

city of forest grove

**ADOPTED
CAPITAL**

IMPROVEMENTS

PROGRAM

2013 - 2018

CAPITAL IMPROVEMENTS PROGRAM

CITY OF FOREST GROVE

TABLE OF CONTENTS

Introduction		Page			Page
Utility and Transportation Projects		1	Utility and Transportation Projects (Continued)		
LP1	Major Tools and Equipment	2	W10	Finished Water Storage	110
LP2	Substation Upgrades	4	W11	Water Rights Strategic Plan	112
LP4	Property Improvements & Office Building	6	W13	Asset Management Program	114
LP8	L&P Vehicle Replacement Program	8	W14	Public Works' Building Improvements	116
LP9	L&P Specialized Equipment	10	W15	Transmission Line Repair	118
LP22	Distribution System Additions And Upgrades	12	W16	Large Meter Replacement	120
EQ1	Equipment Replacement Program	14	W17	Emergency Water Dispenser	122
ST1	Gales Way (From "E" Street To 23rd Avenue)	16	W20	JWC Finished Water Metering	124
ST3	23rd/24th Avenue (Industrial Area)	18	W21	JWC JWC Floc/Sed Basin Improvements	126
ST5	19th Avenue (Oak St. to Hwy 47)	20	W22	JWC Building Improvements	128
ST10	David Hill Road	22	W23	JWC Master Plan	130
ST12	TV Hwy & Quince	24	W24	JWC Thickener	132
ST15	19th Avenue Extension	26	W27	JWC Equipmen t Needs	134
ST17	Thatcher Road	28	W29	JWC Seismic Retro Fit of Current Plant	136
ST18	26th Avenue	30	W30	JWC Hydropneumatic Actuators	138
ST19	Hwy 47 & Maple Street Intersection	32	W31	JWC Remove Lime Silo	140
ST20	Safe Routes to School	34	W32	JWC Source Water Protection Plan	142
ST22	"B" Street North	36	W33	JWC Trash Screen Improvements	144
ST24	Crosswalks -- Thatcher & Gales Creek Hwy	38	W39	JWC Fish Screen At Fern Hill Pump Station	146
ST25	20th Place	40	W41	JWC Water Rights Consult of Record	148
ST26	Transit Improvemtns	42	W42	JWC Bar Rack Cleaning System	150
SW1	Replace / Rehabilitate Old Sewers	44	W43	JWC Connecting Yard Valves	152
SW2	Sewer Oversizing Participation/SDC	46	W44	JWC Electrical Assessment Upgrades	154
SW3	CWS / City Phase III Sewer I&I Repair	48	W45	JWC Filtration Study	156
SW4	Maple Street Capacity Expansion	50	W47	JWC On-Site Power Generation	158
SW5	Willamina Capacity Expansion	52	W48	JWC FG Transmission Line Inspection & Repair	160
SW7	Sunset Drive MSTIP/SDC	54	W49	JWC Pump Station Improvements	162
SW8	23rd/24th Avenue (Industrial Area)	56	W50	JWC Campus Improvements	164
SW9	South Mountain View Lane Sewer Line	58	W51	Land Acquisition	166
SW10	"A" Street Capacity (A to 16th, 8" and 10")	60	Public Safety Projects		169
SW11	Fir Road	62	FF3	Replacement Of Turnouts/Safety Equipment	170
SW15	23rd Avenue I & I Project	64	FF4	Replacement Of Fire Hose, Nozzles, Etc.	172
SW16	Sewer District	66	FF8	Fire Apparatus Replacement Program	174
SWM2	Hawthorne Street Drainage	68	FF25	Portable Radios	176
SWM4	Storm Sewer Construction	70	FF26	Fire Hydrant	178
SWM6	23rd/24th Drainage Culvert	72	FF27	EMS Equipment	180
SWM7	Alyssum and Twinflower Drainage	74	PD11	Replacement Of Mobile And Portable Radios	182
SWM9	Cedar Street Pump Station	76	PD12	Replacement Of MDC's	184
SWM11	Higby Lane	78	PD29	Firearms and Weapons Replacement	186
SWM12	Beal Pond	80			
SWM16	Basin 5 - 17th Avenue & Hawthorne	82	Culture and Recreation Projects		189
SWM 18	Storm Sewer Outfalls	84	AQ4	Aquatic Center Energy Projects	190
SWM 19	"B" Street at Harvey Clark	86	AQ5	Pool Deck	192
SWM20	David Hill Drainage	88	PR9	Rogers Park Renovation	194
SWM21	City Parks Drainage	90	PR13	Trails/Greenways/Linear Parks	196
W1	Distribution Main Improvements	92	PR14	Thatcher Park Phase II	198
W2	Line Oversizing Participation	94	PR20	Joseph Gale Park Improvements	200
W3	FG WTP Improvements	96	PR25	Bard Park Renovation	202
W4	Watershed Road Improvements	98	PR27	Southern Land Acquisition	204
W5	Emergency Intertie	100	PR28	Parks Master Plan Update	206
W6	23rd/24th Avenue (Industrial Area)	102	PR29	Improve Parking Lots at Parks	208
W7	Gales Creek	104	General Government Projects		211
W8	Barney Buy-In	106	AS29	Storage Building (Replace Old L&P Bldg)	212
W9	David Hill	108	AS33	Downtown Parking Improvements	214

May 2013

CITY OF FOREST GROVE

2013-2018 CAPITAL IMPROVEMENTS PROGRAM (CIP)

PURPOSE: To achieve two primary objectives:

Planning for public improvements and capital equipment. Coordination with the comprehensive plan will identify infrastructure and public facilities needed to meet the demands of the community. The City can plan for facility improvements and equipment needs on a long-term basis.

Identifying funding sources for public improvements and capital equipment. The CIP matches anticipated sources to high-priority projects. Therefore, the CIP helps highlight projects for which funding must be secured.

SCOPE: The Capital Improvements Program provides a five-year plan of public physical improvements and major equipment expenditures. The program is ongoing and revised annually as part of the budget process. Review and approval of the CIP is integrated with the annual budget process. The CIP is reviewed and approved every year by the Budget Committee and City Council. The planned expenditures for the coming fiscal year will be reviewed during the City's annual budget review process and may be subject to revision.

Capital improvements include maintenance, renovation, replacement, new construction or expansion of physical facilities requiring an expenditure of \$5,000 or more. This includes cost of land, engineering, architectural planning and contractual services.

The CIP also contains capital equipment expenditures of \$5,000 or more. This is equipment having a relatively long period of usefulness (i.e., over 3 years). Examples include fire engines and all city-owned vehicles.

PROGRAM DESCRIPTIONS: Projects within the Capital Improvements Program are broken into four categories. They include Utility and Transportation Projects; Public Safety Projects; Culture and Recreation Projects; and General Government Projects. These categories do not necessarily correspond to specific departments or funds in the City's annual budget. Each project in the CIP will be budgeted in the fund responsible for managing the project in the annual budget document.

Utility and Transportation Projects: The projects within this category are for constructing, maintaining and developing infrastructure relating to the City's utility and transportation functions. These functions include the provision and maintenance of streets, storm drainage, electrical

distribution, water services, and sewer services. Besides replacing existing infrastructure, projects within this program lay the foundation for future development of all types - residential, commercial and industrial. Some projects in this category play a supportive role to overall utility and transportation functions, such as equipment replacement, property acquisition and building rehabilitation.

Public Safety Projects: Projects within this category are for providing capital equipment and facilities for public safety services. These include law enforcement, crime prevention, fire prevention, fire suppression and emergency operations.

Culture and Recreation Projects: Projects within this category are for maintaining and developing cultural and recreational opportunities within the community through the Parks system, the Aquatic Center and the Library. Projects may include replacement of capital equipment and facilities to maintain existing service levels. This program would also include new equipment and facilities to expand and develop new opportunities to enrich the quality of life in the community.

General Government Projects: Projects within this category are for providing capital equipment and facilities to support the general operations of City government. This includes building construction, repair and maintenance outside of the areas listed above, as well as maintaining general parking facilities. Significant technological improvements are also included in this category, such as replacing software systems or advancing the architecture of the city computer network.

**UTILITY AND
TRANSPORTATION
PROJECTS**

UTILITY AND TRANSPORTATION PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2013-14	2014-15	2015-16	2016-17	2017-18	TOTAL
LIGHT AND POWER FIVE YEAR CAPITAL IMPROVEMENT PROGRAM							
LP1	Major Tools and Equipment	72,000	20,000	20,000	20,000	20,000	152,000
LP2	Substation Upgrades	1,323,000	2,220,000	2,025,000	145,000	110,000	5,823,000
LP4	Property Improvements & Office Building	78,500	0	0	0	0	78,500
LP8	L&P Vehicle Replacement Program	485,000	290,000	165,000	100,000	125,000	1,165,000
LP9	L&P Specialized Equipment	11,000	30,000	30,000	30,000	30,000	131,000
LP22	Distribution System Additions And Upgrades	215,000	50,000	50,000	50,000	50,000	415,000
	LIGHT AND POWER TOTALS	2,184,500	2,610,000	2,290,000	345,000	335,000	7,764,500
EQUIPMENT FUND FIVE YEAR CAPITAL IMPROVEMENT PROGRAM							
EQ1	Equipment Replacement Program	290,000	725,000	371,000	196,000	489,000	2,071,000
	EQUIPMENT TOTALS	290,000	725,000	371,000	196,000	489,000	2,071,000
STREET FUND FIVE YEAR CAPITAL IMPROVEMENT PROGRAM							
ST1	Gales Way (From "E" Street To 23rd Avenue)	0	456,720	0	0	0	456,720
ST3	23rd/24th Ave (Industrial Area)	0	0	0	0	1,324,660	1,324,660
ST5	19th Ave (Oak St. to Hwy 47)	0	0	0	0	330,000	330,000
ST10	David Hill Road	0	0	642,808	2,000,000	3,785,268	6,428,075
ST12	TV Hwy & Quince	1,504,469	0	0	3,330,000	0	4,834,469
ST15	19th Avenue Extension	0	0	0	0	4,768,848	4,768,848
ST17	Thatcher Road	0	0	0	0	3,626,136	3,626,136
ST18	26th Ave	0	450,000	1,400,000	0	0	1,850,000
ST19	Hwy 47 & Maple Street Intersection	0	0	0	0	500,000	500,000
ST20	Safe Routes to School	50,000	0	0	0	0	50,000
ST22	B Street North	0	0	0	0	6,068,623	6,068,623
ST24	Crosswalks - Thatcher & Gales Creek Hwy	105,000	0	0	0	0	105,000
ST25	20th Place	0	0	0	0	280,000	280,000
ST26	Transit Improvements	40,000	0	0	0	0	40,000
	STREET TOTALS	1,699,469	906,720	2,042,808	5,330,000	20,683,535	30,662,531
SEWER FUND FIVE YEAR CAPITAL IMPROVEMENT PROGRAM							
SW1	Replace / Rehabilitate Old Sewers	30,000	100,000	100,000	100,000	100,000	430,000
SW2	Sewer Oversizing Participation/SDC	25,000	50,000	50,000	50,000	50,000	225,000
SW3	CWS / City Phase III Sewer I&I Repair	94,004	94,004	94,004			282,013
SW4	Maple Street Capacity Expansion	0	0	0	0	600,000	600,000
SW5	Willamina Capacity Expansion	0	0	0	677,250	837,750	1,515,000
SW7	Sunset Drive MSTIP/SDC	121,995	121,995	121,995	121,995	121,995	609,973
SW8	23rd/24th Avenue (Industrial Area)	0	0	0	0	278,960	278,960
SW9	Mountain View Sewer Line	0	0	0	0	600,000	600,000
SW10	A Street Capacity (A to 16th; 8" & 10" to 15")	0	0	0	0	590,000	590,000
SW11	Fir Road	0	0	0	0	420,000	420,000
SW15	23rd Ave I&I Project	250,000	250,000	0	0	0	500,000
SW16	Sewer District	0	1,000,000	0	0	0	1,000,000
	SEWER TOTALS	520,999	1,615,999	365,999	949,245	3,598,705	7,050,946

UTILITY AND TRANSPORTATION PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2013-14	2014-15	2015-16	2016-17	2017-18	TOTAL
SURFACE WATER MANAGEMENT FUND FIVE YEAR CAPITAL IMPROVEMENT PROGRAM							
SWM2	Hawthorne Street Drainage	0	0	0	0	342,000	342,000
SWM4	Storm Sewer Construction	20,000	20,000	20,000	20,000	20,000	100,000
SWM6	23rd/24th Drainage Culvert	0	0	0	0	110,000	110,000
SWM7	Alyssum and Twinflower Drainage	0	0	0	135,000	0	135,000
SWM9	Cedar Street Pump Station	0	0	0	0	360,000	360,000
SWM11	Higby Lane	0	0	0	0	230,000	230,000
SWM12	Beal Pond	0	0	26,000	0	0	26,000
SWM16	Basin 5 - 17th Ave & Hawthorne	0	0	0	0	134,000	134,000
SWM18	Storm Sewer Outfalls	10,000	10,000	10,000	10,000	10,000	50,000
SWM19	B Street at Harvey Clark	0	0	71,000	0	0	71,000
SWM20	David Hill Drainage	0	0	0	0	200,000	200,000
SWM21	City Parks Drainage	50,000	75,000	50,000	25,000	25,000	225,000
	SWM TOTALS	80,000	105,000	177,000	190,000	1,431,000	1,983,000

UTILITY AND TRANSPORTATION PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2013-14	2014-15	2015-16	2016-17	2017-18	TOTAL
WATER FUND FIVE YEAR CAPITAL IMPROVEMENT PROGRAM							
W01	Distribution Main Improvements	0	200,000	100,000	200,000	100,000	600,000
W02	Line Oversizing Participation	50,000	50,000	50,000	50,000	50,000	250,000
W03	FG WTP Improvements	45,000	10,000	10,000	10,000	10,000	85,000
W04	Watershed Road Improvements	20,000	20,000	20,000	20,000	250,000	330,000
W05	Emergency Intertie	0	0	0	0	289,819	289,819
W06	23rd/24th Ave (Industrial Area)	0	0	0	129,004	117,396	246,400
W07	Gales Creek	0	0	0	0	2,000,000	2,000,000
W08	Barney Buy-In	0	0	0	0	2,400,000	2,400,000
W09	David Hill	0	0	0	70,000	0	70,000
W10	Finished Water Storage	0	103,000	371,315	0	0	474,315
W11	Water Rights Strategic Plan	15,000	0	0	0	0	15,000
W13	Asset Management Program	0	0	30,000	0	0	30,000
W14	Public Works' Building Improvements	38,000	0	0	0	0	38,000
W15	Transmission Line Repair	275,000	0	0	0	0	275,000
W16	Large Meter Replacement	50,000	50,000	50,000	50,000	50,000	250,000
W17	Emergency Water Dispenser	10,000	0	0	0	0	10,000
W20	JWC Finished Water Metering	0	0	0	0	66,650	66,650
W21	JWC JWC Floc/Sed Basin Improvements	0	0	0	39,990	53,330	93,320
W22	JWC Building Improvements	0	0	0	0	19,995	19,995
W23	JWC Master Plan	0	0	0	46,655	0	46,655
W24	JWC Thickener	0	0	26,660	0	0	26,660
W27	JWC Equipment Needs	0	6,665	10,000	10,000	10,000	36,665
W29	JWC Seismic Retro Fit of Current Plant	0	0	0	0	614,513	614,513
W30	JWC Hydropneumatic Actuators	0	0	0	26,660	0	26,660
W31	JWC Remove Lime Silo	0	0	0	6,665	0	6,665
W32	JWC Source Water Protection Plan	7,332	7,332	7,332	7,332	7,332	36,658
W33	JWC Trash Screen Improvements	0	0	0	0	26,660	26,660
W39	JWC Fish Screen At Fern Hill Pump Station	0	0	0	0	320,000	320,000
W41	JWC Water Rights Consult of Record	6,665	6,665	6,665	6,665	6,665	33,325
W42	JWC Bar Rack Cleaning System	0	0	0	0	93,310	93,310
W43	JWC Connecting Yard Valves	0	0	0	26,660	0	26,660
W44	JWC Electrical Assessment Upgrades	153,295	42,123	168,491	13,330	13,330	390,569
W45	JWC Filtration Study	3,070	20,315	142,204	40,630	0	206,219
W47	JWC On-Site Power Generation	0	166,625	0	0	0	166,625
W48	JWC FG Transmission Line Inspection & Repair	0	0	0	0	119,970	119,970
W49	JWC Pump Station Improvements	53,320	19,995	0	2,666	2,666	78,647
W50	JWC Campus Improvements	26,660	0	0	0	0	26,660
W51	Land Aquisition	0	0	0	0	500,000	500,000
	WATER TOTALS	753,341	702,719	992,667	756,256	6,621,636	9,826,620
	UTILITY AND TRANSPORTATION TOTALS	5,528,309	6,665,438	6,239,474	7,766,501	33,158,875	59,358,597
BOLD =	NEW PROJECTS						

Light & Power

DEPARTMENT

PROJECT DESCRIPTIONS:

The operation of the electric power system has become increasingly technical in recent years, requiring more advanced equipment for testing and calibrating electric meters, substation relays and electrical equipment, and for identifying and troubleshooting customer quality of service issues.

DISCUSSION OF PROJECTS:

The Light and Power Department plans to purchase the following tools and work equipment:

- ▶ Substation instruments
- ▶ Directional drill guidance system
- ▶ Directional drill rods
- ▶ Non-directional short distance drill
- ▶ Vehicle computers

LP1 MAJOR TOOLS AND EQUIPMENT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	72,000	20,000	20,000	20,000	20,000	152,000
Other						0
						0
TOTAL	72,000	20,000	20,000	20,000	20,000	152,000
<u>FUNDING SOURCE</u>						
Current User Rates	72,000	20,000	20,000	20,000	20,000	152,000
						0
						0
TOTAL FUNDING SOURCES	72,000	20,000	20,000	20,000	20,000	152,000

LIGHT & POWER**DEPARTMENT****PROJECT DESCRIPTION:**

For FY 2013-14, the new transformer will be installed at Thatcher Substation. Major site improvements will be started at Forest Grove Substation and new transformers, circuit switchers, and breakers will be ordered for Forest Grove Substation

For FY 2014-15, a major renovation of Forest Grove Substation will be accomplished.

DISCUSSION OF PROJECT:

Much of equipment in the transformer yards that was purchased from BPA in the late 1990s is now at the end of its useful life. The Substation Upgrade project anticipates replacing most of the substation transformers and protective equipment. The details and scheduling of this project will be evaluated and possibly adjusted during the Electric System Master Plan Study.

The replacement of all substation battery banks will be completed in the next several years. General maintenance will be performed at each substation. All feeder breakers will be converted to DC trip.

Thatcher Substation, which has the oldest equipment, will be the first to receive a new power transformer and circuit switcher.

The Forest Grove Substation is anticipated to be completely rebuilt with a different physical layout to provide a better connection to the upgraded BPA 115 kV yard, to make better use of the property available, and to provide an improved grounding system.

After the above improvements, the control panels and relays at Thatcher and Filbert Substations are planned to be replaced.

With completion of this project, Forest Grove's Substation capacity will be greatly increased, and major equipment will have been replaced with newer technology, able to provide a higher level of service.

LP2 SUBSTATION UPGRADES						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	250,000	20,000	25,000	20,000	10,000	325,000
Site Preparation	0	0	200,000	25,000	0	225,000
Construction	81,000	525,000	0	0	0	606,000
Equipment/Furniture	992,000	1,675,000	1,800,000	100,000	100,000	4,667,000
Other						0
						0
TOTAL	1,323,000	2,220,000	2,025,000	145,000	110,000	5,823,000
<u>FUNDING SOURCE</u>						
Current User Rates	1,323,000	2,220,000	2,025,000	145,000	110,000	5,823,000
						0
						0
TOTAL FUNDING SOURCES	1,323,000	2,220,000	2,025,000	145,000	110,000	5,823,000

Light & Power

DEPARTMENT

PROJECT DESCRIPTION:

Complete renovation of the Light and Power Department office utilizing the present building. Most of the renovation has already taken place to provide adequate space for staff and equipment.

DISCUSSION OF PROJECT:

The Light and Power Department began renovating its office building in 2009 utilizing the existing footprint of the building. The auditorium is the last phase of the renovation. Currently, the auditorium is used as a conference room and a training center. The conference and training area has received a major upgrade. Additional office space for Light and Power Engineering and Economic Development has been created by removing the raised platform at the south end of the room and enclosing that space. Additional plumbing and electrical upgrades to the building are also planned. Finally, improvements will be made to the building entrance area including an ADA-compliant door opener.

LP4 PROPERTY IMPROVEMENTS AND OFFICE BUILDING						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	78,500					78,500
Other						0
						0
TOTAL	78,500	0	0	0	0	78,500
<u>FUNDING SOURCE</u>						
Current User Rates	78,500	0	0	0	0	78,500
						0
						0
TOTAL FUNDING SOURCES	78,500	0	0	0	0	78,500

Light & Power

DEPARTMENT

PROJECT DESCRIPTION:

Light and Power maintains the fleet of vehicles associated with the operation of the electrical utility. Over the years, several of the department’s vehicles will become candidates for replacement. The vehicles are replaced on a regular schedule, adjusted in accordance with mileage and maintenance history.

DISCUSSION OF PROJECT:

In the next 4 years, the following vehicles will be replaced:

FY 2013-14	FY 2015-16
Double Bucket Truck	Utility Flatbed – 409
Chevy Manlift	Conservation - 404
FY 2014-15	FY 2016-17
Utility Flatbed – 408	Crew Foreman Utility Truck -411
Backhoe – 422	Meter Reader Truck – 406
Meter Reader – 405	City Manager - 419

Light & Power incorporates vehicle replacement into a 5-year average of capital needs. These needs are considered when rates are reviewed. Funding for equipment and vehicles is through the electrical rates.

LP8 LIGHT AND POWER VEHICLE REPLACEMENT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	485,000	290,000	165,000	100,000	125,000	1,165,000
Other						0
						0
TOTAL	485,000	290,000	165,000	100,000	125,000	1,165,000
<u>FUNDING SOURCE</u>						
Current User Rates	485,000	290,000	165,000	100,000	125,000	1,165,000
Reserves						0
Increased User Rates						0
TOTAL FUNDING SOURCES	485,000	290,000	165,000	100,000	125,000	1,165,000

LP 9

LIGHT & POWER SPECIALIZED EQUIPMENT

Light & Power

DEPARTMENT

PROJECT DESCRIPTION:

Light and Power maintains a fleet of specialized equipment. This equipment is replaced as appropriate based on hours of operation and maintenance history.

DISCUSSION OF PROJECT:

In FY 13-14, a landscape mower will be purchased to use at the substations.

LP 9 LIGHT AND POWER SPECIALIZED EQUIPMENT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	11,000	30,000	30,000	30,000	30,000	131,000
Other						0
						0
TOTAL	11,000	30,000	30,000	30,000	30,000	131,000
<u>FUNDING SOURCE</u>						
Current User Rates	11,000	30,000	30,000	30,000	30,000	131,000
Reserves						0
Increased User Rates						0
TOTAL FUNDING SOURCES	11,000	30,000	30,000	30,000	30,000	131,000

Light & Power

DEPARTMENT**PROJECT DESCRIPTIONS:**

The SCADA System phase 3 (\$25,000) will continue efforts from previous years with purchase of additional equipment to begin monitoring the substation operations. The 24th Avenue recloser project (\$40,000) will improve electric reliability to an industrial area and provide better coordination of all protective devices in that part of the electrical distribution system. Underground feeder extensions and upgrades will also occur.

In fiscal year 2013-14, the Electric System Master Plan will be completed. This plan will outline future distribution system needs and additional upgrades that will be needed.

DISCUSSION OF PROJECTS:

New equipment purchases for the SCADA system will allow the department to remotely monitor the status of critical substation equipment and improve response time by identifying equipment outages.

The Light and Power Department will continue to install remote read electric meters, focusing on areas where remote read water meters have been installed, and continue to coordinate the efforts with the Water Department.

The department will continue with phase 3 of the SCADA system upgrade, and will also continue upgrades to the 24th Avenue capacity. Underground feeder extensions will occur along 26th Avenue, and Rose Grove will see underground upgrades.

LP22 DISTRIBUTION SYSTEM ADDITIONS AND UPGRADES						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	0	0	0	0	0	0
Site Preparation						0
Construction						0
Equipment/Furniture	215,000	50,000	50,000	50,000	50,000	415,000
Other						0
						0
TOTAL	215,000	50,000	50,000	50,000	50,000	415,000
<u>FUNDING SOURCE</u>						
Current User Rates	215,000	50,000	50,000	50,000	50,000	415,000
						0
						0
TOTAL FUNDING SOURCES	215,000	50,000	50,000	50,000	50,000	415,000

EQ1

EQUIPMENT REPLACEMENT PROGRAM

Equipment
DEPARTMENT**PROJECT DESCRIPTION:**

The Equipment Fund owns and maintains seventy-five (75) pieces of equipment. The vehicles are replaced on a regular schedule unless mileage is low and the vehicle has a good maintenance history. Over the next five years, the following are expected to be replaced:

FY 13-14	FY 2015-16
City Hall –Bld PU #703	City Hall – Eng Taurus #700 & Impala #705
Parks –One ton pick up, #602	Parks – One 4X4, #603, One 3/4 ton pick up, #600
Police – Patrol SUV #500	Parks – Toro Mower #615
Police – One PD Motor Bike #521	Police – Four patrol #530, 531, 532,533
Police - CSO Van #515	Public Works – 1 ton #303, 8 yard dump #312
Police – One PD Patrol Vehicle #523	Public Works – Tractor #322
Public Works – One 8 Yd Dump #313	
Public Works – One Roller #329	FY 2016-17
	Parks – Toro mower #608
FY 2014-15	Public Works – Admin #320, Loader #324
City Hall –Eng Suburban #701	Public Works – Boring machine #332
City Hall – Bldg Pick Up #704	
Parks – One zero turn mower, #605	FY 2017-18
Parks – JD Tractor #610	City Hall – Chev Silverado #702 & Honda Hybrid
Police – three patrol #525,526, 527	Police – Ford Fusion #509
Public Works – One 1 ton Utility Truck #302	Police – One PD Motor Bike #521 & Patrol #523
Public Works – One Jet Cleaner #317	Public Works – two pickups, #308 & #310
Public Works – One Camel Cleaner #316	Public Works – JD Backhoe #327
Public Works – Air Compressors #'s 325,326	Public Works – Leaf Vacuum #331
	Public Works – Elgin Sweeper #337

DISCUSSION OF PROJECT:

The Equipment Fund owns vehicles and equipment used by Public Works and all other city departments except Light & Power (L&P) and Fire. The Equipment shop maintains these vehicles and equipment and replaces them when length of time or mileage warrants replacement. Funding for vehicle maintenance, repair and replacement is derived from monthly lease amounts charged to the participating departments.

The Equipment shop also maintains and repairs the 60 vehicles owned by L&P and the Fire Department, as necessary, and bills those departments directly.

In 2013-14, City Hall will replace one of the Building Division's pick-up trucks. Parks will replace one of its pick-up trucks. The Police Department will replace the motor bike it postponed from last year, as well as the Patrol SUV – Expedition, the CSO van, and the last Crown Victoria patrol vehicle will be replaced with a Dodge Charger. Public Works will replace an eight yard dump truck and the vibratory roller.

EQ1 EQUIPMENT REPLACEMENT PROGRAM						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	290,000	725,000	371,000	196,000	489,000	2,071,000
Other						0
						0
TOTAL	290,000	725,000	371,000	196,000	489,000	2,071,000
<u>FUNDING SOURCE</u>						
						0
Equipment Fund Reserve	290,000	725,000	371,000	196,000	489,000	2,071,000
TOTAL FUNDING SOURCES	290,000	725,000	371,000	196,000	489,000	2,071,000

ST1

GALES WAY
(From "E" Street to 23rd Avenue)

Street

DEPARTMENT

PROJECT DESCRIPTION:

Reconstruct and widen Asphaltic Concrete (AC) pavement with curbs, gutters, sidewalks, storm drain and landscaping.

DISCUSSION OF PROJECT:

This street is identified as a collector in the Transportation System Plan. This route provides direct access to the downtown area and carries significant traffic volumes. This project is postponed to seek matching funding.

ST1 GALES WAY (from "E" Street to 23rd Avenue)						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering	0	45,672	0	0	0	45,672
Site Preparation						0
Construction	0	411,048	0	0	0	411,048
Equipment/Furniture						0
Other						0
						0
TOTAL	0	456,720	0	0	0	456,720
<u>FUNDING SOURCE</u>						
						0
Street Fund	0	456,720	0	0	0	456,720
						0
TOTAL FUNDING SOURCES	0	456,720	0	0	0	456,720

ST3

23rd/24th AVENUE (INDUSTRIAL AREA)

Street

DEPARTMENT

PROJECT DESCRIPTION:

Construct new road to connect Hawthorne Street and Quince Street. Project will include Asphaltic Concrete (AC) pavement curbs, gutter, sidewalk, storm drain and landscaping to current construction standards.

DISCUSSION OF PROJECT:

This section of roadway is identified on the Transportation System Plan. This project is needed to carry east/west traffic in the north part of town to relieve congestion on Pacific Avenue and provide access to the industrial land identified in the Comprehensive Plan. This project has been postponed pending development of the area. Cost participation will come from adjacent development.

ST3 23rd/24th AVENUE (Industrial Area)						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering	0	0	0	0	229,110	229,110
Site Preparation						0
Construction	0	0	0	0	1,095,550	1,095,550
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	1,324,660	1,324,660
FUNDING SOURCE						
CDBG						0
TIF					806,696	806,696
Street						0
Sewer SDC					278,960	278,960
SWM SDC					110,000	110,000
Water SDC					129,004	129,004
						0
TOTAL FUNDING SOURCES	0	0	0	0	1,324,660	1,324,660

ST5

**19th AVENUE
(From Oak Street to Highway 47)**

Street

DEPARTMENT

PROJECT DESCRIPTION:

Construction of a new section of 19th Avenue to collector standards in conjunction with a potential development project.

DISCUSSION OF PROJECT:

If a proposed development project occurs, the City has the opportunity to finish 19th Avenue to Highway 47 which could give emergency vehicles another east-west route through the City. This project would allow right turn access only to and from southbound Highway 47. This project is contingent on development of the adjacent shopping center.

ST5 19th AVENUE (Oak St. to Hwy 47)						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction					330,000	330,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	330,000	330,000
FUNDING SOURCE						
TIF					330,000	330,000
						0
TOTAL FUNDING SOURCES	0	0	0	0	330,000	330,000

ST10

DAVID HILL ROAD (Thatcher Road to Hwy 47)

Street

DEPARTMENT

PROJECT DESCRIPTION:

Three-lane arterial connecting Thatcher Road with State Highway 47.

DISCUSSION OF PROJECT:

This road is identified in the City's Transportation System Plan and is a major east-west connection. It is planned to extend easterly from Thatcher Road to Highway 47 as a two-lane arterial facility with left-turn lanes at major intersections. Washington County has pledged funds from the Major Streets Transportation Improvement Program (MSTIP).

ST10 DAVID HILL ROAD (Thatcher Road to Hwy 47)						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering			642,808			642,808
Site Preparation				2,000,000		2,000,000
Construction					3,785,268	3,785,268
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	642,808	2,000,000	3,785,268	6,428,075

FUNDING SOURCE						
County MSTIP		0	642,808	2,000,000	3,785,268	6,428,075
	0					
TOTAL FUNDING SOURCES	0	0	642,808	2,000,000	3,785,268	6,428,075

ST12

TV HWY & QUINCE STREET

Street

DEPARTMENT

PROJECT DESCRIPTION:

This project consists of constructing intersection improvements to improve performance of the intersection.

DISCUSSION OF PROJECT:

The Results from an Access Management Plan Alternative analysis on Highway 47 shows growth in traffic demands at Pacific Avenue and Highway 47. The additional traffic does not result in performance below ODOT operating standards, but significant delay does exist at the intersection as the volume to capacity ration (0.93) is expected to approach the upper limit (0.99). This project will add right turn lanes and improve the turning radius on both the northeast and northwest corners. These improvements are expected to improve the capacity of the intersection.

ST12 TV HWY & QUINCE STREET						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	1,504,469			3,330,000	0	4,834,469
Equipment/Furniture						0
Other						0
						0
TOTAL	1,504,469	0	0	3,330,000	0	4,834,469
FUNDING SOURCE						
TIF						0
Street Fund	204,469					204,469
Reg. Flex Fund (METRO)	1,300,000	0	0			1,300,000
Other/MSTIP				3,330,000	0	3,330,000
TOTAL FUNDING SOURCES	1,504,469	0	0	3,330,000	0	4,834,469

ST15

19TH AVENUE W. EXTENSION

Street

DEPARTMENT

PROJECT DESCRIPTION:

Extend 19th Avenue west and connect to E Street and Pacific Avenue with round-about.

DISCUSSION OF PROJECT:

Development of the property located south of E St. & Pacific Ave. will require the extension of 19th Avenue. This project should move forward only as this property develops. The City will have partial participation according to the TIF or TDT statutes.

ST15 19th AVENUE W. EXTENSION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				0	4,768,848	4,768,848
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	4,768,848	4,768,848
<u>FUNDING SOURCE</u>						
TIF/TDT		0		0	4,768,848	4,768,848
						0
TOTAL FUNDING SOURCES	0	0	0	0	4,768,848	4,768,848

ST17

THATCHER ROAD

Street

DEPARTMENT

PROJECT DESCRIPTION:

Re-align Thatcher Road at its intersection with Gales Creek Road to eliminate substandard angles and improve intersection spacing.

DISCUSSION OF PROJECT:

Thatcher Road intersects with Gales Creek Road at a bad angle which creates sight visibility problems. In addition, recent development in the west and northwest part of town has increased traffic at this intersection. This project is identified in the Transportation System Plan to study this area to determine if the intersection can be re-aligned to improve the visibility. In addition, signalization may be warranted.

ST17 THATCHER ROAD						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering					3,626,136	3,626,136
Site Preparation						0
Construction					0	0
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	3,626,136	3,626,136
<u>FUNDING SOURCE</u>						
Street Fund						0
TIF/TDT					3,626,136	3,626,136
						0
TOTAL FUNDING SOURCES	0	0	0	0	3,626,136	3,626,136

ST18

26TH AVENUE

Street

DEPARTMENT

PROJECT DESCRIPTION:

Improve 26th Avenue from Hawthorne west to Sunset.

DISCUSSION OF PROJECT:

26th Avenue from Hawthorne to Sunset needs improvement. However, this road is currently within Washington County's jurisdiction. If this road transfers to the City's jurisdiction, the City would work with neighboring property owners to improve this road by reconstructing it up to the City's standard of a collector road, which would include sidewalks and a parkway. Because these improvements would benefit the abutting properties, those properties would be assessed for their share, either through a local improvement district or through a reimbursement district.

ST18 26TH AVENUE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering		200,000				200,000
Site Preparation		250,000				250,000
Construction	0		1,400,000			1,400,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	450,000	1,400,000	0	0	1,850,000

<u>FUNDING SOURCE</u>						
Local Improvement or Reimbursement District		225,000	700,000			925,000
TIF/TDT	0	225,000	700,000			925,000
						0
TOTAL FUNDING SOURCES	0	450,000	1,400,000	0	0	1,850,000

Street

DEPARTMENT**PROJECT DESCRIPTION:**

Improve the intersection at Highway 47 and Maple to make for safer crossings and turns.

DISCUSSION OF PROJECT:

This project would improve the safety of the intersection of Highway 47 and Maple Street by adding a signal. Possible funding partners include the Oregon Department of Transportation, Washington County and possibility Clean Water Services. Highway 47 is an ODOT facility, leading to their possible participation. Washington County has jurisdiction over Fern Hill Road, which is straight across Highway 47 from Maple Street, and so they would have interest in improving the intersection's safety. Clean Water Services is embarking on pedestrian friendly amenities at its treatment plant immediately south of this intersection, so pedestrian traffic down Maple Street, crossing over Highway 47 to Fern Hill Road may lead to CWS participating in the improvements. Additionally, this route has been designated as a scenic bikeway.

ST19 HWY 47 AND MAPLE INTERSECTION IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					500,000	500,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	500,000	500,000
<u>FUNDING SOURCE</u>						
Street Fund						0
TIF/TDT	0				500,000	500,000
						0
TOTAL FUNDING SOURCES	0	0	0	0	500,000	500,000

ST20

SAFE ROUTES TO SCHOOL

Street

DEPARTMENT

PROJECT DESCRIPTION:

Improve pedestrian safety access to Harvey Clarke School along B Street.

DISCUSSION OF PROJECT:

This project is in partnership with the Oregon Department of Transportation to install sidewalks along B Street to Harvey Clarke School, to improve pedestrian safety. ODOT received a Safe Routes to School grant of \$350,000, and Forest Grove is matching \$50,000.

ST20 SAFE ROUTES TO SCHOOL						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	50,000					50,000
Equipment/Furniture						0
Other						0
						0
TOTAL	50,000	0	0	0	0	50,000

<u>FUNDING SOURCE</u>						
Street Fund						0
TIF/TDT	50,000					50,000
						0
TOTAL FUNDING SOURCES	50,000	0	0	0	0	50,000

ST22

"B" STREET NORTH

Street

DEPARTMENT

PROJECT DESCRIPTION:

Extend "B" Street north from Hartford Drive to David Hill Road.

DISCUSSION OF PROJECT:

This project would extend "B" Street from the current north end at the intersection with Hartford Drive to the future intersection with David Hill Road. This project is scheduled in future years and will be funded by both private development and TIF or TDT monies.

ST22 "B" STREET NORTH						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					6,068,623	6,068,623
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	6,068,623	6,068,623
<u>FUNDING SOURCE</u>						
TIF/TDT					3,030,000	3,030,000
Street Fund						0
Private					3,038,623	3,038,623
TOTAL FUNDING SOURCES	0	0	0	0	6,068,623	6,068,623

Street

DEPARTMENT

PROJECT DESCRIPTION:

Design and construct safe pedestrian crossings on Thatcher Road at Thatcher Park and on Gales Creek Road at Forest Gale Drive.

DISCUSSION OF PROJECT:

The City's master trail system crosses two high volume, high speed roadways - one at Gales Creek Road and Forest Gale Drive and another at Thatcher Road and David Hill Road. Washington County has developed safety standards for the design of pedestrian crossings. Both of these locations are roads under County jurisdiction and will require approval by the County Engineer. This project will design and install two crossings with County Engineer approval.

ST 24 CROSSWALKS: THATCHER, GALES CREEK						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	105,000					105,000
Equipment/Furniture						0
Contingency						0
						0
TOTAL	105,000	0	0	0	0	105,000
<u>FUNDING SOURCE</u>						
Street Fund	105,000					105,000
TIF						0
CDBG						0
Other						0
TOTAL FUNDING SOURCES	105,000	0	0	0	0	105,000

ST25

20TH PLACE – HAWTHORNE TO PACIFIC

Street

DEPARTMENT

PROJECT DESCRIPTION:

Half-street improvements needed; road needs curbs on south side and the condition is such it needs to be reconstructed.

DISCUSSION OF PROJECT:

Road had deteriorated to the point it needs to be reconstructed, and then curbs can be added on south side.

ST25 20TH PLACE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					280,000	280,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	280,000	280,000
<u>FUNDING SOURCE</u>						
TIF						0
Street Fund					280,000	280,000
Private						0
TOTAL FUNDING SOURCES	0	0	0	0	280,000	280,000

Street

Department

PROJECT DESCRIPTION:

This project will provide matching funds to Ride Connection in order to purchase two 14-passenger buses and to install bus stops, signs and shelters.

DISCUSSION OF PROJECT:

The City embarked upon a Transit Study to explore ways to improve transit circulation throughout Forest Grove. Ride Connection and the City were able to work with TriMet to receive three grants to fund a deviated route service, which includes two grants for operation and one grant for purchase of the equipment. This deviated route service will supplement TriMet's service by serving that portion of the community outside the service area for the Line 57.

The City is responsible to fund the match requirements for the vehicle purchase. The funding for the City's match comes from the Transit portion of the TIF.

ST26 TRANSIT IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	40,000					40,000
Other						0
						0
TOTAL	40,000	0	0	0	0	40,000
<u>FUNDING SOURCE</u>						
TIF	40,000					40,000
Street Fund					0	0
Private						0
TOTAL FUNDING SOURCES	40,000	0	0	0	0	40,000

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Reconstruct existing sewer mains as needed due to pipe condition. This is an ongoing project designed to replace all old and deteriorated sewers. Projects are generally scheduled to coincide with proposed street reconstruction projects.

DISCUSSION OF PROJECT:

The Sewer Master Plan recommends annual replacement/rehabilitation of portions of the old collection piping until it is completely upgraded. The goal is to rehabilitate 1,500 linear feet of sewer each year. Projects are generally selected to coincide with paving projects so that we minimize cutting trenches through good roads.

Recent improvements in technology have allowed more thorough inspection of pipe sections, leading to a series of maintenance projects in older areas of the city. Problems include pipe clogging, infiltration by ground water, or damage by roots or other organic matter. While these pipes overall are still functioning, there is a concern that maintenance costs will continue to increase and flow capacity will be compromised. Over the CIP period of FY 2013-14 through 2017-18, pipe sections along 22nd Ave, 24th Ave, Gales Way at Rodlun Ct, and Cedar Street (alley) have been selected for further review for possible replacement.

SW1 REPLACE / REHABILITATE OLD SEWERS						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	30,000	100,000	100,000	100,000	100,000	430,000
Equipment/Furniture						0
Other						0
						0
TOTAL	30,000	100,000	100,000	100,000	100,000	430,000
FUNDING SOURCE						
Sewer Fund	30,000	100,000	100,000	100,000	100,000	430,000
Sewer SDC						0
TOTAL FUNDING SOURCES	30,000	100,000	100,000	100,000	100,000	430,000

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Developments in certain areas of the City may trigger the need for excess pipe capacity for future growth that is beyond what that specific developer needs. This project allows the City flexibility to cost participate in the oversizing of sewer pipes to adequately prepare for future growth.

DISCUSSION OF PROJECT:

Revenue is collected as system development charges on new sewer hook-ups. The money is used to provide funding flexibility to cost participate with developers to provide increased capacity in the sewer system.

SW2 SEWER OVERSIZING PARTICIPATION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	25,000	50,000	50,000	50,000	50,000	225,000
Equipment/Furniture						0
Other						0
						0
TOTAL	25,000	50,000	50,000	50,000	50,000	225,000
<u>FUNDING SOURCE</u>						
Sewer SDC	25,000	50,000	50,000	50,000	50,000	225,000
						0
						0
TOTAL FUNDING SOURCES	25,000	50,000	50,000	50,000	50,000	225,000

Sewer

DEPARTMENT**PROJECT DESCRIPTION:**

This project was the rehabilitation of the public sanitary sewer line and the private sanitary sewer laterals in the area around Pacific Avenue and SW Cedar Street. To minimize inflow and infiltration of ground water into the existing sanitary sewer system, the public sanitary sewer lines and private service laterals were rehabilitated. The project area is generally bounded by 16th Avenue to the south and Pacific Avenue to the north, "A" Street to the west and Hawthorne Street to the east.

DISCUSSION OF PROJECT:

This project was a joint effort between the City of Forest Grove and the Clean Water Services (CWS). CWS designed the project and provided construction administration. The City's Public Works Department provided in-kind services such as pre-design pipe TV inspection. Project costs including engineering and inspection have been split between the City and CWS on a 50% basis. Only the City's portion of the project is shown in the CIP. CWS funded the entire cost of the project. The City has financed its portion with CWS over a ten-year period, from FY 06-07 through FY 15-16.

SW3 CWS / CITY PHASE III SEWER I&I REPAIR						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other: Debt	94,004	94,004	94,004			282,013
						0
TOTAL	94,004	94,004	94,004	0	0	282,013
<u>FUNDING SOURCE</u>						
						0
Sewer Fund	94,004	94,004	94,004			282,013
						0
TOTAL FUNDING SOURCES	94,004	94,004	94,004	0	0	282,013

Sewer

DEPARTMENT**PROJECT DESCRIPTION:**

Increase sanitary sewer capacity by installing a pipe that would parallel the existing system from the intersection of Laurel Street and 22nd Avenue to the south side of Pacific Avenue then east to Maple Street then south to 19th Avenue:

1. Intersection of Laurel Street and 22nd Avenue to the south side of Pacific Avenue
1100 feet of pipeline
2. South side of Pacific Avenue east to Maple Street
300 feet of pipeline
3. Intersection of Pacific Avenue and Maple Street south to 19th Avenue
500 feet of pipeline

DISCUSSION OF PROJECT:

The CWS Sewer System Master Plan Update (dated April 1995) identifies existing capacity deficiencies in the Maple Street Trunk F-3.

The 2007 City of Forest Grove Master Plan recommends this project should be considered “contingent” and the City need not move forward with it until the need has been verified through flow monitoring.

SW4 MAPLE STREET CAPACITY EXPANSION						
<u>COSTS</u>	2013-14	2014-15	2015-16	2016-17	2017-18	5-YR TOTAL
Design/Engineering						0
Site Preparation						0
Construction					600,000	600,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	600,000	600,000
<u>FUNDING SOURCE</u>						
Sewer SDC					300,000	300,000
Sewer					300,000	300,000
TOTAL FUNDING SOURCES	0	0	0	0	600,000	600,000

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Upgrading 9,800 feet of 15-inch and 18-inch to 30-inch along Willamina between Main Street and Gales Creek Road.

DISCUSSION OF PROJECT:

This project was identified in CWS 2001 flow model as a high priority project. This project will be built only when the existing line reaches capacity. The point at which this line reaches capacity is contingent on the pace of future development.

SW5 WILLAMINA AVENUE CAPACITY EXPANSION						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YR TOTAL
Design/Engineering						0
Site Preparation						0
Construction				677,250	837,750	1,515,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	677,250	837,750	1,515,000
FUNDING SOURCE						
Sewer SDC				677,250	837,750	1,515,000
TOTAL FUNDING SOURCES	0	0	0	677,250	837,750	1,515,000

SW7

SUNSET DRIVE MSTIP

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Install approximately 2400 LF of 10” sanitary sewer with the reconstruction of Sunset Drive.

DISCUSSION OF PROJECT:

The Forest Grove Sanitary Sewer Master Plan identified portions of Sunset Drive to be served with sanitary sewer from the Council Creek trunk line. These portions of sanitary sewer have been installed with the construction of Sunset Drive. CWS funded the entire cost of the project. The City has financed its portion with CWS over a ten year period, from FY 08-09 through FY 17-18.

SW7 SUNSET DRIVE MSTIP						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other: Debt	121,995	121,995	121,995	121,995	121,995	609,973
						0
TOTAL	121,995	121,995	121,995	121,995	121,995	609,973
<u>FUNDING SOURCE</u>						
Sewer Fund						0
Sewer SDC	121,995	121,995	121,995	121,995	121,995	609,973
						0
TOTAL FUNDING SOURCES	121,995	121,995	121,995	121,995	121,995	609,973

Sewer

DEPARTMENT**PROJECT DESCRIPTION:**

Construct new road to connect Hawthorne Street and Quince Street. This project is to construct a new sewer line under that road. Project will include Asphaltic Concrete (AC) pavement, curbs, gutter, sidewalk, storm drain, sewer, water line, and landscaping to current construction standards.

DISCUSSION OF PROJECT:

This section of roadway is identified on the Transportation System Plan. This project is needed to carry east/west traffic in the north part of town to relieve congestion on Pacific Avenue and provide access to the industrial land identified in the Comprehensive Plan. This project has been postponed pending development of the area. Cost participation will come from adjacent development.

SW8 23RD/24TH AVENUE INDUSTRIAL AREA						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering					25,360	25,360
Site Preparation						0
Construction					253,600	253,600
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	278,960	278,960
<u>FUNDING SOURCE</u>						
Sewer Fund						0
Sewer SDC					278,960	278,960
TOTAL FUNDING SOURCES	0	0	0	0	278,960	278,960

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Replace the 12” line on Mountain View Lane south of the Southern Pacific Railroad (SPRR) and the 18” line north of SPRR.

DISCUSSION OF PROJECT:

The existing 12” line located to the west of Mountain View Lane and south of the SPRR trunk will require replacement. Additionally, this project should include improvements made to the north of the SPRR. The Mountain View Lane south of the railroad trunk will be increased in size from 12 to 18-inch diameter line covering approximately 1,300 lineal feet. Lines located north of the railroad trunk will be increased from 18” to 21” for approximately 1,000 lineal feet. The north and south segments 2030 design flow is approximately 2,100 gpm and 1,550 gpm respectively.

This CIP should be considered “contingent” and the City need not move forward with it until the need has been verified through flow monitoring.

SW9 MOUNTAIN VIEW LANE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering					120,000	120,000
Site Preparation						0
Construction					480,000	480,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	600,000	600,000
<u>FUNDING SOURCE</u>						
Sewer Fund					300,000	300,000
Sewer SDC					300,000	300,000
TOTAL FUNDING SOURCES	0	0	0	0	600,000	600,000

SW10

“A” STREET CAPACITY

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

The 8-inch and 10-inch diameter lines from the B Street pump station should be increased to 15-inches in diameter.

DISCUSSION OF PROJECT:

As development occurs, it is anticipated that additional sewer capacity may be needed along this route. The Sanitary Sewer Master Plan confirmed the size of capacity increase and the estimated schedule when it will occur. This project will not be required until the B Street pump station capacity is increased by CWS and development occurs in the area northwest of the Pump station, just north of Gales Creek.

SW10 A STREET CAPACITY						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					590,000	590,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	590,000	590,000
<u>FUNDING SOURCE</u>						
Sewer Fund					295,000	295,000
Sewer SDC					295,000	295,000
TOTAL FUNDING SOURCES	0	0	0	0	590,000	590,000

SW11

FIR ROAD
From 19th to Hwy 47

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Replace 12” Line on Fir Road from Pacific Avenue to the Southern Pacific Railroad (SPRR).

DISCUSSION OF PROJECT:

The existing 12” diameter line ties into the SPRR trunk line. Fir Road upgrades will require the existing line to be upgraded to a 15” diameter line spanning approximately 2,000 lineal feet. The total improvements along Fir Road are estimated to cost \$420,000.

The 2007 City of Forest Grove Master Plan recommends this project should be considered “contingent” and the City need not move forward with it until the need has been verified through flow monitoring.

SW11 FIR ROAD (From 19th to Hwy 47)						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					420,000	420,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	420,000	420,000
<u>FUNDING SOURCE</u>						
Sewer SDC					420,000	420,000
Sewer						0
TOTAL FUNDING SOURCES	0	0	0	0	420,000	420,000

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

This project will rehabilitate the public sanitary sewer line and the private sanitary sewer laterals in the area around 23rd Avenue. To minimize inflow and infiltration of ground water into the existing sanitary sewer system, the public sanitary sewer lines and private service laterals need to be rehabilitated. The project area is generally bounded by 23rd to the south and Tara Court to the north, D Street to the west and A Street to the east.

DISCUSSION OF PROJECT:

This project is a joint effort between the City of Forest Grove and the Clean Water Services (CWS). CWS will design the project and provide construction administration. The City's Public Works Department will provide in-kind services such as pre-design pipe TV inspection. Project costs including engineering and inspection will be split between the City and CWS on a 50% basis. Only the City's portion of the project is shown in the CIP.

This project is estimated to cost approximately \$1 million, and will be completed in two phases. The first phase will be completed in FY 13-14, and the second phase in FY 14-15. The City is responsible for 50% of the funding, and CWS the other 50%.

SW15 23rd Ave I & I Project						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	250,000	250,000				500,000
Equipment/Furniture						0
						0
TOTAL	250,000	250,000	0	0	0	500,000
<u>FUNDING SOURCE</u>						
Sewer SDC Fund	250,000					250,000
Sewer Fund		250,000				250,000
						0
TOTAL FUNDING SOURCES	250,000	250,000	0	0	0	500,000

Sewer

DEPARTMENT**PROJECT DESCRIPTION:**

This project will install sewer mains and laterals in areas not previously served.

DISCUSSION OF PROJECT:

In the spring of 2013, the City went through a process and annexed properties within the bounds of the City but technically in the jurisdiction of Washington County, know as “island” properties. In the process of annexing these islands, the residents came forward and expressed interest in connecting to the City’s sewer system.

Connecting to the City’ sewer system is paid for by the owners of the property that benefits. At the time a new house is built within the City, the developer pays all the fees, charges, and the cost to construct the connection to the City’s sewer, and all these costs are built into the price of the home. However, those previously in Washington County’s jurisdiction have septic tanks, and so to connect to the City’s sewer system, those property owners must pay the cost to connect, including fees, charges and construction.

The City can manage the construction and front the necessary cash to install sewer mains and laterals, but must be paid back by the benefiting property owners. The City has two main mechanisms it will explore to allow property owners to pay back the City. One mechanism is a local improvement district (LID), where property owners pay in monthly installments the cost of constructing the sewer, plus fees and charges, plus interest. The term of the LID can vary, up to 30 years. The City files a lien on the property until the amount owed is paid in full. The other mechanism is a reimbursement district, where the entire amount is due when the benefiting property makes the connection to the sewer system.

This project represents a place-holder on the City’s part, in case the property owners come together in an area and decide to petition the City to install sewer mains and laterals.

SW16 Sewer District						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction		1,000,000				1,000,000
Equipment/Furniture						0
						0
TOTAL	0	1,000,000	0	0	0	1,000,000
<u>FUNDING SOURCE</u>						
Sewer SDC Fund						0
Sewer Fund						0
Local Improvement District/ Reimbursement District		1,000,000				1,000,000
TOTAL FUNDING SOURCES	0	1,000,000	0	0	0	1,000,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

This project is proposed in the Storm Drainage Master Plan project list, and will provide stream restoration on open channels. The project replaces a 36-inch railroad culvert with a 54-inch culvert, and replaces Hawthorne Street's 48-inch culvert with a 54-inch culvert.

DISCUSSION OF PROJECT:

These improvements are designed to increase the storm water conveyance capacity of the City's system. Projects follow recommendations in the Storm Drainage Master Plan and are designed to alleviate localized drainage problems due in part to the lack of hydraulic capacity.

SWM2 HAWTHORNE STREET DRAINAGE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					342,000	342,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	342,000	342,000

<u>FUNDING SOURCE</u>						
SWM SDC					171,000	171,000
SWM					171,000	171,000
						0
TOTAL FUNDING SOURCES	0	0	0	0	342,000	342,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Expand storm sewer capacity or rehabilitate storm sewers as necessary.

DISCUSSION OF PROJECT:

No specific project has been identified. This funding is set aside in the event it is necessary for the City to expand or rehabilitation a storm sewer.

SWM4 STORM SEWER CONSTRUCTION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	20,000	20,000	20,000	20,000	20,000	100,000
Equipment/Furniture						0
Other						0
						0
TOTAL	20,000	20,000	20,000	20,000	20,000	100,000
<u>FUNDING SOURCE</u>						
SWM SDC						0
SWM	20,000	20,000	20,000	20,000	20,000	100,000
						0
TOTAL FUNDING SOURCES	20,000	20,000	20,000	20,000	20,000	100,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Construct a new road to connect Hawthorne Street and Quince Street. The project will include Asphaltic Concrete (AC) pavement, curbs, gutter, sidewalk, storm drain, sewer, water line, and landscaping to current construction standards.

DISCUSSION OF PROJECT:

This section of roadway is identified on the Transportation System Plan. This project is needed to carry east/west traffic in the north part of town to relieve congestion on Pacific Avenue and provide access to the industrial land identified in the Comprehensive Plan. This project has been postponed pending development of the area. Cost participation will come from adjacent development.

SWM6 23rd/24th DRAINAGE CULVERT						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering					10,000	10,000
Site Preparation						0
Construction					100,000	100,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	110,000	110,000

FUNDING SOURCE						
SWM SDC					110,000	110,000
SWM						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	110,000	110,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

This project is proposed in the Storm Drainage Master Plan project list. It replaces a 12-inch and 18-inch pipeline along Alyssum from Twinflower east approximately 550 feet.

DISCUSSION OF PROJECT:

These improvements are designed to increase the storm water conveyance capacity of the City's system. Projects follow recommendations in the Storm Drainage Master Plan and are designed to alleviate localized drainage problems due in part to the lack of hydraulic capacity.

SWM7 ALYSSUM AND TWINFLOWER DRAINAGE						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction				135,000		135,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	135,000	0	135,000

FUNDING SOURCE						
SWM SDC			0	135,000	0	135,000
SWM						0
						0
TOTAL FUNDING SOURCES	0	0	0	135,000	0	135,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

This project is proposed in the Storm Drainage Master Plan project list. The current Cedar Street Pump Station will be removed and replaced with a gravity line to Douglas Street.

DISCUSSION OF PROJECT:

These improvements are designed to increase the storm water conveyance capacity of the City's system. Projects follow recommendations in the Storm Drainage Master Plan and are designed to alleviate localized drainage problems due in part to the lack of hydraulic capacity.

SWM9 CEDAR STREET PUMP STATION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	0	0	0	0	360,000	360,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	360,000	360,000

<u>FUNDING SOURCE</u>						
SWM SDC	0	0	0	0	180,000	180,000
SWM	0	0	0	0	180,000	180,000
TOTAL FUNDING SOURCES	0	0	0	0	360,000	360,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Proposed in the Storm Drainage Master Plan project list. 1000-feet of excavation and defining channel through Higby Lane are proposed.

DISCUSSION OF PROJECT:

Existing flow routes are undefined. Current conveyance is land flow to Beal Pond. These improvements are designed to increase the storm water conveyance capacity of the City's system. Projects follow recommendations in the Storm Drainage Master Plan and are designed to alleviate localized drainage problems due in part to the lack of hydraulic capacity.

SWM11 HIGBY LANE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					230,000	230,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	230,000	230,000
<u>FUNDING SOURCE</u>						
SWM SDC						0
SWM					230,000	230,000
TOTAL FUNDING SOURCES	0	0	0	0	230,000	230,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Install a continuous stage recording device at the pond to record the frequency of specific high water levels.

DISCUSSION OF PROJECT:

Beal Pond is located near Beal Road and Highway 47. This pond influences and plays a key role in the City's storm drainage system. A well functioning storm drainage system can prevent flooding. The Master Plan suggests that water levels in Beal Pond be studied and measured through several seasons to determine whether storm drainage flow can be improved. This project installs equipment to do that measuring.

SWM12 BEAL POND STUDY						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction			26,000			26,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	26,000	0	0	26,000

<u>FUNDING SOURCE</u>						
SWM SDC						0
SWM			26,000			26,000
TOTAL FUNDING SOURCES	0	0	26,000	0	0	26,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Additional storm piping with catch basins along 17th Avenue from Hawthorne east to Kingwood.

DISCUSSION OF PROJECT:

This project will construct a new storm pipe in an existing neighborhood. It is needed to pickup the slow draining intersection at 17th and Hawthorne. This project is identified in the Storm Water Master Plan.

SWM16 BASIN 5 - 17th AVENUE and HAWTHORNE STREET						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					134,000	134,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	134,000	134,000

<u>FUNDING SOURCE</u>						
SWM SDC						0
SWM					134,000	134,000
TOTAL FUNDING SOURCES	0	0	0	0	134,000	134,000

Sewer

DEPARTMENT

PROJECT DESCRIPTION:

Various projects were identified in Clean Water Services' (CWS) report on storm sewer outfalls. This project will install headwalls on several existing culverts. The headwalls will be designed to be animal and fish friendly.

DISCUSSION OF PROJECT:

A recent study completed by Clean Water Services revealed that culverts create barriers for fish and small animals in the urban created system.

SWM 18 STORM OUTFALL PROJECTS						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	10,000	10,000	10,000	10,000	10,000	50,000
Equipment/Furniture						0
Contingency						0
						0
TOTAL	10,000	10,000	10,000	10,000	10,000	50,000

FUNDING SOURCE						
SWM Fund	10,000	10,000	10,000	10,000	10,000	50,000
SWM SDC						0
						0
TOTAL FUNDING SOURCES	10,000	10,000	10,000	10,000	10,000	50,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Upsize storm pipe at B Street and Harvey Clarke to alleviate flooding.

DISCUSSION OF PROJECT:

This project is south of Camino. The existing 12” storm line has had capacity issues and localized flooding has periodically been experienced.

SWM 19 B STREET AT HARVEY CLARK						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction			71,000			71,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	71,000	0	0	71,000
<u>FUNDING SOURCE</u>						
SWM SDC			71,000			71,000
SWM						0
						0
TOTAL FUNDING SOURCES	0	0	71,000	0	0	71,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Install drainage along new section of David Hill Road.

DISCUSSION OF PROJECT:

This road is identified in the City's Transportation System Plan and is a major east-west connection. It is planned to extend easterly from Thatcher Road to Highway 47 as a two-lane arterial facility with left-turn lanes at major intersections. Washington County has pledged funds from the Major Streets Transportation Improvement Program (MSTIP).

This project would fund the drainage portion, if necessary.

SWM 20 DAVID HILL ROAD DRAINAGE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction					200,000	200,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	200,000	200,000
<u>FUNDING SOURCE</u>						
SWM SDC					200,000	200,000
SWM						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	200,000	200,000

Surface Water Management

DEPARTMENT

PROJECT DESCRIPTION:

Design, construction and cost participate in drainage solutions at new City parks.

DISCUSSION OF PROJECT:

The City Parks Department occasionally constructs new parks. This project is to cost participate in managing the storm water run off created by new parks. Projects may include natural features, such as bioswales and wetlands, or more hard features of concrete catch basins.

SWM 21 CITY PARKS DRAINAGE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	50,000	75,000	50,000	25,000	25,000	225,000
Equipment/Furniture						0
Other						0
						0
TOTAL	50,000	75,000	50,000	25,000	25,000	225,000
<u>FUNDING SOURCE</u>						
SWM SDC	50,000	75,000	50,000	25,000	25,000	225,000
SWM						0
						0
TOTAL FUNDING SOURCES	50,000	75,000	50,000	25,000	25,000	225,000

W1

DISTRIBUTION MAIN IMPROVEMENTS

Water
DEPARTMENT

PROJECT DESCRIPTION:

This project is a set aside for general waterline improvements that are identified in the updated Water Master Plan, completed in 2010. These projects would improve flow and pressure at specific points in the system as identified by the hydraulic model.

DISCUSSION OF PROJECT:

These improvements are designed to increase flows to certain areas of the City for better fire protection or to replace old deteriorated pipe. Funding is from the Water Fund, to be completed by City crews.

W1 DISTRIBUTION MAIN IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	0	200,000	100,000	200,000	100,000	600,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	200,000	100,000	200,000	100,000	600,000
<u>FUNDING SOURCE</u>						
Water Fund	0	200,000	100,000	200,000	100,000	600,000
Water SDC						0
TOTAL FUNDING SOURCES	0	200,000	100,000	200,000	100,000	600,000

W2

LINE OVERSIZING PARTICIPATION

Water

DEPARTMENT

PROJECT DESCRIPTION:

Developments in certain areas of the City may trigger the need for excess pipe capacity for future growth that is beyond what that specific developer needs. This project allows the City flexibility to cost participate in the oversizing of water pipes to adequately prepare for future growth.

DISCUSSION OF PROJECT:

Revenue is collected as system development charges on new water connections. The money is used to provide funding flexibility to cost participate with developers to provide increased capacity in the water system.

W2 LINE OVERSIZING PARTICIPATION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	50,000	50,000	50,000	50,000	50,000	250,000
Equipment/Furniture						0
Other						0
						0
TOTAL	50,000	50,000	50,000	50,000	50,000	250,000
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	0	0
Water SDC	50,000	50,000	50,000	50,000	50,000	250,000
TOTAL FUNDING SOURCES	50,000	50,000	50,000	50,000	50,000	250,000

Water**DEPARTMENT****PROJECT DESCRIPTION:**

This project includes improvements to the water treatment plant as outlined in the Water Master Plan.

DISCUSSION OF PROJECT:

These improvements are needed to rehabilitate the current treatment plant to extend the service life through the next 30 years.

In FY 2013-14, the following projects are planned:

- East filter bay repair
- Hydraulic valve repair & replacement
- Analyzers for fluoride and chlorine

Following is a list of projects that has been identified in the 2010 Forest Grove Water Master Plan update (see Master Plan for more information):

- Finished water, transfer pump station, and solids transfer vaults safety improvements - environmental sensor “sniffer,” air ventilation system, associated controls.
- Demo and remove old out-of-service surge tank from filter gallery area.
- Filter Backwash Supply Pump spare parts.
- Replace 12” check valve on suction side of BW pump.
- Replace valves in Filter Gallery (~10 valves) – Staff has been gradually replacing all the valves in the filter gallery with ~10 remaining and intends to include 2-3 each year in the annual budget for the plant.
- Filter media and underdrain inspection - determine if filter media and/or underdrain system (clay Leopold blocks) need replacement.
- Pretreatment Improvements (long-term) – Plate settlers, mechanical sludge collection, and effluent launder replacement. A pretreatment upgrade could include a retrofit of the basin with plate settlers (or other high rate sedimentation); new effluent launders and mechanical sludge collection would significantly improve pretreatment performance and filtration performance and would reduce the number of days that plant would need to be out of service for sludge removal and during storm events. Pre-treatment improvements should be coordinated to ensure any improvements are compatible and also to consider any future system changes that would change plant flows or raw water quality.
- Mechanical sludge/residuals collection system in sediment basins.
- Plate settlers and launder replacement.

W3 F.G. WATER TREATMENT PLANT MAJOR MAINTENANCE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	45,000	10,000	10,000	10,000	10,000	85,000
Other						0
						0
TOTAL	45,000	10,000	10,000	10,000	10,000	85,000
<u>FUNDING SOURCE</u>						
Water	45,000	10,000	10,000	10,000	10,000	85,000
Water SDC						0
TOTAL FUNDING SOURCES	45,000	10,000	10,000	10,000	10,000	85,000

W4

WATERSHED MAJOR MAINTENANCE

Water

DEPARTMENT

PROJECT DESCRIPTION:

Improve drainage and roadways within the Watershed.

DISCUSSION OF PROJECT:

The Watershed Road Survey and the Watershed Stewardship Management Plan has identified hazards and problems along roads located in the watershed. Projects will install drainage crossings and re-surface existing roads for better surface water run-off, as well as decommission Deep Creek Road. Projects will be improved to Department of Forestry Standards.

W4 WATERSHED MAJOR MAINTENANCE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	20,000	20,000	20,000	20,000	250,000	330,000
Equipment/Furniture						0
Other						0
						0
TOTAL	20,000	20,000	20,000	20,000	250,000	330,000
<u>FUNDING SOURCE</u>						
Water	20,000	20,000	20,000	20,000	250,000	330,000
Water SDC	0	0	0	0	0	0
TOTAL FUNDING SOURCES	20,000	20,000	20,000	20,000	250,000	330,000

W5

EMERGENCY INTERTIE

Water

DEPARTMENT

PROJECT DESCRIPTION:

Build a water valve station at Heather Street.

DISCUSSION OF PROJECT:

A connection to the Joint Water Commission north transmission line near Heather Street has been recommended in the Forest Grove Water Master Plan. This project requires designing and constructing a valve station to meter the flow of water into the Forest Grove system. This valve would only be opened in the event of an emergency.

W5 EMERGENCY INTERTIE						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction				0	289,819	289,819
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	289,819	289,819
FUNDING SOURCE						
Water Fund				0	289,819	289,819
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	289,819	289,819

W6

23RD/24TH AVENUE (INDUSTRIAL AREA)

Water

DEPARTMENT

PROJECT DESCRIPTION:

Construct new water line underneath a new road that will connect Hawthorne Street and Quince Street. Project will include Asphaltic Concrete (AC) pavement, curbs, gutter, sidewalk, storm drain, sewer, water line, and landscaping to current construction standards.

DISCUSSION OF PROJECT:

This section of roadway is identified on the Transportation System Plan. When the new road goes in, the new water line should be constructed at that time. This project is needed to carry east/west traffic in the north part of town to relieve congestion on Pacific Avenue and provide access to the industrial land identified in the Comprehensive Plan. This project has been postponed pending development of the area. Cost participation will come from adjacent development.

W6 23RD/24TH AVENUE (INDUSTRIAL AREA)						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				129,004	117,396	246,400
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	129,004	117,396	246,400
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	0	0
Water SDC				129,004	117,396	246,400
TOTAL FUNDING SOURCES	0	0	0	129,004	117,396	246,400

Water

DEPARTMENT

PROJECT DESCRIPTION:

Preliminary engineering study, permitting and building of infrastructure.

DISCUSSION OF PROJECT:

The City of Forest Grove proactively seeks all means to most efficiently and most economically meet long-term water demand needs. This preliminary engineering analysis will provide the City of Forest Grove with critical information necessary to best guide critical next-step decisions on developing intake facilities at Gales Creek. The work program proposed will take a preliminary look at Environmental/Regulatory Review, Preliminary Project Definition, Preliminary Hydraulic Analysis, and Preliminary Project Cost Estimates. This project will construct necessary infrastructure in the future to take advantage of this water source.

Water

DEPARTMENT

PROJECT DESCRIPTION:

Preliminary engineering study, permitting and building of infrastructure.

DISCUSSION OF PROJECT:

The City of Forest Grove proactively seeks all means to most efficiently and most economically meet long-term water demand needs. This preliminary engineering analysis will provide the City of Forest Grove with critical information necessary to best guide critical next-step decisions on developing intake facilities at Gales Creek. The work program proposed will take a preliminary look at Environmental/Regulatory Review, Preliminary Project Definition, Preliminary Hydraulic Analysis, and Preliminary Project Cost Estimates. This project will construct necessary infrastructure in the future to take advantage of this water source.

W7 GALES CREEK INTAKE AND PUMPING STATION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction			0	0	2,000,000	2,000,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	2,000,000	2,000,000
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	1,000,000	1,000,000
Water SDC	0	0	0	0	1,000,000	1,000,000
TOTAL FUNDING SOURCES	0	0	0	0	2,000,000	2,000,000

W8

BARNEY BUY-IN

Water

DEPARTMENT

PROJECT DESCRIPTION:

Purchase additional 800-acre feet storage capacity in Barney Reservoir.

DISCUSSION OF PROJECT:

The 1994 Joint Ownership Agreement – Barney Project provides an expansion in ownership to Forest Grove. This option will be exercised at the time Forest Grove’s water demand shows additional water supply is necessary to meet the City’s need.

W8 BARNEY BUY-IN						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other				0	2,400,000	2,400,000
						0
TOTAL	0	0	0	0	2,400,000	2,400,000
<u>FUNDING SOURCE</u>						
Water Fund						0
Water SDC	0	0	0	0	2,400,000	2,400,000
Water Revenue Bond						0
TOTAL FUNDING SOURCES	0	0	0	0	2,400,000	2,400,000

W 9

DAVID HILL ROAD WATERLINE

Water

DEPARTMENT

PROJECT DESCRIPTION:

Construct 8" ductile iron water main.

DISCUSSION OF PROJECT:

As a part of the David Hill Road extension project, an extension of the City's water distribution piping system will also occur. It is anticipated that adjacent development will participate in the cost of this project.

W9 DAVID HILL ROAD WATERLINE						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	0	0		70,000		70,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	70,000	0	70,000
FUNDING SOURCE						
Water Fund						0
Water SDC	0	0		70,000		70,000
TOTAL FUNDING SOURCES	0	0	0	70,000	0	70,000

W 10

FINISHED WATER STORAGE

Water

DEPARTMENT

PROJECT DESCRIPTION:

Twin 0.18 million gallon reservoirs (total of 0.36 MG) and purchase of property to meet storage requirements in the upper pressure zone by 2030.

DISCUSSION OF PROJECT:

The upper pressure zone needs approximately 0.18 million gallons by 2018, growing to 0.36 million gallons by 2030, due to growth based on forecasted water demands. Twin reservoirs of 0.18 MG each will be built to meet the 2030 storage needs over the next 20 years. Property sufficient for the two reservoirs that provide the proper elevation will be identified and purchased in the next several years, with construction of one of the reservoirs following property acquisition. Currently, this is envisioned to happen within the CIP planning period.

W10 FINISHED WATER STORAGE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction			371,315			371,315
Equipment/Furniture						0
Other		103,000				103,000
						0
TOTAL	0	103,000	371,315	0	0	474,315
<u>FUNDING SOURCE</u>						
Water Fund						0
Water SDC		103,000	371,315			474,315
TOTAL FUNDING SOURCES	0	103,000	371,315	0	0	474,315

Water
DEPARTMENT

PROJECT DESCRIPTION:

Develop a Water Rights Strategic Plan to utilize the City's Clear Creek and Gales Creek water rights and secure long-term water supply reliability.

DISCUSSION OF PROJECT:

The City of Forest Grove has a certificated water right from Gales Creek and water rights permit for Roaring Creek/Clear Creek. The City's use of this water is limited by water availability in these basins during the summer months. A Water Rights Strategic Plan will evaluate the options the City has to optimize use of these water rights including using them directly or leasing the water rights to interested parties. The Strategic Plan will analyze the seasonal/monthly water availability from the Clear Creek and Gales Creek basins, especially in the summer months when the Forest Grove Water Treatment Plant is water supply-limited. The Water Rights Strategic Plan is critical to allow the City to develop a long-term water supply plan related to Joint Water Commission supply, Tualatin Basin Water Supply Project, and other supply options including Tualatin Valley Irrigation District.

W 11 WATER RIGHTS STRATEGIC PLAN						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	15,000					15,000
						0
TOTAL	15,000	0	0	0	0	15,000
<u>FUNDING SOURCE</u>						
Water	7,500					7,500
Water SDC	7,500					7,500
TOTAL FUNDING SOURCES	15,000	0	0	0	0	15,000

Water

DEPARTMENT**PROJECT DESCRIPTION:**

An Asset Management Program is a tool for condition assessment of assets, in order to forecast and schedule appropriate rehabilitation and reconstruction activities in order to assist in producing an annual capital budget program. An Asset Management Program keeps track of current levels of service, life cycle trends and deterioration models. This helps to plan and develop an integrated detailed short term capital budget and projected long range capital budget.

DISCUSSION OF PROJECT:

An Asset Management Program has been recommended in the City's Water Master Plan update. These programs can help to optimize management of the physical assets of a system to maximize value. Managing assets across facilities can improve utilization and performance, reduce capital costs, reduce asset-related operating costs, extend asset life and subsequently improve return on assets.

W13 ASSET MANAGEMENT PROGRAM						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other			30,000			30,000
						0
TOTAL	0	0	30,000	0	0	30,000
<u>FUNDING SOURCE</u>						
Water Fund			30,000			30,000
Water SDC						0
TOTAL FUNDING SOURCES	0	0	30,000	0	0	30,000

W14

PUBLIC WORKS CAMPUS IMPROVEMENTS

Water

DEPARTMENT

PROJECT DESCRIPTION:

The Public Works campus houses offices for the public works and parks crews, the mechanic shop, and storage for public works and parks. The buildings are owned by the Water Fund. Periodic improvements, repairs and updates are needed.

DISCUSSION OF PROJECT:

This project will perform major maintenance and repair on the facilities at the Public Works campus. Scheduled for FY 2013-14 is to replace the roof on the Parks office and storage building.

W14 BUILDING IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	38,000					38,000
Equipment/Furniture						0
Other						0
						0
TOTAL	38,000	0	0	0	0	38,000
<u>FUNDING SOURCE</u>						
Water Fund	38,000	0	0	0	0	38,000
Water SDC						0
TOTAL FUNDING SOURCES	38,000	0	0	0	0	38,000

W15

TRANSMISSION LINE REPAIR

Water

DEPARTMENT

PROJECT DESCRIPTION:

The water transmission line that conveys water from the City's watershed to the City's water treatment plant needs to be repaired and relocated.

DISCUSSION OF PROJECT:

The water transmission line that conveys water from the City's watershed to the City's water treatment plant is embedded in the Clear Creek creek bed. Overtime, erosion has caused the pipe to become exposed, and to deteriorate. The exposed pipe is at risk for breakage by debris flowing down the creek. The City is also exploring relocating this pipe to suspend from the bridge that crosses Clear Creek.

W15 TRANSMISSION LINE REPAIR						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	275,000					275,000
Equipment/Furniture						0
Other						0
						0
TOTAL	275,000	0	0	0	0	275,000
<u>FUNDING SOURCE</u>						
Water Fund	275,000		0			275,000
Water SDC						0
TOTAL FUNDING SOURCES	275,000	0	0	0	0	275,000

W16

LARGE METER REPLACEMENT

Water

DEPARTMENT

PROJECT DESCRIPTION:

The City's water utility owns the water meters used to measure water usage. Some commercial and industrial users have large water meters, located in vaults, that are quite expensive to repair and replace.

DISCUSSION OF PROJECT:

This project is to rehabilitate vaults that house large water meters, and to replace those large water meters. In FY 13-14, a large meter and its vault that serve Pacific University will be replaced.

W16 LARGE METER REPLACEMENT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	50,000	50,000	50,000	50,000	50,000	250,000
Equipment/Furniture						0
Other	0	0	0	0	0	0
						0
TOTAL	50,000	50,000	50,000	50,000	50,000	250,000
<u>FUNDING SOURCE</u>						
Water Fund	50,000	50,000	50,000	50,000	50,000	250,000
Water SDC						0
TOTAL FUNDING SOURCES	50,000	50,000	50,000	50,000	50,000	250,000

W17

EMERGENCY WATER DISPENSER

Water

DEPARTMENT

PROJECT DESCRIPTION:

Purchase one emergency water dispensing Blivet and trailer.

DISCUSSION OF PROJECT:

During an emergency or a large scale water line break, a section of town could be without water. In this scenario, a water blivet could be used to dispense water in the interim until the distribution system is repaired. A blivet unit is trailer mounted and can be taken to a location near the emergency area. It is connected to the water distribution system through a fire hydrant. Residential customers drive through and fill small water containers with potable water.

W17 EMERGENCY WATER DISPENSER						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	10,000	0	0	0	0	10,000
Equipment/Furniture						0
Other	0	0	0	0	0	0
						0
TOTAL	10,000	0	0	0	0	10,000
<u>FUNDING SOURCE</u>						
Water Fund	10,000	0	0	0	0	10,000
Water SDC						0
TOTAL FUNDING SOURCES	10,000	0	0	0	0	10,000

W20

JWC FINISHED WATER METER

Water _____
DEPARTMENT

PROJECT DESCRIPTION:

At the Joint Water Commission water treatment plant, install magnetic flow meters on the discharge of Pump Stations 1 and 2 for accurate metering.

DISCUSSION OF PROJECT:

Existing meters on both pump stations are Panametrics ultrasonic meters and are beyond their useful service life. The meter on the discharge of Pump Station #1 is field adapted and is installed in a poor location for accurate metering. Both meters would be replaced with magnetic flow meters which are considered to be the best available technology for accurate flow metering for this application.

W20 JWC FINISHED WATER METERING						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture					66,650	66,650
Other	0	0	0	0	0	0
						0
TOTAL	0	0	0	0	66,650	66,650
FUNDING SOURCE						
Water Fund	0	0	0	0	66,650	66,650
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	66,650	66,650

W21

JWC FLOC SED BASIN IMPROVEMENTS

Water _____
DEPARTMENT

PROJECT DESCRIPTION:

At the Joint Water Commission water treatment plant, install higher capacity drain lines for Floc/Sed basins D through G. Replace sludge drain valves from Floc/Sed basins A, B, C. Also, Floc/Sed Basin "A" has channel cracks and Basin "C" has floor cracks. The walls will be sand blasted to remove old paint, then recoated with a sealer. The cracks will be cleaned and injection grouted to seal leaks

DISCUSSION OF PROJECT:

This project will increase worker safety by replacing the sludge drain valves and adding actuators to the valves. The project will also reduce maintenance and the time to drain sludge basins.

During the Near-Term Improvement project, cracks and water seepage were observed in Basin "A" and "C". The leaks have created maintenance issues. The basins were last painted during the original construction. This paint has been peeling and is a maintenance concern.

W21 JWC FLOC/SED BASIN IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				39,990	53,330	93,320
Equipment/Furniture					0	0
Other	0	0	0	0	0	0
						0
TOTAL	0	0	0	39,990	53,330	93,320
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	39,990	53,330	93,320
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	39,990	53,330	93,320

W22

JWC WTP INTERIOR BUILDING IMPROVEMENTS

Water

DEPARTMENT

PROJECT DESCRIPTION:

Repaint Control Building, Pump Station 1 Interior and Exterior. Paint is circa 1976 and in need of recoating.

DISCUSSION OF PROJECT:

Much of the original WTP has not been repainted since the original construction in 1976. This original paint is in need of recoating from both a maintenance and aesthetic perspective.

W22 WTP INTERIOR BUILDING IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	0	0	0	0	19,995	19,995
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	19,995	19,995
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	19,995	19,995
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	19,995	19,995

Water

DEPARTMENT

PROJECT DESCRIPTION:

Update to the Joint Water Commission Master Plan

DISCUSSION OF PROJECT:

The Oregon Department of Human Services, Drinking Water Program, requires the JWC to maintain a current master plan for its water system. A JWC Master Plan update is recommended every five years through the planning period of this project. A regular master plan update will provide flexibility to adjust the timing and magnitude of projects based on changing water demands and other conditions.

W23 JWC MASTER PLAN UPDATE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other				46,655		46,655
						0
TOTAL	0	0	0	46,655	0	46,655
<u>FUNDING SOURCE</u>						
Water Fund			0	46,655	0	46,655
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	46,655	0	46,655

W24

JWC THICKENER UPGRADE EXISTING PLANT

Water

DEPARTMENT

PROJECT DESCRIPTION:

Make improvements to the existing Joint Water Commission (JWC) water treatment plant solids thickener system.

DISCUSSION OF PROJECT:

The pipeline between the recycle pump station and the thickeners takes a circuitous route through the main floor of the operations building and through valves that are currently inoperable. Increasing the pipe size and rerouting the pipeline outside of the operations building is desired.

Refurbish/replace the drives on two 1976 vintage thickeners, and clean, repair, and paint the structures. The drives on the two 1976 thickeners are starting to create ongoing maintenance issues. They are in need of overall rehabilitation in order to extend their useful life.

W24 JWC THICKENER UPGRADE EXISTING PLANT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	0	0	26,660	0	0	26,660
						0
TOTAL	0	0	26,660	0	0	26,660
<u>FUNDING SOURCE</u>						
Water Fund	0	0	26,660	0	0	26,660
Water SDC						0
TOTAL FUNDING SOURCES	0	0	26,660	0	0	26,660

W27

JWC EQUIPMENT NEEDS

Water

DEPARTMENT

PROJECT DESCRIPTION:

This is a category of projects for the Joint Water Commission assets that captures equipment needs, building repair and modification needs, various reconditioning projects, etc.

DISCUSSION OF PROJECT:

The JWC water treatment plant and intake pump station incorporate many pieces of major mechanical equipment: pump, valves, mixers, compressors, and other items. There is also a building, area lighting and an asphalt driveway and parking. All of these items need various repairs and reconditioning over time. Also, spare pipe is purchased and stored.

W27 JWC EQUIPMENT NEEDS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other		6,665	10,000	10,000	10,000	36,665
						0
TOTAL	0	6,665	10,000	10,000	10,000	36,665
<u>FUNDING SOURCE</u>						
Water Fund	0	6,665	10,000	10,000	10,000	36,665
Water SDC						0
TOTAL FUNDING SOURCES	0	6,665	10,000	10,000	10,000	36,665

W29

JWC SEISMIC MITIGATION EXISTING PLANT

Water

DEPARTMENT

PROJECT DESCRIPTION:

This project will make improvements at the existing plant to minimize damage and protect the safety of staff following a medium earthquake event.

DISCUSSION OF PROJECT:

In September 2007, the JWC engaged a consultant to perform a seismic evaluation of the JWC water treatment plant. The purpose of the evaluation was to assess the reliability of the water treatment plant and associated facilities following potential seismic event. The evaluation developed recommended improvements to mitigate identified vulnerabilities. Projects were developed at the existing plant to protect plant staff safety and minimize operational damage following a small earthquake event. See JWC master plan for a detailed list of overall project improvements.

W29 SEISMIC MITIGATION EXISTING PLANT						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	0	0	0	0	614,513	614,513
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	0	0	0	614,513	614,513
FUNDING SOURCE						
Water Fund	0	0	0	0	614,513	614,513
Water SDC						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	614,513	614,513

W30

JWC HYDROPNEUMATIC ACTUATORS

Water

DEPARTMENT

PROJECT DESCRIPTION:

Replace hydropneumatic actuators on Filters 1-8. This project will replace the existing hydropneumatic actuators with electric actuators like those on Filters 9-14.

DISCUSSION OF PROJECT:

This project will increase reliability and commonality of spare parts by standardizing all actuators to electric actuators.

W30 HYDROPNEUMATIC ACTUATORS						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	0	0	0	26,660	0	26,660
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	0	0	26,660	0	26,660
FUNDING SOURCE						
Water Fund	0	0	0	26,660	0	26,660
Water SDC						0
						0
TOTAL FUNDING SOURCES	0	0	0	26,660	0	26,660

W31

JWC REMOVE LIME SILO

Water

DEPARTMENT

PROJECT DESCRIPTION:

Removal of Old Lime Silo. The silo has not been utilized in many years.

DISCUSSION OF PROJECT:

The removal of the silo is for both aesthetic and maintenance needs.

W31 REMOVE LIME SILO						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	0	0	0	6,665		6,665
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	0	0	6,665	0	6,665
FUNDING SOURCE						
Water Fund	0	0	0	6,665	0	6,665
Water SDC						0
						0
TOTAL FUNDING SOURCES	0	0	0	6,665	0	6,665

Water
DEPARTMENT

PROJECT DESCRIPTION:

Assess ways to protect the drainage basin of the sources of the Joint Water Commission water supply.

DISCUSSION OF PROJECT:

The Technical Advisory Committee has recommended that staff complete a GIS project to better assess risks to the water supply drainage basin while staff work on the development of the plan and implementation of the program. DEQ did most of this work in a project with Trust for Public Lands. They will give staff the geodatabase, but staff will need to modify it for JWC purposes and create risk layers. Staff would also like to incorporate the Barney Reservoir area and water quality data into the database to correlate the data collected with the source water assessment data risks.

W32 SOURCE WATER PROTECTION PLAN						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	7,332	7,332	7,332	7,332	7,332	36,658
Equipment/Furniture						0
Contingency						0
						0
TOTAL	7,332	7,332	7,332	7,332	7,332	36,658
FUNDING SOURCE						
Water Fund	7,332	7,332	7,332	7,332	7,332	36,658
Water SDC						0
						0
TOTAL FUNDING SOURCES	7,332	7,332	7,332	7,332	7,332	36,658

W33

JWC TRASH SCREEN IMPROVEMENTS

Water

DEPARTMENT

PROJECT DESCRIPTION:

Improve the rotating raw water trash screen. The existing trash rack is part of original equipment for the pump station and would be rehabilitated or replaced with this project.

DISCUSSION OF PROJECT:

One of two trash screens at the raw water pump station is part of the original equipment. The screen is becoming worn and is becoming a frequent maintenance item. Staff recommends a completed refurbishment of the existing trash screen. However, this work on the intake structure must coordinated with the Tualatin Valley Irrigation District.

W33 TRASH SCREEN IMPROVEMENTS						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction	0	0	0	0	26,660	26,660
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	0	0	0	26,660	26,660
FUNDING SOURCE						
Water Fund	0	0	0	0	26,660	26,660
Water SDC						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	26,660	26,660

W39

JWC FISH SCREEN AT FERN HILL PUMP STATION

Water

DEPARTMENT

PROJECT DESCRIPTION:

Replace existing fish screen on the intakes at the Joint Water Commission Plant on Fern Hill Road.

DISCUSSION OF PROJECT:

This federally required project requires a federal match, which has not yet been budgeted. Forest Grove is required to participate at the percent if the City's ownership.

W39 JWC FISH SCREEN AT FERN HILL PUMP STATION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	0	0	0	0	320,000	320,000
						0
TOTAL	0	0	0	0	320,000	320,000
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	320,000	320,000
Water SDC	0	0	0			0
TOTAL FUNDING SOURCES	0	0	0	0	320,000	320,000

Water
DEPARTMENT

PROJECT DESCRIPTION:

Continuation of Joint Water Commission (JWC) project for water rights consultant of record.

DISCUSSION OF PROJECT:

This project provides continuation of funding for technical assistance relating to the JWC water rights permits. There are several tasks identified under this project including work on the JWC permit extension, permit amendment to move JWC permit point of diversion to the Spring Hill Pump, development of the claim of beneficial use for the Scoggins secondary permit for the JWC associated storage contracts, coordination between contract holders for the certification of Bureau of Reclamation's (BOR) secondary permit, and application for a new JWC supplemental water right at the Spring Hill Pump. The JWC water right permit (Permit S-50879 for 75 cfs) needs to be extended to maintain the water right permit for future development. Although the permit initially required construction and complete application of the water to beneficial use by October 1, 1992, the Oregon Water Resources Division (OWRD) has extended this deadline on two occasions. The current deadline for completion is October 1, 2000. The JWC filed an extension application with the OWRD on June 29, 2001 requesting additional time to complete development under the permit. The application is still pending at this time. No changes to this permit, such as a permit amendment to move the point of diversion downstream, can be approved until the pending extension is approved. The current permit application pending at the state is outdated and will be updated with current demands and for coordination with the Tualatin Basin Water Supply Project (TBWSP). After the permit extension is approved JWC will need to submit a permit amendment for a point of diversion change to the Spring Hill Pump as required by the Oregon Division of Fish and Wildlife's (ODFW) fish persistence conditions. This project also includes work to certificate the JWC member agencies contracts as part of the BOR's secondary storage permit (right to release). Finally, the JWC will need to apply for a supplemental water right to the JWC permit due to availability issues associated with that permit as previously presented.

W41 JWC WATER RIGHTS CONSULTANT OF RECORD						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	6,665	6,665	6,665	6,665	6,665	33,325
						0
TOTAL	6,665	6,665	6,665	6,665	6,665	33,325
<u>FUNDING SOURCE</u>						
Water Fund	6,665	6,665	6,665	6,665	6,665	33,325
Water SDC						0
TOTAL FUNDING SOURCES	6,665	6,665	6,665	6,665	6,665	33,325

W42

JWC BAR RACK CLEAN SYSTEM

Water

DEPARTMENT

PROJECT DESCRIPTION:

This project will install an automated cleaning system at the raw water intake.

DISCUSSION OF PROJECT:

A bar rack exists upstream of the trash screens. The rack does not have a cleaning system and can only be accessed by boat. The project would install an automated trash rack cleaning system. This will increase Operator safety and reduce maintenance at the intake. However, this work on the intake structure must be undertaken in coordination with the Tualatin Basin Water Supply project and coordinated with the Tualatin Valley Irrigation District.

W42 JWC BAR RACK CLEANING SYSTEM						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	0	0	0	0	93,310	93,310
						0
TOTAL	0	0	0	0	93,310	93,310
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	93,310	93,310
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	93,310	93,310

W43

JWC CONNECTING YARD VALVES

**Water
DEPARTMENT**

PROJECT DESCRIPTION:

This project will replace several critical yard valves that are not operating correctly.

DISCUSSION OF PROJECT:

Several valves have been identified as not operating correctly or have seats that failed and preventing complete shutoff and creating issues during facility maintenance activities.

W43 JWC CONNECTING YARD VALVES						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture						0
Other	0	0	0	26,660	0	26,660
						0
TOTAL	0	0	0	26,660	0	26,660
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	26,660	0	26,660
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	26,660	0	26,660

**Water
DEPARTMENT**

PROJECT DESCRIPTION:

In 2011, the Joint Water Commission retained a consultant to review the electrical system at the water treatment, including reviewing panels, switches, boards, etc. This study showed that many of the aging electrical systems should be replaced.

DISCUSSION OF PROJECT:

Projects include:

- ▶ Panel board 4P-MCS-8 Short-Circuit Remediation: For panel board 4P-MCS-8, replacement of the existing feeding circuit breaker or installing a set of Class J or Class T fuses between the existing circuit breaker and the panel board would be a remedial solution.
- ▶ MCO Short-Circuit Remediation: For MCO, installing a set of Class J fuses, not larger than 400A, ahead of the MCO main circuit breaker, (i.e. inside of MCS, feeding MCO) would be an acceptable solution.
- ▶ Replacement of transformers T1 and T2 and switchgear SBP: The two most vulnerable elements are the main switchgear SBP and the transformers T1 and T2. These transformers and switchgear have reached the end of their useful life and should be replaced.
- ▶ Acquisition of spare MV Circuit Interrupter: The main Medium-Voltage (MV) switchgear does not have a spare circuit interrupter for the circuit feeding the treatment plant transformers T1, T2, T3, and T4. This project purchases a spare replacement 1200 A circuit interrupter and will be installed in a spare medium voltage cubicle.
- ▶ Repair of Existing MV Circuit Interrupter: The existing 1200 A Medium-Voltage circuit interrupter feeding transformers T1, T2, T3, and T4 (located in the main, MV switchgear) has difficulties in closing properly. A full-maintenance check, service, and repair of this item will be performed to ensure continued proper operation. This action requires outside, experienced and certified medium voltage equipment technicians.
- ▶ Bypass old switchgear at Spring Hill Pumping Plant: The main switchgear circuit breaker is at the end of its useful life. This project will replace the trip unit and reroute the load conductors.

W44 JWC ELECTRIC ASSESSMENT UPGRADES						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	153,295	42,123	168,491	13,330	13,330	390,569
Other	0	0	0	0	0	0
						0
TOTAL	153,295	42,123	168,491	13,330	13,330	390,569
<u>FUNDING SOURCE</u>						
Water Fund	153,295	42,123	168,491	13,330	13,330	390,569
Water SDC						0
TOTAL FUNDING SOURCES	153,295	42,123	168,491	13,330	13,330	390,569

W45

JWC FILTRATION STUDY

Water
DEPARTMENT

PROJECT DESCRIPTION:

This project will test and study the capacity of the filtration system to see if it can be increased.

DISCUSSION OF PROJECT:

This project will modify the water treatment filtration system in order to evaluate if additional capacity can be obtained.

W45 JWC FILTRATION STUDY						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	3,070	20,315	142,204	40,630	0	206,219
Other	0	0	0	0	0	0
						0
TOTAL	3,070	20,315	142,204	40,630	0	206,219
<u>FUNDING SOURCE</u>						
Water Fund	3,070	20,315	142,204	40,630	0	206,219
Water SDC						0
TOTAL FUNDING SOURCES	3,070	20,315	142,204	40,630	0	206,219

Water

DEPARTMENT

PROJECT DESCRIPTION:

This project is for the installation of an on-site power generation system for the Joint Water Commission's Water Treatment Plant, to run in the event of an emergency that causes the Portland General Electric service to go down.

DISCUSSION OF PROJECT:

This project installs an on-site back up power generation system for the JWC water treatment plant. The JWC was successfully awarded a \$225,000 matching grant from USAI to design the project. Additional grant funding may be available for the installation portion of the project.

Uninterruptable or redundant power supply has been identified as a priority by the Carollo Seismic Report and also the Black & Veatch Master Plan. On-site, back-up power generation was also listed as a need in the Water Treatment Plant Facility plan that was developed by CH2MHill and adopted by the JWC in April 2005.

Forest Grove's participation is equal to approximately 1 million gallons per day for approximately 3 days.

W47 JWC ON-SITE POWER GENERATION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	0					0
Site Preparation						0
Construction		166,625				166,625
Equipment/Furniture						0
Other						0
						0
TOTAL	0	166,625	0	0	0	166,625
<u>FUNDING SOURCE</u>						
Water Fund	0	166,625				166,625
Water SDC						0
TOTAL FUNDING SOURCES	0	166,625	0	0	0	166,625

Water**DEPARTMENT****PROJECT DESCRIPTION:**

Inspection of two JWC concrete cylinder water transmission pipelines: 1) the South Transmission Line (45-inch and 42-inch diameter, approximately 43,700 lineal feet), and, 2) the Forest Grove/Hillsboro Line (24-inch diameter, approximately 8,137 lineal feet).

DISCUSSION OF PROJECT:

Both transmission lines from the Fern Hill reservoirs are critical infrastructure. Because they are buried it is difficult to assess the condition of these lines. The purpose of this project is to provide routine, periodic inspections of the transmission piping by excavation and physical assessment. These inspections will allow the JWC to assess the useful life of the mains and plan for their eventual replacement.

W48 FG TRANSMISSION LINE INSPECTION & REPAIR						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	0	0	0	0	119,970	119,970
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	119,970	119,970
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	119,970	119,970
Water SDC	0	0	0	0	0	0
TOTAL FUNDING SOURCES	0	0	0	0	119,970	119,970

Water
DEPARTMENT

PROJECT DESCRIPTION:

This project will replace and improve various equipment and mechanical items at the Joint Water Commission water treatment plant. Projects include:

- ▶ Ball valve replacement for Pump Station #1, pumps 4 & 6.
- ▶ Installing flow meters on decant pump station to head works and into each existing floc/sed basin.
- ▶ Pump Station #1 VFD - Add one VFD to a larger pump in Pump Station #1. Will require replacement of one soft start with a VFD and replacement of one motor with an inverter duty motor.
- ▶ Replace pumps 4 & 5 in Pump Station #1
- ▶ Study whether to rebuild pump motors or replace them with newer, more efficient motors.

DISCUSSION OF PROJECT:

The seals in the existing ball valves are wearing out and beginning to fail. The leaking seals cause water to flow back from the pump header pipe back into the clearwell. In some instances, pump motors without non-reverse ratchets, will slowly spin backwards. This project corrects those problems.

Install flow meters on decant pump station to head works and into each existing floc/sed basin. The installation of flow meters will allow for greater operational control of the water treatment plant. There are no flow meters on the line from the decant station to the head works or to each floc/sed basin. This makes it difficult for operators to manage flow rate. The addition of meters will give the operators greater operational control and WTP optimization.

One VFD will be added to a larger pump in pump station #1. Pump station #1 is the primary operational pump station during winter time low flow periods. This pump station only has one small pump with a variable frequency drive. A second, larger VFD equipped pump would allow Operators greater operational control, efficiency, and better plant optimization during low demand periods.

Pumps 4 and 5 in Pump Station Number 1 (PS 1) were pulled as part of the assessment program. Based upon the wear of the pumps including extensive cavitation of the pump impellers, and the lack of replacement parts, it was determined that it was not feasible re-assemble these pumps and return them to service. Consequently these two pumps are currently being replaced. Furthermore, a study will be conducted to identify the cost/benefit of continuing to periodically rebuild the pump motors versus replacing them with newer more efficient motors.

W49 JWC PUMP STATION IMPROVEMENTS						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering	0					0
						0
Construction	53,320	19,995	0	2,666	2,666	78,647
Equipment/Furniture						0
Other						0
						0
TOTAL	53,320	19,995	0	2,666	2,666	78,647
FUNDING SOURCE						
Water Fund	53,320	19,995	0	2,666	2,666	78,647
Water SDC						0
TOTAL FUNDING SOURCES	53,320	19,995	0	2,666	2,666	78,647

W50

JWC CAMPUS IMPROVEMENTS

Water

DEPARTMENT

PROJECT DESCRIPTION:

The Joint Water Commission's Operations Building periodic improvements.

DISCUSSION OF PROJECT:

This project will re-roof the operations building.

W50 JWC CAMPUS IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	26,660					26,660
Equipment/Furniture						0
Other	0	0	0	0	0	0
						0
TOTAL	26,660	0	0	0	0	26,660
<u>FUNDING SOURCE</u>						
Water Fund	26,660	0	0	0	0	26,660
Water SDC						0
TOTAL FUNDING SOURCES	26,660	0	0	0	0	26,660

W51

LAND ACQUISITION

Water

DEPARTMENT

PROJECT DESCRIPTION:

Acquire land abutting the City's watershed, within the drainage basin..

DISCUSSION OF PROJECT:

The City desires to own the lands that drain into its watershed. This project is a placeholder to acquire lands abutting its current watershed that drain into the basin. This project is recommended as part of the Watershed Stewardship Management Plan.

W51 LAND ACQUISITION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction	0	0	0	0	500,000	500,000
Equipment/Furniture						0
Other	0	0	0	0	0	0
						0
TOTAL	0	0	0	0	500,000	500,000
<u>FUNDING SOURCE</u>						
Water Fund	0	0	0	0	500,000	500,000
Water SDC						0
TOTAL FUNDING SOURCES	0	0	0	0	500,000	500,000

**PUBLIC SAFETY
PROJECTS**

PUBLIC SAFETY PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2013-14	2014-15	2015-16	2016-17	2017-18	TOTAL
FF3	Replacement Of Turnouts/Safety Equipment	31,000	19,000	19,000	19,000	19,000	107,000
FF4	Replacement Of Fire Hose, Nozzles, Etc.	15,500	12,500	12,500	12,500	12,500	65,500
FF8	Fire Apparatus Replacement Program	345,000	340,000	130,000	395,100	473,000	1,683,100
FF25	Portable Radios	0	10,000	15,000	15,000	15,000	55,000
FF26	Fire Hydrant	14,500	0	0	0	0	14,500
FF27	EMS Equipment	25,800	0	0	0	0	25,800
	FIRE TOTALS	431,800	381,500	176,500	441,600	519,500	1,950,900
PD11	Replacement Of Mobile And Portable Radios	16,800	16,800	16,800	16,800	16,800	84,000
PD12	Replacement Of MDC's	0	0	18,000	18,000	18,000	54,000
PD29	Firearms and Weapons Replacement	4,300	4,300	4,300	4,300	4,300	21,500
	POLICE TOTALS	21,100	21,100	39,100	39,100	39,100	159,500
	PUBLIC SAFETY TOTALS	452,900	402,600	215,600	480,700	558,600	2,110,400
Bold = NEW PROJECTS							

FF3

REPLACEMENT OF TURNOUTS

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Replace turnout on an annual basis and other accessories as needed to insure maintenance of required safety equipment.

DISCUSSION OF PROJECT:

The Fire Department has approximately sixty-five (65) sets of turnouts in the department with an average cost of \$1,700 each. Life of a set of turnouts is approximately five (5) years. The department also has suspenders, gloves and flashlights that are replaced on an as-needed basis resulting in an annual expenditure of approximately \$10,000 to \$25,000. Turnouts are required safety equipment and must be maintained in good condition at all times.

FF3 REPLACEMENT OF TURNOUTS/SAFETY EQUIPMENT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	31,000	19,000	19,000	19,000	19,000	107,000
Other						0
						0
TOTAL	31,000	19,000	19,000	19,000	19,000	107,000
<u>FUNDING SOURCE</u>						
General Fund	15,500	9,500	9,500	9,500	9,500	53,500
Fire District	15,500	9,500	9,500	9,500	9,500	53,500
						0
TOTAL FUNDING SOURCES	31,000	19,000	19,000	19,000	19,000	107,000

FF4

REPLACEMENT OF FIRE HOSE, NOZZLES, ETC.

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Replacement of fire hose on an annual basis to insure maintenance of required equipment.

DISCUSSION OF PROJECT:

Replacement of fire hose is a continuous program that results in replacing fire hose when it is approximately seven (7) years of age. Cost of the hose ranges from \$194 per 100 feet for 1-3/4" hose to \$450 per 100 feet for 4" hose with a total of approximately 26,000 feet of hose in service and a total dollar amount of \$81,340 worth of hose. Also included in this is the replacement of nozzles.

FF4 REPLACEMENT OF FIRE HOSE, NOZZLES, ETC.						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	15,500	12,500	12,500	12,500	12,500	65,500
Other						0
						0
TOTAL	15,500	12,500	12,500	12,500	12,500	65,500
<u>FUNDING SOURCE</u>						
FERF	7,750	6,250	6,250	6,250	6,250	32,750
Fire District	7,750	6,250	6,250	6,250	6,250	32,750
						0
TOTAL FUNDING SOURCES	15,500	12,500	12,500	12,500	12,500	65,500

FF8

FIRE APPARATUS REPLACEMENT PROGRAM

Fire

DEPARTMENT

PROJECT DESCRIPTION:

The Fire Department's 14 pieces of apparatus are replaced on a scheduled basis. Capital costs are split on a 50/50 basis between the City and Rural District. Pickups are replaced every 7 to 10 years, pumpers are replaced every 17 years, and tankers and ladder trucks are replaced every 20 years.

DISCUSSION OF PROJECT:

The City and the District both maintain a reserve to replace fire apparatus. With the reserve, money to fund replacement of vehicles is built up over the life of the vehicle. This practice maintains annual expenditures for apparatus and allows both the City and District to avoid periods of high and low spending. This funding method is the same method that the City uses to maintain its equipment fund.

In FY 2013-14, the principal purchase is the replacement of water tender.

FF8 FIRE APPARATUS REPLACEMENT PROGRAM						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	345,000	340,000	130,000	395,100	473,000	1,683,100
Other						0
						0
TOTAL	345,000	340,000	130,000	395,100	473,000	1,683,100
<u>FUNDING SOURCE</u>						
Fire Equipment Repl Fund	172,500	170,000	65,000	197,550	236,500	841,550
Fire District	172,500	170,000	65,000	197,550	236,500	841,550
						0
TOTAL FUNDING SOURCES	345,000	340,000	130,000	395,100	473,000	1,683,100

FF25

PORTABLE RADIOS

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Replace portable radios used in the day to day fire/rescue/EMS operations.

DISCUSSION OF PROJECT:

Portable radios have be replaced due to general wear and tear from daily use and due to upgrades at Washington County Consolidated Communications Center. The new radios are capable of a larger channel template.

FF25 PORTABLE RADIOS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	0	10,000	15,000	15,000	15,000	55,000
Other						0
						0
TOTAL	0	10,000	15,000	15,000	15,000	55,000
<u>FUNDING SOURCE</u>						
Fire Equipment Replacement	0	5,000	7,500	7,500	7,500	27,500
Fire District	0	5,000	7,500	7,500	7,500	27,500
Grant	0					0
TOTAL FUNDING SOURCES	0	10,000	15,000	15,000	15,000	55,000

FF26

FIRE HYDRANT

Fire

DEPARTMENT

PROJECT DESCRIPTION:

Install fire hydrant in the back parking lot of the Fire Department..

DISCUSSION OF PROJECT:

This project will install a fire hydrant in the back parking lot of the Fire Department. This hydrant will be used for training purposes. Currently, the Fire Department uses the fire hydrant on Ash Street. However, this has become too disruptive to traffic flow and for the Fire Department training procedures. A hydrant in the back parking lot will allow the Fire Department to conduct training much more efficiently.

FF26 FIRE HYDRANT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	14,500					14,500
Other						0
						0
TOTAL	14,500	0	0	0	0	14,500
<u>FUNDING SOURCE</u>						
Fire Equipment Replacement	7,250					7,250
Fire District	7,250					7,250
Grant						0
TOTAL FUNDING SOURCES	14,500	0	0	0	0	14,500

Fire

DEPARTMENT**PROJECT DESCRIPTION:**

This project will purchase EMS equipment for the Fire Department. .

DISCUSSION OF PROJECT:

EMS Equipment purchases will be as follows:

- Video Laryngoscope – one of the critical skills performed by paramedics is the insertion of a tube into the lungs (intubation) to control an airway, provide respiration, and protect from aspiration. This skill can be complicated and difficult to perform due to unusual anatomy, obese patients, or significant facial/throat trauma. The success rate for this procedure is 94% - the Fire Department hopes to improve this to 99-100% success through the added tool of a video laryngoscope. This is recommended by our supervising physician, Dr. Daya. Estimated cost: \$12,000 for two.
- ALS Training Mannequin – EMS skills are practiced almost daily – this training mannequin allows the Fire Department to practice everything from intubation (see above) to medication administration, IV access, intraosseous (bone needle) administration, etc. Replaces a training mannequin that is over 10 years old and no longer usable. Estimated cost: \$9100.
- Carbon Monoxide Monitor – Utilized for patients that have been exposed to high levels of carbon monoxide, provides paramedics accurate read outs on blood concentration to determine appropriate levels of treatment - \$4700.

FF27 EMS EQUIPMENT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	25,800					25,800
Other						0
						0
TOTAL	25,800	0	0	0	0	25,800
<u>FUNDING SOURCE</u>						
Fire Equipment Replacement	12,900					12,900
Fire District	12,900					12,900
Grant						0
TOTAL FUNDING SOURCES	25,800	0	0	0	0	25,800

PD11 REPLACEMENT OF MOBILE AND PORTABLE RADIOS

Police

DEPARTMENT

PROJECT DESCRIPTION:

On-going replacement of radios to ensure properly functioning equipment capable of maintaining interagency and interoperability communications.

DISCUSSION OF PROJECT:

The Department has a responsibility in maintaining Forest Grove's part in the integrity of the county-wide system.

PD11 REPLACEMENT OF MOBILE AND PORTABLE RADIOS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	16,800	16,800	16,800	16,800	16,800	84,000
Other						0
						0
TOTAL	16,800	16,800	16,800	16,800	16,800	84,000
<u>FUNDING SOURCE</u>						
General Fund	10,800	10,800	10,800	10,800	10,800	54,000
CIP Excise Tax Fund	6,000	6,000	6,000	6,000	6,000	30,000
						0
TOTAL FUNDING SOURCES	16,800	16,800	16,800	16,800	16,800	84,000

PD12 REPLACEMENT OF MOBILE DATA COMPUTERS (MDC's)

Police

DEPARTMENT

PROJECT DESCRIPTION:

On-going replacement of MDC's for the police vehicles.

DISCUSSION OF PROJECT:

The Department has a responsibility to maintain Forest Grove's part in the integrity of the countywide system. It is up to the individual departments in the County to keep current with technology. This technology ensures interoperability between regional law enforcement agencies and the countywide dispatch center. The Department must be prepared to expend the funds necessary to maintain the technology used in the rest of the County agencies. This expenditure projects for the projected life of the in-vehicle mobile data computers. The proposed configuration will support advanced emerging technologies with the mobile data computers such as GPS, mapping, and access to informational databases.

PD12 REPLACEMENT OF MDC'S						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	0	0	18,000	18,000	18,000	54,000
Other						0
						0
TOTAL	0	0	18,000	18,000	18,000	54,000
<u>FUNDING SOURCE</u>						
CIP Excise Tax Fund	0	0	18,000	18,000	18,000	54,000
						0
						0
TOTAL FUNDING SOURCES	0	0	18,000	18,000	18,000	54,000

Police

DEPARTMENT**PROJECT DESCRIPTION:**

The department intends to periodically replace firearms/weapons on a periodic basis to ensure no loss of operational capability and ensure firearms/weapons are available as needed to sworn personnel.

DISCUSSION OF PROJECT:

The Department's current inventory of Remington 870 shotguns have been in service for well over 30 years. The department has been successful in repairing and maintaining these weapons, but is experiencing a diminishing return related to the serviceability of the weapons.

The Department has an inventory of AR-15 rifles. At least two of these rifles were purchased in 2002 and over time have deteriorated due to their nature as high velocity, high pressure weapons and their use as training weapons. The department intends to replace two of these weapons yearly, taking older weapons out of operational service and transferring them to exclusively training service. This will ensure 100% operational availability and readiness of this weapons platform while also allowing us to meet our annual training requirements.

The Department has a current inventory of Tasers, including two different models. The department intends to replace older models with newer models and initiate a systematic replacement program to ensure sufficient Tasers are available for operational requirements.

Due to operational and training wear and recalls, the department also intends to replace our primary handgun issued to sworn personnel. The details of the weapons platform are still subject to internal department discussions, but the replacement program would be in concert with a turn-in program to obtain credit, thereby reducing the expenditure for replacement.

The timelines for the replacement program are: 8 Years for Handguns; 5 Years for AR-15 Rifles, 10 Years for Shotguns, and Tasers as needed or manufacturer recommendation. This program will increase the presence of less-lethal options with patrol staff, increase our weapons compatibility, reduce our repair and maintenance costs, and potentially reduce risk exposure for high-risk, low-probability policing events.

PD29 FIREARMS/WEAPONS REPLACEMENT						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction						0
Equipment/Furniture	4,300	4,300	4,300	4,300	4,300	21,500
Contingency						0
						0
TOTAL	4,300	4,300	4,300	4,300	4,300	21,500
FUNDING SOURCE						
CIP Excise Tax Fund	4,300	4,300	4,300	4,300	4,300	21,500
						0
TOTAL FUNDING SOURCES	4,300	4,300	4,300	4,300	4,300	21,500

**CULTURE
AND RECREATION
PROJECTS**

CULTURE AND RECREATION PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2013-14	2014-15	2015-16	2016-17	2017-18	TOTAL
		0	0	0	0	0	0
	<u>LIBRARY TOTALS</u>	0	0	0	0	0	0
AQ 4	Aquatic Center Energy Projects	0	157,500	100,000	75,000	0	332,500
AQ 5	Pool Deck	0	0	0	0	110,000	110,000
PR9	Rogers Park Renovation	0	225,000	0	0	0	225,000
PR13	Trails & Greenways	373,000	0	548,500	0	0	921,500
PR14	Thatcher Park Phase II	0	0	0	0	2,000,000	2,000,000
PR20	Joseph Gale Park Improvements	0	0	0	130,000	0	130,000
PR25	Bard & Talisman Park Improvements	103,000	0	55,000	0	0	158,000
PR27	Southern Land Acquisition	240,000	0	0	0	0	240,000
PR28	Parks Master Plan	85,000	0	0	0	0	85,000
PR29	Improve Parking Lots at Parks	0	0	53,000	0	0	53,000
	<u>AQUATICS & PARKS TOTALS</u>	801,000	382,500	756,500	205,000	2,110,000	4,255,000
	CULTURE AND RECREATION TOTALS	801,000	382,500	756,500	205,000	2,110,000	4,255,000
Bold = NEW PROJECTS							

Aquatics

DEPARTMENT

PROJECT DESCRIPTION:

Explore and implement energy conservation projects at the Forest Grove Aquatic Center.

DISCUSSION OF PROJECT:

The City partnered with the Energy Trust of Oregon to study the energy consumption at the Aquatic Center. The study was completed in February 2012. Findings included a number of measures that could be implemented to reduce consumption and achieve payback for the investment over a relatively short amount of time for some measure, others were longer. This project addresses the Council sustainability goals at the pool. Measures included in the study are: Install automatic pool blankets, upgrade all HVAC systems in the natatorium and locker rooms, install heat recovery system for outside air and supply fan systems and install new boiler control system. The study showed payback periods ranging from 3.5 years to 40.5 years. This project also includes UV water treatment system to prevent chemical balance issues once the pools are covered.

In FY 13-14, the City will be exploring which projects make the most sense to embark upon first, and to ensure the City has adequate funding to pay for the projects.

AQ 4 AQUATIC CENTER ENERGY PROJECTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2016-17</u>	<u>5-YEAR TOTAL</u>
Design/Engineering		37,500				37,500
Site Preparation						0
Construction		120,000	100,000	75,000		295,000
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	157,500	100,000	75,000	0	332,500
<u>FUNDING SOURCE</u>						
MMRF		157,500	100,000	75,000	0	332,500
						0
TOTAL FUNDING SOURCES	0	157,500	100,000	75,000	0	332,500

AQ 5

POOL DECK

Aquatics

DEPARTMENT

PROJECT DESCRIPTION:

Repair pool deck.

DISCUSSION OF PROJECT:

This project will replace/repair the pool deck including locker rooms. The deck was refinished during the 2001 renovation and has not met expectations. There are a number of places that are failing and becoming discolored. This is the one area that staff receive comments from patrons on how unclean the facility appears

AQ 5 POOL DECK						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction					110,000	110,000
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	0	0	0	110,000	110,000
FUNDING SOURCE						
MMRF					110,000	110,000
						0
TOTAL FUNDING SOURCES	0	0	0	0	110,000	110,000

PR9

ROGERS PARK RENOVATION

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Make improvements to park based on master plan.

DISCUSSION OF PROJECT:

Project includes restroom construction and possible construction of an additional picnic shelter. Also includes replacment of play equipment, the relocation of sand play area and additional benches for park users. This project is identified in the Parks and Recreation Master Plan.

PR9 ROGERS PARK RENOVATION						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering		25,000				25,000
Site Preparation						0
Construction		90,000				90,000
Equipment/Furniture		100,000				100,000
Contingency		10,000				10,000
						0
TOTAL	0	225,000	0	0	0	225,000
<u>FUNDING SOURCE</u>						
Grant funding		112,500				112,500
Park SDC's		112,500				112,500
TOTAL FUNDING SOURCES	0	225,000		0	0	225,000

Park & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Development of trails/greenways/linear parks that connect these areas to each other and various parks and recreational facilities in the community.

DISCUSSION OF PROJECT:

During the development of the Parks Master Plan in 2002 it became clear that connecting our community with trails and greenways is a high priority to the citizens. These projects provide ten opportunities to circle our community and add trail connections to parklands. Cost will be shared by in-kind donations, grant funding and SDC funds. The projects listed in the 5 year CIP includes continuing the loop near the B Street Trail and development in the western portion of Forest Grove.

PR13 TRAILS/GREENWAYS/LINEAR PARKS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	48,000		90,000			138,000
Site Preparation						0
Construction	325,000		450,000			775,000
In-Kind Construction Services						0
Equipment/Furniture						0
Land Acquisition						0
Contingency			8,500			8,500
TOTAL	373,000	0	548,500	0	0	921,500
<u>FUNDING SOURCE</u>						
Parks Acq & Dev	242,500		329,100			571,600
Grants	130,500		219,400			349,900
Solid Waste Contribution						0
						0
TOTAL FUNDING SOURCES	373,000	0	548,500	0	0	921,500

Park & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Develop 15 acres of open space and park land in the north-northwest section of Forest Grove.

DISCUSSION OF PROJECT:

Thatcher Park including the Loomis Property was purchased with Metro Greenspaces Funds in FY 2000 and completed with Bond proceeds in 2001. A portion of the site will remain a passive recreation area in accordance with the Greenspaces program. Improvements may include interpretive trail and signage, benches, picnic tables and parking area. Phase II of the active area of the park will include features approved in the Master Plan adopted in 2008. This area will include water spray recreation area, picnic areas, trail development, and additional parking.

PR14 THATCHER PARK PHASE II						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering					200,000	200,000
Site Preparation						0
Construction					1,800,000	1,800,000
Equipment/Furniture						0
						0
						0
TOTAL	0	0	0	0	2,000,000	2,000,000
<u>FUNDING SOURCE</u>						
Parks SDC					2,000,000	2,000,000
Grants						0
						0
TOTAL FUNDING SOURCES	0	0	0	0	2,000,000	2,000,000

PR20

JOSEPH GALE PARK IMPROVEMENTS

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

This project will improve the park facilities to comply with ADA standards.

DISCUSSION OF PROJECT:

Joseph Gale Park continues to be a heavily used facility. The majority of the park's facilities (restrooms, ballfields, and other equipment) were constructed in the 1960's. This project will replace restrooms, construct walking paths, and upgrade all facilities to ADA standards. Additional benches, picnic tables, drinking fountains, and equipment will be included.

PR20 JOSEPH GALE PARK IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2016-17</u>	<u>5-YEAR TOTAL</u>
Design/Engineering				15,000		15,000
Site Preparation						0
Construction				100,000		100,000
Equipment/Furniture						0
Contingency				15,000		15,000
						0
TOTAL	0	0	0	130,000	0	130,000
<u>FUNDING SOURCE</u>						
Lottery Grant				65,000		65,000
SDC Funds				65,000		65,000
TOTAL FUNDING SOURCES	0	0	0	130,000	0	130,000

PR25

BARD & TALISMAN PARK IMPROVEMENTS

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Continue improvements to Bard Park.
Add improvements to Talisman Park.

DISCUSSION OF PROJECT:

Bard Park received a major renovation in FY 2005-06. This project continues this renovation with construction of restrooms and new playground equipment. This well-used facility has playground equipment that was installed in the early 1990's. This equipment was not replaced in the 05-06 renovation.

This project will install new playground equipment at Bard and Talisman Parks.

/

PR25 BARD AND TALISMAN PARK IMPROVEMENTS						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering			5,000			5,000
Site Preparation						0
Construction						0
Equipment/Furniture	103,000		50,000			153,000
Contingency						0
						0
TOTAL	103,000	0	55,000	0	0	158,000
<u>FUNDING SOURCE</u>						
Grants	45,000					45,000
SDC Funds	58,000		55,000			113,000
TOTAL FUNDING SOURCES	103,000	0	55,000	0	0	158,000

Parks & Recreation

Department

PROJECT DESCRIPTION:

This project purchases land in the southern portion of Forest Grove.

DISCUSSION OF PROJECT:

The Parks Recreation and Open Space Master Plan indentified a need for additional neighborhood park land in the southern section of the community. Identified as N-7 in the master plan, this project will provide space in an area that has been traditionally difficult to find property. As property oppourtunities occur the City should take advantage of these rare chances in an area that is underserved at this time. This becomes very significant as the City is continuing to look for property for community garden space.

PR27 SOUTHERN LAND PURCHASE						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Property Purchase	240,000					240,000
Construction						0
Equipment/Furniture						0
Contingency						0
						0
TOTAL	240,000	0	0	0	0	240,000
FUNDING SOURCE						
Parks SDC	240,000					240,000
						0
TOTAL FUNDING SOURCES	240,000	0	0	0	0	240,000

PR28 PARKS, RECREATION AND OPEN SPACE MASTER PLAN UPDATE

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Provide an update to the Parks, Recreation and Open Space Master Plan.

DISCUSSION OF PROJECT:

This project will update the Master Plan that was adopted by City Council in 2002. The project will include update and revision of the Parks SDC methodology and fees. Also, included will be the study of a Community Recreation Center that is a part of the Community Vision Statement.

PR28 PARKS RECREATION AND OPEN SPACE MASTER PLAN UPDATE						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering	85,000					85,000
Site Preparation						0
Construction						0
Equipment/Furniture						0
Contingency						0
						0
TOTAL	85,000	0	0	0	0	85,000
<u>FUNDING SOURCE</u>						
						0
Parks SDC's	85,000					85,000
						0
TOTAL FUNDING SOURCES	85,000	0	0	0	0	85,000

PR29

IMPROVE PARKING LOTS AT CITY PARKS

Parks & Recreation

DEPARTMENT

PROJECT DESCRIPTION:

Repair and rehabilitation parking lots at City parks.

DISCUSSION OF PROJECT:

This project will repair two (2) City owned parking lots within Lincoln Park. These lots were repaired during the renovation of the park in 2007, but they continue to show signs of failure. The project would clean, seal, crack seal, remove and replace some areas completely, and restripe with the current layout. This has been a significant deferred maintenance issue.

PR29 IMPROVE PARKING LOTS AT CITY PARKS						
COSTS	2013-14	2014-15	2015-16	2016-17	2017-18	5-YEAR TOTAL
Design/Engineering						0
Site Preparation						0
Construction			53,000			53,000
Equipment/Furniture						0
Contingency						0
						0
TOTAL	0	0	53,000	0	0	53,000
FUNDING SOURCE						
MMRF		0	53,000	0	0	53,000
						0
TOTAL FUNDING SOURCES	0	0	53,000	0	0	53,000

**GENERAL
GOVERNMENT
PROJECTS**

GENERAL GOVERNMENT PROJECTS

CAPITAL OUTLAY SUMMARY SCHEDULE

CIP#	PROJECT	2013-14	2014-15	2015-16	2016-17	2017-18	TOTAL
AS29	Storage Building (Replace Old L&P Bldg)	0	0	0	170,000	0	170,000
AS33	Downtown Parking Improvements	0	0	0	0	120,000	120,000
	ADMINISTRATIVE SERVICES TOTALS	0	0	0	170,000	120,000	290,000
	GENERAL GOVERNMENT TOTALS	0	0	0	170,000	120,000	290,000
Bold = NEW PROJECTS							

AS29

STORAGE BUILDING (REPLACE OLD L&P BUILDING)

Administrative Services

DEPARTMENT

PROJECT DESCRIPTION:

The project will replace the deteriorating building on B Street across from the Transfer Station that was formerly the Light & Power Department Building.

DISCUSSION OF PROJECT:

The old Light & Power building is currently used for storage. It is an old building and is deteriorating. Our insurance company believes the building should be torn down due to its condition because the building has fallen into disrepair and will eventually become hazardous. The building is currently used by several departments to store various items. Since the City lacks indoor storage space, the preliminary plan is to construct (erect) a new storage building that can be separated into sections so departments that need to keep their items secure can have a separate area. The replacement building might not be located at that site depending on space availability at other sites. The Times Litho property, depending on its ultimate use, might be able to provide some of those indoor storage needs.

AS29 STORAGE BUILDING (REPLACE OLD L&P BUILDING)						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation						0
Construction				170,000		170,000
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	170,000	0	170,000
<u>FUNDING SOURCE</u>						
CIP Excise Tax Fund				50,000		50,000
Light & Power Fund				120,000		120,000
TOTAL FUNDING SOURCES	0	0	0	170,000	0	170,000

AS33

CITY HALL GRAVEL PARKING LOT

Administrative Services

DEPARTMENT

PROJECT DESCRIPTION:

The project will pave the gravel portion of the City-owned parking lot across from City Hall.

DISCUSSION OF PROJECT:

The City-owned parking lot across from City Hall is a combination of a paved lot and a gravel parking lot. To improve the appearance of the area, the plan is to eventually pave the gravel portion of the parking. The cost is based on a preliminary estimate from the Engineering Department with a small inflation factor for the year the project is tentatively scheduled.

AS33 CITY HALL GRAVEL PARKING LOT						
<u>COSTS</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>	<u>2016-17</u>	<u>2017-18</u>	<u>5-YEAR TOTAL</u>
Design/Engineering						0
Site Preparation					15,000	0
Construction					105,000	0
Equipment/Furniture						0
Other						0
						0
TOTAL	0	0	0	0	120,000	0
<u>FUNDING SOURCE</u>						
General Fund					120,000	0
						0
TOTAL FUNDING SOURCES	0	0	0	0	120,000	0