Response to Questions of Council -

1) What % of the Water Usage is the Port & Harbors?

8.67% of the "Other", or (Commercial) Users, or 5,780,182 Gallons of Water Annually.

16 Meters, Total Avg annual costs: $ 70,694

2) Who Certifies Meters?

Meters are tested at the factory. Each meter comes with a certification indicating conformance to industry standards at high, intermediate and low flow rates.

Meters do over time tend to lose their accuracy (usually measuring less not more). The City, over the last two years, has replaced every meter on the system.

3) How much does it cost to produce a gallon of water?

	2011 Water Budget	2011 Sewer Budget	Combined
Budget Expenses	$1,782,288	$1,746,622	$3,528,910
2010 Gallonage Used	121,179,200	104,835,525	
Cost Per Gallon	**0.01471**	**0.01666**	0.03137

4) Can we legally set two separate rates for the bulk users?
..... One for in town users and one for out of town users?

From an initial impression our attorney believed that we could charge different rates for users in town and another rate for users out of town. He is to look into this further.

5) What are the EPA requirements and what are we providing? **Attachment A**

EPA (ADEC now that the State has primacy) requires that individuals operating public water and wastewater systems be certified (see attached 18 AAC 74).

The City's water system certifications require Level II for the treatment plant and Level III for distribution.

The City's sewer system certifications require Level III for treatment plant and Level II for collection

The number of employees is not regulated; because Homer's system is relatively large and complex, we do have more employees than other communities with smaller, simpler systems.

6) Please provide what the rates would look like if there was an increase in customer charges and not user fees, enough to cover deficit.

Attachment B

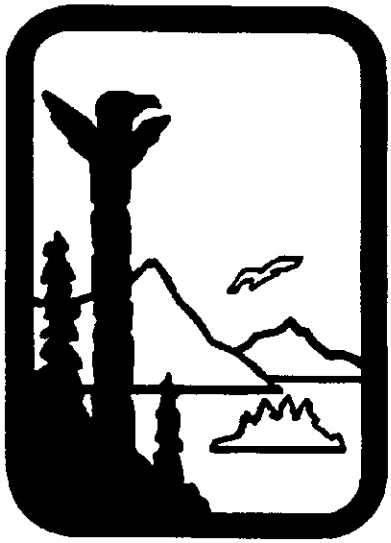
7) What would the rates look like if we followed the rate model?

Attachment C

Comparison of current rates to 7) & 8). **Attachment D**

STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION



18 AAC 74

WATER AND WASTEWATER OPERATOR CERTIFICATION AND TRAINING

With Amendments Through December 3, 2006

Frank Murkowski
Governor

Kurt Fredriksson
Commissioner

IMPORTANT NOTE TO READER

The regulations in this booklet have been prepared by the Department of Environmental Conservation. They do not constitute an official version of these regulations, nor do they necessarily reflect current law. Any amendments made after the date of this booklet would appear in the published version of the Alaska Administrative Code. If any discrepancy is found between this booklet and the Alaska Administrative Code, the Code should be considered the final authority, unless the discrepancy is the result of a manifest error in the Code

CHAPTER 74. WATER AND WASTEWATER OPERATOR CERTIFICATION AND TRAINING.

ARTICLE 1. REQUIREMENTS FOR A CLASS I – CLASS IV WATER SYSTEM OR WASTEWATER SYSTEM.

Section

Editor's note: The subject matter formerly found in 18 AAC 74.060 – 18 AAC 74.080, 18 AAC 74.100 – 18 AAC 74.120, and 18 AAC 74.160 – 18 AAC 74.170, can now be found in 18 AAC 74.800 – 18 AAC 74.870.

18 AAC 74.005. Transition period for September 1993 examination cycle. Expired. (In effect 5/29/93 - 9/25/93, by em adop., Register 126)

18 AAC 74.006. Applicability. The requirements of 18 AAC 74.006 – 18 AAC 74.125 apply to a

(1) public or private wastewater system that

(A) has 100 or more service connections; or

(B) is used or intended for use by 500 or more individuals per day;

(2) community or non-transient non-community water system that has 100 or more service connections;

(3) community or non-transient non-community water system that

(A) has 15 or more service connections; and

(B) is used or intended for use by 500 or more individuals per day;

(4) community or non-transient non-community water system that

(A) has fewer than 100 service connections;

(B) is used or intended for use by fewer than 500 individuals per day; and

(C) uses a water treatment process that uses

(i) coagulation;

(ii) chemically-aided filtration;

(iii) membrane filtration; or

(iv) the addition of more than one chemical to accomplish multiple water treatment objectives; or

(v) a combination of water treatment processes not listed in (i) – (iv) of this subparagraph that, in the department's determination, require a high level of operator skill; in determining whether a combination of water treatment processes require a high level of operator skill, the department will consider the advice of the board; and

(5) community or non-transient non-community water system that

(A) has fewer than 15 service connections;

(B) is used or intended for use by 500 or more individuals per day; and

(C) uses a water treatment process that uses

(i) coagulation;

(ii) chemically-aided filtration;

(iii) membrane filtration;

(iv) the addition of more than one chemical to accomplish multiple water treatment objectives; or

(v) a combination of water treatment processes not listed in (i) – (iv) of this subparagraph that, in the department's determination, require a high level of operator skill; in determining whether a combination of water treatment processes require a high level of operator skill, the department will consider the advice of the board. (Eff. 1/18/2001, Register 157; am 12/3/2006, Register 180)

Authority: AS 46.30.040 AS 46.30.080 AS 46.30.120

18 AAC 74.010. Supervising operator responsibilities. (a) A public water system, a public wastewater system, and a private wastewater system must be actively supervised as described in (b) of this section each day that the system operates by an operator certified by the department under 18 AAC 74.050 – 18 AAC 74.170. A supervising operator of

(1) a primary operating shift of a system must be certified at a level equal to or greater than the classification of the system under that operator's control;

(2) a secondary operating shift of a system must be certified at no less than one level below that level equal to the classification of the system under that operator's control; a secondary operating shift may not occur on a day without a primary operating shift; and

(3) more than one system must be certified at a level equal to or greater than the highest system classification under that operator's control.

(b) Except as provided in (c) and (d) of this section, a supervising operator described in (a) of this section shall be on-site at the system during normal working hours for that system. If the supervising operator must be absent from the system to attend to system-related business or other routine activities, the supervising operator shall be available to respond by radio or telephone to initiate appropriate action in a timely manner to protect human health, safety, and welfare. After normal working hours, the supervising operator shall be available to respond by radio or telephone.

(c) If the supervising operator cannot be present or available to respond as required in (b) of this section, the system owner shall designate another operator who is certified at the correct level under 18 AAC 74.050 – 18 AAC 74.120 to assume the supervising operator's duties.

(d) Department approval is required for a method of system supervision other than that described in (b) and (c) of this section. The department will approve, with terms and conditions, or will deny a request under this subsection after considering recommendations of the board. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 5/29/93, Register 126; am 1/18/2001, Register 157; am 12/3/06, Register 180)

Authority: AS 46.30.040 AS 46.30.080 AS 46.30.120

18 AAC 74.020. Certification requirements. (a) An individual seeking certification under 18 AAC 74.005 – 18 AAC 74.120 must submit a completed application to the department, for the level of certification sought

(1) on a form provided by the department;

(2) at least 45 days before the date set for an examination under 18 AAC 74.040; and

(3) accompanied by the fee required by 18 AAC 74.870(a).

(b) The department will certify an applicant who meets the

(1) examination requirements of 18 AAC 74.040;

(2) experience and education requirements of 18 AAC 74.050; and

(3) fee requirements of 18 AAC 74.870. (Eff. 8/21/78, Register 67; am 8/24/85,

Register 95; am 1/18/2001, Register 157)

Authority: AS 46.30.060 AS 46.30.080

18 AAC 74.030. Certification without examination. Deleted 8/24/85.

Editor's notes. -- Under AS 44.62.060(b) and 44.62.125(b), 18 AAC 74.030 was deleted by the regulations attorney 8/24/85 because it lacked statutory authority.

18 AAC 74.040. Examination requirements. (a) To be certified to operate a water or wastewater system classified as class I – class IV under 18 AAC 74.120, an applicant must pass an approved and validated examination that demonstrates the applicant's skills, knowledge, ability, and judgment to operate a system of that classification.

(b) To be eligible to take an examination, the applicant must meet the education and experience requirements of 18 AAC 74.050. The department will notify the applicant of eligibility for an examination. Examinations will be held at least annually, at the time and place announced by the department. The applicant shall pay the examination fee required by 18 AAC 74.870(c) at the time of the examination.

(c) Repealed 12/3/2006.

(d) The department will grade each examination administered under this section and notify each applicant of the results within 60 days after the examination. The department will not provide the completed, graded examination to the applicant. The applicant may review the applicant's examination results with the department.

(e) An applicant who fails the examination, or who, except as provided in 18 AAC 74.870(f), fails to appear for an examination may submit an application for reexamination. The applicant must submit to the department the application for reexamination and the fee required by 18 AAC 74.870(b) at least 45 days before a scheduled examination date. The applicant shall pay the examination fee required by 18 AAC 74.870(c) at the time of the examination. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 1/23/86, Register 97; am 5/29/93, Register 126; am 1/18/2001, Register 157; am 12/3/2006, Register 180)

Authority: AS 46.30.050 AS 46.30.080

18 AAC 74.050. Experience and education requirements. (a) Except as provided in (g) of this section, the department will use the basic criteria set out in Table A of this section to evaluate an operator's qualifications.

TABLE A

GENERAL OPERATOR EDUCATION AND EXPERIENCE REQUIREMENTS*
(in years)

	Operator Level									
	Provisional		I		II		III		IV	
System Type	Ed.	Op. Exp.	Ed.	Op. Exp.	Ed.	Op. Exp.	Ed.	Op. Exp.	Ed.	Op. Exp.
Wastewater Collection	12	**	12	1	12	3	13	4	13	6
Wastewater Treatment	12	**	12	1	12	3	14	4	16	4
Water Distribution	12	**	12	1	12	3	13	4	13	6
Water Treatment	12	**	12	1	12	3	14	4	16	4

Notes: Required periods of education and experience are reflected in years. Twelve years of education represents high school diploma or general educational development (GED) diploma. The department will waive the minimum education requirement for the provisional level and level 1 in accordance with (e)(6) of this section.

*Additional experience and education criteria and substitution requirements are set out in (b) - (g) of this section.

**Three months of operating experience or the completion of a department-approved training course, as described in (c)(1) of this section is required.

Abbreviations:
Ed. - Education Op. Exp. - Operator Experience

(b) Additional experience criteria referred to in Table A of this section and used by the department to evaluate qualifications of operators are subject to the following provisions:

(1) if an individual is employed as an operator at the time of application, that employment experience must be verified by the employer's signature on the applica-

tion; the operator is responsible for providing verification of past experience; the department may contact the operator's previous employers;

(2) at least 50 percent of the operating experience must be obtained in the same system type at no more than one class lower than the level of certification requested, and the department will not allow substitution of education or substitution of operating experience gained in another system type to meet the requirement of this paragraph, except

(A) an applicant with 10 years of more operating experience in a class I system meets the experience requirements for level III certification in the same system type; and

(B) an applicant with 10 years or more of operating experience in a class II system meets the experience requirements for level IV certification in the same system type;

(3) the department will consider a total of 1,950 or more hours worked during a period of 12 consecutive months as one year of experience; the department will prorate less than 1,950 hours worked during a period of 12 consecutive months to a portion of one year of experience.

(c) Except as provided in (b)(2) of this section, the department will allow substitutions for experience required in Table A of this section only as follows:

(1) for provisional level certification, a department-approved college, correspondence, or short course completed within the three years before application may be substituted for experience and must be in the subject area of certification requested;

(2) water treatment and wastewater treatment experience are interchangeable;

(3) water distribution and wastewater collection experience are interchangeable;

(4) the following are interchangeable at 25 percent:

(A) water distribution and water treatment experience;

(B) wastewater collection and wastewater treatment experience;

(C) approved water laboratory and water treatment experience up to a maximum of one year of substituted time;

(D) approved wastewater laboratory and wastewater treatment experience up to a maximum of one year of substituted time.

(5) postsecondary education as described in (d) of this section may be substituted for up to 50 percent of the required operating experience for levels II, III, and IV; the rate of exchange of education for experience is one year of experience for each year of department-approved, full-time postsecondary education successfully completed that meets the requirements of this section;

(6) education substituted for an operating experience requirement may not also be applied to the education requirement for certification.

(d) Additional education criteria referred to in Table A of this section and used by the department to evaluate qualifications of operators are subject to the following provisions:

(1) the operator must provide a transcript, a certificate of completion, or similar verification approved by the department to document education used for certification requirements;

(2) 45 continuing education units (CEUs) in specialized operator training or education approved by the department will be counted as one year of post-secondary education toward the certification requirements; 10 hours of coursework approved by the department equals one CEU; the department will approve specialized training or education coursework if it is directly related to, or can be applied to, the operation, maintenance, or management of a water supply or wastewater system; the department will consider the advice and recommendations of the board in approving this specialized training or coursework;

(3) the department will credit no more than 45 CEUs for one year of trade school; any time during trade school spent in on the job training will count toward the experience requirement separate from the education requirement;

(4) the department will apply a bachelor's degree in physical science, biology, chemistry, physics, engineering, or another related field as four years of postsecondary education toward certification requirements; the department will apply an associate degree in one of those fields as two years of postsecondary education toward certification requirements; if approved by the department, the department will apply college or technical coursework in a non-related field toward certification requirements as calculated under (2) of this subsection.

(e) The department will allow substitutions for the minimum education requirements of Table A of this section only as follows:

(1) two years of accrued excess water treatment or wastewater treatment experience at a class II or higher water treatment or wastewater treatment facility may be used to satisfy a maximum of one year of the postsecondary education requirement for level III water treatment or wastewater treatment certification;

(2) two years of accrued excess water treatment or wastewater treatment experience at a class III or higher water treatment or wastewater treatment facility may be used to satisfy a maximum of one year of the postsecondary education requirement for level IV water treatment or wastewater treatment certification;

(3) one year of accrued excess water distribution or wastewater collection experience at a class II water distribution or wastewater collection system may be used to satisfy a maximum of six months of the postsecondary education requirement for level III water distribution or wastewater collection certification;

(4) one year of operating experience may be substituted for either two years of elementary school, or one year of high school education;

(5) experience substituted for an education requirement may not also be applied to the operating experience requirements;

(6) for certification of an operator at the provisional level and level I certification, the department will waive the minimum education requirements for an applicant who passes a written examination and a practical evaluation.

(f) The department will administer level I exams to applicants who meet the requirements for the provisional level certificate. Provisional certificates will be upgraded to

level I certificates upon satisfactory fulfillment of the certification requirements of level I certification and approval of a completed application. Applications for upgrade of provisional certificates will be reviewed at least annually.

(g) For an operator who is simultaneously supervising and operating a system that is required to have a certified operator under this chapter, the department may waive the experience requirements of Table A of this section. In reviewing a request under this subsection, the department will consider

(1) the complexity of the system;

(2) the number of hours spent each month simultaneously supervising and operating the system;

(3) whether the simultaneous supervising and operating experience claimed was acquired at the system that the operator will be operating when examined;

(4) whether the operator has a minimum of

(A) 12 months of simultaneous supervising and operating experience toward level I certification, even if the total number of hours worked during that period of 12 months is less than 1,950 hours;

(B) 36 months of simultaneous supervising and operating experience toward level II certification, even if the total number of hours worked during that period of 36 months is less than 5,850 hours;

(C) 48 months of simultaneous supervising and operating experience toward level III certification, even if the total number of hours worked during that period of 48 months is less than 7,800 hours;

(D) 48 months of simultaneous supervising and operating experience toward level IV water treatment and wastewater treatment certification, even if the total number of hours worked during that period of 48 months is less than 7,800 hours;

(E) 72 months of simultaneous supervising and operating experience toward level IV water distribution and wastewater collection certification, even if the total number of hours worked during that period of 72 months is less than 11,700 hours;

(5) whether all other applicable requirements of this chapter have been met; and

(6) other factors relevant to assessing the operator's experience.

(h) A certificate that is issued based on a waiver granted in (g) of this section applies only to the system the operator is operating when examined. When an operator certified under (g) of this section submits an application and meets the experience requirements of (a) – (e) of this section, the department may upgrade the certificate to one that is transferable. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 5/29/93, Register 126; am 1/18/2001, Register 157; am 12/3/2006, Register 180)

Authority: AS 46.30.080

18 AAC 74.060. Display of certificate. Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 5/29/93, Register 126; repealed 1/18/2001, Register 157)

Editor's note: The subject matter formerly found in 18 AAC 74.060 can now be found in 18 AAC 74.080.

18 AAC 74.070. Certificate term and renewal. Repealed. (Eff. 8/21/78, Register 67; am 3/24/85, Register 95; am 1/23/86, Register 97; am 5/29/93, Register 126; repealed 1/18/2001, Register 157)

Editor's note: The subject matter formerly found in 18 AAC 74.070 can now be found in 18 AAC 74.810.

18 AAC 74.080. Lapsed certificate. Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 1/23/86, Register 97; am 5/29/93, Register 126; repealed 1/18/2001, Register 157)

Editor's note: The subject matter formerly found in 18 AAC 74.080 can now be found in 18 AAC 74.820.

18 AAC 74.090. Canceled certificate. Repealed 2/21/81.

18 AAC 74.100. Revocation of certificate. Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; repealed 1/18/2001, Register 157)

Editor's note: The subject matter formerly found in 18 AAC 74.100 can now be found in 18 AAC 74.830.

18 AAC 74.110. Temporary certification. Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 1/23/86, Register 97; repealed 1/18/2001, Register 157)

Editor's note: The subject matter formerly found in 18 AAC 74.110 can now be found in 18 AAC 74.840.

18 AAC 74.120. Classification of water and wastewater systems. (a) Water distribution and wastewater collection systems designated in 18 AAC 74.006 are classified as follows:

(1) except as provided in (2) and (3) of this subsection, water distribution and wastewater collection systems are classified as follows:

(A) systems with 15 to 500 service connections are classified as class I;

(B) systems with 501 to 5,000 service connections are classified as class II;

(C) systems with 5,001 to 15,000 service connections are classified as class III;

(D) systems with more than 15,000 service connections are classified as class IV;

(2) for water distributions systems, the following requirements also apply:

(A) water distribution systems where water is circulated or heated to prevent freezing in the water distribution system will be classified at one class higher than the class determined under (1)(A) - (C) of this subsection;

(B) water distribution systems with five or more pressure zones will be classified at one class higher than the class determined under (1)(A) - (C) of this subsection;

(C) water distribution systems with five or more pressure zones and where water is circulated or heated to prevent freezing in the water distribution system will be classified at one class higher than the class determined under (1)(A) - (C) of this subsection;

(3) for wastewater collection systems, the following requirements also apply:

(A) wastewater collection systems where gravity is the only means of wastewater flow will be classified as class I systems, regardless of the number of service connections;

(B) wastewater collection systems with 15 or more main line lift stations will be classified at one class higher than the class determined under (1)(A) - (C) of this subsection.

(b) Water treatment and wastewater treatment systems designated in 18 AAC 74.006 are classified as set out in Table B of this subsection.

TABLE B
CLASSIFICATION RATING SYSTEM:
TREATMENT SYSTEMS
(By Range of Points)

System Type	I	II	III	IV
Wastewater Treatment System	1-30	31-55	56-75	76 and above
Water Treatment System	1-30	31-55	56-75	76 and above

(c) The department may, after considering the advice of the board, modify the rating system in (a) and (b) of this section as applied to a particular system if the department finds that

(1) unusual factors affect the complexity of unit processes, the quality of raw water sources, or the users of water downstream from wastewater system discharges; or

(2) potential health hazards exist.

(d) To classify wastewater treatment systems under (b) of this section,

(1) the department will use the following point system:

Item	Points
Size	
Peak Day Design Capacity, gallons per day:	
less than 10,000	1
10,000 – 50,000	2
50,001 – 100,000	4
100,001 – 500,000	9
500,001 – 1,000,000	12
1,000,001 – 5,000,000	16
5,000,001 – 10,000,000	20
10,000,001 – 50,000,000	25
greater than 50,000,000	30
Pretreatment	
Influent pumping	2
Flow equalization basin	1
Manually cleaned screens	1
Mechanically cleaned screens	2
Fine screens, including microscreens	3
Comminutor, barminutor, grinders	2
Grit removal	2
Primary Treatment	
Primary clarifiers	4
Primary clarifiers with chemical addition	7
Imhoff tank, or other method of combined sedimentation and digestion, other than a septic tank	3
Dissolved air flotation	16
Secondary Treatment	
Trickling filter without recirculation	5
Trickling filter with recirculation	8
Activated sludge:	
Oxidation ditch	8
Diffused or dispersed aeration	10
Pure oxygen	15
Sequencing batch reactor (SBR), intermittent cycle extended aeration system (ICEAS), or other batch treatment method	20
Additional points if an activated sludge plant is operated in high rate mode or contact stabilization mode	2

Rotating biological contactor 10
Activated bio-filter with aeration 10
Activated bio-filter without aeration 8
Stabilization ponds without aeration 5
Aerated lagoon 8
Secondary clarifiers 4
Secondary clarifiers with chemical addition 7

Advanced Waste Treatment

Polishing pond or effluent flow equalization 2
Chemical and physical treatment without secondary treatment 20
Chemical and physical treatment following secondary treatment 15
Ion exchange 4
Granular media filtration 8
Membrane filtration, including reverse osmosis 10
Electrodialysis, electrodialysis reversal 20
Biological or combined chemical and biological nutrient removal 12
Nitrification by extended aeration only 2
Chemical precipitation of phosphorous 3
pH adjustment 3
Activated carbon columns or beds 8

In-Plant Odor Control

Biofilter 3
Adsorption with activated carbon or equal adsorbent 3
Wet Scrubber 6
Thermal deactivation with catalytic process 6
Odor-reducing sprays 2

Sludge Thickening and Dewatering

Sludge decant tank 2
Gravity thickener basin 3
Gravity belt thickener 4
Screw press 5
Centrifuge 6
Belt filter press, plate-and-frame press, or vacuum filter 8
Sludge bagger 3
Evaporative sludge drying by means of drying beds 2
Additional points if a polymer is added to sludge before the sludge is put in drying beds 3

Sludge Stabilization and Conditioning

Unheated anaerobic digestion 8
Heated anaerobic digestion 10
Aerobic digestion 5
Wet oxidation 10

Chemical stabilization with lime 3
In-vessel composting, if controlled and operated by
the operator as part of routine system operations.....10
Static pile composting, if controlled and operated by the
operator as part of routine system operations 5

Solids Disposal

Incineration, if controlled and operated by the operator
as part of routine system operations.....12
Land application, if controlled and operated by the
operator as part of routine system operations 5
Sludge lagoon.....3
Off-site disposal 1

Disinfection

Liquid and powdered hypochlorites.....3
Additional points if hypochlorites are generated on-site 2
Gas chlorine 12
Ultraviolet light.....3
Ozonation.....10
Dechlorination with gas 10
Dechlorination with chemical dechlorination agents other than gas 3

Effluent Discharge

Plant pumping of effluent 2
Effluent aeration.....2

(2) for purposes of this subsection, septic tanks will be considered part of the wastewater collection system, not a primary treatment method; and

(3) nutrient removal utilizing biological or combined chemical and biological processes for advanced waste treatment include one or more of the following methods:

(A) nitrification that utilizes those processes; if a facility nitrifies based solely on detention time or another extended aeration process, only the points for nitrification by extended aeration will be given;

(B) denitrification;

(C) phosphorous removal.

(e) To classify water treatment systems under (b) of this section,

(1) the department will use the following point system:

Item	Points
Size	
Peak day design capacity, gallons per day:	
less than 10,000	1
10,000 – 50,000	2
50,001 – 100,000	4
100,001 – 500,000	9
500,001 – 1,000,000	12
1,000,001 – 5,000,000	16
5,000,001 – 10,000,000	20
10,000,001 – 50,000,000	25
greater than 50,000,000	30
Water Supply Source	
Groundwater	2
Groundwater under the direct influence of surface water	4
Surface water	6
Surface water maintaining filtration avoidance criteria under 18 AAC 80.620	8
Seawater	10
Purchased treated water	0
Raw water storage tank	4
Pre-Treatment	
Presedimentation basin	4
Hydrocyclone or similar sand separator device	2
Microscreen	3
Roughing filter:	
Cartridge filter	2
Non-backwashable strainer or filter	2
Gravel or rock filter	4
Backwashable granular media filter	8
Add-heat system to heat raw water	2
Adjustment and Corrosion Control	
pH adjustment	3
Corrosion inhibitor	3
Limestone or calcite contactor	2

Treatments

Aeration:
- In-line venturi-type....1
- Mechanical or diffused....3

Degasification....3
Ion exchange....4
Non-regenerated sorption processes, including activated alumina, modified activated alumina, and iron based sorbents....3
On-site regeneration of sorption process media....10
Activated carbon, if not included as a bed layer in another filter:
- Activated carbon cartridge or bag filter....2
- Powdered activated carbon treatment....4
- Granular activated carbon filters....8
- On-site regeneration of activated carbon....16

Chemical oxidation:
- Hypochlorite solution....3
- Gas chlorine....12
- Potassium permanganate....4
- Hydrogen peroxide....5

Ozonation....10
Coagulation:
- Primary coagulant....5
- Coagulant aid, flocculent, or filter aid....3 points for each chemical added, up to a maximum of 12 points

Rapid mix units:
- Mechanical mixers....5
- Injection mixers....3
- In-line blender mixers....2
- In-line static mixers....1

Flocculation tanks:
- Hydraulic flocculator....4
- Mechanical flocculator....8

Sedimentation or clarification:
- Tube settlers....2
- Inclined-plate, Lamella-type or equivalent....2
- Horizontal flow conventional clarifier....4
- Adsorption clarifier....6
- Up-flow solids contact....10
- Dissolved air flotation....16
- Combined rapid mix-coagulation-flocculation-sedimentation unit....20

Filtration:
- Cartridge or bag filter – single unit....2
- Cartridge or bag filters – staged, multiple units....4
- Slow sand....4
- Granular media....8

Membrane, all types 10
Diatomaceous earth 12
Electrodialysis, electrodialysis reversal, distillation 10
Lime softening 16
Recarbonation 8
Fluoridation:
Sodium fluoride saturator 2
Sodium silicofluoride 3
Hydrofluorosilicic acid 5
Disinfection:
Liquid and powdered hypochlorites 3
Additional points if hypochlorites are generated on-site 2
Gas chlorine 12
Ammonia addition for chloramination:
using liquid ammonia solution 3
using ammonia gas 12
Chlorine dioxide 8
Ozonation 10
Ultraviolet light 3
Clearwell or finished water storage in plant 3
On-site treatment of system sludge or backwash:
Discharge to sewer or other off-site treatment 0
Discharge to on-site pond, septic tank, or lagoon 2
Mechanical dewatering 6

(2) for purposes of the point system set out in (1) of this subsection, the department will assign a point value to ozonation only once, even if ozonation is used to accomplish multiple water treatment objectives. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; am 1/18/2001, Register 157; am 12/3/2006, Register 180)

Authority: AS 46.30.010 AS 46.30.080 AS 46.30.090

18 AAC 74.125. Transition for systems increasing in classification. (a) If as required under 18 AAC 74.010(a) a supervising operator of primary operating shift of a water or wastewater system was certified at a level equal to the classification on or before December 3, 2006 of the system under that operator's control, and that system increased in classification under 18 AAC 74.120 on December 3, 2006, that supervising operator of the primary operating shift must be certified on or before December 3, 2008 at a level equal to or greater than the higher classification.

(b) If as required under 18 AAC 74.010(a) a supervising operator of a secondary operating shift of a water or wastewater system was certified at no less than one level below the level equal to the classification on or before December 3, 2006 of the system under that operator's control, and that system increased in classification under 18 AAC 74.120 on December 3, 2006, that supervising operator of the secondary operating shift must be certified on or before December 3, 2008 at a level no less than one level below the higher classification. (Eff. 12/3/2006, Register 180)

Authority: AS 46.30.010 AS 46.30.080 AS 46.30.090

18 AAC 74.130. Training. Repealed 8/24/85.

18 AAC 74.140. Water and wastewater works advisory board. Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; repealed 1/18/2001, Register 157)

Editor's note: The subject matter formerly found in 18 AAC 74.140 can now be found in 18 AAC 74.850.

18 AAC 74.150. Composition of the water and wastewater works advisory board. Deleted 8/24/85.

Editor's note: Under AS 44.62.060(b) and 44.62.125(b), 18 AAC 74.150 was deleted by the regulations attorney 8/24/85 because it lacked statutory authority.

18 AAC 74.160. Appeals. Repealed. (Eff. 8/21/78, Register 67; am 8/24/85, Register 95; repealed 1/18/2001, Register 157)

Editor's note: The subject matter formerly found in 18 AAC 74.160 can now be found in 18 AAC 74.860.

18 AAC 74.170. Fees. Repealed. (Eff. 1/23/86, Register 97; am 5/29/93, Register 126; repealed 1/18/2001, Register 157)

Editor's note: The subject matter formerly found in 18 AAC 74.170 can now be found in 18 AAC 74.870.

UTILITY - 2011 BUDGET

	WATER	SEWER	Total
	2011	2011	2011
EXPENDITURES TO BE COVERED BY USER FEES:			
Personnel	868,276	729,802	1,598,078
Operations & Maintenance	446,833	467,395	914,228
Other Charges	200,968	279,013	479,981
Depreciation Reserves	250,000	250,000	500,000
Leave Cash Outs	16,211	20,412	36,623
Total Expenditures to be covered	**1,782,288**	**1,746,622**	**3,528,910**
Anticipated Revenue, Based on 2010 Actual Usage:			
Single Family Dwelling Users	453,135	658,321	1,111,456
Other Users	925,492	961,584	1,887,076
Bulk Users	253,937	-	253,937
Other Operating Revenues	38,400	17,100	55,500
	1,670,964	**1,637,005**	**3,307,969**
Anticipated Revenue Shortfall:	**(111,324)**	**(109,617)**	**(220,941)**

Water Rate Structure Analysis

	2010 Actual	%		$1,782,288
Gallonage				
Single Family Dwelling	33,084,800	27.3%	0.00442	146,234.82
Other	68,130,900	56.2%	0.01140	776,692.26
Bulk	19,963,500	16.5%	0.01269	253,336.82
	121,179,200			**1,176,263.89**
Users				
Single Family Dwelling	1,023	67.3%	27.73	340,372.14
Other	496	32.6%	37.86	225,368.20
Bulk	2	0.1%	1,678.49	40,283.76
	1,521			**606,024.11**
				$1,782,288

Sewer Rate Structure Analysis

	2010 Actual	%		$1,746,622
Gallonage				
Single Family Dwelling	38,178,587	36.4%	0.00997	380,640.51
Other	66,656,938	63.6%	0.01264	842,543.70
	104,835,525			**1,223,184.21**
Users				
Single Family Dwelling	1,157	70.0%	18.40	255,437.38
Other	496	30.0%	45.03	268,000.41
	1,653			**523,437.79**
				$1,746,622

Rates, Leave the $ per Gallon alone, adjust the Monthly Customer Charge to Cover Shortfall

UTILITY - 2011 BUDGET

	WATER	SEWER	Total
	2011	2011	2011
EXPENDITURES TO BE COVERED BY USER FEES:			
Personnel	868,276	729,802	1,598,078
Operations & Maintenance	446,833	467,395	914,228
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Other Users	925,492	961,584	1,887,076
Bulk Users	253,937	-	253,937
Other Operating Revenues	38,400	17,100	55,500
	1,670,964	**1,637,005**	**3,307,969**
Anticipated Revenue Shortfall:	**(111,324)**	**(109,617)**	**(220,941)**

Water Rate Structure Analysis

	2010 Actual	%		$1,782,288
Users				
Single Family Dwelling	1,023	67.3%		306,900.00
Other	496	32.6%		148,800.00
Bulk	2	0.1%		600.00
	1,521			**456,300.00**
Gallonage				
Single Family Dwelling	33,084,800	27.3%	0.0054	179,706.96
Other	68,130,900	56.2%	0.0125	853,260.46
Bulk	19,963,500	16.5%	0.0147	293,020.58
	121,179,200			**1,325,988.00**
				$1,782,288

Sewer Rate Structure Analysis

	2010 Actual	%		$1,746,622
Users				
Single Family Dwelling	1,157	70.0%		277,680
Other	496	30.0%		119,040
	1,653			**396,720**
Gallonage				
Single Family Dwelling	38,178,587	36.4%	0.0094	358,398
Other	66,656,938	63.6%	0.0149	991,504
	104,835,525			**1,349,902**
				$1,746,622

UPDATED RATES, USING CURRENT RATE STRUCTURE

ATTACHMENT C

Rate Comparision:		Per Gallon	
Proposed Rates:	Current Rate Model	Current Rate Model, Adjusted	Increase in Customer Charge
Water Customers			
Single Family Dwelling Units			
1,000 Gallons	29.42	30.40	32.15
2,500 Gallons	36.05	38.50	38.78
3,750 Gallons	41.58	45.25	44.31
5,000 Gallons	47.10	52.00	49.83
7,500 Gallons	58.15	65.50	60.88
Other (Includes Multi-Family, Business, B&B, Etc)			
1,000 Gallons	36.40	37.50	49.26
2,500 Gallons	53.50	56.25	66.36
3,750 Gallons	67.75	71.88	80.61
5,000 Gallons	82.00	87.50	94.86
7,500 Gallons	110.50	118.75	123.36
10,000 Gallons	139.00	150.00	151.86
20,000 Gallons	253.00	275.00	265.86
30,000 Gallons	367.00	400.00	379.86
50,000 Gallons	595.00	650.00	607.86
100,000 Gallons	1,165.00	1,275.00	1,177.86
Bulk Water Users			
500,000 Gallons	6,370.00	7,375.00	8,023.49
1,400,000 Gallons	17,791.00	20,605.00	19,444.49

Rate Comparision:		Per Gallon	
Proposed Rates:	Current Rate Model	Current Rate Model, Adjusted	Increase in Customer Charge
Sewer Customers			
Single Family Dwelling Units			
1,000 Gallons	29.97	29.40	37.70
2,500 Gallons	44.93	43.50	52.66
3,750 Gallons	57.39	55.25	65.12
5,000 Gallons	69.85	67.00	77.58
7,500 Gallons	94.78	90.50	102.51
Other (Includes Multi-Family, Business, B&B, Etc)			
1,000 Gallons	32.64	34.90	57.67
2,500 Gallons	51.60	57.25	76.63
3,750 Gallons	67.40	75.88	92.43
5,000 Gallons	83.20	94.50	108.23
7,500 Gallons	114.80	131.75	139.83
10,000 Gallons	146.40	169.00	171.43
20,000 Gallons	272.80	318.00	297.83
30,000 Gallons	399.20	467.00	424.23
50,000 Gallons	652.00	765.00	677.03
100,000 Gallons	1,284.00	1,510.00	1,309.03