MEMORANDUM



EUGENE WATER & ELECTRIC BOARD



TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital

FROM: EWEB Water Operations and Engineering

DATE: 10/02/13

SUBJECT: Buried Water Infrastructure

OBJECTIVE: To Share AWWA Publication with Focus on Buried Water Infrastructure

Issue

To inform EWEB leadership with an emerging challenge, within the water industry, as it relates to existing infrastructure.

Background

The poor condition of the America's infrastructure is a common theme in numerous public works publications and industry discussions. These are often focused on transportation facilities; however, recently the American Water Works Association (AWWA) prepared a publication, *Buried No Longer: Confronting America's Water Infrastructure Challenge* focused on buried water infrastructure. Staff wanted to share this publication with EWEB leadership and provide some thoughts on how information presented relates to EWEB facilities.

Discussion

As you read the attached publication, please note the following:

- The EWEB water system would be considered a "Large System" serving an estimated population of 178,100 people, with approximately 800 miles of water pipeline.
- EWEB's buried water infrastructure has an average age of 39 years, which is relatively young as compared to other utilities in the Northwest.
- The annual leak repair rate at EWEB is approximately 9 leaks per 100 miles of pipeline, where the average in North America is 25.
- The number of years from installation to replacement of a pipeline is called a service life. Engineering staff estimates the average service life of a pipeline in the EWEB water system to be 100 to 130 years.
- In comparison, the AWWA publication suggests an average service life of a pipeline in the EWEB water system to be 70 to 115 years.
- Engineering staff can use the service life to estimate annual replacement mileage of buried water infrastructure, along with estimating the associated capital expenditures.

Engineering staff intends to continually update EWEB leadership with the ongoing development of service life planning, estimated capital expenditures and the importance for maintaining our buried water infrastructure. There are no recommendations at this time; only presenting information.



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD



TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital

FROM: Cathy Bloom, Finance Manager; Sue Fahey, Fiscal Services Supervisor; Harvey

Hall, Senior Financial Analyst

DATE: October 29, 2013

SUBJECT: Customer Service Policy & Procedure Update for Bonneville Power Administration

(BPA) Pass-Through (E-V)

OBJECTIVE: Information Only

Issue

At the July 16, 2013 Board meeting, Commissioners unanimously approved Resolution #1315 which authorized the automatic pass-through of BPA rate changes. The Electric Customer Services Policies and Procedures Manual (Chapter V) needs to be updated for the recent increase in BPA costs.

Background

On October 1, 2013 BPA increased the rates charged for energy and transmission costs. The increase resulted in a 1.75% overall average rate increase for EWEB's retail customers which is effective on bills rendered on and after November 1, 2013. For your information, the updated Electric Customer Services Policies and Procedures Manual (Chapter V) is attached.

Recommendation and Requested Board Action

This item is information only and accordingly there is no recommendation or requested Board action.

Attachment: Updated Electric Customer Services Policies and Procedures, Chapter V



Customer Services Policies and Procedures Electric Utility

V. ELECTRIC SERVICE CHARGES AND RATES

For charges specific to Water; see Water Service Charges and Rates. For all other charges; see All Utilities Charges and Rates

TABLE OF CONTENTS

A.	Temporary Electric Service Installation Charges	E-V-2
B.	Customer-Damaged EWEB Facilities	E-V-2
C.	Primary Service and Maintenance Agreement Fees	E-V-2
D.	Residential Service, Schedule R-6	E-V-3
E.	Small General Service, Schedule G-1	E-V-5
F.	Medium General Service, Schedule G-2	E-V-8
G.	Large General Service, Schedule G-3	E-V-11
H.	Very Large General Service, Schedule G-4	E-V-14
I.	Special Very Large General Service – Schedule G-5	E-V-17
J.	Customer-Owned Street Lighting, Schedule J-3 (Closed to New Service)	E-V-19
K.	Customer-Owned Street Lighting, Schedule J-4	E-V-21
L.	Private Property Lighting Service, Schedule L-3 (Closed to New Service)	E-V-23
M.	Private Property Lighting Service, Schedule L-4	
N.	Residential Service, Schedule Pilot Time of Use Rates	E-V-27
O.	Dark Fiber Lease	

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Eugene Water & Electric Board

Customer Services Policies and Procedures Electric Utility

A.	Temporary	Electric	Service	Installation	Charges
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1.	Temporary Service (150 feet or less)	\$155.00
2.		
3.	Temporary Transformer (single)	
4.	Three-Phase Temporary Service with Primary	
Custo	omer-Damaged EWEB Facilities	Actual cost

C. Primary Service (at 12.47 KV) and Maintenance Agreement Fees

Customers will be charged the actual cost of labor, equipment, materials and applicable overhead in order to establish and maintain primary service.



Customer Services Policies and Procedures Electric Utility

D. Residential Service - Schedule R-6

1. Applicable

To underground or overhead electric service for separately metered single-family residences, duplexes, triplexes, quads, townhouses, multifamily structures with less than four living units, and mobile homes, except as may be otherwise specified by prior contract. Boarding, lodging, rooming houses or group care facilities shall also be considered residential services if not more than five private sleeping rooms are used by other than members of the customer's family.

When a major portion of a dwelling is regularly used for the conduct of business, the customer may separate the wiring so that the residential portion may be metered separately and billed on the Residential Schedule, otherwise the entire dwelling shall be billed on a General Service Schedule.

Rate schedules apply to the sale of electrical energy for the sole and exclusive use of the customer. The customer shall not resell electrical energy supplied by EWEB.

2. Character of Service

Single-phase, 60-cycle, nominal 120, 208Y/120 or 240/120 volts, subject to voltage classification available and compatibility with geographic area.

3. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

Basic Charge	\$11.15	per month
Dubic Charge	Ψ11.10	per moner

Delivery Charge (all usage): \$0.03191 per kWh

Energy Charge:

Summer (May through October billing cycles):

First 800 kWh	\$0.05309	per kWh
Next 900 kWh	\$0.07147	per kWh
Over 1 700 kWh	\$0.08509	per kWh

Winter (November through April billing cycles):

First 800 kWh\$0.053	09 per kWh
Next 2,200 kWh\$0.071	47 per kWh
Over 3,000 kWh	

4. Minimum Charge

The minimum charge per month shall be the applicable basic charge.



Customer Services Policies and Procedures Electric Utility

5. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

6. BPA Power Cost Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.

7. Special Provisions

Individual single-phase motors larger than 7.5 horsepower may be connected only with the written permission of EWEB.

8. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB.



Customer Services Policies and Procedures Electric Utility

E. Small General Service - Schedule G-1 (For Service up to 30 kW)

1. Applicable

To commercial, industrial, commercial irrigation uses, public buildings, churches, public and private schools, public and private hospitals, multifamily structures with four or more living units served through one meter, and their common use facilities. This General Service schedule also applies to rooming, lodging, boarding houses, or group care facilities where more than five private sleeping rooms are used for persons not members of the customer's immediate family. Service under this schedule is available to customers with monthly billing demands that do not exceed 30 kilowatts. Service is applicable to customers with the average of the three highest monthly kW demands in a 12-month period not exceeding 30 kilowatts.

When a major portion of a dwelling is regularly used for the conduct of business, the customer may separate the wiring so that the residential portion may be metered separately and billed on the Residential schedule, otherwise the entire dwelling shall be billed on the General Service schedule.

All of the customer's lighting, heating and power requirements shall be served through a single meter at one point of delivery under one phase and one secondary voltage classification, except as noted under the "special provisions" requirements of this rate schedule. Service shall be supplied only at the phases and voltages as EWEB may have available or is willing to make available.

Rate schedules apply to the sale of electrical energy for the sole and exclusive use of the customer. The customer shall not resell electrical energy supplied by EWEB.

2. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

T	•	α
Кo	CIC	Charge:
Da	310	Charge.

Single-phase Service	\$19.84	per month
Three-phase Service	\$29.35	per month

Demand Charge:

First 10 KW	No Charge
All Additional kW\$6.05	per kW

Delivery Charge:

First 1,75	50 kWh	\$0.03275	per kWh
All Addi	tional kWh	\$0.00121	per kWh

Energy Charge:

All Kilowatt-hours	\$0.06314	per kWh



Customer Services Policies and Procedures Electric Utility

3. Minimum Charge

The minimum charge per month shall be the applicable basic charge.

4. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

5. BPA Power Cost Recovery Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.

6. Demand

The demand shall be the maximum average kilowatt load used by the customer for any period of 15 consecutive minutes during the month. The demand may be determined at the option of EWEB by one of the following methods:

- a. By installation of a demand meter
- b. By assessment or periodic measurement
- c. In single motor installations, by assessing 1 kW per horsepower of nameplate rating

7. Special Provisions

The customer's load characteristics must be acceptable to EWEB. An established customer (as contrasted with a customer starting a new business operation) may be granted a waiver from the General Service schedule concerning service availability under one phase and one secondary classification. If a second service voltage is made available, the customer shall make a cash payment in accordance with Electric Utility, Section E-IV of EWEB's Policies and Procedures Manual and may, at the option of EWEB, be required to advance a stipulated portion of the capital investment necessary to provide a second voltage service.



Customer Services Policies and Procedures Electric Utility

8. Voltage Available

Voltage and phase classifications available under this schedule are:

120 volts, single-phase, 2-wire 208Y/120 volts, single-phase (open wye), 3-wire 208Y/120 volts, 3-phase wye, 4-wire 240/120 volts, single-phase, 3-wire 240/120 volts, 3-phase delta, 4-wire 480 volts, 3-phase delta, 3-wire 480Y/277 volts, 3-phase wye, 4-wire

9. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB.



Customer Services Policies and Procedures Electric Utility

F. Medium General Service - Schedule G-2 (For Service from 31 kW to 500 kW)

1. Applicable

To electric service for commercial, industrial and public agency customers with monthly billing demands from 31 to 500 kilowatts. Service is applicable to customers with the average of the three highest monthly kW demands in a 12-month period falling between 31 and 500 kilowatts.

Primary Service is available for customers who contract for 300 kilowatts or more at one point of delivery at approximately 12,000 volts. It is not available to customers inside the underground secondary network. All Primary Service shall be three-phase, 60-cycle, at 12,000 volts or higher at the option of EWEB. Service shall be furnished through one meter, at one point of delivery and at one voltage. Secondary Service applies to customers served below 12,000 volts.

Rate schedules apply to the sale of electrical energy for the sole and exclusive use of the customer. The customer shall not resell electrical energy supplied by EWEB.

2. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

Pagia Changas	Secondary Service	Primary <u>Service</u>	
Basic Charge:	Φ00.07		
Single-phase Service			per month
Three-phase Service	\$51.74	\$3,005	per month
Demand Charge:	фс. c1		1 337
First 300 kW of Demand			per kW
Over 300 kW of Demand	\$6.61	\$6.46	per kW
Energy Charge:	Φ0.05720	Φ0.05.4.6	1.3371.
All Kilowatt-hours	. \$0.05/28	\$0.03646	per kWh

3. Minimum Charge

The minimum charge shall be the applicable basic charge.



Customer Services Policies and Procedures Electric Utility

4. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

5. BPA Power Cost Recovery Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.

6. Demand

The demand shall be the maximum average kilowatt load used by the customer for any period of 15 consecutive minutes during the month. The demand may be determined at the option of EWEB by one of the following methods:

- a. By installation of a demand meter
- b. By assessment or periodic measurement
- c. In single motor installations, by assessing 1 kW per horsepower of nameplate rating.

7. Reactive Power Charge

Where applicable, a reactive power charge will be added to the above charges based on the maximum 15-minute reactive demand for the month, expressed in kilovars (kVAR). The monthly rate is \$0.28 per kVAR.

8. Special Provisions – General

The customer's load characteristics must be acceptable to EWEB.

An established customer (as contrasted with a customer starting a new business operation) may be granted a waiver from the General Service schedule concerning service availability under one phase and one secondary classification. If a second service voltage is made available, the customer shall make a cash payment in accordance with Electric Utility, Section E-IV of EWEB's Policies and Procedures Manual and may, at the option of EWEB, be required to advance a stipulated portion of the capital investment necessary to provide a second voltage service.



Customer Services Policies and Procedures Electric Utility

9. Special Provisions – Primary Service

The customer shall provide, own, install and maintain all necessary transformers, cutouts, protection equipment, concrete slab or vault, primary metering enclosure, and all distribution beyond the point of delivery. EWEB will furnish and install all distribution facilities to the point of delivery and the primary potential and current transformers.

For Primary Service under this rate schedule, transformer losses will be borne by the customer and will be measured or calculated at the option of EWEB.

10. Voltage Available

Voltage and phase classifications available under this schedule are:

120 volts, single-phase, 2-wire
208Y/120 volts, single-phase (open wye), 3-wire
208Y/120 volts, 3-phase wye, 4-wire
240/120 volts, single-phase, 3-wire
240/120 volts, 3-phase delta, 4-wire
480 volts, 3-phase delta, 3-wire
480Y/277 volts, 3-phase wye, 4-wire
12,470Y/7,200 volts, 4-wire, 3-phase wye
12,470 volts, 3-wire, 3-phase delta

11. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB. (See, in particular, Electric Utility, page E-I-5, paragraph 3.)



Customer Services Policies and Procedures Electric Utility

G. Large General Service - Schedule G-3 (For Service from 501 kW to 10,000 kW)

1. Applicable

To electric service for large commercial, industrial and public agency customers with monthly billing demands from 501 to 10,000 kilowatts. Service is applicable to customers with the average of the three highest monthly kW demands in a 12-month period falling between 501 and 10,000 kilowatts.

Primary Service is available for customers who contract for 300 kilowatts or more at one point of delivery at approximately 12,000 volts. It is not available to customers inside the underground secondary network. All Primary Service shall be three-phase, 60-cycle, at 12,000 volts or higher at the option of EWEB. Service shall be furnished through one meter, at one point of delivery and at one voltage. Secondary Service applies to customers served below 12,000 volts.

Rate schedules apply to the sale of electrical energy for the sole and exclusive use of the customer. The customer shall not resell electrical energy supplied by EWEB.

2. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

	Secondary Service	Primary <u>Service</u>	
Basic Charge:	\$2,630	\$2,559	per month
Demand Charge: First 300 kW of Demand			1 ***
Over 300 kW of Demand	\$7.380	\$7.170	per kW
Energy Charge:			
All Kilowatt-hours	. \$0.04717	\$0.04632	per kWh

3. Minimum Charge

The minimum charge shall be the applicable basic charge.

4. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.



Customer Services Policies and Procedures Electric Utility

5. BPA Power Cost Recovery Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.

6. Demand

The demand shall be the maximum average kilowatt load used by the customer for any period of 15 consecutive minutes during the month as determined by a suitable demand meter.

7. Reactive Power Charge

Where applicable, a reactive power charge will be added to the above charges based on the maximum 15-minute reactive demand for the month, expressed in kilovars (kVAR). The monthly rate is \$0.28 per kVAR.

8. Special Provisions – General

The customer's load characteristics must be acceptable to EWEB.

An established customer (as contrasted with a customer starting a new business operation) may be granted a waiver from the General Service schedule concerning service availability under one phase and one secondary classification. If a second service voltage is made available, the customer shall make a cash payment in accordance with Electric Utility, Section E-IV of EWEB's Policies and Procedures Manual and may, at the option of EWEB, be required to advance a stipulated portion of the capital investment necessary to provide a second voltage service.

9. Special Provisions – Primary Service

The customer shall provide, own, install and maintain all necessary transformers, cutouts, protection equipment, concrete slab or vault, primary metering enclosure, and all distribution beyond the point of delivery. EWEB will furnish and install all distribution facilities to the point of delivery and the primary potential and current transformers.

For Primary Service under this rate schedule, transformer losses will be borne by the customer and will be measured or calculated at the option of EWEB.



Customer Services Policies and Procedures Electric Utility

10. Voltage Available

Voltage and phase classifications available under this schedule are:

208Y/120 volts, 3-phase wye, 4-wire 480Y/277 volts, 3-phase wye, 4-wire 12,470Y/7,200 volts, 4-wire, 3-phase wye 12,470 volts, 3-wire, 3-phase delta

11. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB. (See, in particular, Electric Utility, page E-I-5, paragraph 3.)



Customer Services Policies and Procedures Electric Utility

H. Very Large General Service – Schedule G-4 (For Service over 10,000 kW)

1. Applicable

To electric service for large commercial, industrial and public agency customers with monthly billing demands over 10,000 kilowatts, or customers classified as New Large Single Load ("NLSL") by the Bonneville Power Administration ("BPA"). Service is applicable to NLSL customers or customers with the average of the three highest monthly kW demands in a 12-month period exceeding 10,000 kilowatts.

Primary Service is available for customers who contract for 300 kilowatts or more at one point of delivery at approximately 12,000 volts. It is not available to customers inside the underground secondary network. All Primary Service shall be three-phase, 60-cycle, at 12,000 volts or higher at the option of EWEB. Service shall be furnished through one meter, at one point of delivery and at one voltage. Secondary Service applies to customers served below 12,000 volts.

Rate schedules apply to the sale of electrical energy for the sole and exclusive use of the customer. The customer shall not resell electrical energy supplied by EWEB.

2. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

	Secondary	Primary	
	<u>Service</u>	<u>Service</u>	
Basic Charge:	\$2,717	\$2,645	per month
Demand Charge:			
First 300 kW of Demand	No charge N	No charge	
Over 300 kW of Demand	\$7.17	\$6.97	per kW
Energy Charge:			

All Kilowatt-hours\$0.06517 \$0.06517 per kWh

3. Minimum Charge

The minimum charge shall be the applicable basic charge.

4. Demand

The demand shall be the maximum average kilowatt load used by the customer for any period of 15 consecutive minutes during the month as determined by a suitable demand meter.



Customer Services Policies and Procedures Electric Utility

5. Reactive Power Charge

Where applicable, a reactive power charge will be added to the above charges based on the maximum 15-minute reactive demand for the month, expressed in kilovars (kVAR). The monthly rate is \$0.28 per kVAR.

6. Special Provisions - General

The customer's load characteristics must be acceptable to EWEB.

An established customer (as contrasted with a customer starting a new business operation) may be granted a waiver from the General Service schedule concerning service availability under one phase and one secondary classification. If a second service voltage is made available, the customer shall make cash payment in accordance with Electric Utility, Section E-IV of EWEB's Policies and Procedures Manual and may, at the option of EWEB, be required to advance a stipulated portion of the capital investment necessary to provide a second voltage service.

7. Special Provisions – Primary Service

The customer shall provide, own, install and maintain all necessary transformers, cutouts, protection equipment, concrete slab or vault, primary metering enclosure, and all distribution beyond the point of delivery. EWEB will furnish and install all distribution facilities to the point of delivery and the primary potential and current transformers.

For Primary Service under this rate schedule, transformer losses will be borne by the customer and will be measured or calculated at the option of EWEB.

8. Voltage Available

Voltage and phase classifications available under this schedule are:

208Y/120 volts, 3-phase wye, 4-wire 480Y/277 volts, 3-phase wye, 4-wire 12,470Y/7,200 volts, 4-wire, 3-phase wye 12,470 volts, 3-wire, 3-phase delta

9. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.



Customer Services Policies and Procedures Electric Utility

10. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB. Generally, those policies can be found in EWEB's Customer Services Policies & Procedures, All Utilities and Electric Utility.



Customer Services Policies and Procedures Electric Utility

I. Special Very Large General Service – Schedule G-5 (For Service over 10,000 kW)

1. Applicable

To electric service for large commercial and industrial customers with monthly billing demands over 10,000 kilowatts where EWEB served the location prior to 1980 and the location is outside the urban growth boundary of the City of Eugene. Service is applicable to customers with the average of the three highest monthly kW demands in a 12-month period exceeding 10,000 kilowatts. Service will be at the primary service level (approximately 12,000 volts).

Rate schedules apply to the sale of electrical energy for the sole and exclusive use of the customer. The customer shall not resell electrical energy supplied by EWEB.

2. Monthly Rate

Basic Charge:\$9,576per monthDemand Charge:\$5.22per kWEnergy Charge:\$0.04941per kWh

3. Minimum Charge

The minimum charge shall be the applicable basic charge.

4. Demand

The demand shall be the maximum average kilowatt load used by the customer for any period of 15 consecutive minutes during the month as determined by a suitable demand meter.

5. Reactive Power Charge

Where applicable, a reactive power charge will be added to the above charges based on the maximum 15-minute reactive demand for the month, expressed in kilovars (kVAR). The monthly rate is \$0.28 per kVAR.



Customer Services Policies and Procedures Electric Utility

6. Special Provisions – General

The customer's load characteristics must be acceptable to EWEB.

An established customer (as contrasted with a customer starting a new business operation) may be granted a waiver from the General Service schedule concerning service availability under one phase and one secondary classification. If a second service voltage is made available, the customer shall make cash payment in accordance with Electric Utility, Section E-IV of EWEB's Policies and Procedures Manual and may, at the option of EWEB, be required to advance a stipulated portion of the capital investment necessary to provide a second voltage service.

7. Special Provisions – Primary Service

The customer shall provide, own, install and maintain all necessary transformers, cutouts, protection equipment, concrete slab or vault, primary metering enclosure, and all distribution beyond the point of delivery. EWEB will furnish and install all distribution facilities to the point of delivery and the primary potential and current transformers.

For Primary Service under this rate schedule, transformer losses will be borne by the customer and will be measured or calculated at the option of EWEB.

8. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

9. General Terms and Conditions

Service under this schedule is subject to the Policies and Procedures of EWEB. Generally, those policies can be found in EWEB's Customer Services Policies and Procedures, All Utilities and Electric Utility.



Customer Services Policies and Procedures Electric Utility

J. Customer-Owned Street Lighting Service - Schedule J-3 (Closed to New Services)

1. Applicable

To governmental agency, lighting district, and water district-owned daily, dusk-to-dawn lighting systems which illuminate streets, alleys, and thoroughfares used primarily for motorized vehicular traffic and which meet EWEB's specifications.

2. Specifications

System type and design must be approved by EWEB.

3. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

<u>Description</u>	<u>Lamp Type</u>	Net per <u>Lamp</u>
175 Watt MV	Mercury Vapor	\$ 7.73
250 Watt MV	Mercury Vapor	\$ 9.51
400 Watt MV	Mercury Vapor	\$13.94
700 Watt MV	Mercury Vapor	\$23.40

4. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

5. BPA Power Cost Recovery Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.

6. Special Provisions

a. Rates

Monthly rates provide only for delivery of energy and associated utility costs.



Customer Services Policies and Procedures Electric Utility

b. Ownership

Customers served under this schedule are responsible for all operation and maintenance of their lighting facilities.

c. Additional EWEB Services

Customers may apply for a contractual agreement between the customer and EWEB to provide for operation and maintenance services. Charges to the customer for such services shall be based on actual cost of materials, labor, and equipment, plus appropriate overhead and administrative costs.

- d. Restrictions
 - (1) Customer-owned lighting systems shall not be installed or modified by the customer when located on EWEB-owned facilities.
 - (2) No new lighting fixtures or systems shall be served under this schedule.
- 7. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB.



Customer Services Policies and Procedures Electric Utility

K. Customer-Owned Street Lighting Service - Schedule J-4

1. Applicable

To governmental agency, lighting district, and water district-owned daily, dusk-to-dawn lighting systems which illuminate streets, alleys, and thoroughfares used primarily for motorized vehicular traffic and which meet EWEB's specifications.

2. Specifications

System type and design must be approved by EWEB.

3. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

<u>Description</u>	Lamp Type	Net per <u>Lamp</u>
35 Watt HPS	High Pressure Sodium	\$ 2.49
50 Watt HPS	High Pressure Sodium	\$ 3.79
70 Watt HPS	High Pressure Sodium	\$ 4.48
100 Watt HPS	High Pressure Sodium	\$ 5.55
150 Watt HPS	High Pressure Sodium	\$ 7.17
200 Watt HPS	High Pressure Sodium	\$ 8.34
250 Watt HPS	High Pressure Sodium	\$10.12
310 Watt HPS	High Pressure Sodium	\$11.80
400 Watt HPS	High Pressure Sodium	\$14.09
1000 Watt HPS	High Pressure Sodium	\$31.85
1000 Watt MH	Metal Halide	\$31.85

4. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

5. BPA Power Cost Recovery Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.



Customer Services Policies and Procedures Electric Utility

6. Special Provisions

a. Rates

Monthly rates provide only for delivery of energy and associated utility costs.

b. Ownership

Customers served under this schedule are responsible for initial design, purchase and installation costs, and for all operation and maintenance of their lighting facilities.

c. Additional EWEB Services

Customers may apply for a contractual agreement between the customer and EWEB to provide for design, installation, and operation and maintenance services. Charges to the customer for such services shall be based on actual cost of materials, labor, and equipment, plus appropriate overhead and administrative costs.

d. Restrictions

Customer-owned lighting systems shall not be installed or modified by the customer when located on EWEB-owned facilities.

7. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB.



Customer Services Policies and Procedures Electric Utility

L. Private Property Lighting Service - Schedule L-3 (Closed to New Services)

1. Applicable

To overhead outdoor lighting from dusk-to-dawn each day throughout the year for lighting private property with facilities supplied by EWEB.

The 100-, 200- and 400-watt applications are no longer available for new installations, in accordance with Eugene City Code 9.6725. Existing fixtures will be replaced as part of a maintenance program.

2. Specifications

System shall be overhead construction on existing wood poles, consisting of aerial circuits with mast arms not longer than four feet and standard street lighting luminaries using high pressure sodium lamps. All equipment used to furnish service under this schedule shall be furnished, owned, operated and maintained by EWEB.

3. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

Description	Lamp Type	Net per <u>Lamp</u>
100 Watt HPS 200 Watt HPS	High Pressure Sodium High Pressure Sodium	\$ 6.82 \$ 8.70
400 Watt HPS	High Pressure Sodium	\$ 14.45

4. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

5. BPA Power Cost Recovery Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.



Customer Services Policies and Procedures Electric Utility

6. Special Provisions

- a. Service will be furnished only under contracts for not less than three years. Contracts may be terminated before expiration of the contract period only after receipt by EWEB of contracted monthly rate multiplied by the number of months remaining on the contract. After the contracted revenue requirement is satisfied, and upon demand of the customer, EWEB will remove any EWEB-owned facilities installed to provide such Schedule L-3 service.
- b. Service under this schedule will be provided only where unmetered 120-volt power is available within a normal service drop or a secondary span extension. Metered service shall not be provided under this schedule.
- c. Any damage to the luminaire(s) or mast arm(s) or replacement beyond fair wear and tear will, at the option of EWEB, be charged to the customer.
- d. A monthly pole rental fee of \$1.00 shall be added to the above lamp charge(s) in all cases where an existing pole is dedicated to the sole and exclusive use for private lighting supplied by EWEB.

7. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB.



Customer Services Policies and Procedures Electric Utility

M. Private Property Lighting Service - Schedule L-4

1. Applicable

To overhead outdoor lighting from dusk-to-dawn each day throughout the year for lighting private property with facilities supplied by EWEB. For the purposes of administering this service, the primary references are Eugene Code 9.6725 and all EWEB policies and procedures pertaining to light pollution, light trespass and glare.

2. Specifications

System shall be overhead construction on existing poles, consisting of aerial circuits with a four-foot standard mast arms length. Non-standard equipment may be considered at EWEB's sole discretion if so doing so would help mitigate light pollution. All equipment used to provide service under this schedule shall be furnished, owned, operated and maintained by EWEB.

3. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

<u>Description</u>	Lamp Type	Net per <u>Lamp</u>
50 Watt High Efficiency	High Pressure Sodium	\$ 5.49
70 Watt High Efficiency	High Pressure Sodium	\$ 5.60
150 Watt High Efficiency*	High Pressure Sodium	\$ 6.05

^{*} Available only in limited commercial applications, as determined by EWEB.

4. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

5. BPA Power Cost Recovery Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.



Customer Services Policies and Procedures Electric Utility

6. Special Provisions

- a. Service will be furnished only under contracts for not less than three years. Contracts may be terminated before expiration of the contract period only after receipt by EWEB of contracted monthly rate multiplied by the number of months remaining on the contract. After the contracted revenue requirement is satisfied, and upon demand of the customer, EWEB will remove any EWEB-owned facilities installed to provide such Schedule L-4 service.
- b. Service under this schedule will be provided only where unmetered 120-volt power is available within a normal service drop or a secondary span extension. Metered service shall not be provided under this schedule.
- c. Any damage to the luminaire(s) or mast arm(s) or replacement beyond fair wear and tear will, at the option of EWEB, be charged to the customer.
- d. A monthly pole rental fee of \$1.00 shall be added to the above lamp charge(s) in all cases where an existing pole is dedicated to the sole and exclusive use for private lighting supplied by EWEB.

7. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB.



Customer Services Policies and Procedures Electric Utility

N. Residential Service – Schedule Pilot Time of Use Resolution No. 1215

1. Applicability

The pilot rate is available for up to 200 customers. Participation is at the sole discretion of EWEB and may be applied to either sub-metered customer load, such as EV or water heater end use devices, or to whole house loads. This rate will sunset as of September 20, 2015 without further Board action. Customers will be allowed to return to the standard Residential Service – Schedule R-6 rate at any time, but EWEB will not allow customers to return to the Pilot Time of Use rate once opted out of the rate.

To underground or overhead electric services for separately metered single-family residences, duplexes, triplexes, quads, townhouses, multifamily structures with less than four living units, and mobile homes, except as may be other otherwise specified by prior contract. Boarding, lodging, rooming houses, or group care facilities shall also be considered residential services if not more than five private sleeping rooms are used by members of the customer's family.

When a major portion of a dwelling is regularly used for the conduct of business, the customer may separate the wiring so that the residential portion may be metered separately and billed on the Residential Schedule, otherwise the entire dwelling shall be billed on a General Service Schedule.

Rate schedules apply to the sale of electrical energy for the sole and exclusive use of the customer. The customer shall not resell electrical energy supplied by EWEB.

2. Character of Service

Single-phase, 60-cycle, nominal 120, 208Y/120 or 240/120 volts, subject to voltage classification available and compatibility with geographic area.



Customer Services Policies and Procedures Electric Utility

3. Monthly Rate

(Resolution No. 1315 – Automatic adjustment clause applicable to increase or decrease of BPA wholesale rates)

On-Peak Energy Charge\$0.15949 per kWh

Off-Peak Energy Charge\$0.06927 per kWh

On and Off Peak Hours

Winter (beginning November 1st of each year)

On-Peak 7:00 a.m. to 11:00 a.m. Monday - Friday

5:00 p.m. to 9:00 p.m. Monday - Friday

Off-Peak 9:00 p.m. to 7:00 a.m. Monday - Friday

11:00 a.m. to 5:00 p.m. Monday - Friday

All hours Saturday - Sunday

Summer (beginning May 1st of each year)

On-Peak 12:00 p.m. to 8:00 p.m. Monday - Friday Off-Peak 8:00 p.m. to 12:00 p.m. Monday - Friday

All hours Saturday - Sunday

4. Minimum Charge

The minimum charge per month shall be the applicable basic charge.

5. Annual Rate Adjustments

As established in Board Policy SD9, the EWEB Board has exclusive jurisdiction to approve annual operating budgets and establish rates for electric service. The rates established under this schedule (Schedule Pilot TOU R) will be adjusted annually to reflect the overall change for the Residential Service – Schedule R-6 rates.

6. Power Cost Recovery Adjustment

At the discretion of the Board, the rates may be adjusted for 12 months to reflect the variance between budgeted and actual power cost for the previous calendar year. The adjustment is determined by dividing the amount to be rebated or recovered by the projected annual kilowatt-hour sales in that calendar year, and then decreasing or increasing the energy or power component of the rate accordingly.

Approved: 09/12 Revision Date Effective: 11/01/13

Adopted: 07/13 Revision: 3



Customer Services Policies and Procedures Electric Utility

7. BPA Power Cost Adjustment

Electric rates may be automatically adjusted for up to 12 months to reflect a future variance in projected power costs due to changes in Bonneville Power Administration (BPA) wholesale rates. The adjustment is determined by dividing the amount to be rebated or recovered by the projected kilowatt-hour sales for the appropriate period and then decreasing or increasing the energy or power component of the rate accordingly.

8. Special Provisions

Individual single-phase motors larger than 7.5 horsepower may be connected only with the written permission of EWEB.

9. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB.



Customer Services Policies and Procedures Electric Utility

O. Dark Fiber Lease

1. Availability

EWEB's fiber optic cables run through public right-of-way and are owned and maintained by EWEB. This rate schedule applies to public agencies and higher level educational institutions as well as existing leases for medical service providers within EWEB's service territory, with the exception of any other rate that may apply under a separate agreement or rate schedule.

2. Character of Service

EWEB's Dark Fiber Lease Rate Schedule (DFL-1) pertains to the available surplus fiber strands contained within EWEB's existing fiber-optic system, covering the Eugene metropolitan area and other areas within EWEB's service territory. Subscribing to EWEB's Dark Fiber Lease allows the interconnecting entity to obtain an indefeasible right of use of allocated EWEB-owned fiber strands for the purpose of transmitting voice, data and/or video signals between locations.

3. Interconnection

The Customer is responsible for providing a complete conduit path from the termination point inside their facility to the EWEB demarcation point near the customer premise, in accordance with EWEB's Fiber Optic Customer Standards. All customer provided conduit facilities and patch panels shall be inspected and approved by EWEB prior to connection of the lateral extension.

4. Advance Engineering Fee

All prospective EWEB Dark Fiber Lease subscribers must work with EWEB to complete an Advance Engineering Estimate of the cost and schedule for EWEB to provide dark fiber connectivity. A non-refundable \$500.00 fee is required prior to completing the Advance Engineering Estimate.

Advance Engineering Fee \$500.00 (Resolution No. 1304)

5. Service Agreement

A signed "Indefeasible Right of Use Agreement" or an "Intergovernmental Agreement" is required by EWEB before commencement of the detail Engineering design and construction of the lateral extension.

6. Non-Recurring Charges

The Customer shall pay an amount equal to 100 percent of the actual design and construction costs, payable upon completion of Dark Fiber connectivity.

Approved: 05/13 Revision Date Effective: 05/07/13 Revision: 1



Customer Services Policies and Procedures Electric Utility

7. Recurring Charges

The monthly charge for Dark Fiber Lease is determined by multiplying the length of the subscribed fiber strand(s) times the current monthly rate. The length of each fiber strand is determined from EWEB's Geographic Information System (GIS) Fiber Manager Application rounded up to the nearest one-half mile length. The Dark Fiber customer shall be billed a minimum of one (1) mile length for each such fiber pair. This information will be recorded in the customer's service agreement.

Dark Fiber Lease bills shall be rendered quarterly.

2013 Monthly Rate per Strand Mile*\$21.13

Note: *The Dark Fiber Lease Rate Schedule will be adjusted annually based on the City of Portland Consumer Price Index. (Resolution No. 1304)

8. General Terms and Conditions

Service under this schedule is subject to the policies and procedures of EWEB.

Approved: 05/13 Revision Date Effective: 05/07/13 Revision: 1



FOUNDATION Achieving Dreams

October 15, 2013

2012-2013

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Roger Gray Eugene Water & Electric Board PO Box 10148

Eugene, OR 97440-2148

Dear Roger,

Imagine a Lane student achieving their dream! Right now Eugene Water & Electric Board's grant is making a difference in the lives of our students. Without your support we would not have the privilege of seeing how your generosity touches others here at Lane Community College. We are so grateful.

It's been said, "Generosity is the real miracle out of which all other miracles grow." Thank you for your support, as well as that of your employees, for the good that you do, and for the wonderful accomplishments your help makes possible.

Roger, if you have any questions, please feel free to contact me at (541) 463-5804. I'd love to share with you first hand how your partnership with us has benefited the future for many in our community!

Sincerely,

Wendy Jett

Foundation Director

Information about Eugene Water & Electric Board's generous

grant:

Gift Amount: \$35,000.00

Gift Date:

10/15/2013 Designation: Energy Management Instructor Fund

Please regard this letter as your receipt and keep it for tax purposes.

Lane Community College Foundation is a non-profit, 501(c)(3) public foundation. This gift is tax-deductible to the extent allowed by law. Our EIN is 23-7113266.

A reasonable one-time administrative fee may be charged to this gift.

No goods or services were received by the donor in exchange for this gift.

MEMORANDUM



EUGENE WATER & ELECTRIC BOARD

Relyonus.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital

FROM: Erin Erben, Power & Strategic Planning Manager; Lisa Atkin, Power & Strategic

Planning Supervisor

DATE: October 25, 2013

SUBJECT: R&D Pilot Programs Quarterly Reporting Summary (Q3 2013)

OBJECTIVE: Information Only

Issue

The purpose and intent of this memorandum is to provide a quarterly summary report of the research & development work on load management pilot programs being undertaken by a cross-functional team of EWEB staff. This quarterly reporting period ended September 30, 2013.

Background

Staff continues to explore an array of energy efficiency and demand response programs designed to help afford flexibility in EWEB's business model, power supply options, and conservation strategies. The proposed programs are also intended to better position EWEB to assist customers with bill savings opportunities in the future. Within EWEB's service territory there are currently six pilot programs in existence at various stages of operation, from the planning & design phase through to completion. Appendix 1 summarizes current status by pilot program, offering additional insight and context to the pilots being undertaken.

Discussion

Many of the projects have been the result of collaborative efforts with other regional partners, often with shared funding provisions. For 2013 and into 1st QTR 2014, the design and implementation of a Residential TOU (R-TOU) program continues to be the flagship effort that EWEB staff has engaged upon for the residential sector. Last year, the primary focus was on water heater management technology. In addition, with the recent October 1, 2013 approval by the EWEB Board of Commissioners of Resolution No. 1322, Advanced Metering Infrastructure (AMI) Project, staff has commenced efforts to review the R&D Pilot Programs roadmap and associated assumptions alongside the AMI Business Case, in light of a preferred customer opt-in strategic approach to AMI. Through early identification of synergies between existing pilot programs and AMI, such as Beyond The Meter program offerings, and through focusing resources on additional pilots that enhance AMI effectiveness, opt in rates and accessibility to the customer, EWEB will be better positioned to provide more cost-conscious and effective options for those electing to opt in.

Each potential pilot program under consideration is taken through a series of primary, secondary and general research questions prior to further exploration and scoping of the business requirements and associated impacts, which in essence provides a high level appraisal of the impacts anticipated from a TBL perspective. In Q2, EWEB submitted a bid to work with BPA to engage in a regional DR commercialization demonstration project (incorporating around 10 EWEB commercial customer sites) aimed at addressing multiple issues including utility peaks and distribution system constraints, wholesale system peaks, within-hour balancing, over-generation and non-wires transmission, and distribution investment deferral opportunities. Our bid was received favorably by BPA, and preliminary efforts to explore operational feasibility and logistics with BPA, other utilities and third party vendors is being undertaken.

The Metro Waste Water pilot program successfully executed eight of its ten summer pilot control events very successfully, determining the remaining two events were not required. Five Heat Pump Water Heater units have been installed in the EWEB service territory as part of a pilot program regionally with NEEA.

Requested Board Action

No action is required from the Board at this time.

Appendix 1: Research & Development Pilot Programs Status

	RESI	DENTIAL PROGRA	MS	COMMERIC	AL & INDUSTRIAL	PROGRAMS
	Residential Time Of Use (TOU)	Carina Water Heater (Phase II)	Steffes Water Heater (Phase I)	EWEB Water Pumping & Storage	Metro Waste Water	SnoTemp Cold Storage
Current Stage	Design/ development	Operational	Completed	Scoping	Operational & Planning (TOU)	Operational – on hold
Implementation	Meter-to-Bill development 80% complete. Landis + Gyr meter selection made. First Article meter procurement & configuration testing underway. Communications Plan in execution phase.	35 sites with load shift control schedules (one unplanned move out). An additional 5 HPWH installed Closing out summer control schedule with no customer issues.	Pilot ended 9/12. Sites Dcx or Carina converted.	TOU rate schedule required for cost/resource effective participation. Discussion proceeding with new Pumping & Storage Supervisor.	Summer test plan 8/10 events completed successfully and determined sufficient. Exploring vision for automated response system.	On hold awaiting BPA C&I Aggregator project approval to reinitiate Q4 2013/Q1 2014.
Evaluation	Additional rate comparison and analysis undertaken in light of potential base rate changes over time.	Reviewing load data. EM&V report timeline anticipated for completion Q2 2014.	Final EM&V report completed.	SCADA in place. TOU meter change out under consideration.	Analysis of power reduction exceeding self-generation. June 2014 completion.	Evaluation slated for a 2014 completion.
External	Updated timeline and metering specifications provided to EPRI.	Staff working with NEEA to change to winter control schedule.	BPA DR contract.	EWEB to share results with wider utility partners.	BPA DR contract.	Conceptual aggregator proposal with BPA being explored for continuation.
Hypothesis & Findings	Determine how TOU participants modify electrical usage, and the potential impact those modified behaviors can support peak shifting strategies. Evaluation not yet commenced.	Determining the feasibility of using residential water heaters to respond to a peak load shifting and thermal storage control strategy. Evaluation commenced.	Determine the feasibility of using residential water heaters to respond to wind balancing signals, together with testing peak shifting and thermal storage capability. Evaluation in progress.	Demonstrate the ability to demand response to both increase load when extra capacity exists, and decrease load during capacity constraints. Evaluation not yet commenced.	Demonstrate the ability to demand response to both increase load when extra capacity exists, and decrease load during capacity constraints. Evaluation not yet commenced.	Demonstrate the ability to demand response to both increase load when extra capacity exists, and decrease load during capacity constraints. Evaluation not yet commenced.
Eligible	100% of the 78,000	Approx. 80% of	Approx. 80% of residential	This would impact EWEB	With a Commercial TOU in	n place, approx 10,000 C&I
Population	residential customers. Unit	residential customers.	customers. Savings	facilities only. Unit	businesses would have ac	cessibility to participate in
and/or Unit	savings to be determined in Evaluation phase. Pilot is	Unit savings determined in	impact to be determined in Evaluation phase.	savings to be determined in Evaluation phase	peak load shifting initiative be determined in the Evalu	·
Savings	voluntary.	Evaluation phase.				

MEMORANDUM



EUGENE WATER & ELECTRIC BOARD

Relyonus.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital

FROM: Cathy Bloom, Finance Manager and Gail Murray, Purchasing/Risk Manager

DATE: October 29, 2013

SUBJECT: Third Quarter Contract Report

OBJECTIVE: Information Only

Issue

At the August 6th Board meeting, the Board ratified Resolution 1320, which increased the Board Approval Threshold for certain contracts to more closely align with solicitation thresholds. As a result, the processes were streamlined for the Board and the Purchasing/Risk department and assisted with a strategy to move forward with reduced staffing levels in the Purchasing Department. The Board requested that staff provide a quarterly report of contracts between \$20,000 and \$150,000, which would have come to the board for approval under the previous threshold amounts.

Background

Due to the cost reduction strategies implemented in the last eighteen months, the Purchasing department has been reduced by two FTE, or a 20% reduction in staff. In an effort to streamline processes and procedures for both staff and the Board, management proposed and the Board approved the alignment of Board approval and procurement thresholds. This change will result in the reduction of the number of items coming before the Board on the consent calendar. This would allow the Board to focus on higher level/higher risk contracts and other strategic initiatives. It will also allow purchasing staff to focus their energies on the higher risk/greater return projects and contracts.

The thresholds are:

Purchase of all Goods, Equipment, Services and Personal Services: \$ 150,000 or greater Purchase of Construction Services: \$ 100,000 or greater

Discussion

Attached is the Contract report for the third quarter. The contracts listed are those that would have previously come to the Board for approval, but which are now below the board approval threshold. The threshold changes became effective on August 6th, so this report is for a partial quarter. If you have any questions regarding the contracts, please contact the Purchasing Manager, Gail Murray.

Recommendation/Requested Board Action

None at this time. This information is provided for informational purposes only.

CONTRACTS BETWEEN \$20,000 AND \$150,000 FOR Q3 2013

Contract

Execution	Contract # Contractor		City, State	Description	Amount	Contract Term	Contract Process	LT Manager
08/07/2013	2341	IPS	Portland, OR	Smith Creek Generator Repairs	\$53,125.00	8/7/13 - 11/1/13	Informal RFP	Roger Kline
08/21/2013	2342	Loop 1 Systems	Austin, TX	Solarwinds Professional Serv. & Trainir	\$50,680.00	8/21/13 - 12/31/13	Direct Negotiation	Matt Sayre
09/05/2013	2352	Willamette University	Salem, OR	Leadership Training - Utility Mgmt	\$28,000.00	9/5/13 - 12/31/13	Direct Negotiation	Erin Erben
09/11/2013	2350	BBAO Group, LLC	Eugene, OR	Business Analysis Services	\$98,400.00	9/11/13 - 6/30/14	Direct Negotiation	Matt Sayre
09/16/2013	2349	Z2Solutions, LLC	Durango, CO	MDMS Consulting Services	\$61,000.00	9/16/13 - 12/31/14	Direct Negotiation	Roger Gray

Total # of Executed Contracts between \$10,000 - \$20,0000 = 8

EWEB association for all above contracts = None

Questions please contact: Gail Murray 541-685-7429

MEMORANDUM



EUGENE WATER & ELECTRIC BOARD

Relyonus.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital

FROM: Steve Newcomb, Environmental Management Department Manager

Karl Morgenstern, Environmental Management Supervisor

DATE: October 25, 2013

SUBJECT: Watershed Protection Program Overview

OBJECTIVE: Information Only

Issue

This memo provides information about EWEB's current investments in drinking water source protection program and how the program addresses the highest priority threats to the source of Eugene's drinking water. There were specific questions at the September board meeting about the septic assistance program which are answered immediately below.

Septic Assistance Program

In response to Board discussion and questions at the September 17, 2013, the following information is provided:

- The 2013 Budget includes \$10,000 for the septic cost share program. As of August 2013 these funds were spent and the program was put on hold until 2014 funding kicks in. Adequate funds exist in 0% interest revolving loan fund for 2013 and beyond.
- The 2014 budget was increased (in response to Commissioner Brown's request) by \$10,000 for a total of \$20,000 following the September 17, 2013 Board meeting. Based on past program participation, this level of funding is anticipated to be adequate to meet the demand for assistance.

Background

EWEB invests nearly \$670,000 annually to implement and maintain a comprehensive drinking water source protection program. The internal funding is often matched with a similar amount of outside funding. Based on years of research and analysis, the highest priority threats to water quality in the McKenzie Watershed are:

- Hazardous material spills from transportation accidents and releases from commercial and industrial facilities.
- Pollution runoff from east Springfield's urban stormwater system, which has five outfalls immediately upstream of EWEB's Hayden Bridge intake.
- Cumulative impacts associated with development along the river (septic systems, chemical use, vegetation removal in riparian areas, and loss of agricultural and forest lands to future development).
- Agricultural impacts associated with pesticide and fertilizer use, livestock access to

- waterways, and vegetation removal in riparian areas.
- Climate change impacts that may result in larger and more frequent flooding events, longer dry seasons, more frequent and severe wildfires, and increasingly volatile weather patterns.

Over the last 12 years, EWEB has invested in risk based watershed protection programs that: a) are collaborative and build lasting relationships with partners, stakeholders and communities; b) leverage outside funding and resources; c) are based on best available science; d) address multiple economic, social and environmental issues; e) are sustainable over the long term; and, f) are monitored for effectiveness. Following is a list of the major initiatives that have been implemented with various partners (please see http://eweb.org/sourceprotection for more information). This list addresses the highest priority threats in the watershed.

- McKenzie Watershed Emergency Response System (MWERS)
- Comprehensive Water Quality Monitoring Program
- Healthy Farms Clean Water Program
- Septic System Assistance Program
- Berggren Demonstration Farm
- Voluntary Incentives Program
- Urban Runoff Mitigation Program
- Landowner Education Program
- Pollution Prevention Coalition/EcoBiz Certification Program
- Leaburg Demonstration Forest

Discussion

Investments in source water quality protection are designed to address the highest level risks to water quality in the basin. These investments are leveraged with other sources of funding to increase the effectiveness of the programs. Table 1 summarizes some of the major initiatives EWEB has funded in last few years and shows the amounts of outside funding that the program has attracted on an annual basis. **The total outside funding for 2012 nearly equaled the EWEB investment**. For more detailed summary of all of the source protection programs see Attachment A.

Table 1 Summary of Major Source Protection Initiatives 2012-2013

Program	Purpose	2012	2012 Outside	2013	2013 Outside
		Costs ¹	Funding ²	Costs ¹	Funding ²
MWERS	Ensure a well coordinated	\$37,000	\$5,000	\$37,000	\$5,000
	response to hazardous				
	material spills that contains				
	and stabilizes incidents				
	within initial hours				
Water Quality	Maintain a comprehensive	\$209,000	\$66,000	\$198,000	\$61,000
Monitoring	water quality monitoring				
	program to assess the				
	health of the McKenzie				
	River over time and				
	evaluate effectiveness of				

	Source Protection efforts.				
Healthy Farms	Work closely with	\$189,000	\$168,000	\$124,000	\$180,000
Clean Water	McKenzie farmers and				
	ranchers to increase and				
	protect riparian buffers and				
	reduce chemical use.				
Septic System	Work with McKenzie	\$26,000	\$10,000	\$22,000	\$10,000
Assistance	homeowners and small				
	communities to increase				
	maintenance, repair and				
	replacement of septic				
	systems.				
Voluntary	Engage landowners who	\$179,000	\$350,000	\$155,000	\$175,000
Incentives	own land in riparian areas				
Program	and reward good				
	stewardship that provides				
	long-term protection of				
	these critical areas while				
	encouraging restoration of				
77.1 5 00	degraded riparian forests.	\$7.000	4.0	***	†2 0.000
Urban Runoff	Work with City of	\$5,000	\$0	\$23,000	\$38,000
Mitigation	Springfield to treat and				
	reduce pollution impacts				
	from stormwater runoff.				
TOTAL		\$645,000	\$599,000	\$559,000	\$469,000

¹- cost estimates include labor and O & M and do not account for all source protection programs (see Attachment A for complete list of investments).

²- leveraged fund estimates from outside sources includes only cash and not in-kind services (i.e.,

If additional investment in source protection is contemplated, EWEB staff feel that these funds would be best used for supporting the Voluntary Incentives Program and/or Urban Runoff Mitigation Program. Please refer to Attachment A for summary of long-term funding needs that are being planned for.

Recommendation

Staff recommends moving forward with additional funding for the septic system cost-share program in the 2014 budget to provide a more robust program that will last the entire year.

Requested Board Action

No action is requested at this time. Additional funding was added to the 2014 budget for the Septic System Assistance Program. The 2014 budget will be acted on later this year.

² – leveraged fund estimates from outside sources includes only cash and not in-kind services (i.e. underestimates true value of leveraged resources).

Program	Purpose/Objectives	Main Program Components	Threats Program Addresses	Data Collected/Used	General Trends/Oberservations	Active Partners
McKenzie Watershed Emergency Response System (MWERS)		Annual interagency drills and training. Four fully equipped spill response trailers. GIS-based response plan/web application.	High priority threats from Hwy 126 truck and vehicle accidents, urban spills to stormwater system and commercial/industrial facility releases.	Fire Marshal Hazardous Material Facilities. ODOT vehicle accident data. OERS spill incident data. GIS Spill Equipment Inventories. Emergency Contact Database. GIS Critical Resources for Protection. GIS Spill Response Strategies.	Small spills occurring on periodic basis. No major spills since 1993.	Region 2 HazMat Team, McKenzie Fire & Rescue, Eugene/Springfield Fire, Springfield Public Works, ODOT, USFS, EWEB Generation & Hayden Bridge, SUB, Lane County Sheriff, Lane County Public Works, Army COE, US EPA
Water Quality Monitoring Program	Maintain a comprehensive water quality monitoring program to assess the health of the McKenzie River over time and to provide a scientific basis for evaluating the effectiveness of Source Protection mitigation strategies that address known impacts and emerging threats to drinking water quality.		priority threats associated with urban runoff, agriculture, forestry, reservoir operations, septic systems and development for water quality impacts and longer term trends.	bloom data. Storm event optical properties and dissolved organic carbon data.	Increasing trends over time for <i>E. coli</i> bacteria. Higher pesticide concentrations and frequency of detections associated with urban runoff and areas with increased development. Algal bloom trends appear to be occurring at higher levels and with new species (data back to 1990). Dissolved organic contaminants found at persistently low levels on regular basis at intake. Lack of health standards exist for majority of pesticides and organic chemicals detected.	U.S. Geological Survey, USFS, SUB, McKenzie Watershed Council, City o Springfield, Oregon Health Authority, Army COE
Healthy Farms Clean Water Program	Work closely with McKenzie farmers and ranchers to increase and protect riparian buffers and reduce chemical use while increasing the economic viability of farming to help keep farmland as preferred floodplain landuse.	Hazelnut orchards filbert worm mating disruption and nutrient management project. Blueberry growers nonchemical alternative solutions to addressing mummyberry. Berggren Demonstration Farm. Local Food Connection Annual Event. Support for organic certification of McKenzie farms. Support for removal of old ag chemicals from farms. Support for nutrient management on farms.	agriculture and high priority threats from increased development in floodplain.	crop type. Storm event runoff data (pesticides, organic carbon, nutrients, optical properties).	Reduced amount of old ag chemicals removed from farms (2007-2012). Reduced nitrogen fertilizer use on hazelnut orchards. Reduced pesticide use on hazelnut orchards. Increased number of farmers participating in workshops. Increased organic certification of farms. Increased farmer and buyer interest in sourcing locally grown food. Pesticides found in storm event runoff from ag fields.	OSU, OSU Extension, USDA NRCS, Northwest Coalition for Alternatives to Pesticides. Willamette Farm & Food Coalition, LCC, U of O, Meyer Memorial Trust, Cascade Pacific RC&D, Upper Willamette SWCD, McKenzie River Trust, McKenzie Watershed Council, Oregon Tilth, Oregon Hazelnut Commission
Healthy Forests Clean Water Program		USFS Stewardship Contracting Program. Leaburg Demonstration Forest. Wildfire prevention and response efforts (participation on East lane Forest Protection Association Board). Watershed forestry summit. GIS tracking of timber harvest and chemical applications.	industrial forest management activities and low priority threats from USFS/BLM forest management activities. High priority threats from increased development in F-2	GIS timber harvest locations/acres and pesticide and fertilizer application areas. Storm event runoff data (pesticides, organic carbon, nutrients, optical properties). USFS timber harvest activities.Wildfire activities and acres burned.	Increased timber harvests on private lands. Reduced timber harvests on federal lands (currently approximately 15% federal/85% private). Increased turbidity events in creek basins with significant logging (Quartz and Gate Creeks). Low levels of pesticides found in storm runoff from creek basins with spray activities.	USFS, Oregon Depaertment of Forestry, East Lane Forest Protection Association, OSU, U of O, McKenzie Watershed Council, McKenzie River Trust, Cascade Pacific RC&D, Oregon Wild, Cascadia Wildlands, Upper Willamette SWCD.

Program	Purpose/Objectives	Main Program Components	Threats Program Addresses	Data Collected/Used	General Trends/Oberservations	Active Partners
Septic System Assistance Program	Work with McKenzie homeowners and small communities to increase maintaince, repair and replacement of septic systems to ensure proper treatment of human waste.	(50%). Septic system repair and	High priority threats from septic systems and development.	All septic system locations (>4,100 septics). Locations and results of septic inspections (531 inspected), quantities of waste pumped at each system (196 systems pumped), reasons for need for repair or replacement of systems (109 systems failing) funded under SAP. Location, work done, and loan amounts under 0% interest loans. Water quality impacts from septic cluster areas (surface water and groundwater). Septic system repair, replacement or new installation permits.	Systems are old - average age of McKenzie septic systems inspected is 24 years (design to last 20-30 years). Areas with high densities of septics have higher water quality impacts. Homeowner education about septic maintenance needs is significantly increasing. More failing systems are found and moving toward repair or replacement. Development continues to occur with siting systems close to river.	McKenzie homeowners, Oregon DEQ, McKenzie septic contractors, Blue River Economic Development Corp., Blue River residents, LCC
Voluntary Incentives Program	Engage hundreds of landowners that own land in riparian forest areas and reward good stewardship that provides long-term protection of these critical areas while encouraging restoration of degraded riparian forests.	and mapping. LiDAR analysis of	High priority threats from development and septic systems, medium high priority associated with agriculture.	Modeled ripairan forest ecosystem boundary (>7,000 acres). Canopy cover in privately owned ripairan forest (44% good, 30% impacted, 26 signficantly degraded). House and structural foorprints for each building in watershed. Building permit activities and locations. Future build-out data. Landuse zoning and tax lot information.	Increased development over last 30 years on smaller lots close to river. Currently over 4,100 homes exist above intake with 200 homes in floodway and within 50 feet of river, over 680 homes are within 100 feet of river, 1,150 homes in 100-year floodplain. Future buildout indicates nearly 1,000 new homes can be built based on current zoning and development code with majority in floodplain.	OSU, U of O, McKenzie River Trust, McKenzie Watershed Council, Upper Willamette SWCD, LCOG, Cascade Pacific RC&D, USFS, Freshwater Trust, Landowners, Local businesses
Outdoor Education Program	Provide comprehensive outdoor education opportunities for K-12 students in McKenzie, Springfield and Eugene school districts and internship/research opportunities for U of O, OSU and LCC students associated with water quality, natural resource management and watershed sciences so the next generation of leaders are well versed in these complex issues and challenges.	Camp and Cedar Creek Education Basins. Berggren Demonstration Farm. Leaburg Demonstration Forest. River Observatory Project	High priority threats from development impacts and urban stormwater runoff, medium high pirority threats from agriculture and medium priority threats from forestry.	Water quality and macroinvertebrate data collected and analyzed in Camp and Cedar Creeks. Farm management and production data. Farm to School data (schools sourcing local foods). Number of students involved/educated. Number of internships. Research projects and results.	Reduced education funding, fewer teachers, increased class sizes means reduced opportunities for students to learn in outdoor/real world environments that provides skills for future careers that benefit watershed	McKenzie School District, 4J School District, Springfield School District, LCC, U of O, USGS, EWEB PIE and School Education Program, USFS, McKenzie Watershed Council, SUB, Lane County Education

Program	Purpose/Objectives	Main Program Components	Threats Program Addresses	Data Collected/Used	General Trends/Oberservations	Active Partners
Urban Runoff Mitigation Program	Work with City of Springfield to treat and reduce pollution impacts from stromwater runoff above EWEB's Hayden Bridge intake.	52nd Wetland Treatment Project. 42nd Street stormwater diversion project. Child care center stormwater treatment. Oregon Industrial Lumber stormwater runoff treatment.	, ,	GIS Springfield stormwater system infrastructure. City of Springfield Phase II NPDES permit plan activities. Water quality data collected and analyzed for 42nd Street, 52nd Street, 64th Street, 69th Street and 72nd Street stormwater channels and outfalls. Also monitoring WC impacts to Cedar Creek and keizer Slough.	pesticides, bacteria, nutrients and other contaminants in the watershed. Streams and river dilute these levels to	City of Springfield, SUB, McKenzie Watershed Council, ODOT, ODF&W, ODEQ, Rainbow Water District, International Paper, Weyerhauser, USGS, Springfield School District

Program McKenzie Watershed Emergency Response System (MWERS)	General 2012 Costs (O & M/Staff) \$37,000 (\$14K/\$23K)	2012 Outside Funding Leveraged ¹ \$5,000	& M/Staff)	Outside Funding Anticipated ² \$5,000	General 2014 Budget (O & M/Staff) \$52,000 (\$13K/\$39K) Anticipated 2014 Outside Funding = \$10,000	Long-term Funding Needs (Annual Staff Time and O & M Costs) \$55,000 - \$60,000 for training, drills, equipment, EWEB staff participation, GIS web application maintenance and upgrades	Region 2 HazMat leads drills, training, equipment maintenance. MWERS becomes regional system including metro area and Middle Fork Willamette (2nd Source). EWEB maintains GIS web application.	Close relationships with first responder community allows better coordinated responses to other disasters. Align budgets with partners to reduce costs to EWEB and partners. Reduced short and long term impacts and cleanup costs to drinking water source from spills.	Climate Change Impacts Anticipate more extreme weather events, better coordination with partners protects EWEB's infrastructure.
Water Quality Monitoring Program	\$209,000 (\$166K/\$53K)	\$66,000	\$198,000 (\$165K/\$33K)		\$169,000 (\$116K/\$53K) Anticipated 2014 Outside Funding = \$60,000	\$190,000 - \$220,000 for real-time sensors and monitoring equipment at key locations in watershed, maintenance and calibration of equipment, baseline monitoring. focused water quality investigations (as necessary), and data management and website update and maintenance.	Develop watershed monitoring network with partners that reduces costs while providing meaningful data to understand changes in water quality from landuse changes as well as climate change impacts. This may include real-time sensors and monitoring equipment at various locations in watershed that provides data to all partners.	Develop less expensive surrogate measurements for water quality that allow spatially more robust monitoring of watershed water quality and health, which would focus more in-depth investigations as necessary. Leverage partnerships to assist with funding, data management and equipment	Allows documentation of changes in watershed conditions over time that may inform design of mitigation and/or resiliency strategies for EWEB.
Healthy Farms Clean Water Program	\$189,000 (\$95K/\$94K)	\$168,000	\$124,000 (\$75K/\$49K)		\$126,000 (\$81K/\$45K) Anticipated 2014 Outside Funding = \$200,000	\$80,000 - \$100,000 for continued engagement and expansion of the HFCW Program to include placement of conservation easements to protect buffers, reducing risk for growers to transition to organic practices or reduce chemical use, and data management on agricultural activities and program impacts. These costs do not include devleopment of land acquisition program that would allow acquisition of key farmland properties, placement of conservation easements on critical areas for protection, then resaling properties to beginning farmers trained in water quality protection farming practices (\$100,000 - \$150,000/year).	Provide support for McKenzie agricultural community to reduce chemical use, increase buffers to protect riparian forests, increase economic viability by reducing operating costs (chemical, water & energy) and increasing revenue (local markets that pay more, organic certification, new crops).	Reduces amount of pesticides, nutrients, bacteria and other contaminants that impact EWEB's treatment capabilities and/or DBP formation (avoid future regulatory and treatment costs). Increased economic development for McKenzie and Eugene community by protecting farmland, protecting riprian forests and encouraging local markets that increase local economic activity. Reduce conversion of farmland to housing development.	·

Program	General 2012	2012	General 2013	2013	General 2014	Long-term Funding Needs	Long Term Objectives	Long Term Benefits	Climate Change
ŭ	Costs (O & M/Staff)	Outside Funding Leveraged ¹		Outside Funding Anticipated ²	Budget (O & M/Staff)	(Annual Staff Time and O & M Costs)			Impacts
Healthy Forests Clean Water Program	\$42,000 (\$14K/\$28K)	\$19,000	\$65,000 (\$30K/\$35K)	\$10,000	\$78,000 (\$30K/\$48K) Anticipated 2014 Funding = \$250,000 (timber harvest revenue)	\$80,000 - \$90,000 for continued engagement in Stewardship Contracting collaborative, Leaburg Forest management, and working with industiral timber to increase buffers and reduce chemical use. These costs do not include development of land acquisition program that would allow acquisition of key forestland properties that could generate revenue via carbon market and conservation focused timber harvests (\$100,000 - \$150,000).	Develop watershed forestry collaborative that helps guide and support increased restorative harvests on USFS and BLM land while providing incentives for industrial and private forest owners to incorporate more conservation forestry that reduces chemical use and diversifies income streams while protecting riparian forests.	Maintains and increases healthy forest cover as key protection of water quality of drinking water source. Builds support for predicatable and sustainable timber harvests from federal forests in a way that benefits watershed health and restoration. Diversifies private forest management to provide income from carbon/conservation based forestry. Improves local economic conditions in watershed and Eugene community. Reduces conversion of F-2 forestland to housing development. Avoided future treatment costs associated with loss of forest cover, increased sedimentation and organic carbon, loss of filtration capabilities of forests.	sequestration and builds the local economy around more restorative forestry, conservation markets and local supply
Septic System Assistance Program	\$26,000 (\$10K/\$16K)	\$10,000	\$22,000 (\$12K/\$10K)	\$10,000	\$37,000 (\$22K/\$15K) Anticipated 2014 Funding = \$20,000	\$40,000 - \$45,000 for continuing cost share program. EWEB investment in Blue River community septic treatment project would require \$50,000 - \$100,000. Assumes continuation of revolving loan program.	Education of homeowners on maintenance and care of septic systems leads to proactive repair and replacement of failing systems to reduce risks from untreated sewage inputs in river.	Development of community septic treatment solutions reduces risks from clusters of individual systems and increases economic development in communities like Blue River that are limited by each tax lot having a spetic system. Reduced water quality impacts and better awareness of homeowners around good stewardship responsibilities. Avoided future treatment costs associated with increased DBPs, pharmacueticals and perssonal care products.	Reduce nutirent loads to river as increasing temperatures could lead to more algal blooms.
Voluntary Incentives Program	\$ 179,000 (\$84K/\$95K)	\$350,000	\$155,000 (\$70K/\$85K)	\$175,000	\$195,000 (\$130K/\$65K) Anticipated 2014 Outside Funding = \$250,000	\$250,000 - \$275,000 for developing program that protects healthy riparian forests by providing incentives to landowners in return for long-term protection and restoration of these critical areas for water quality.	Provide incentives for good stewardship that educates landowners along the river, allows protection of nearly 3,000 acres of healthy riparian forests while providing opportunity to restore a large portion of the over 4,000 acres of degraded riparian forests.	Riparian forests provide critical fundtions for continued clean water including pollution filtration, septic waste uptake via root systems, erosion control, flood mitigation, temperature control to reduce algal growth, ESA fish habitat (helps EWEB hydroelectric projects). Provides education of hundreds of landowners along the river about what good stewardship is. Reduces future development in these critical areas. Economic development and increased capacity of partner organizations to work with landowners. Engagement of businesses sponsorship and outside investment in McKenzie. Avoided/reduced future treatment costs	Increased watershed resiliency by protecting riparian forests in face of more extreme weather events. Reduced property damage and flushing of contaminants into river. Mitigation of increasing temperatures, reducing algal bloom impacts and formation of DBPs.

Water Funded

Electric Funded

\$609,179

\$99,821

Program	General 2012 Costs (O & M/Staff)	2012 Outside Funding Leveraged ¹	General 2013 Budget (O & M/Staff)	2013 Outside Funding Anticipated ²	Budget (O & M/Staff)	Long-term Funding Needs (Annual Staff Time and O & M Costs)	Long Term Objectives	Long Term Benefits	Climate Change Impacts
Outdoor Education Program	\$32,000 (\$20K/\$12,K)	\$12,000	\$41,000 (\$21K/\$20K)	\$23,000	\$25,000 (\$10K/\$15K) Anticipated 2014 Outside Funding = \$50,000	\$40,000 - \$60,000 for assisting with funding for outdoor education basin coordinators that work directly with schools and teachers to incorporate water quality monitoring, field chemistry, field biology, geography (GIS and mapping), statistical analysis into classroom instruction. Student stipends for internships and some funding for research projects that directly benefit watershed protection efforts. Funds would also help maintain database and websites that house student data for analysis.	each area high school that build on	Provides comprehensive education opportunties around watershed science, water quality and natural resource management that helps prepare community youth for future careers and understanding the complexities of developing long term solutions in the face of changing climates. Short term benefits are having focused work in various creek basins that lead to research and deeper thinking around problems and solutions. Long term benefits are developing the next generation of leaders that are interested and trained in these issues and can develop solutions that benefit EWEB and the community.	watershed issues in the face of a changing climate. Can provide long term data sets in various creek basins that can be used to see impacts from climate change over time and help develop
Urban Runoff Mitigation Program	\$ 5,000 (\$0/\$5K)	\$0	\$23,000 (\$10K/\$13K)	\$40,000	\$46,000 (\$15K/\$31K) Anticipated 2014 Outside Funding = \$40,000	\$50,000 - \$70,000 for assisting with development of other wetland treatment buffers upstream on 52nd Street, diverting 42nd Street stormwater to Q Street channel, and working with Child Care Center and Oregon Industrial Lumber to mitigate stormwater runoff. Track City of Springfield storwater mitigation activities, comment on NPDES permit renewal and coordinate with SUB on other stormwater issues.	Springfield to prioritize stromwater treatment and mitigation efforts for systems that discharge upstream of intake. Align and leverage funding to increase development of treatment projects and landowner education	Development of stormwater treatment structures (e.g., wetlands, bio swales, infiltration galleries, stormwater diversions, etc.) removes contaminants and provides buffers to McKenzie River during storm event flushes and spills to stormwater drains. Avoids/reduces future treatment costs and regulatory costs.	Provides more resiliency and treatment during extreme events that flush pollutants from urban areas. Lowers water temperatures and reduces algal blooms that can lead to DBP formation.
TOTALS	\$709,000	\$630,000	\$668,940	\$504,000	\$728,000				I

2014 Outside Funding = \$880,000

\$473,500

\$254,500

\$476,400

192,540

¹ - Leveraged funds from outside agencies and partners includes only cash and not in-kind services (i.e., under estimates true leveraged resources).