



To Protect and Promote the Health and the Environment of the People of Kittitas County

Date: September 10, 2013

To: Kittitas County Board of Health & Board of County Commissioners

From: Kittitas County Public Health Department

Re: Revising and adding fees for a water metering program

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### Background

As part of Kittitas County's efforts to comply with the Growth Management Act, the County is proposing to implement a water metering program in all areas of the county outside of the Upper Kittitas County Groundwater Rule Area. The water metering program will be administered by the Kittitas County Public Health Department, necessitating the revision and addition of fees in order to recover costs to implement and maintain the program. Below is a description of the proposed fee revisions and additions. The changes in the fee schedule can be seen in *Exhibit A: Environmental Health Fees, Drinking Water Program*. No changes are being recommended at this time in the fee policy or other program fees.

### Reduce Fee for Automatic Meter Reading System (AMRS) units

The current fee for AMRS units is \$175 which includes the cost of the units and an administrative fee for processing the transaction. KCPHD is proposing to reduce this fee to **\$125** which is the actual cost of the AMRS units and include any staff costs for the transaction in the program annual fee. Water metering customers will purchase the first AMRS unit and KCPHD will replace and maintain the unit as needed as part of the annual fee.

### Add Annual Fee for Maintenance of the Water Metering Program (See Exhibit B for Calculations)

The proposed annual fee for customers required to meter is **\$195**. The fee covers:

- Costs for replacing AMRS units when defective or not functioning properly
- Replacing AMRS unit batteries
- General supplies
- Software maintenance
- Equipment replacement including handheld units to read meters, gateways and repeaters to gather AMRS unit data, cameras, GPS units, tablets, printers, desk, computers, etc.
- Vehicles and repairs, maintenance, and fuel (calculated at \$.55 per mile)
- Inflation (assumed a 2.4% annual rate)
- Staff costs including:
  - Health Officer (1 hour/week for high level oversight and decisions)
  - Environmental Health Supervisor (2 hours/week for program management and oversight)
  - Environmental Health Permit Technician (20 hours/week for program coordination, working with customers, communicating with other county departments, assisting with





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billing, scheduling inspections, reporting data, ordering equipment and supplies, troubleshooting, etc.)

- Public Health Clerks (1 hour/week for receiving and routing applications and answering questions)
- Water Resource Specialist (20 hours/week for installing AMRS units and inspecting meters, reading meters, replacing defective or non-functioning AMRS units, compiling meter data, and compliance and enforcement activities.)

**Program Implementation Costs**

Spreading the costs over 10 years and assuming 100 new customers per year, there will not be enough yearly revenue to cover costs until the sixth year (2019), at \$195 per year per customer. The county will need to loan approximately **\$201,045** to the program for the first five years. Costs would be paid back during the tenth year (2023).

**Annual Revenue & Cost Recovery**

Annual Fee: \$195  
 Total Loan Required: (\$201,045)

Year	# of Customers	Yearly Revenue	Annual Program Cost	Difference	
2014	100	\$19,500	\$94,063	(\$74,563)	Would require loan for initial costs
2015	200	\$39,000	\$96,346	(\$57,346)	Would require loan for initial costs
2016	300	\$58,500	\$98,658	(\$40,158)	Would require loan for initial costs
2017	400	\$78,000	\$101,026	(\$23,026)	Would require loan for initial costs
2018	500	\$97,500	\$103,451	(\$5,951)	Would require loan for initial costs
2019	600	\$117,000	\$105,934	\$11,066	Meet cost recovery
2020	700	\$136,500	\$108,476	\$28,024	Pay back loan
2021	800	\$156,000	\$111,080	\$44,920	Pay back loan
2022	900	\$175,500	\$113,745	\$61,755	Pay back loan
2023	1000	\$195,000	\$116,475	\$78,525	Pay back loan
<b>TOTAL:</b>		<b>\$1,072,500</b>	<b>\$1,049,255</b>	<b>\$23,245</b>	Difference due to rounding fee up





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**EXHIBIT A**

**2013 Environmental Health Fees**

ACTIVITY	TERM	2012 Fees	2013 Fees
<b>DRINKING WATER</b>			
Certificate of Potable Water Storage/Cistern Use New Permit	Each (expires w/in 2 years)	\$415.00	\$435.00
Potable Water Hauler License	Annual	\$220.00	\$240.00
Time of Sale Potable Water Storage/Cistern System Inspection	Each	\$415.00	\$435.00
Annual Potable Water Storage/Cistern Water Test Results Review	Annual	\$35.00	\$35.00
Group B workbook	Each	\$8.00	\$8.00
Water & Sewage Evaluation	Each	\$305.00	\$320.00
Re-evaluations	Each	\$155.00	\$195.00
Water OR Sewage Evaluation	Each	\$190.00	\$235.00
Water Sample collected by EH staff	Each	\$155.00	\$200.00
Well Site Review	Each	\$100.00	\$125.00
Well Site Inspection	Each	\$250.00	\$275.00
Group B Water System Application Review and Approval	Each	\$450.00	\$480.00
Group B Water System Expansion (3-9 connections)	Each	\$310.00	\$345.00
<u>Automatic Meter Reading System Units</u>	Each	\$175.00	<u>\$125.00</u>
<u>Water Metering Annual Fee</u>	<u>Annual</u>	<u>N/A</u>	<u>\$195.00</u>



507 N. Nanum St. Suite. 102 · Ellensburg, WA 98926

T: 509.962.7515 · F: 509.962.7581

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## EXHIBIT B: CALCULATIONS

### Water Metering Annual Fee Proposal

YEARS: 10  
 AVERAGE # OF ANNUAL CUSTOMERS: 550  
 (based on 100 new customers per year, averaged over 5 years)

COST DESCRIPTION	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Details
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
AMRS Unit Replacement <i>Inflation</i>	\$1,250	\$1,250	\$1,280	\$1,311	\$1,342	\$1,374	\$1,407	\$1,441	\$1,476	\$1,511	Assumes 100 AMRS units sold per year, 10% failure rate
Vehicle Replacement <i>Inflation</i>	\$2,400	\$2,400	\$2,458	\$2,517	\$2,577	\$2,639	\$2,702	\$2,767	\$2,833	\$2,901	Assumes 1 new vehicle every 5 years, 1/2 time
Vehicle Fuel, Repair, and Maintenance <i>Inflation</i>	\$5,720	\$5,720	\$5,857	\$5,998	\$6,142	\$6,289	\$6,440	\$6,595	\$6,753	\$6,915	Assumes 200 miles per week at \$.55/mile, 52 weeks a year
Equipment Replacement <i>Inflation</i>	\$7,894	\$7,919	\$8,109	\$8,304	\$8,503	\$8,707	\$8,916	\$9,130	\$9,349	\$9,573	See equipment list
Staffing Costs <i>Inflation</i>	\$71,299	\$71,299	\$73,010	\$74,762	\$76,557	\$78,394	\$80,276	\$82,202	\$84,175	\$86,195	See staffing calculations
Software Maintenance Costs <i>Inflation</i>	\$3,500	\$3,500	\$3,584	\$3,670	\$3,758	\$3,848	\$3,941	\$4,035	\$4,132	\$4,231	For software upgrades, support and maintenance
Misc. Goods and Services <i>Inflation</i>	\$2,000	\$2,000	\$2,048	\$2,097	\$2,147	\$2,199	\$2,252	\$2,306	\$2,361	\$2,418	Office supplies, AMRS unit installation supplies, etc.
<b>TOTALS:</b>	<b>\$94,063</b>	<b>\$96,346</b>	<b>\$98,658</b>	<b>\$101,026</b>	<b>\$103,451</b>	<b>\$105,934</b>	<b>\$108,476</b>	<b>\$111,080</b>	<b>\$113,745</b>	<b>\$116,475</b>	

<b>TOTAL COSTS OVER 10 YEARS:</b>	<b>\$1,049,255</b>
<b>Annual Fee:</b>	<b>\$191</b>
<b>Proposed Fee (Rounded):</b>	<b>\$195</b>



## Yearly Staffing Costs

Position	Weekly Hours	Hourly Rate*	Annual Salary
Health Officer	1	\$116.51	\$6,059
Environmental Health Director	2	\$49.30	\$5,127
Environmental Health Permit Technician	20	\$30.03	\$31,231
Water Resource Specialist	20	\$26.66	\$27,726
Public Health Clerks	1	\$22.22	\$1,155
		<b>TOTAL:</b>	<b>\$71,299</b>

\*Hourly rate includes salary, benefits, and indirect costs

## Equipment Replacement over 10 Years

Equipment	Quantity	Cost per Unit	Total Cost
Handheld Electronic Meter Reader	4	\$6,698	\$26,792
Fixed Gateway	2	\$4,000	\$8,000
Enhanced Repeater	5	\$1,000	\$5,000
Camera	3	\$250	\$750
GPS Units	4	\$400	\$1,600
Tablets	4	\$1,000	\$4,000
Printer	2	\$500	\$1,000
Computer	2	\$1,200	\$2,400
Chair	2	\$200	\$400
Desk	1	\$1,000	\$1,000
Batteries	1000	\$28	\$28,000
		<b>TOTAL:</b>	<b>\$78,942</b>
		<b>Annual average:</b>	<b>\$7,894.20</b>

