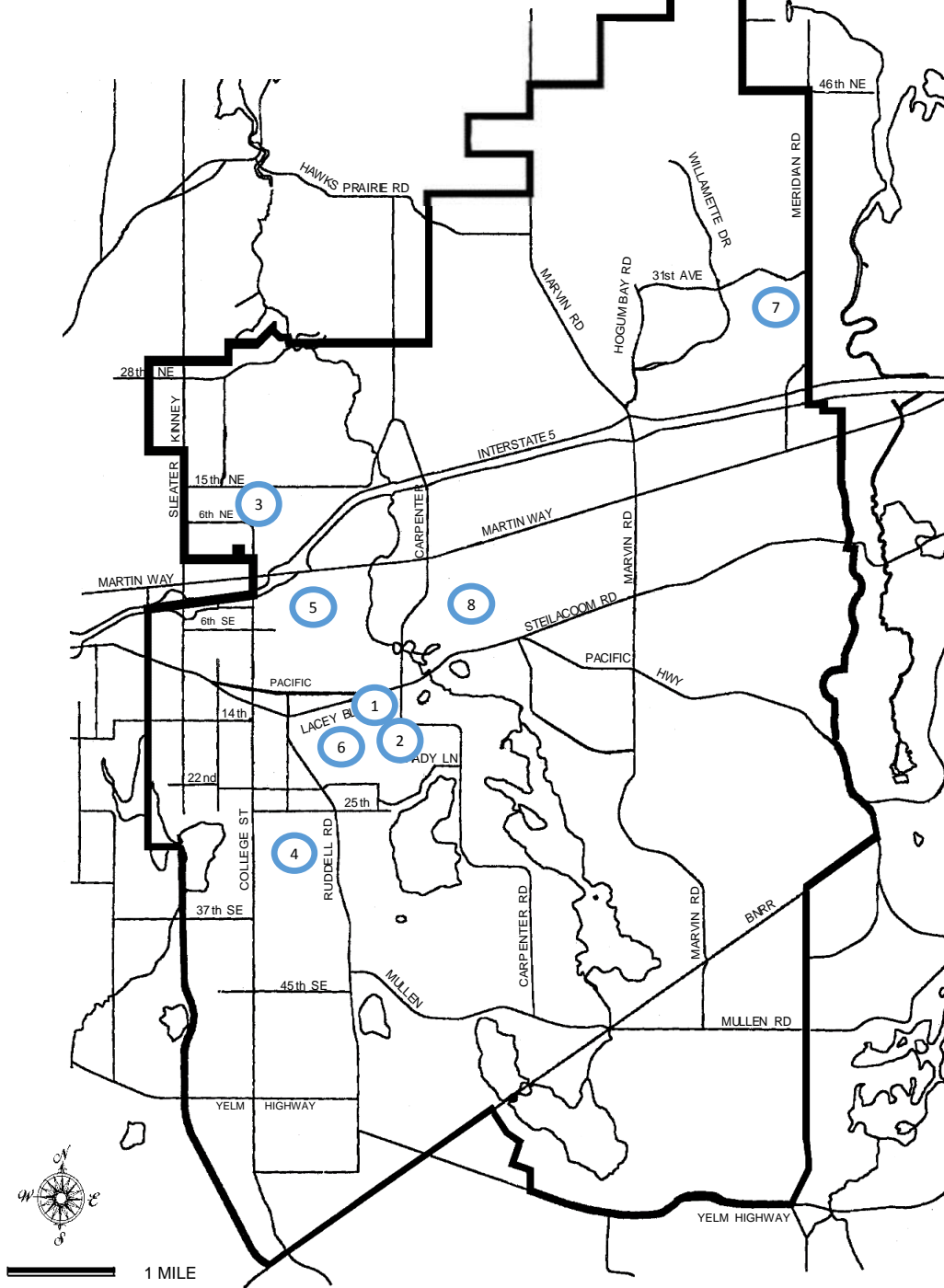
6-Year Financing Plan

The 6-year Financing Plan is shown in the Stormwater Project Summary Sheet.



CITY OF LACEY
CAPITAL FACILITIES PLAN
2019-2038

PUGET
SOUND



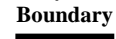
1 MILE

Stormwater Facility Projects

Project Numbers



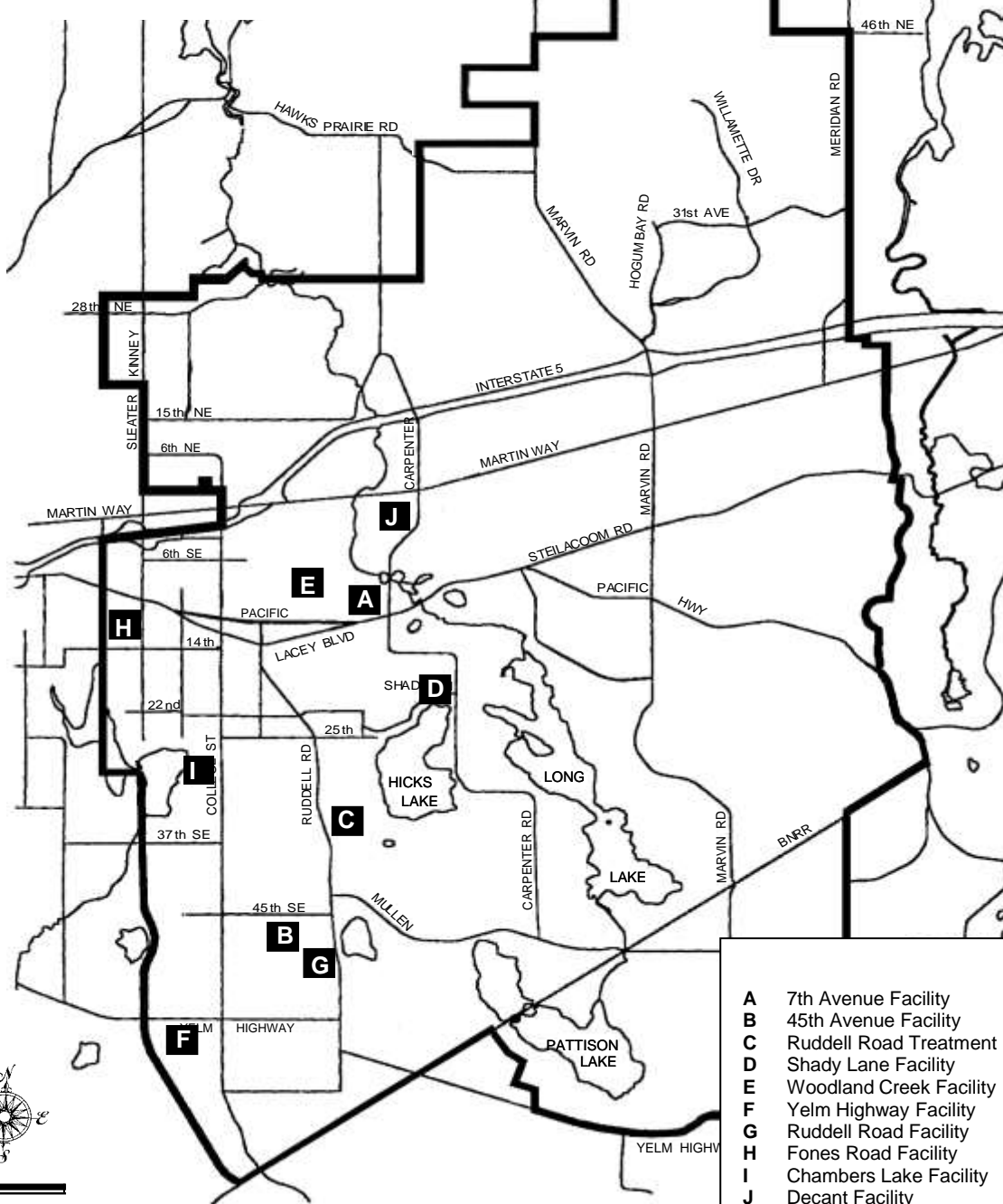
Lacey UGA
Boundary





CITY OF LACEY
 CAPITAL FACILITIES PLAN
 2019-2038

PUGET
 SOUND



1 MILE

- A 7th Avenue Facility
- B 45th Avenue Facility
- C Ruddell Road Treatment
- D Shady Lane Facility
- E Woodland Creek Facility
- F Yelm Highway Facility
- G Ruddell Road Facility
- H Fones Road Facility
- I Chambers Lake Facility
- J Decant Facility

**Regional Stormwater
 Facilities Inventory**

Regional Facilities

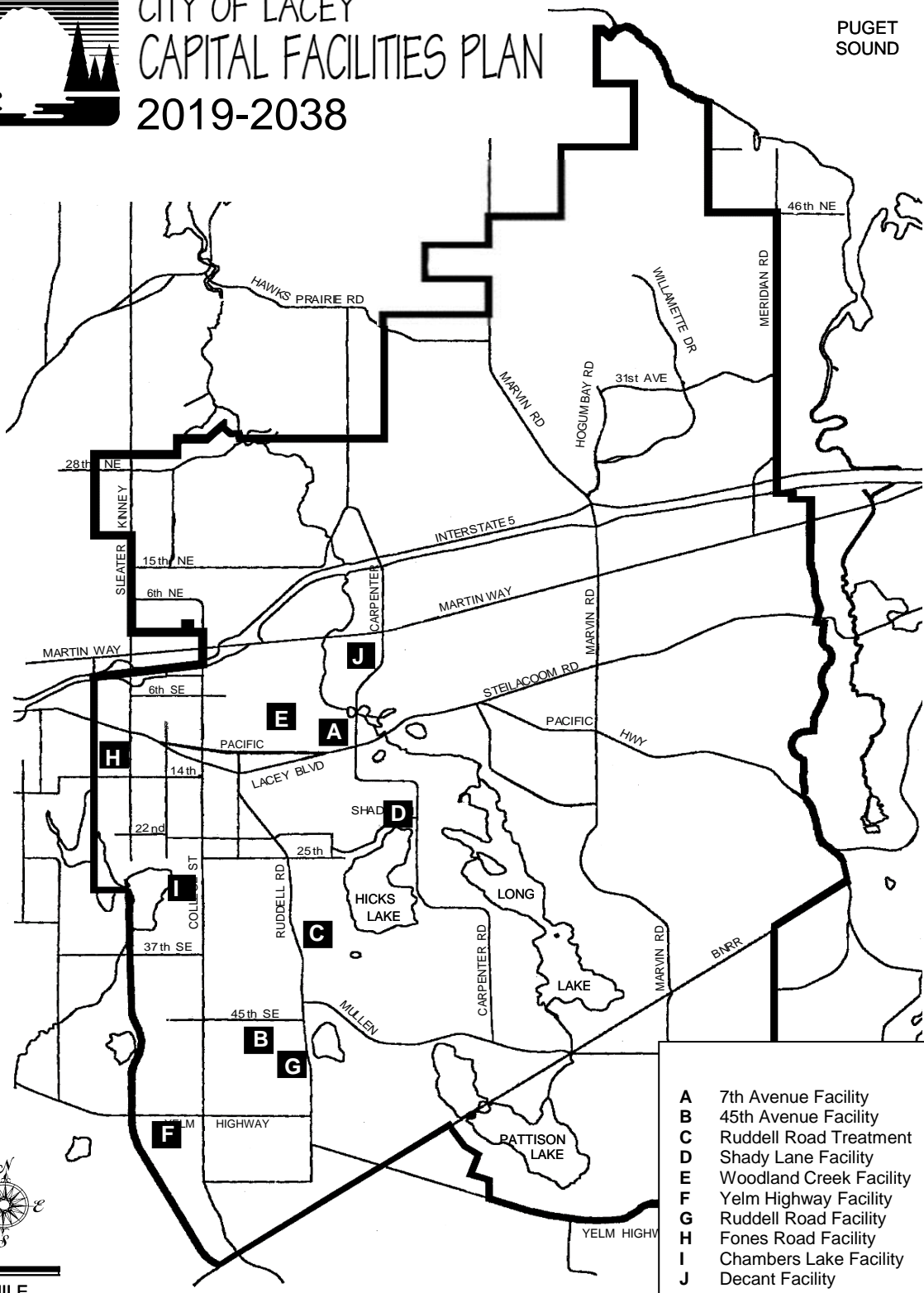


**Lacey UGA
 Boundary**



CITY OF LACEY
CAPITAL FACILITIES PLAN
2019-2038

PUGET
SOUND



1 MILE

- A 7th Avenue Facility
- B 45th Avenue Facility
- C Ruddell Road Treatment
- D Shady Lane Facility
- E Woodland Creek Facility
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**Regional Stormwater
Facilities Inventory**

Regional Facilities



**Lacey UGA
Boundary**

**CITY OF LACEY 2019-2038 CAPITAL FACILITIES PLAN
STORM DRAINAGE PROJECTS SUMMARY SHEET**

FUNDING SOURCES	Prior Years	2019	2020	2021	2022	2023	2022	6-Year Total	%	Future Years
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds		103,415	133,137	592,749	470,699			1,300,000	61%	
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital	127,515	376,719	467,286					844,005	39%	7,126,468
TOTAL	127,515	480,134	600,423	592,749	470,699			2,144,005	100%	7,126,468

EXPENDITURES BY CATEGORY

7-7

Planning										
Preliminary Design										
Design & Engineering		261,136	232,609	257,444	124,001			875,190	41%	888,962
Land / ROW Acquisition										
Construction	127,515	218,998	367,814	335,305	346,698			1,268,815	59%	6,237,506
Other										
TOTAL	127,515	480,134	600,423	592,749	470,699			2,144,005	100%	7,126,468

EXPENDITURES BY PROJECT

SW 1 22nd Avenue SE System Rehabilitation		39,755	120,448					160,203	7%	
SW 2 Diamond Stormwater Alternative	115,816	251,798						251,798	12%	
SW 3 Stormwater Comprehensive Plan	11,699	85,166	88,752					173,918	8%	
SW 4 25th Loop Storm Improvements		103,415	302,407					405,822	19%	
SW 5 Clearbrook Drainage Improvements			88,816	385,918				474,734	22%	
SW 6 Homann Area System Rehabilitation				189,798	316,330			506,128	24%	
SW 7 1010 Midway Storm Improvements				17,033	30,368			47,401	2%	
SW 8 Belair / Impala Stormwater Installation					124,001			124,001	6%	514,529
SW 9 College Regional Stormwater Facility										5,721,344
SW 10 Alder and Gemini Drainage System										631,552
SW 11 White Fir Stormwater Installation										223,517
SW 12 5th Ct SE and 5th Way Improvements										35,526
TOTAL	127,515	480,134	600,423	592,749	470,699			2,144,005	100%	7,126,468

Planning Period: 2019-2038
 Project Title: 22nd Avenue SE System Rehabilitation
 Location: Between College and Golf Club

File Number: sw001.xls
 UGA Planning Area: Central

CFP Project: SW - 1
 Department: Public Works

Project Description: Convert 500 linear feet of existing grassy swale to bioretention facilities. Install new storm drain from the existing pump station location southward, across private property, to an existing depression.

Project Justification: Drainage from the neighborhood to the north overflows to 25th Loop SE and the outlet of this basin has been partially blocked by a private driveway. A stormwater pump station has been installed but requires frequent maintenance so a better long term solution is needed.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City ROW

PROJECT FUNDING SOURCES AND EXPENDITURES

7-12

FUNDING	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital		39,755	120,448					160,203	100%	
TOTAL FUNDING		39,755	120,448					160,203	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering		39,755	15,816					55,571	35%	
Land / ROW Acquisition										
Construction			104,632					104,632	65%	
Other										
TOTAL EXPENDITURES		39,755	120,448					160,203	100%	

Notes:

Planning Period: 2019-2038
 Project Title: Diamond Stormwater Alternative
 Location: 22nd Ave SE and Ruddell Road

File Number: sw002.xls
 UGA Planning Area: Central

CFP Project: SW - 2
 Department: Public Works

Project Description: Manage stormwater onsite using permeable pavers for 360 LF on the east side of 22nd Avenue SE between Golf Club Rd SE and College St SE. Install pavers between existing asphalt road edge and sidewalk. This solution manages stormwater while preserving current parking uses. Also install pipe on the northeast end of 22nd Ave SE to connect existing drainage pathway to the existing catch basin in College St SE.

Project Justification: Three existing drywells are no longer functioning and causing flooding on several properties. Ponded water extends up to the front steps of residences. However, residents don't want to sacrifice parking for open conveyance or bioretention facilities.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City ROW

PROJECT FUNDING SOURCES AND EXPENDITURES

7-13

	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital	115,816	251,798						251,798	100%	
TOTAL FUNDING	<u>115,816</u>	<u>251,798</u>						<u>251,798</u>	<u>100%</u>	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering	115,816	32,800						32,800	13%	
Land / ROW Acquisition										
Construction		218,998						218,998	87%	
Other										
TOTAL EXPENDITURES	<u>115,816</u>	<u>251,798</u>						<u>251,798</u>	<u>100%</u>	

Notes:

Planning Period: 2019-2038
 Project Title: Stormwater Comprehensive Plan
 Location: N/A

File Number: sw007.xls
 UGA Planning Area: All

CFP Project: SW - 3
 Department: Public Works

Project Description: The City will need to update the SCP to reflect the 2018 updates to the Phase II Permit. The SCP will build on the City's existing stormwater management program and known stormwater problems to ensure that the stormwater infrastructure, policies, and funding mechanisms will meet the City's needs for the 2018-2023 cycle.

Project Justification: The Growth Management Act requires cities to periodically update their comprehensive plan. Ecology plans to update the 2013 -2018 Phase II permit for the next permit cycle 2018-2023.

Policy Basis: Growth Management Act

Current Project Status: Planning

Land Status: N/A

PROJECT FUNDING SOURCES AND EXPENDITURES

	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital	11,699	85,166	88,752					173,918	100%	
TOTAL FUNDING	<u>11,699</u>	<u>85,166</u>	<u>88,752</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>173,918</u>	<u>100%</u>	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering	11,699	85,166	88,752					173,918	100%	
Land / ROW Acquisition										
Construction										
Other										
TOTAL EXPENDITURES	<u>11,699</u>	<u>85,166</u>	<u>88,752</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>173,918</u>	<u>100%</u>	

Notes:

7-14

Planning Period: 2019-2038
 Project Title: 25th Loop Storm Improvements
 Location: 25th Loop

File Number: sw004.xls
 UGA Planning Area: Central

CFP Project: SW - 4
 Department: Public Works

Project Description: Install backflow preventers on 2 existing storm drain outfalls to pond. Install a new storm pump station adjacent to the sanitary sewer pump station on Diamond Loop SE, a force main to convey flow to the stormwater outfalls, and a filtration system at the pump station inlet to provide water quality treatment.

Project Justification: Stormwater at this location is pumped away during extreme storm events (i.e., every couple of years). An alternative solution is needed that would manage stormwater without pumping it away.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City ROW

PROJECT FUNDING SOURCES AND EXPENDITURES

7-15

FUNDING	Prior Years	2017	2018	2019	2020	2021	2022	6-Year Total	%	Future Years
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds		103,415	44,321					147,736	36%	
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital			258,086					258,086	64%	
TOTAL FUNDING		103,415	302,407					405,822	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering		103,415	39,225					142,640	35%	
Land / ROW Acquisition										
Construction			263,182					263,182	65%	
Other										
TOTAL EXPENDITURES		103,415	302,407					405,822	100%	

Notes:

Planning Period: 2019-2038
 Project Title: Clearbrook Drainage Improvements
 Location: Clearbrook Drive

File Number: sw005.xls
 UGA Planning Area: Central

CFP Project: SW - 5
 Department: Public Works

Project Description: Lower invert of pond outlet and increase pipe size (larger pipe at reduced slope). Excavate a linear swale around the perimeter to provide adequate fall for the pipes and install two pedestrian bridges. Add an upstream infiltration facility in 19th Ct NE with stormwater treatment.

Project Justification: The aging storm drain in this area has limited slope and there is no fall between the storm drain outlets and Clearbrook Pond. The system frequently get backwatered, causes street flooding and threatens to flood one house during any significant rain event.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City ROW

PROJECT FUNDING SOURCES AND EXPENDITURES

7-16

FUNDING	Prior Years	2019	2020	2021	2022	2023	2024	6-Year Total	%	Future Years
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds			88,816	385,918				474,734	100%	
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital										
TOTAL FUNDING			88,816	385,918				474,734	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering			88,816	50,613				139,429	29%	
Land / ROW Acquisition										
Construction				335,305				335,305	71%	
Other										
TOTAL EXPENDITURES			88,816	385,918				474,734	100%	

Notes:

Planning Period: 2019-2038
 Project Title: Homann Area System Rehabilitation
 Location: Homann Drive

File Number: sw006.xls
 UGA Planning Area: Central

CFP Project: SW - 6
 Department: Public Works

Project Description: Install 10 new bioretention facilities in the right of way to enhance local infiltration and take advantage of high infiltrating soils in the area.

Project Justification: Drywells and infiltration trenches in this area are no longer functioning and causing localized nuisance flooding.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City Owned

PROJECT FUNDING SOURCES AND EXPENDITURES

7-17

	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds				189,798	316,330			506,128	100%	
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital										
TOTAL FUNDING				189,798	316,330			506,128	100%	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering				189,798				189,798	38%	
Land / ROW Acquisition										
Construction					316,330			316,330	63%	
Other										
TOTAL EXPENDITURES				189,798	316,330			506,128	100%	

Notes:

Planning Period: 2019-2038
 Project Title: 1010 Midway Storm Improvements
 Location: Midway

File Number: sw007.xls
 UGA Planning Area: Pleasant Glade

CFP Project: SW - 7
 Department: Public Works

Project Description: Install 10 new bioretention facilities in the right of way to enhance local infiltration and take advantage of high infiltrating soils in the area.

Project Justification: A clogged storm drain pipe and blind connection into the County storm drain is causing flooding.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City Owned

PROJECT FUNDING SOURCES AND EXPENDITURES

7-18

	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds				17,033	30,368			47,401	100%	
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital										
TOTAL FUNDING				<u>17,033</u>	<u>30,368</u>			<u>47,401</u>	<u>100%</u>	
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering				17,033				17,033	36%	
Land / ROW Acquisition										
Construction					30,368			30,368	64%	
Other										
TOTAL EXPENDITURES				<u>17,033</u>	<u>30,368</u>			<u>47,401</u>	<u>100%</u>	

Notes:

Planning Period: 2019-2038
 Project Title: Belair / Impala Stormwater Installation
 Location: Belair and Impala Drives

File Number: sw008.xls
 UGA Planning Area: Central

CFP Project: SW - 8
 Department: Public Works

Project Description: Install Storm drain along Impala Drive SE and 32nd Avenue SE to convey stormwater to Ruddell Road Stormwater Treatment Facility.

Project Justification: Lack of drainage infrastructure in this area is causing nuisance flooding. All stormwater runoff flows overland towards Wonderwood Park causing chronic flooding on residential streets and in some driveways. Flooding is most significant at the downstream end of the neighborhood. Drainage infrastructure is needed in this neighborhood.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City Owned

PROJECT FUNDING SOURCES AND EXPENDITURES

7-19

FUNDING	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds					124,001			124,001	100%	
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital										514,529
TOTAL FUNDING					<u>124,001</u>			<u>124,001</u>	<u>100%</u>	<u>514,529</u>
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering					124,001			124,001	100%	
Land / ROW Acquisition										
Construction										514,529
Other										
TOTAL EXPENDITURES					<u>124,001</u>			<u>124,001</u>	<u>100%</u>	<u>514,529</u>

Notes:

Planning Period: 2019-2038
 Project Title: College Regional Stormwater Facility
 Location:

File Number: sw009.xls
 UGA Planning Area: Central

CFP Project: SW - 9
 Department: Public Works

Project Description: Construct a new storm drain from College Regional Stormwater Facility to Woodland Creek. Option A would reroute the flow path to the eastward down an alignment that slopes correctly, but does not currently connect. Option B would route flow under Martin Way and northward.

Project Justification: Under a 2008 agreement between the City and St. Martin's Abbey/University, the City is required to modify the facility to accommodate additional flow from the University resulting from campus growth and improvements. This is because the facility outfall was discovered to be smaller than originally thought (30 inch diameter, not 36 inch diameter).

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: St Martin's Property

PROJECT FUNDING SOURCES AND EXPENDITURES

	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital										5,721,344
TOTAL FUNDING										5,721,344
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering										744,817
Land / ROW Acquisition										
Construction										4,976,527
Other										
TOTAL EXPENDITURES										5,721,344

Notes:

Planning Period: 2019-2038
 Project Title: Alder and Gemini Drainage System
 Location: Alder and Gemini Streets

File Number: sw010.xls
 UGA Planning Area: Central

CFP Project: SW - 10
 Department: Public Works

Project Description: Rehab existing drywells, install new storm drain to convey stormwater to new infiltration galleries in community open space and overflow from the infiltration facility to the storm drain in Lacey Blvd.

Project Justification: Lack of drainage infrastructure in this area is causing nuisance flooding.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City Owned

PROJECT FUNDING SOURCES AND EXPENDITURES

7-21

	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital										631,552
TOTAL FUNDING										631,552
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering										123,828
Land / ROW Acquisition										
Construction										507,724
Other										
TOTAL EXPENDITURES										631,552

Notes:

Planning Period: 2019-2038
 Project Title: White Fir Stormwater Installation
 Location: White Fir Drive NE

File Number: sw011.xls
 UGA Planning Area: Hawks Prairie

CFP Project: SW - 11
 Department: Public Works

Project Description: Install new permeable gravel shoulder with underdrain pipe on north and south shoulders of White Fir Drive NE. Connect underdrain to existing storm drain system. Existing system discharges to infiltration area that is functioning well

Project Justification: Lack of drainage infrastructure in this area is causing nuisance flooding.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status: City owned

PROJECT FUNDING SOURCES AND EXPENDITURES

7-22

	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
FUNDING										
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital										223,517
TOTAL FUNDING										223,517
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering										20,317
Land / ROW Acquisition										
Construction										203,200
Other										
TOTAL EXPENDITURES										223,517

Notes:

Planning Period: 2019-2038
 Project Title: 5th Ct SE and 5th Way Improvements
 Location: 5th Ct SE and 5th Way

File Number: sw012.xls
 UGA Planning Area: Tanglewilde

CFP Project: SW - 12
 Department: Public Works

Project Description: Construct channelized inverts in the bottom of existing CB's to enable jetting of pipes as needed for maintenance. Will also require increased maintenance of upstream and downstream structures.

Project Justification: Pipes / Structures in backyard area creating a maintenance problem because access is limited.

Policy Basis: Stormwater Comp Plan

Current Project Status: Planning

Land Status:

PROJECT FUNDING SOURCES AND EXPENDITURES

7-23

FUNDING	<u>Prior Years</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>6-Year Total</u>	<u>%</u>	<u>Future Years</u>
General Revenue										
Voted G.O. Bonds										
Non-Voted G.O. Bonds										
Revenue Bonds										
Utility Rates / Fees										
GFC Revenue										
LID / ULID										
Arterial Street Fund										
PWTF Loan										
Interfund Loan										
Grants										
SEPA / LTA										
Developer Financing										
Stormwater Capital										35,526
TOTAL FUNDING										35,526
EXPENDITURES										
Planning										
Preliminary Design										
Design & Engineering										
Land / ROW Acquisition										
Construction										35,526
Other										
TOTAL EXPENDITURES										35,526

Notes: