

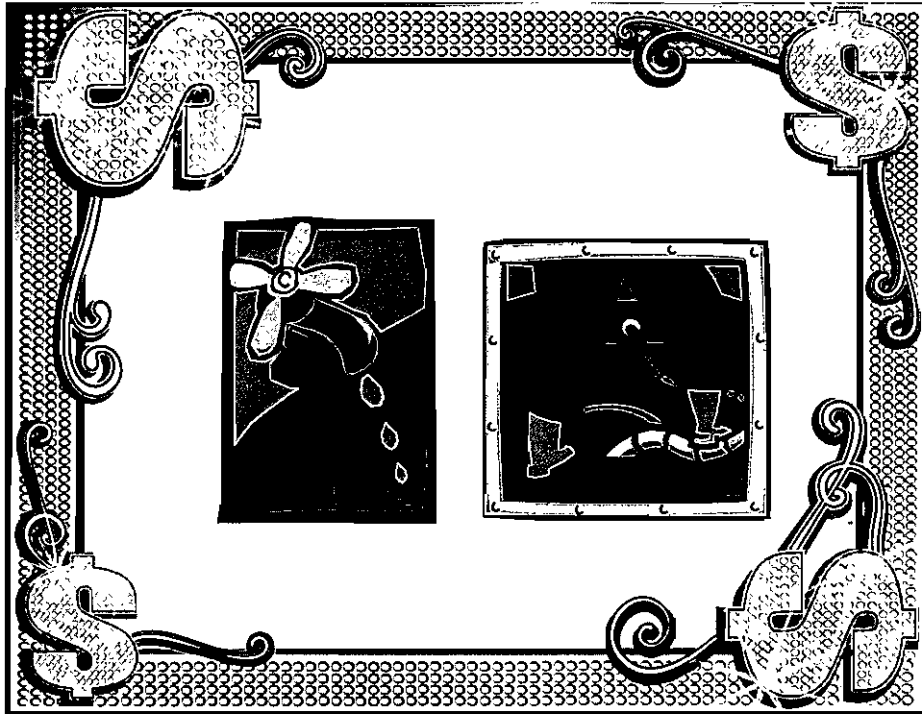
# Water & Sewer Rate Task Force

Tuesday

June 19, 2012

Regular Meeting

5:15 p.m.



City Hall Conference Room - Upstairs  
491 E. Pioneer Avenue  
Homer, Alaska 99603





**NOTICE OF MEETING  
REGULAR MEETING**

- 1. CALL TO ORDER**
- 2. APPROVAL OF THE AGENDA**
- 3. PUBLIC COMMENTS REGARDING ITEMS ON THE AGENDA**
- 4. RECONSIDERATION**
- 5. APPROVAL OF MINUTES** (*Minutes are approved during regular meetings only*)
  - A. Approval of the Regular Meeting Minutes for May 22, 2012 Page 5
- 6. VISITORS**
- 7. STAFF & COUNCIL REPORT/COMMITTEE REPORTS/BOROUGH REPORTS**
- 8. PUBLIC HEARING**
- 9. PENDING BUSINESS**
  - A. Creating a Project Timeline – Setting Goals and Benchmarks (this item was introduced and not discussed) Page 11
  - B. Memorandum from Deputy City Clerk dated May 31, 2012 Re: Rate Study from 2000-2001
    1. Rates and Information Provided by Public Works from 2000 Page 19
  - C. Information Requested from Finance at the May 22, 2012 Meeting: Page 35
    1. Seasonal Use – Number of Gallons Used Monthly
    2. Flow Rates – Yearly Graph that Depicts Additional Costs for Peak Months
- 10. NEW BUSINESS**
  - A. Random Sampling of Residential Water & Sewer Bills – Review and Discussion of Data Page 39
  - B. Review and Discussion of Percentage of Water Lost Due to Line Flushing and Leakage
- 11. INFORMATIONAL ITEMS**
  - A. Letter dated May 30, 2012 from Terry Yager Tendering his Resignation Page 47
  - B. City of Homer Water & Sewer Enterprise Fund Rate Analysis 2007-2008 Budget Process Page 49
  - C. Documents from August 11, 1997 on 1996 Utility Rate Study Page 51
- 12. COMMENTS OF THE AUDIENCE**
- 13. COMMENTS OF THE CITY STAFF**
- 14. COMMENTS OF THE CHAIR**
- 15. COMMENTS OF THE TASK FORCE**
- 16. ADJOURNMENT** next WORKSESSION is scheduled for **TUESDAY, JULY 10, 2012** City Hall **Upstairs Conference Room at 5:15 p.m.** The next REGULAR MEETING is **TUESDAY JULY 17, 2012** at 5:15 p.m. Conference Room Upstairs in the City Hall located at 491 E. Pioneer Avenue, Homer Alaska.

---

Water and Sewer Rate Task Force Purpose:  
TO EXAMINE THE EXISTING RATES AND RATE STRUCTURE  
TO PREPARE A RECOMMENDATION TO COUNCIL ON A RATE AND RATE STRUCTURE FOR 2013.



Session 12-02 A Regular Meeting of the Water and Sewer Rate Task Force was called to order at 5:15 pm on May 22, 2012 by Chair Beth Wythe at City Hall Cowles Council Chambers located at 491 E. Pioneer Avenue, Homer, Alaska.

**PRESENT:** LLOYD MOORE, KEN CASTNER, SHARON MINSCH, AND BETH WYTHE

**ABSENT:** TERRY YAGER, BARBARA HOWARD, BOB HOWARD

**STAFF:** RENEE KRAUSE, CMC, DEPUTY CITY CLERK I  
REGINA MAURAS, FINANCE DIRECTOR

### **APPROVAL OF THE AGENDA**

Chair Wythe requested a motion to approve the agenda.

MINSCH/CASTNER – SO MOVED.

There was no discussion.

The agenda was approved by consensus of the Task Force.

### **PUBLIC COMMENT REGARDING ITEMS ON THE AGENDA (3 Minute Time Limit)**

Mr. Larry Slone, city resident, stated he was back again to report his opinion on the rates which are unfair to the low volume user; that the fixed fees do not cover the costs which appear to be over \$3 million and administrative costs are a third of that if you go by the budget; the infrastructure is not important it's the water that is important without the water all you have is scrap iron; he puts emphasis on a flowage fee based on per gallon. Mr. Slone stated that his perspective the value is in the water.

Mr. Castner responded to the comment of the infrastructure and public purpose behind distribution.

### **RECONSIDERATION**

There were no items for reconsideration.

### **APPROVAL OF MINUTES (Minutes are approved during Regular Meetings only)**

Chair Wythe requested a motion to approve the minutes as presented.

MINSCH/CASTNER - MOVED TO APPROVE THE MINUTES AS PRESENTED.

There was no discussion.

The minutes were approved by consensus of the Task Force.

### **VISITORS**

There were no visitors scheduled.

### **STAFF & COUNCIL REPORT/COMMITTEE REPORTS/BOROUGH REPORTS**

*(Chair set time limit not to exceed 5 minutes)*

There were no reports submitted.

**PUBLIC HEARING** *(3 minute time limit)*

There were no items for public hearing.

**PENDING BUSINESS**

There were no pending business items on the agenda.

**NEW BUSINESS**

A. Open Meetings in Alaska – Information and State Statutes on the Meetings Act

Chair Wythe introduced the first item on the agenda under New Business.

Ms. Krause stated she included an excerpt from a training document used in 2007 which still applied today. These rules applied to all meetings whether quasi-judicial or not.

Ms. Minsch requested clarification from the City Clerk on whether the members of the committee could speak to the Public. Ms. Krause confirmed that they could talk to the public and Chair Wythe agreed noting that they will probably be approached by the public as time goes on.

There was no further discussion.

B. Nomenclature – Discussion on terminology for the Project

Chair Wythe introduced the item on the agenda stating she requested this item on the agenda to have a discussion on terminology for the sake of their project because different people consider different words and she would like a common agreement to use the same terms.

Chair Wythe recommended the Task Force use the Key Terms as shown on page 4-6 of the document "Setting Small Drinking Water System Rates for a Sustainable Future".

Discussion ensued on using the language as shown in the document recommended by Chair Wythe and that if everyone is using the same language then it allows for easier flow in their discussions.

There was no objection voiced by the members of the Task Force present.

C. Creating a Project Timeline – Setting Goals and Benchmarks

Chair Wythe introduced the next item on the agenda and stated that setting a timeline and goals of where the task force wanted to be through the end of the year would aid them in progression and would like to open this for discussion.

*Multiple discussions were held on how to proceed and what information that the Task Force would like to review and cover. I included summaries of those discussions for the benefit of absent members of the Task Force.*

Mr. Castner noted that this information was difficult to view online. He would like to talk about generally what the utility is; who are making the demands and how those costs are associated. He did not want to get mired down in numbers yet.

Chair Wythe inquired if that information was included in the handout that was provided by Finance.

Ms. Mauras responded the information was broken down into categories requested and rates back to 2000 along with the percentages. The rates show the progression and when the rate model was changed in 2008 those rates are reflected on a separate page. In 2008 the rate was changed to a variable rate schedule based on residential and commercial then was changed to customer charge and flat rate per gallon; then this past year the multi-family classification was added.

Discussion ensued with questions posed by the task force on reasons the rates and classifications were changed such as the changes in one rate for residential - single family dwelling or large commercial could put in the same size meter since there was no regulation

- From 2000 when the model was implemented to 2008 each year the rates were not raised by council the model was messed with so the rates could correlate with the budget.
- In 2007, Finance reverted back to the original rate model and inputted the rates increase as it should have been and if this was done it would have meant a 34% increase in rates. Council was opposed to this increase.
- It was pointed out that a multi-family unit would be limited to what the smallest size meter they could install before they did not get water due to demand.
- Clarification on commodity charges and surcharges in previous years was requested

Further discussion ensued on whether they should go back and review the model from 2000 and work forward to determine where to go from there; it was noted that in 2000 there were 1000 customers now they have 1500 which is not much increase; more water is being used than was anticipated according to figures provided; multi-family and condos – how many dwelling units were represented in those numbers was requested; explanation on percentage shown and number of gallons; the information on the average gallons used by the residential customer; the information provided did not provide an accurate picture on how many users in each category and the average amount of gallons used; meter size is no longer tracked how can the usage be accurately tracked now; larger users put more stress and wear and tear on the system and rates should reflect that; it was noted that “demand” is not in the Key terms and should be included since it will be used a lot in discussions; explanation on how a meter works and the size of the meter relevant to the usage and fees charged and when the system was changed and the City stopped tracking; confirmation that tracking is done but on a different methodology.

Staff will provide a breakdown on classification usage. A white board was requested for these meetings by Mr. Castner. Mr. Castner outlined what was done in 2000. Staff will review if the information can be extracted based on meter to provide to the Task Force. Staff clarified the information provided on the bottom percentage of users and historical information on costs reflected from 2000 forward. Mr. Moore opined he would like to go all the way back to find out why they are paying so much more in Homer compared to other communities. Chair Wythe responded that there would not be much value in that and related the expenses and requirements imposed on the City of Homer regarding Water & Sewer. It was noted that having those systems on line should be reflected somewhere. It was hard to accept the high rate of costs for the system in comparison.

Discussion continued on the responsibility of the Task Force to review the existing rates and rate structure and that there is only x amount of customers; costs; and why go back in history. They need to figure a rate schedule on what it actually costs; there are benchmarks to compare; but they must be comparable levels too.

Chair Wythe commented on the Kenai and Soldotna systems and requested the 2000 rate study document at the next worksession if possible. Staff will look to see if she can get those rates. Chair Wythe commented on the informational document created by the EPA which has worksheets and step by step instructions on creating a rate system. Ms. Mauras commented on the former rate model and dropping in the figures. Ms. Krause noted the rate study should be archived in the City's Library. Ms. Mauras questioned going back to 2000 and just looking at now.

Chair Wythe further explained the reasons to look back in the past to determine if Council made the right decision. When council started tweaking the rates it was because of the budget, no increases meant they started not collecting enough to have the system pay for itself.

More discussion came out on the process, the previous rate model and current rate model, the cost is the cost, there was a model put in effect and Council did not raise the rates as was required which caused problems, people who bypass the system add to the problems also; the political aspects involved in determining rates; not raising rates depletes the depreciation reserves which in effect reduces the ability to repair and replace

equipment; adding new burdens to the system; reduction in new construction; can today's numbers be used in the old rate model from 2000; life expectancy of infrastructure; administrative costs over \$1.277 million; have staff provide what the administrative requirements are; difficulties with hiring qualified personnel, discussion in itself as separate issue; at the end of the day whatever the variables are, a required amount is needed to for costs.

Some items to consider when determining rates and can be included in their recommendation and can be discussed later in their agendas:

- Demand fee
- Leakage
- Theft
- costs allocation
- Inspection of meters

Chair Wythe requested delaying financial matters to the June 19, 2012 since Ms. Mauras is still working part time. The Clerk will provide the 2000 Rate Study documentation for the worksession on June 5, 2012.

At the worksession the Task Force would like to have on the agenda a discussion on production and loss, common understanding of the Water System from source to consumer, not details just general information, and maintenance requirements for the system.

For a later meeting consider as part of the recommendation establishing a permanent Water Sewer Board that is advisory to the Council.

Chair Wythe would like to try to keep things in bite sized portions so when questioned they can respond knowledgeably to the public. The other members were in consensus on that approach.

Chair Wythe noted that the parameters on questions to ask staff at the Worksession, June 5th

- Explain the system from the ground up – source to consumer – What is our system?
- Why is pressure reducing needed? What is required to maintain this equipment? Why do we treat our water?
- What items are different with the Homer system compared to other systems of similar size?
- Associated sale of water and production to provide a sense of possible loss

Additional items for Discussion in future meetings:

- Need to break down the users into more manageable groups such as the Spit. There is not much they can do now.
- Seasonal use - number of gallons monthly – June 19<sup>th</sup> meeting
- Flow rates – yearly graph that shows the additional costs for the peak months from PW or Finance
- Fire protection element – Hydrants, etc.
- Recommendation may include hiring a qualified consultant to review the income and expense of the system to see where savings can be implemented
- Incentive – Reduction of Use or Increasing Use
- Government, Schools, Health Facilities burden on the system
- Results to the System when changed from an Enterprise Fund
- Expectation on service
- Direct Allocation of Costs – Beneficial or Detrimental?

There was a closing discussion on conducting future meetings in a more casual discussion format as this meeting; spending some time to determine what their product will look like to develop a timeline; additional time needed in the introductory phase before establishing benchmarks; too early in the process to establish a timeline; the value of establishing a timeline with benchmarks aids in conducting the meetings and what they will address; the learning process; identifying benchmarks and deliverables at the second meeting in June.

#### **INFORMATIONAL MATERIALS**

- A. City of Kenai Water and Sewer Rate Study
- B. City of Soldotna Water and Sewer Rate Study

- C. Water and Sewer Special Revenue Fund – Budgets 2009 – 2014
  - Revenues
  - Line Item Expenditures
  - Audited 2011 Budget – Utility Special Revenue Fund
- D. Rate Setting for Small Water Systems – Texas Cooperative Extension, March 2007
- E. Basic Guide to Water Rates Chapter 2- [www.lwua.gov.ph/water\\_rates\\_08/rates\\_two](http://www.lwua.gov.ph/water_rates_08/rates_two)
- F. EPA – Setting Small Drinking water System Rates for a Sustainable Future, January 2006
- G. Price and Rate Structures, Chapter 5 Urban Water Demand Management and Planning Hanemann, 1997

Chair Wythe summarized the value of the informational materials provided and requested the members to retain these documents as they may refer to them at future meetings.

#### **COMMENTS OF THE AUDIENCE**

Mr. Slone, city resident, commented on the expectation fee, proposal of a commodity charge; that staff would be able to provide any information in a couple of hours that they would need. He additionally noted the different categories.

#### **COMMENTS OF THE CITY STAFF**

Ms. Krause noted that the Task Force will be meeting in the Conference Room upstairs with the exception of one of the meeting dates in August and they will be in the Council Chambers.

#### **COMMENTS OF THE CHAIR**

Chair Wythe had no comments.

#### **COMMENTS OF THE TASK FORCE**

Mr. Moore and Ms. Minsch had no comments.

Mr. Castner expressed thanks for having the requested information provided.

#### **ADJOURN**

There being no further business before the Water and Sewer Rate Task Force Chair Wythe adjourned the meeting at 7:22 p.m. **A WORKSESSION** is scheduled for **TUESDAY, JUNE 5, 2012 AT 5:15 p.m.** The next **REGULAR MEETING** is **JUNE 19, 2012** at 5:15 P.M. in the **UPSTAIRS CONFERENCE ROOM** at City Hall, 491 E. Pioneer Avenue, Homer, Alaska.

---

Renee Krause, CMC, Deputy City Clerk I

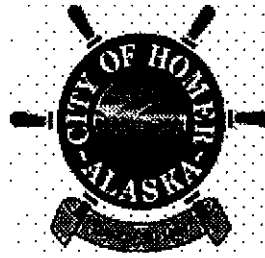
Approved: \_\_\_\_\_



## Office of the City Clerk

Jo Johnson, CMC, City Clerk

Melissa Jacobsen, CMC, Deputy City Clerk II  
Renee Krause, CMC, Deputy City Clerk I



491 E. Pioneer Avenue  
Homer, Alaska 99603-7624  
(907) 235-3130

(907) 235-8121  
Extension: 2227  
Extension: 2224

Fax: (907) 235-3143  
Email: [clerk@ci.homer.ak.us](mailto:clerk@ci.homer.ak.us)

# MEMORANDUM

---

DATE: MAY 17, 2012

TO: WATER AND SEWER RATE TASK FORCE

FROM: RENEE KRAUSE, CMC, DEPUTY CITY CLERK

SUBJECT: TIMELINES

---

Chair Wythe has requested this item to be on the agenda for discussion.

As with any process or "Project" timelines are established to effectively move toward completion of set goals. Settings goals or benchmarks in relation to the "project" allows for the task or work to be accomplished in the established timeframe or sooner.

I have taken the liberty to provide two samples, a simple form that is Excel based and can be modified to reflect the various goals this committee will determine. It is a changeable document and not set in stone.

The committee can add the activity or goal, such as obtaining certain information, historical documents, public input or hearings, etc. Applying a start date will automatically calculate how many days are remaining or show the information or goal is overdue. If the committee assigns individual members or Staff is to provide certain materials to the Task Force then that can be tracked also.

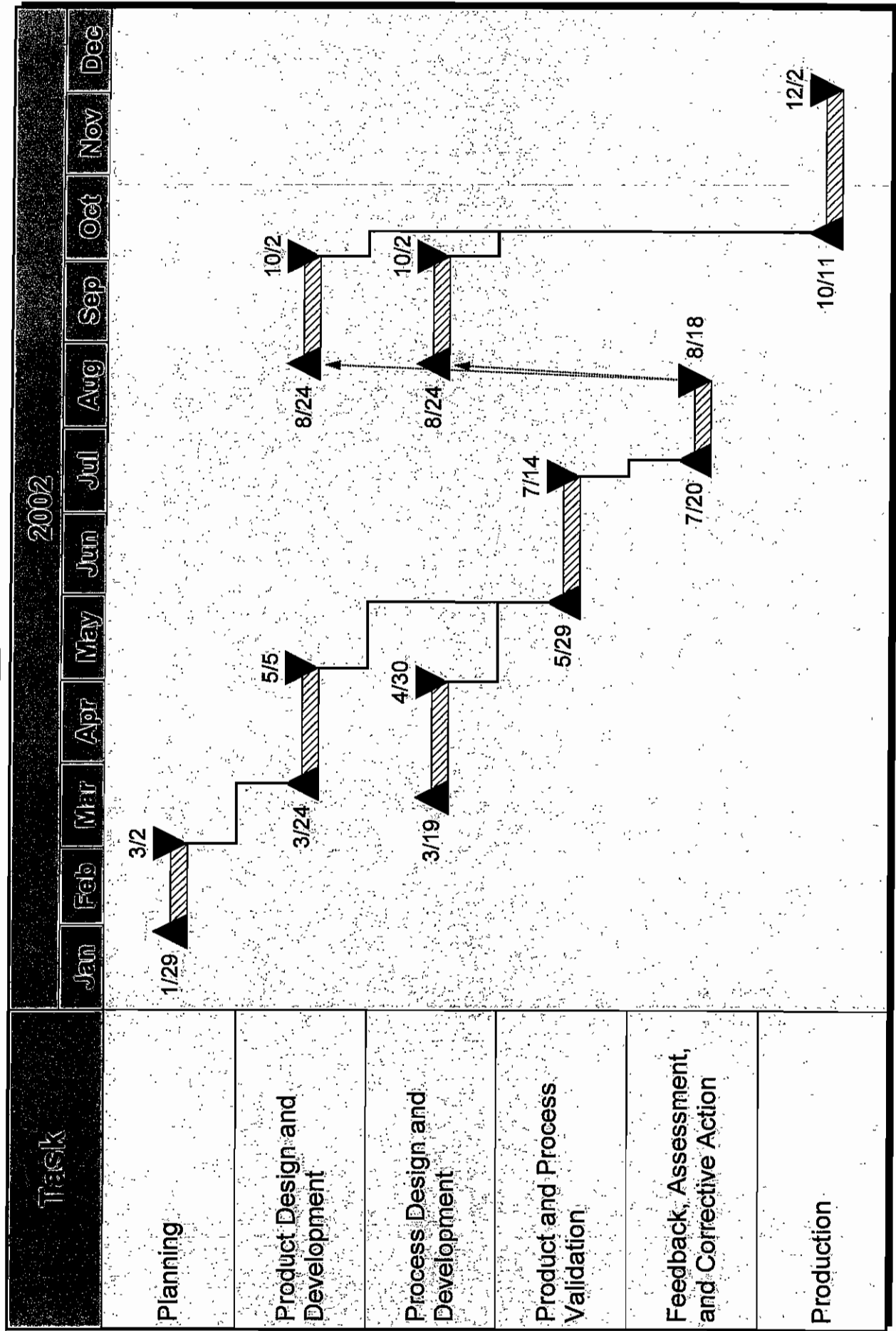
Or a simple Gantt timeline can be used with the project outlined with the first meeting date and the finish date of June 13, 2013. Items that can be projected on the Gantt timeline are as follow:

- Milestones: important checkpoints or interim goals for a project.
- Resources: for team projects, it often helps to have an additional column containing numbers or initials which identify who on the team is responsible for the task.
- Status: the projects progress, the chart is updated by filling in the task's bar to a length proportional to the amount of work finished.
- Dependencies: an essential concept that some activities are dependent on other activities being completed first.



# Product Development Schedule Phase One

Created Using Milestones Software  
www.kidasa.com





Please do not edit data which are in orange!!! Edit only those except orange.

Name or section of the Project/Process and Activities	Start date	Duration (days)	Today's Date	Completed	Days to Complete/Provide Info	Staff/Committee person Responsible	Notes
<b>Water Rate Model</b>							
Hold First Meeting of Task Force	5/9/12	0				Krause	
Set Meeting Schedule	5/9/12	0				Committee	
Election of Chair & Vice Chair	5/9/12	0				Committee	
Budget - Revenue and Expenses	5/9/12	30				Mauras	
Rate Study City of Kenai	5/9/12	30				Krause	
Rate Study City of Soldotna	5/9/12	30				Krause	
Water Rate Setting Information	5/9/12	30				Wythe	
Historical Information	5/9/12	30				Clerk's	
Activity 9						Public Works	
Activity 10							
Activity 11							
Activity 12							
Activity 13							
Activity 14							
Activity 15							
Activity 16							
Activity 17							

Please do not edit data which are in orange!!! Edit only those except orange.

Name or section of the Project/Process and Activities	Start date	Duration (days)	Today's Date	Completed	Days to Complete/Provide Info	Staff/Committee person Responsible	Notes
Sewer Rate Model							
Activity 1			12/10/12				
Activity 2			12/10/12				
Activity 3			12/10/12				
Activity 4			12/10/12				
Activity 5			12/10/12				
Activity 6			12/10/12				
Activity 7			12/10/12				
Activity 8			12/10/12				
Activity 9			12/10/12				
Activity 10			12/10/12				
Activity 11			12/10/12				
Activity 12			12/10/12				
Activity 13			12/10/12				
Activity 14			12/10/12				
Activity 15			12/10/12				
Activity 16			12/10/12				
Activity 17			12/10/12				
Activity 18			12/10/12				
Activity 19			12/10/12				
Activity 20			12/10/12				
Activity 21			12/10/12				
Activity 22			12/10/12				
Activity 23			12/10/12				
Activity 24			12/10/12				
Activity 25			12/10/12				

Please do not edit data which are in orange!!! Edit only those except orange.

Name or section of the Project/Process and Activities	Start date	Duration (days)	Today's Date	Completed	Days to Complete/Provide Info	Staff/Committee person Responsible	Notes
Fire Protection							
Activity 1			Feb 12	8:51 AM	100%		
Activity 2			Feb 12	8:51 AM	100%		
Activity 3			Feb 12	8:51 AM	100%		
Activity 4			Feb 12	8:51 AM	100%		
Activity 5			Feb 12	8:51 AM	100%		
Activity 6			Feb 12	8:51 AM	100%		
Activity 7			Feb 12	8:51 AM	100%		
Activity 8			Feb 12	8:51 AM	100%		
Activity 9			Feb 12	8:51 AM	100%		
Activity 10			Feb 12	8:51 AM	100%		
Activity 11			Feb 12	8:51 AM	100%		
Activity 12			Feb 12	8:51 AM	100%		
Activity 13			Feb 12	8:51 AM	100%		
Activity 14			Feb 12	8:51 AM	100%		
Activity 15			Feb 12	8:51 AM	100%		
Activity 16			Feb 12	8:51 AM	100%		
Activity 17			Feb 12	8:51 AM	100%		
Activity 18			Feb 12	8:51 AM	100%		
Activity 19			Feb 12	8:51 AM	100%		
Activity 20			Feb 12	8:51 AM	100%		



## Office of the City Clerk

Jo Johnson, CMC, City Clerk

Melissa Jacobsen, CMC, Deputy City Clerk II  
Renee Krause, CMC, Deputy City Clerk I



491 E. Pioneer Avenue  
Homer, Alaska 99603-7624  
(907) 235-3130

(907) 235-8121  
Extension: 2227  
Extension: 2224

Fax: (907) 235-3143  
Email: [clerk@ci.homer.ak.us](mailto:clerk@ci.homer.ak.us)

# *MEMORANDUM*

---

DATE: MAY 31, 2012

TO: WATER AND SEWER RATE TASK FORCE

FROM: RENEE KRAUSE, CMC, DEPUTY CITY CLERK

SUBJECT: RATE STUDY DOCUMENTATION FROM 2000 - 2001

---

I wanted to let the Task Force know that after careful research through our files I have not been able to locate any Rate Study Documentation that was produced on or about 2000-2001.

The only information I have relevant to Water/Sewer performed in the appropriate time period mentioned frequently by Mr. Castner and Mr. Moore was in changing the Methodology of the LID process.

I have been provided by Public Works a copy of the Water and Wastewater Utilities Rate Study performed by KMPG Peat Marwick February 11, 1991. This was a Document we did not have in our file.

The City Library is currently being relocated back into City Hall and I can do further research to see if there are any documents that may have been misfiled or not included in the Clerk's index file system.



City of Homer  
2000 Budget

Water Rate Model

DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)

REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND

INPUT DATA: ENTER THE CORRECT DATA IN THE HIGHLIGHTED BOXES.

REVENUE REQUIREMENTS		
Dept.	Component	Requirement
403	Pump Station	\$ 52,723
405	Water Reservoir Maintenance	\$ 16,592
404	Water Distribution Operations	\$ 113,830
407	Water Hydrants Maintenance	\$ -
401	Treatment Plant Operations	\$ 188,750
402	Treatment Plant Testing	\$ 29,041
406	Meter Operations	\$ 46,171
400	Administrative and General	\$ 361,820
400	Debt Service	\$ 130,000
400	Capital Reserve	\$ 128,000
400	Fleet Allocation	\$ 20,000

METER AND BILLING FIGURE FROM THE OVERHEAD BUDGET		
		\$ 12,286
PERCENTAGE OF FIXED COSTS ALLOCATED TO THE HOMER SPIT		
Dept.	Expenditure Component	Percentage (%)
403	Pump Station	15
405	Water Reservoir Maintenance	25
404	Water Distribution Operations	15
407	Water Hydrants Maintenance	0

Laurie has spreadsheet

Leave Fixed for now  
Leave Fixed for now  
Leave Fixed for now  
Leave Fixed for now

ESTIMATED ANNUAL WATER SALES IN GALLONS	132,274,130
ESTIMATED ANNUAL BULK WATER SALES IN GALLONS	15,260,000

**INPUT DATA: ENTER THE CORRECT DATA IN THE HIGHLIGHTED BOXES.**

**DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)**

**REVISION # 1 HRYDARNT COST REIMBURSED FROM GENERAL FUND**

**NUMBER OF WATER CUSTOMERS BY METER SIZE**

Meter Size	Total	Spit
5/8	1006	15
3/4	37	5
1	55	1
1 1/2	35	2
2	18	4
3	2	0
4	1	0
6	0	0
<b>TOTAL</b>	<b>1154</b>	<b>27</b>

City of Homer  
2000 Budget  
Water Rate Model

t



City of Homer  
2000 Budget

Water Rate Model  
DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)  
REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND

water1

**MONTHLY RATES FOR THE CITY OF HOMER WATER CUSTOMERS**

**CUSTOMER CHARGE** \$4.22

**COMMODITY CHARGE  
PER 1,000 GALLONS** \$4.20

**BULK RATE PER  
1,000 GALLONS** \$7.36

**SERVICE CHARGE**

Meter Size	General Service Charge	Spit Service Charge
5/8	\$ 19.46	\$ 87.28
3/4	\$ 29.19	\$ 130.92
1	\$ 48.65	\$ 218.20
1 1/2	\$ 97.31	\$ 436.41
2	\$ 155.69	\$ 698.26
3	\$ 340.57	\$ 1,527.43
4	\$ 613.02	\$ 2,749.38
6	\$ 1,362.27	\$ 6,109.73

**EXCESS USE SURCHARGE**

Meter Size	Monthly Use Exceeds	General Service Charge	Spit Service Charge
5/8	20,000 gallons	\$ 29.19	\$ 130.92
5/8	70,000 gallons	\$ 48.65	\$ 218.20
3/4	70,000 gallons	\$ 48.65	\$ 218.20

City of Homer  
2000 Budget  
Water Rate Model

DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)  
REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND

<u>Annual Revenue Requirement</u>		<u>Allocation</u>					
Dept.	Expenditure Component	2000 Revenue Requirement	Meter and Billing Costs	Variable Costs	Fixed Costs	Fixed Costs Spit	Spit (%)
	O&M Expenses:						
403	Pump Station	\$ 52,723		\$ 44,815	\$ 7,908		15
405	Water Reservoir Maintenance	\$ 16,592		\$ 12,444	\$ 4,148		25
404	Water Distribution Operations	\$ 113,830		\$ 96,756	\$ 17,075		15
407	Water Hydrants Maintenance	\$ -		\$ -	\$ -		0
401	Treatment Plant Operations	\$ 188,750	\$ 188,750				
402	Treatment Plant Testing	\$ 29,041	\$ 29,041				
406	Meter Operations	\$ 46,171	\$ 46,171				
400	Administrative and General	\$ 361,820	\$ 12,286	\$ 189,869	\$ 134,269	\$ 25,396	
	Capital Requirements:						
400	Debt Service	\$ 130,000		\$ 130,000			
400	Capital Reserve	\$ 128,000		\$ 128,000	\$ -	\$ -	
400	Fleet Allocation	\$ 20,000		\$ 20,000	\$ -	\$ -	
	Total	\$ 1,086,927	\$ 58,457	\$ 555,660	\$ 418,283	\$ 54,527	\$ 1,086,927
	Monthly Revenue Requirements	\$ 90,577	\$ 4,871	\$ 46,305	\$ 34,857	\$ 4,544	\$ 90,577
	Check:						

City of Homer  
2000 Budget  
Water Rate Model

**DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)**  
**REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND**  
**DETERMINATION OF CUSTOMER RATE**

Monthly Meter and Billing Costs:	\$4,871
Average Number of Water Customers	1154
Monthly Customer Rate	<input type="text" value="\$4.22"/>

**DETERMINATION OF COMMODITY RATE**

Annual Variable Cost	\$555,660
Annual Water Sales in Gallons	132,274,130
Commodity Rate Per 1000 Gallons	<input type="text" value="\$4.20"/>

**DETERMINATION OF BULK RATE**

Annual Bulk sales in Gallons	15,260,000
Total Sales in Gallons	132,274,130
Bulk % of Total:	11.54

Annual Fixed Cost	\$418,283
Fixed Cost to be paid by Bulk Users:	\$48,256
Surcharge Per 1000 Gallons	\$3.16
Commodity Rate Per 1000 Gallons	\$4.20

Total Bulk Rate Per 1000 Gallons	<input type="text" value="\$7.36"/>
----------------------------------	-------------------------------------

City of Homer  
2000 Budget  
Water Rate Model

**DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)  
REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND  
DETERMINATION OF FIXED RATES**

Total annual revenue requirement to be covered by fixed \$ 418,283  
Less amount charged to Bulk Users: \$ 48,256  
Monthly revenue requirement: \$ 30,836

Meter Size	No. of Cust.	Equiv. Meters	Index Number	Fixed Rate	Monthly Revenue
5/8	1006	1	1.00	\$ 19.46	\$ 19,577.79
3/4	37	1.5	1.50	\$ 29.19	\$ 1,080.09
1	55	2.5	2.50	\$ 48.65	\$ 2,675.89
1 1/2	35	5	5.00	\$ 97.31	\$ 3,405.68
2	18	8	8.00	\$ 155.69	\$ 2,802.39
3	2	17.5	17.50	\$ 340.57	\$ 681.14
4	1	31.5	31.50	\$ 613.02	\$ 613.02
6	0	70	70.00	\$ 1,362.27	\$ -
<b>Totals</b>	<b>1154</b>				<b>\$ 30,836.00</b>

**SPIT SURCHARGE**

Total annual revenue requirement to be covered by fixed \$ 54,527  
Monthly revenue requirement: \$ 4,544

Meter Size	No. of Cust.	Equiv. Meters	Index Number	Surcharge	Monthly Revenue
5/8	15	1	1.00	\$ 67.82	\$ 1,017.31
3/4	5	1.5	1.50	\$ 101.73	\$ 508.66
1	1	2.5	2.50	\$ 169.55	\$ 169.55
1 1/2	2	5	5.00	\$ 339.10	\$ 678.21
2	4	8	8.00	\$ 542.57	\$ 2,170.27
3	0	17.5	17.50	\$ 1,186.87	\$ -
4	0	31.5	31.50	\$ 2,136.36	\$ -
6	0	70	70.00	\$ 4,747.46	\$ -
<b>Totals</b>	<b>27</b>				<b>\$ 4,544.00</b>

**TOTAL SPIT FIXED RATES**

Meter Size	Fixed Rate
5/8	\$ 87.28
3/4	\$ 130.92
1	\$ 218.20
1 1/2	\$ 436.41
2	\$ 698.26
3	\$ 1,527.43
4	\$ 2,749.38
6	\$ 6,109.73

**EXCESS USE SURCHARGE**

Meter Size	Monthly Use Exceeds	General Service Charge	Spit Service Charge
5/8	20,000 gallons	\$ 29.19	\$ 130.92
5/8	70,000 gallons	\$ 48.65	\$ 218.20
3/4	70,000 gallons	\$ 48.65	\$ 218.20

Revised  
September 1999

City of Homer

2000 Budget

Water Rate Model

DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)

REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND

INPUT DATA: ENTER THE CORRECT DATA IN THE HIGHLIGHTED BOXES.

REVENUE REQUIREMENTS		
Dept.	Component	Requirement
403	Pump Station	\$ 52,723
405	Water Reservoir Maintenance	\$ 16,592
404	Water Distribution Operations	\$ 113,830
407	Water Hydrants Maintenance	\$ -
401	Treatment Plant Operations	\$ 188,750
402	Treatment Plant Testing	\$ 29,041
406	Meter Operations	\$ 46,171
400	Administrative and General	\$ 361,820
400	Debt Service	\$ 130,000
400	Capital Reserve	\$ 128,000
400	Fleet Allocation	\$ 20,000

METER AND BILLING FIGURE FROM THE OVERHEAD BUDGET		
		\$ 12,286
PERCENTAGE OF FIXED COSTS ALLOCATED TO THE HOMER SPIT		
Dept.	Expenditure Component	Percentage (%)
403	Pump Station	15
405	Water Reservoir Maintenance	25
404	Water Distribution Operations	15
407	Water Hydrants Maintenance	0

Laurie has st

Leave Fixed  
Leave Fixed  
Leave Fixed  
Leave Fixed

ESTIMATED ANNUAL WATER SALES IN GALLONS	132,274,130
ESTIMATED ANNUAL BULK WATER SALES IN GALLONS	15,260,000

City of Homer  
2000 Budget  
Water Rate Model

**INPUT DATA: ENTER THE CORRECT DATA IN THE HIGHLIGHTED BOXES.**  
DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)  
REVISION # 1 HYDARNT COST REIMBURSED FROM GENERAL FUND

Meter Size	Total	Spit
5/8	1450	15
3/4	37	5
1	55	1
1 1/2	35	2
2	18	4
3	2	0
4	1	0
6	0	0
TOTAL	1598	27

City of Homer  
2000 Budget

Water Rate Model  
DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)  
REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUNI

water1

MONTHLY RATES FOR THE CITY OF HOMER WATER CUSTOMERS

CUSTOMER CHARGE \$3.05

COMMODITY CHARGE  
PER 1,000 GALLONS \$4.20

BULK RATE PER  
1,000 GALLONS \$12.01

SERVICE CHARGE

Meter Size	General Service Charge	Spit Service Charge
5/8	\$ 8.49	\$ 37.62
3/4	\$ 25.47	\$ 112.86
1	\$ 50.95	\$ 225.72
1 1/2	\$ 101.90	\$ 451.43
2	\$ 203.79	\$ 902.87
3	\$ 407.58	\$ 1805.74
4	\$ 815.17	\$ 3611.47
6	\$ 1,630.33	\$ 7,222.95

EXCESS USE SURCHARGE

Meter Size	Monthly Use Exceeds	General Service Charge	Spit Service Charge
5/8	20,000 gallons	\$ 25.47	\$ 112.86
5/8	70,000 gallons	\$ 50.95	\$ 225.72
3/4	70,000 gallons	\$ 50.95	\$ 225.72

City of Homer  
2000 Budget  
Water Rate Model

DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)  
REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND

<u>Annual Revenue Requirement</u>		<u>Allocation</u>					
Dept.	Expenditure Component	2000 Revenue Requirement	Meter and Billing Costs	Variable Costs	Fixed Costs	Fixed Costs Spit	Spit (%)
	O&M Expenses:						
403	Pump Station	\$ 52,723			\$ 44,815	\$ 7,908	15
405	Water Reservoir Maintenance	\$ 16,592			\$ 12,444	\$ 4,148	25
404	Water Distribution Operations	\$ 113,830			\$ 96,756	\$ 17,075	15
407	Water Hydrants Maintenance	\$ -			\$ -	\$ -	0
401	Treatment Plant Operations	\$ 188,750		\$ 188,750			
402	Treatment Plant Testing	\$ 29,041		\$ 29,041			
406	Meter Operations	\$ 46,171	\$ 46,171				
400	Administrative and General	\$ 361,820	\$ 12,286	\$ 189,869	\$ 134,269	\$ 25,396	
	Capital Requirements:						
400	Debt Service	\$ 130,000			\$ 130,000		
400	Capital Reserve	\$ 128,000		\$ 128,000	\$ -	\$ -	
400	Fleet Allocation	\$ 20,000		\$ 20,000	\$ -	\$ -	
	Total	\$ 1,086,927	\$ 58,457	\$ 555,660	\$ 418,283	\$ 54,527	\$ 1,086,927
	Monthly Revenue Requirements	\$ 90,577	\$ 4,871	\$ 46,305	\$ 34,857	\$ 4,544	\$ 90,577
							Check:

City of Homer  
2000 Budget  
Water Rate Model

**DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)**  
**REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND**  
**DETERMINATION OF CUSTOMER RATE**

Monthly Meter and Billing Costs:	\$4,871
Average Number of Water Customers	1598
Monthly Customer Rate	<input type="text" value="\$3.05"/>

**DETERMINATION OF COMMODITY RATE**

Annual Variable Cost	\$555,660
Annual Water Sales in Gallons	132,274,130
Commodity Rate Per 1000 Gallons	<input type="text" value="\$4.20"/>

**DETERMINATION OF BULK RATE**

# of Customers (connected)	1,154
# of Customers (bulk water)	460
Bulk % of Total (based on # of connectic	28.50
Annual Fixed Cost	\$418,283
Fixed Cost to be paid by Bulk Users:	\$119,213
Annual Bulk Water Usage	15,260,000
Surcharge	<input type="text" value="\$7.81"/>
Commodity Rate Per 1000 Gallons	\$4.20
Total Bulk Rate Per 1000 Gallons	<input type="text" value="\$12.01"/>

City of Homer  
2000 Budget  
Water Rate Model

**DEPRECIATION & FLEET ALLOCATION TO VARIABLE COST (\$148,000)  
REVISION # 1 HYDRANT COST REIMBURSED FROM GENERAL FUND  
DETERMINATION OF FIXED RATES**

Total annual revenue requirement to be covered by fixed \$ 418,283  
Less amount charged to Bulk Users: \$ 119,213  
Monthly revenue requirement: \$ 24,922

Meter Size	No. of Cust.	Equiv. Meters	Index Number	Fixed Rate	Monthly Revenue
5/8	1450	1	1.00	\$ 8.49	\$ 12,312.40
3/4	37	1.5	3.00	\$ 25.47	\$ 942.54
1	55	2.5	6.00	\$ 50.95	\$ 2,802.13
1 1/2	35	5	12.00	\$ 101.90	\$ 3,566.35
2	18	8	24.00	\$ 203.79	\$ 3,668.25
3	2	17.5	48.00	\$ 407.58	\$ 815.17
4	1	31.5	96.00	\$ 815.17	\$ 815.17
6	0	70	192.00	\$ 1,630.33	\$ -
<b>Totals</b>	<b>1598</b>				<b>\$ 24,922.00</b>

**SPIT SURCHARGE**

Total annual revenue requirement to be covered by fixed \$ 54,527  
Monthly revenue requirement: \$ 4,544

Meter Size	No. of Cust.	Equiv. Meters	Index Number	Surcharge	Monthly Revenue
5/8	15	1	1.00	\$ 29.13	\$ 436.92
3/4	5	1.5	3.00	\$ 87.38	\$ 436.92
1	1	2.5	6.00	\$ 174.77	\$ 174.77
1 1/2	2	5	12.00	\$ 349.54	\$ 699.08
2	4	8	24.00	\$ 699.08	\$ 2,796.31
3	0	17.5	48.00	\$ 1,398.15	\$ -
4	0	31.5	96.00	\$ 2,796.31	\$ -
6	0	70	192.00	\$ 5,592.62	\$ -
<b>Totals</b>	<b>27</b>				<b>\$ 4,544.00</b>

**TOTAL SPIT FIXED RATES**

Meter Size	Fixed Rate
5/8	\$ 37.62
3/4	\$ 112.86
1	\$ 225.72
1 1/2	\$ 451.43
2	\$ 902.87
3	\$ 1,805.74
4	\$ 3,611.47
6	\$ 7,222.95

**EXCESS USE SURCHARGE**

Meter Size	Monthly Use Exceeds	General Service Charge	Spit Service Charge
5/8	20,000 gallons	\$ 25.47	\$ 112.86
5/8	70,000 gallons	\$ 50.95	\$ 225.72
3/4	70,000 gallons	\$ 50.95	\$ 225.72

Revised  
September 1999



# City of Homer

## Finance

491 East Pioneer Avenue  
Homer, Alaska 99603-7645

*Telephone* (907) 235-8121  
*Fax* (907) 235-3140  
*E-mail* [Finance@ci.homer.ak.us](mailto:Finance@ci.homer.ak.us)  
*Web Site* [www.ci.homer.ak.us](http://www.ci.homer.ak.us)

---

Date: June 13, 2012  
To: Water/Sewer Task Force  
From: Regina Mauras  
Finance Director  
Subject: Meter Size Issues

After the last Water/Sewer Task Force meeting, I went through our accounting software only to discover that meter sizes were not kept and most of the 1,472 customers showed no meter size listed at all.

I found a list of meter size by location from 2007, and from that list input them into our accounting software. At least 1/3 of the meter sizes were still missing. I got with our staff to figure out why and what could we do. There are a few problems.

When we changed out to the electric meter reader boxes, most of them were changed to 5/8" meter. This includes businesses, multiplexes, etc. Only a few maintained the larger meter sizes. Since meter size was not being utilized to substantiate rates, these records were not maintained.

Once again, one of the problems with the old rate model that charged by meter size, is that a lot of folks switched to the smaller meter size to avoid higher costs of water/sewer services.



Where the Land Ends and the Sea Begins




<b>CLASSIFICATION</b>	<b>NO. OF CUSTOM ERS</b>	<b>2011 Mo Avg Gallage</b>	<b>% of Water Used</b>
<b>Commerical/Other Users:</b>			
Bed and Breakfast	19	1,265,042	1.04%
Campground/Trailer Park	5	922,900	0.76%
Comm - Apartments/Condo	11	1,662,650	1.37%
Comm - Business	180	9,939,920	8.18%
Comm - Church	15	708,300	0.58%
Comm - Cocktail Lounge	4	575,218	0.47%
Comm - Grocery	2	2,965,500	2.44%
Comm - Hospital	3	2,284,100	1.88%
Comm - Hotel/Motel	11	2,302,417	1.89%
Comm - Laundromat	3	1,678,600	1.38%
Comm - Mini Malls	4	575,100	0.47%
Comm - Private Club	3	266,700	0.22%
Comm - Restaurant	19	3,219,450	2.65%
Comm - Service Station	4	525,733	0.43%
Comm and Residence	14	576,414	0.47%
Flow Meter 6 Spit"	1	-	0.00%
Pub Authority - City Govt	5	1,798,800	1.48%
Pub Authority - Fire Hall	1	143,000	0.12%
Pub Authority - Library	1	87,600	0.07%
Pub Authority - Museum	2	309,100	0.25%
Pub Authority - Other Govt	6	290,900	0.24%
Pub Authority - Parks	5	120,800	0.10%
Pub Authority - Police	2	267,200	0.22%
Pub Authority - Public Works	3	1,765,000	1.45%
Pub Authority - School	10	3,773,600	3.11%
Spit - Boat Harbor	2	2,221,000	1.83%
Spit - Business	16	1,955,900	1.61%
Spit - Camp Ground	1	415,400	0.34%
Spit - Cannery	5	2,822,500	2.32%
Spit - City Govt	11	5,661,631	4.66%
Spit - Cocktail Lounge	1	101,100	0.08%
Spit - Other Govt	4	525,200	0.43%
Spit - Restaurant	5	3,421,800	2.82%
<b>Commerical/Other Monthly Average T</b>	<b>378</b>	<b>55,148,575</b>	<b>45.39%</b>
<b>Res - Multi Family = 639 Units</b>	<b>121</b>	<b>11,675,563</b>	<b>9.61%</b>
<b>Res - Single Family</b>	<b>970</b>	<b>31,603,954</b>	<b>26.01%</b>
<b>Water Resale</b>	<b>3</b>	<b>23,072,500</b>	<b>18.99%</b>
<b>Grand</b>	<b>1,472</b>	<b>121,500,592</b>	<b>100.00%</b>



04/16/2012 to 05/11/2012 06/13/12 3.0980.01

	PREVIOUS BALANCE	██████████	06/13/2012	3.0980.01
	Water Service/Customer Charge	25.00		
641	653 12 W	5.30		
	Sewer Service/Customer Charge	20.00		
	Sewer Charges	11.96		
	Tax	4.67		
	Penalty			



Prior Year Usage: 19

Due Date: 06/15/2012

66.93

Residential 1200 gall

04/16/2012 to 05/14/2012 06/13/12 3.1610.01

Water Service/Customer Charge	25.00
1,057 1,098 41 W	18.12
Sewer Service/Customer Charge	20.00
Sewer Charges	40.88
Tax	7.80
Penalty	

06/13/2012 3.1610.01 111.80



Prior Year Usage: 47

Due Date: 06/15/2012 111.80

Residential 4100 gall

04/12/2012 to 05/10/2012 06/13/12 1.0050.01

PREVIOUS BALANCE	[REDACTED]	06/13/2012	1.0050.01	18,635.25
Water Service/Customer Charge				25.00
242,848	245,134	2,286	W	2,606.04
Sewer Service/Customer Charge				20.00
Sewer Charges				2,889.50
Tax				37.50
Penalty				180.02



Prior Year Usage: 2,503

Due Date: 06/15/2012

18,635.25

Commercial

228,600 gall

04/12/2012 to 05/10/2012 06/13/12 4.2020.03

	PREVIOUS BALANCE	-9.98	06/13/2012 4.2020.03	1,080.78
	Water Service/Customer Charge	25.00		
37,045	37,461 416 W	474.24		
	Sewer Service/Customer Charge	20.00		
	Sewer Charges	525.82		
	Tax	37.50		
	Penalty	8.20		



Prior Year Usage: 433

Due Date: 06/15/2012 1,080.78

Commercial  
41,600 gall

04/12/2012 to 05/14/2012 06/13/12 16.5000.01

	PREVIOUS BALANCE	-225.30	06/13/2012	16.5000.01
	Water Service/Customer Charge	25.00		
5,337	5,412 75 W	85.50		
	Sewer Service/Customer Charge	20.00		
	Sewer Charges	94.80		



Prior Year Usage: 78

Due Date: 06/15/2012

Commercial  
7,500 gallons

04/12/2012 to 05/10/2012 06/13/12 3.9465.01

				06/13/2012	3.9465.01	82.64
	Water Service/Customer Charge				25.00	
1,860	1,873	13	W		14.82	
	Sewer Service/Customer Charge				20.00	
	Sewer Charges				16.43	
	Tax				5.72	
	Penalty				.67	

**Prior Year Usage:** 18

Due Date: 06/15/2012 82.64

Commercial

1,300 gall



04/18/2012 to 05/10/2012 06/13/12 1.2470.02

Water Service/Customer Charge	75.00
1,742 1,788 46 W	20.33
Sewer Service/Customer Charge	60.00
Sewer Charges	45.86
Tax	15.09
Penalty	

06/13/2012 1.2470.02 216.28



Prior Year Usage: 68

Due Date: 06/15/2012 216.28

Multi-plex

3 units

4,600 gallons

MAY 30, 2012

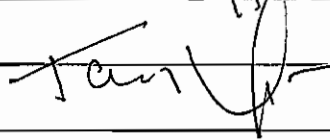
CITY OF HOMER

BETH WYTHE, CHAIRPERSON

MAY 31 2012 AM 11:37 AC

THIS LETTER IS TO INFORM THE CITY OF HOMER AND THE WATER & SEWER TASK FORCE THAT UNEXPECTED BUSINESS AND PERSONAL MATTERS MAKE MY SERVING ON THE WATER & SEWER TASK FORCE NO LONGER POSSIBLE.

I WANT TO THANK THE CITY AND TASK FORCE FOR ALLOWING ME TO SERVE AND DEEPLY REGRET MY RESIGNATION

Sincerely,  


TERRY YAGER

MAY 20 1951

City of Houston

Public Health Department

THIS OFFICE IS IN RECEIPT OF THE FOLLOWING

THE [REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED] [REDACTED]

IN THE [REDACTED] [REDACTED] [REDACTED]

IT IS THE POLICY OF THIS DEPARTMENT

TO [REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

CITY OF HOMER  
WATER & SEWER ENTERPRISE FUND  
WATER/SEWER RATE ANALYSIS

Water	2007 Rates	2008 Budget	2008 (2)	Sewer	2007 Rates	2008 Budget	2008 (2)	2007 Rates	2008 Budget	2008 (2)
Customer Charge	4.38	4.82		Customer Charge	3.98			3.98	4.38	
Commodity Charge per 1,000 Gallons	5.21	5.73		Commodity Charge per 1,000 gallons	9.12			9.12	10.03	
Bulk Rate Per 1,000 gallons	11.53	12.68	10.25	Service Charge - 5/8" Meter	16.95			16.95	18.65	
Bulk Rate Per 1,000 gallons at PW	15.17	16.69	13.00	Service Charge - 3/4" Meter	25.44			25.44	27.98	
Service Charge - 5/8" Meter	18.36	20.20		Service Charge - 1" Meter	42.39			42.39	46.63	
Service Charge - 3/4" Meter	27.54	30.29		Service Charge - 1 1/2" Meter	84.78			84.78	93.26	
Service Charge - 1" Meter	45.90	50.49		Service Charge - 2" Meter	135.65			135.65	149.22	
Service Charge - 1 1/2" Meter	91.78	100.96		Service Charge - 3" Meter	296.73			296.73	326.40	
Service Charge - 2" Meter	146.85	161.54		Service Charge - 4" Meter	534.12			534.12	587.53	
Service Charge - 3" Meter	321.14	353.25		Service Charge - 6" Meter	1,287.70			1,287.70	1,416.47	
Service Charge - 4" Meter	578.06	635.87								
Service Charge - 6" Meter	1,287.70	1,416.47		Residential Customer Charge						20.00
Excess use surcharge - 5/8 Meter, exceed 20,000 gallons	27.54	30.29		Flat Rate for Residential <= 2,000 Gallons						12.00
Excess use surcharge - 5/8 Meter, exceed 70,000 gallons	45.90	50.49		Residential <= 5,000 Gallons per 1,000 Gallons						7.00
Excess use surcharge - 3/4 Meter, exceed 70,000 gallons	45.90	50.49		Residential <= 10,000 Gallons per 1,000 Gallons						8.00
				Residential <= 20,000 Gallons per 1,000 Gallons						8.25
Residential Customer Charge			25.00	Residential > 10,000 Gallons per 1,000 Gallons						10.00
Flat Rate for Residential <= 2,000 Gallons			5.00	Residential Seasonal						
Residential <= 5,000 Gallons per 1,000 Gallons			4.00	Commercial Customer Charge						100.00
Residential <= 10,000 Gallons per 1,000 Gallons			5.00	Flat Rate for Commercial <= 5,000 Gallons						15.00
Residential <= 20,000 Gallons per 1,000 Gallons			6.50	Commercial <= 10,000 Gallons per 1,000 Gallons						8.00
Residential > 20,000 Gallons per 1,000 Gallons			9.00	Commercial <= 20,000 Gallons per 1,000 Gallons						8.25
Residential Discount for customers who use less than 1,000 gallons			12.50	Commercial <= 50,000 Gallons per 1,000 Gallons						8.25
Commercial Customer Charge			80.00	Commercial <= 100,000 Gallons per 1,000 Gallons						8.25
Flat Rate for Commercial <= 5,000 Gallons			10.00	Commercial > 100,000 Gallons per 1,000 Gallons						50.00
Commercial <= 10,000 Gallons per 1,000 Gallons			5.00	Commercial Seasonal						
Commercial <= 20,000 Gallons per 1,000 Gallons			6.50							
Commercial > 20,000 Gallons per 1,000 Gallons			9.00							
Commercial Seasonal			40.00							

	1,000 Gallon Usage		2,000 Gallon Usage		3,500 Gallon Usage	
	2007 Rates	2008 Budget	2007 Rates	2008 Budget	2007 Rates	2008 Budget
Average Residential Utility Bill:						
Water:	27.95	30.75	33.16	36.48	40.98	45.07
Sewer:	30.05	33.06	39.17	43.09	52.85	58.14
	58.00	63.80	72.33	79.56	93.83	103.21
Sales Tax	3.77	4.15	4.70	5.17	6.10	6.71
Average Residential Utility Bill:	61.77	67.95	77.03	84.73	99.92	109.92

	Customer No. 1 - 2,000 Gallons 5/8" Meter		Customer No. 2 - 25,000 Gallons 5/8" Meter		Customer No. 5 - 225,000 Gallons 2" Meter	
	2007 Rates	2008 Budget	2007 Rates	2008 Budget	2007 Rates	2008 Budget
Average Commercial Utility Bill:						
Water:	33.16	36.48	152.99	168.29	1,323.48	1,455.83
Sewer:	39.17	43.09	248.93	273.82	2,191.63	2,410.79
	72.33	79.56	401.92	442.11	3,515.11	3,866.62
Sales Tax	4.70	5.17	26.12	28.74	228.48	251.33
Average Commercial Utility Bill:	77.03	84.73	428.04	470.85	3,743.59	4,210.74
		(Increase = 141.30 @ mo)		(Increase = 108.45 @ mo)		(Increase = 467.15 @ mo)



**T R A N S M I T T A L**



**MONTGOMERY WATSON**

4100 Spenard Road  
Anchorage, Alaska 99517

Tel: (907) 248-8883  
Fax: (907) 248-8884

**Date:** August 11, 1997

**To:** Val Koeberlein, City of Homer

**From:** Brent Farr

**Re:** 1189035.01090020

The following items are:

- Requested       Enclosed       Sent Separately via \_\_\_\_\_  
 Report       Specification       Cost Estimate       Shop Drawings  
 Test Result       Prints       Test Sample       Other

No. of Copies	Description
1	1996 Utility Rate Study - Final Report.
1	1996 Utility Rate Study - Final Rate Model on Disk.

This data is submitted:

- At your request       For your action  
 For your approval       For your files  
 For your review       For your information

**General Remarks:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# CITY OF HOMER UTILITY RATE STUDY

August 11, 1997

Prepared for:

City of Homer  
491 East Pioneer Avenue  
Homer, Alaska 99603

Prepared by:

Montgomery Watson  
4100 Spenard Road  
Anchorage, Alaska 99517



**MONTGOMERY WATSON**



A couple of unique aspects exist within the demand cost portion of the rate structure. The new rate structure does not recognize separate classes of customers (residential, commercial, public authority, etc.) Rather, all customers with a given meter size pay the same demand rate. The exceptions to this rule are the customers that are located on the Homer Spit. Due to the large capital costs associated with providing service to those customers, a surcharge is applied to their demand rate.

Another unique feature added to the rate structure is application of a demand surcharge to customers that far exceed the normal range of water consumption for a given meter size. This feature adds a conservation incentive to the rate structure.

Customer costs comprise those costs associated with serving customers, irrespective of the amount or rate of water use. They include meter reading, billing, and customer accounting and collecting expenses, as well as maintenance and capital costs related to meters and services.

A hard copy of the water utility rate structure is attached, and a diskette containing the rate model has been provided. Data used in the model is 1997 data provided by the City of Homer.

### **Wastewater Utility**

The wastewater utility rate structure is based on the same methodology as the water utility rate structure. The costs are allocated to customer, commodity, and demand categories. The demand costs are distributed based on the equivalent meter concept, and a surcharge is applied to customers located on the Homer Spit.

Kachemak City customers that receive service from the City of Homer are treated like any other residential customer within the City of Homer, with one exception: an additional charge is assessed to cover the cost of pumping each resident's septic tank.

A hard copy of the wastewater utility rate structure is attached, and a diskette containing the rate model has been provided.

### **USING THE RATE MODELS**

The rate model was written on Microsoft Excel. One of the objectives of the rate study was to create a model that was easy to update so that rates would always reflect the current needs of the utility. The individual responsible for updating the water and wastewater models should open the desired document and locate the first sheet in the workbook entitled "Input Data". This is the only sheet in the workbook that is not protected. All other sheets are protected so that formulas and other critical data are not accidentally altered. The password for the water model is simply "water". The password for the wastewater model is "sewer". The passwords must be entered in lower case.

The first sheet in the workbook prompts the user for specific information relating to the utility. Revenue requirements, water sales, and the number of customers by meter size are all examples of the type of data required. Most of the data is readily available through the City of Homer at City Hall, or through the Department of Public Works. Once the data has been entered, the spreadsheet calculates the rates automatically. The second worksheet in the workbook shows the rates that reflect the entered data. This information should be used to formulate customer bills. The remainder of the sheets contain formulas and show how the rates are derived.

C

CITY OF HOMER  
UTILITY RATE STUDY

WATER UTILITY

**FINAL RATE MODEL  
AUGUST 11, 1997**

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

**INPUT DATA: ENTER THE CORRECT DATA IN THE HIGHLIGHTED BOXES.**

<b>REVENUE REQUIREMENTS</b>		
<u>Dept.</u>	<u>Component</u>	<u>Requirement</u>
403	Pump Station	\$ 55,000
405	Water Reservoir Maintenance	\$ 16,000
404	Water Distribution Operations	\$ 119,100
407	Water Hydrants Maintenance	\$ 51,800
401	Treatment Plant Operations	\$ 185,000
402	Treatment Plant Testing	\$ 28,400
406	Meter Operations	\$ 39,500
400	Administrative and General	\$ 440,200
400	Debt Service	\$ 79,500
400	Capital Reserve	\$ 128,000
400	Fleet Allocation	\$ 20,000

<b>METER AND BILLING FIGURE FROM THE OVERHEAD BUDGET</b>		\$ 87,059
<b>PERCENTAGE OF FIXED COSTS ALLOCATED TO THE HOMER SPIT</b>		
<u>Dept.</u>	<u>Expenditure Component</u>	<u>Percentage (%)</u>
403	Pump Station	15
405	Water Reservoir Maintenance	25
404	Water Distribution Operations	15
407	Water Hydrants Maintenance	10

<b>ESTIMATED ANNUAL WATER SALES IN GALLONS</b>	146,810,160
<b>ESTIMATED ANNUAL BULK WATER SALES IN GALLONS</b>	18,146,677

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

INPUT DATA: ENTER THE CORRECT DATA IN THE HIGHLIGHTED BOXES.

NUMBER OF WATER CUSTOMERS BY METER SIZE

Meter Size	Total	Spit.
5/8	964	15
3/4	44	5
1	67	2
1 1/2	33	1
2	18	4
3	3	1
4	1	0
6	0	0
TOTAL	1130	28

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

**MONTHLY RATES FOR THE CITY OF HOMER WATER CUSTOMERS**

**CUSTOMER CHARGE** \$9.33

**COMMODITY CHARGE  
PER 1,000 GALLONS** \$2.58

**BULK RATE PER  
1,000 GALLONS** \$6.50

**SERVICE CHARGE**

Meter Size	General Service Charge	Spit Service Charge
5/8	\$ 27.44	\$ 110.64
3/4	\$ 41.15	\$ 165.97
1	\$ 68.59	\$ 276.61
1 1/2	\$ 137.18	\$ 553.22
2	\$ 219.49	\$ 885.16
3	\$ 480.13	\$ 1,936.26
4	\$ 864.23	\$ 3,485.27
6	\$ 1,920.52	\$ 7,745.03

**EXCESS USE SURCHARGE**

Meter Size	Monthly Use Exceeds	General Service Charge	Spit Service Charge
5/8	20,000 gallons	\$ 41.15	\$ 165.97
5/8	70,000 gallons	\$ 68.59	\$ 276.61
3/4	70,000 gallons	\$ 68.59	\$ 276.61

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

<u>Annual Revenue Requirement</u>		<u>Allocation</u>					
Dept.	Expenditure Component	Revenue Requirement	Meter and Billing Costs	Variable Costs	Fixed Costs	Fixed Costs Spilt	Spit (%)
	O&M Expenses:						
403	Pump Station	\$ 55,000			\$ 46,750	\$ 8,250	15
405	Water Reservoir Maintenance	\$ 16,000			\$ 12,000	\$ 4,000	25
404	Water Distribution Operations	\$ 119,100			\$ 101,235	\$ 17,865	15
407	Water Hydrants Maintenance	\$ 51,800			\$ 46,620	\$ 5,180	10
401	Treatment Plant Operations	\$ 185,000		\$ 185,000			
402	Treatment Plant Testing	\$ 28,400		\$ 28,400			
406	Meter Operations	\$ 39,500	\$ 39,500				
400	Administrative and General	\$ 440,200	\$ 87,059	\$ 165,518	\$ 160,248	\$ 27,376	
	Capital Requirements:						
400	Debt Service	\$ 79,500			\$ 79,500		
400	Capital Reserve	\$ 128,000			\$ 108,800	\$ 19,200	
400	Fleet Allocation	\$ 20,000			\$ 20,000		
	Total	\$ 1,162,500	\$ 126,559	\$ 378,918	\$ 575,153	\$ 81,871	Check:
	Monthly Revenue Requirements	\$ 96,875	\$ 10,547	\$ 31,576	\$ 47,929	\$ 6,823	\$ 96,875

FINAL  
AUGUST 11, 1997

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

**DETERMINATION OF CUSTOMER RATE**

Monthly Meter and Billing Costs:	\$10,547	
Average Number of Water Customers	1130	
Monthly Customer Rate	<table border="1"><tr><td>\$9.33</td></tr></table>	\$9.33
\$9.33		

**DETERMINATION OF COMMODITY RATE**

Annual Variable Cost	\$378,918	
Annual Water Sales in Gallons	146,810,160	
Commodity Rate Per 1000 Gallons	<table border="1"><tr><td>\$2.58</td></tr></table>	\$2.58
\$2.58		

**DETERMINATION OF BULK RATE**

Annual Bulk sales in Gallons	13,146,677	
Total Sales in Gallons	146,810,160	
Bulk % of Total:	8.95	
Annual Fixed Cost	\$575,153	
Fixed Cost to be paid by Bulk Users:	\$51,504	
Surcharge Per 1000 Gallons	\$3.92	
Commodity Rate Per 1000 Gallons	\$2.58	
Total Bulk Rate Per 1000 Gallons	<table border="1"><tr><td>\$6.50</td></tr></table>	\$6.50
\$6.50		

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

**DETERMINATION OF FIXED RATES**

Total annual revenue requirement to be covered by fixed rates:	\$ 575,153
Less amount charged to Bulk Users:	\$ 51,504
Monthly revenue requirement:	\$ 43,637

Meter Size	No. of Cust.	Equiv. Meters	Index Number	Fixed Rate	Monthly Revenue
5/8	964	1	1.00	\$ 27.44	\$ 26,448.33
3/4	44	1.5	1.50	\$ 41.15	\$ 1,810.78
1	67	2.5	2.50	\$ 68.59	\$ 4,595.53
1 1/2	33	5	5.00	\$ 137.18	\$ 4,526.94
2	18	8	8.00	\$ 219.49	\$ 3,950.79
3	3	17.5	17.50	\$ 480.13	\$ 1,440.39
4	1	31.5	31.50	\$ 864.23	\$ 864.23
6	0	70	70.00	\$ 1,920.52	\$ -
<b>Totals</b>	<b>1130</b>				<b>\$ 43,637.00</b>

**SPIT SURCHARGE**

Total annual revenue requirement to be covered by fixed rates:	\$ 81,871
Monthly revenue requirement:	\$ 6,823

Meter Size	No. of Cust.	Equiv. Meters	Index Number	Surcharge	Monthly Revenue
5/8	15	1	1.00	\$ 83.21	\$ 1,248.11
3/4	5	1.5	1.50	\$ 124.81	\$ 624.05
1	2	2.5	2.50	\$ 208.02	\$ 416.04
1 1/2	1	5	5.00	\$ 416.04	\$ 416.04
2	4	8	8.00	\$ 665.66	\$ 2,662.63
3	1	17.5	17.50	\$ 1,456.13	\$ 1,456.13
4	0	31.5	31.50	\$ 2,621.03	\$ -
6	0	70	70.00	\$ 5,824.51	\$ -
<b>Totals</b>	<b>28</b>				<b>\$ 6,823.00</b>

**TOTAL SPIT FIXED RATES**

Meter Size	Fixed Rate
5/8	\$ 110.64
3/4	\$ 165.97
1	\$ 276.61
1 1/2	\$ 553.22
2	\$ 885.15
3	\$ 1,936.26
4	\$ 3,485.27
6	\$ 7,745.03

**EXCESS USE SURCHARGE**

Meter Size	Monthly Use Exceeds	General Service Charge	Spit Service Charge
5/8	20,000 gallons	\$ 41.15	\$ 165.97
5/8	70,000 gallons	\$ 68.59	\$ 276.61
3/4	70,000 gallons	\$ 68.59	\$ 276.61

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

**COMPARISON OF 1994 RATES WITH PROPOSED RATES**

**CUSTOMER RATE:**

1994 NONE  
PROPOSED \$9.33

**BULK RATE:**

1994 Surcharge Per 1000 Gallons \$1.65  
Commodity Rate Per 1000 Gallons \$2.94  
Total Bulk Rate Per 1000 Gallons \$4.59

**VARIABLE RATE:**

1994 \$2.94  
PROPOSED \$2.58

PROPOSED Surcharge Per 1000 Gallons \$3.92  
Commodity Rate Per 1000 Gallons \$2.58  
Total Bulk Rate Per 1000 Gallons \$6.50

% CHANGE: -12.2

% CHANGE 41.6

**FIXED RATES:**

Residential

Meter Size	1994	Proposed	% Change
5/8	\$ 22.74	\$ 27.44	20.7
3/4	\$ 28.48	\$ 41.15	44.5
1	\$ 39.95	\$ 68.59	71.7
1 1/2	\$ 68.64	\$ 137.18	99.9
2	\$ 103.07	\$ 219.49	113.0
3	\$ 183.57	\$ 480.13	161.6
4	\$ 284.32	\$ 864.23	204.0
6	\$ 517.12	\$ 1,920.52	271.4

Commercial

Meter Size	1994	Proposed	% Change
5/8	\$ 33.55	\$ 27.44	-18.2
3/4	\$ 43.06	\$ 41.15	-4.4
1	\$ 62.06	\$ 68.59	10.5
1 1/2	\$ 109.58	\$ 137.18	25.2
2	\$ 166.61	\$ 219.49	31.7
3	\$ 679.81	\$ 480.13	-29.4
4	\$ 529.71	\$ 864.23	63.2
6	\$ 1,016.26	\$ 1,920.52	89.0

Public Authority

Meter Size	1994	Proposed	% Change
5/8	\$ 38.04	\$ 27.44	-27.9
3/4	\$ 52.26	\$ 41.15	-21.3
1	\$ 57.99	\$ 68.59	18.3
1 1/2	\$ 91.24	\$ 137.18	50.4
2	\$ 131.14	\$ 219.49	67.4
3	\$ 490.23	\$ 480.13	-2.1
4	\$ 490.89	\$ 864.23	76.1
6	\$ 901.13	\$ 1,920.52	113.1

Spit.

Meter Size	1994	Proposed	% Change
5/8	\$ 87.28	\$ 110.64	26.8
3/4	\$ 112.58	\$ 165.97	47.4
1	\$ 163.19	\$ 276.61	69.5
1 1/2	\$ 289.70	\$ 553.22	91.0
2	\$ 441.52	\$ 885.15	100.5
3	\$ 1,200.00	\$ 1,936.26	61.4
4	\$ 1,500.00	\$ 3,485.27	132.4
6	\$ 3,000.00	\$ 7,745.03	158.2

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

**COMPARISON OF 1994 BILL WITH PROPOSED BILL**

**MONTHLY WATER BILL AS A FUNCTION OF WATER CONSUMPTION**

<u>Residential User Class</u>					
Meter Size	Water Cons. (1000 gal)	Current	Recommended	% Change	# of Customers Affected
5/8	0	\$ 22.74	\$ 36.77	62	783
	1	\$ 25.68	\$ 39.35	53	
	3	\$ 31.56	\$ 44.51	41	
	5	\$ 37.44	\$ 49.67	33	
	10	\$ 52.14	\$ 62.58	20	
3/4	0	\$ 28.48	\$ 50.49	77	16
	1	\$ 31.42	\$ 53.07	69	
	3	\$ 37.30	\$ 58.23	56	
	5	\$ 43.18	\$ 63.39	47	
	10	\$ 57.88	\$ 76.30	32	
1	0	\$ 39.95	\$ 77.92	95	30
	3	\$ 48.77	\$ 85.67	76	
	5	\$ 54.65	\$ 90.83	66	
	10	\$ 69.35	\$ 103.73	50	
	15	\$ 84.05	\$ 116.64	39	
1.5	0	\$ 68.64	\$ 146.51	113	19
	3	\$ 77.46	\$ 154.26	99	
	5	\$ 83.34	\$ 159.42	91	
	10	\$ 98.04	\$ 172.32	76	
	15	\$ 112.74	\$ 185.23	64	
2	0	\$ 103.07	\$ 228.82	122	1
	3	\$ 111.89	\$ 236.56	111	
	5	\$ 117.77	\$ 241.73	105	
	10	\$ 132.47	\$ 254.63	92	
	15	\$ 147.17	\$ 267.54	82	
3	0	\$ 183.57	\$ 489.46	167	0
	5	\$ 198.27	\$ 502.37	153	
	10	\$ 212.97	\$ 515.27	142	
	15	\$ 227.67	\$ 528.18	132	
	20	\$ 242.37	\$ 541.08	123	
4	0	\$ 284.32	\$ 873.57	207	0
	5	\$ 299.02	\$ 886.47	196	
	10	\$ 313.72	\$ 899.38	187	
	15	\$ 328.42	\$ 912.28	178	
	20	\$ 343.12	\$ 925.19	170	

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

COMPARISON OF 1994 BILL WITH PROPOSED BILL

MONTHLY WATER BILL AS A FUNCTION OF WATER CONSUMPTION

Commercial User Class

Meter Size	Water Cons. (1000 gal)				% Change	# of Customers Affected
		Current	Recommended			
5/8	0	\$ 33.55	\$ 36.77		10	118
	3	\$ 42.37	\$ 44.51		5	
	5	\$ 48.25	\$ 49.67		3	
	10	\$ 62.95	\$ 62.58		-1	
	15	\$ 77.65	\$ 75.48		-3	
3/4	0	\$ 43.06	\$ 50.49		17	20
	3	\$ 51.88	\$ 58.23		12	
	5	\$ 57.76	\$ 63.39		10	
	10	\$ 72.46	\$ 76.30		5	
	15	\$ 87.16	\$ 89.20		2	
1	0	\$ 62.06	\$ 77.92		26	23
	3	\$ 70.88	\$ 85.67		21	
	5	\$ 76.76	\$ 90.83		18	
	10	\$ 91.46	\$ 103.73		13	
	15	\$ 106.16	\$ 116.64		10	
1.5	0	\$ 109.58	\$ 146.51		34	8
	5	\$ 124.28	\$ 159.42		28	
	10	\$ 138.98	\$ 172.32		24	
	15	\$ 153.68	\$ 185.23		21	
	20	\$ 168.38	\$ 198.13		18	
2	0	\$ 166.61	\$ 228.82		37	6
	5	\$ 181.31	\$ 241.73		33	
	10	\$ 196.01	\$ 254.63		30	
	15	\$ 210.71	\$ 267.54		27	
	20	\$ 225.41	\$ 280.44		24	
3	0	\$ 679.81	\$ 489.46		-28	1
	5	\$ 694.51	\$ 502.37		-28	
	10	\$ 709.21	\$ 515.27		-27	
	15	\$ 723.91	\$ 528.18		-27	
	20	\$ 738.61	\$ 541.08		-27	
4	0	\$ 529.71	\$ 873.57		65	1
	5	\$ 544.41	\$ 886.47		63	
	10	\$ 559.11	\$ 899.38		61	
	15	\$ 573.81	\$ 912.28		59	
	20	\$ 588.51	\$ 925.19		57	
6	0	\$ 1,016.26	\$ 1,929.86		90	0
	1	\$ 1,019.20	\$ 1,932.44		90	
	3	\$ 1,025.08	\$ 1,937.60		89	
	5	\$ 1,030.96	\$ 1,942.76		88	
	10	\$ 1,045.66	\$ 1,955.67		87	

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

**COMPARISON OF 1994 BILL WITH PROPOSED BILL**

MONTHLY WATER BILL AS A FUNCTION OF WATER CONSUMPTION

<u>Public Authority User Class</u>					
Meter Size	Water Cons. (1000 gal)	Current	Recommended	% Change	# of Customers Affected
5/8	0	\$ 38.04	\$ 36.77	-3	6
	3	\$ 46.86	\$ 44.51	-5	
	5	\$ 52.74	\$ 49.67	-6	
	10	\$ 67.44	\$ 62.58	-7	
	15	\$ 82.14	\$ 75.48	-8	
3/4	0	\$ 52.26	\$ 50.49	-3	0
	3	\$ 61.08	\$ 58.23	-5	
	5	\$ 66.96	\$ 63.39	-5	
	10	\$ 81.66	\$ 76.30	-7	
	15	\$ 96.36	\$ 89.20	-7	
1	0	\$ 57.99	\$ 77.92	34	10
	5	\$ 72.69	\$ 90.83	25	
	10	\$ 87.39	\$ 103.73	19	
	15	\$ 102.09	\$ 116.64	14	
	20	\$ 116.79	\$ 129.54	11	
1.5	0	\$ 91.24	\$ 146.51	61	4
	5	\$ 105.94	\$ 159.42	50	
	10	\$ 120.64	\$ 172.32	43	
	15	\$ 135.34	\$ 185.23	37	
	20	\$ 150.04	\$ 198.13	32	
2	0	\$ 131.14	\$ 228.82	74	5
	5	\$ 145.84	\$ 241.73	66	
	10	\$ 160.54	\$ 254.63	59	
	15	\$ 175.24	\$ 267.54	53	
	20	\$ 189.94	\$ 280.44	48	
3	0	\$ 490.23	\$ 489.46	0	1
	5	\$ 504.93	\$ 502.37	-1	
	10	\$ 519.63	\$ 515.27	-1	
	15	\$ 534.33	\$ 528.18	-1	
	20	\$ 549.03	\$ 541.08	-1	
4	0	\$ 490.89	\$ 873.57	78	0
	5	\$ 505.59	\$ 886.47	75	
	10	\$ 520.29	\$ 899.38	73	
	15	\$ 534.99	\$ 912.28	71	
	20	\$ 549.69	\$ 925.19	68	
6	0	\$ 901.13	\$ 1,929.86	114	0
	5	\$ 915.83	\$ 1,942.76	112	
	10	\$ 930.53	\$ 1,955.67	110	
	15	\$ 945.23	\$ 1,968.57	108	
	20	\$ 959.93	\$ 1,981.48	106	

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WATER UTILITY

COMPARISON OF 1994 BILL WITH PROPOSED BILL

MONTHLY WATER BILL AS A FUNCTION OF WATER CONSUMPTION

<u>Spit User Class</u>					
Meter Size	Water Cons. (1000 gal)	Current	Recommended	% Change	# of Customers Affected
5/8	0	\$ 87.28	\$ 119.98	37	13
	3	\$ 96.10	\$ 127.72	33	
	5	\$ 101.98	\$ 132.88	30	
	10	\$ 116.68	\$ 145.79	25	
	15	\$ 131.38	\$ 158.69	21	
3/4	0	\$ 112.58	\$ 175.30	56	5
	3	\$ 121.40	\$ 183.04	51	
	5	\$ 127.28	\$ 188.20	48	
	10	\$ 141.98	\$ 201.11	42	
	15	\$ 156.68	\$ 214.01	37	
1	0	\$ 163.19	\$ 285.94	75	2
	3	\$ 172.01	\$ 293.68	71	
	5	\$ 177.89	\$ 298.85	68	
	10	\$ 192.59	\$ 311.75	62	
	15	\$ 207.29	\$ 324.66	57	
1.5	0	\$ 289.70	\$ 562.55	94	1
	5	\$ 304.40	\$ 575.46	89	
	10	\$ 319.10	\$ 588.36	84	
	15	\$ 333.80	\$ 601.27	80	
	20	\$ 348.50	\$ 614.17	76	
2	0	\$ 441.52	\$ 894.48	103	5
	5	\$ 456.22	\$ 907.39	99	
	10	\$ 470.92	\$ 920.29	95	
	20	\$ 500.32	\$ 946.10	89	
	40	\$ 559.12	\$ 997.72	78	
3	0	\$ 1,200.00	\$ 1,945.59	62	1
	5	\$ 1,214.70	\$ 1,958.50	61	
	10	\$ 1,229.40	\$ 1,971.40	60	
	20	\$ 1,258.80	\$ 1,997.21	59	
	40	\$ 1,317.60	\$ 2,048.83	55	
4	0	\$ 1,500.00	\$ 3,494.60	133	1
	5	\$ 1,514.70	\$ 3,507.50	132	
	10	\$ 1,529.40	\$ 3,520.41	130	
	20	\$ 1,558.80	\$ 3,546.22	127	
	40	\$ 1,617.60	\$ 3,597.84	122	
6	0	\$ 3,000.00	\$ 7,754.37	158	0
	5	\$ 3,014.70	\$ 7,767.27	158	
	10	\$ 3,029.40	\$ 7,780.18	157	
	20	\$ 3,058.80	\$ 7,805.99	155	
	40	\$ 3,117.60	\$ 7,857.61	152	

CITY OF HOMER  
UTILITY RATE STUDY

WASTEWATER UTILITY

**FINAL RATE MODEL**  
**AUGUST 11, 1997**

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WASTEWATER UTILITY

**INPUT DATA: ENTER THE CORRECT DATA IN THE HIGHLIGHTED BOXES.**

**REVENUE REQUIREMENTS**

Dept.	Expenditure Component	Revenue Requirement	Variable Cost <sup>2</sup>	Fixed Cost <sup>2</sup>
500	Administrative and General	\$ 435,190		
501	Sewer Treatment Plant Operations	\$ 261,870	\$ 106,590	\$ 155,280
502	Sewer Treatment Plant Testing	\$ 41,970		
503	Pump Station Operations	\$ 70,950	\$ 12,000	\$ 31,244
504	Collection System <sup>1</sup>	\$ 67,140		
500	Debt Service	\$		
500	Capital Reserve	\$ 60,000		
500	Fleet Allocation	\$ 20,000		
	Kachemak City Septage <sup>1</sup>	\$ 5,000		

<sup>1</sup> Collection system normalization:

Kachemak City pumping takes place every two years. The cost of pumping should be divided in half and applied to each year rather than applying a bi-annual cost.

Revenue requirements for septage pumping should be removed from Dept. 504 and reported in the Kachemak City Septage box.

Example:     Projected 1998 Bi-Annual Cost: \$ 10,000  
                   Projected 1997 Annual Cost: \$ 5,000

<sup>2</sup> Variable vs. Fixed Costs:

Variable costs for Department 501 are line items 5203 Fuel/Lube, 5204 Chemicals, and 5217 Electricity. The only variable cost for Department 503 is line item 5217 Electricity.

**METER AND BILLING FIGURE FROM THE OVERHEAD BUDGET**

\$ 87,059

**PERCENTAGE OF FIXED COSTS ALLOCATED TO THE HOMER SPIT**

Dept.	Expenditure Component	Percentage (%)
503	Pump Station Operations	47
504	Collection System	34

**ESTIMATED ANNUAL FLOW TO THE WW TREATMENT PLANT**

125,903,320

This number may be derived by starting with the total annual water sales, adding the contribution from Kachemak City, and subtracting water sold to water-only customers and any other water that does not return to the Plant (Icicle Seafoods, for example).

CITY OF HOMER  
 1996 UTILITY RATE STUDY  
 WASTEWATER UTILITY

INPUT DATA: ENTER THE CORRECT DATA IN THE HIGHLIGHTED BOXES.

DETERMINATION OF THE NUMBER OF SEWER CUSTOMERS BY METER SIZE

Number of water customers by meter size:

Meter Size	Total	Spit
5/8	964	15
3/4	44	5
1	67	2
1 1/2	33	1
2	18	4
3	3	1
4	1	0
6	0	0
<b>TOTAL</b>	<b>1130</b>	<b>28</b>

ADJUSTMENTS:

Subtract the number of metered water users without wastewater service:

Meter Size	Total	Spit
5/8	75	0
3/4	2	0
1	2	2
1 1/2	0	0
2	0	0
3	0	0
4	0	0
6	0	0
<b>TOTAL</b>	<b>79</b>	<b>2</b>

Add the Kachemak City users as 5/8 inch residential customers:

73

Add any residential wastewater-only customers as 5/8 inch residential customers:

9

Total number of wastewater customers by meter size:

Meter Size	Total	Spit
5/8	971	15
3/4	42	5
1	65	0
1 1/2	33	1
2	18	4
3	3	1
4	1	0
6	0	0
<b>TOTAL</b>	<b>1133</b>	<b>26</b>

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WASTEWATER UTILITY

**MONTHLY RATES FOR CITY OF HOMER WASTEWATER CUSTOMERS**

**CUSTOMER CHARGE** \$6.84

**COMMODITY CHARGE  
PER 1,000 GALLONS** \$4.44

**SERVICE CHARGE**

Meter Size	General Service Charge	Spit Service Charge
5/8	\$ 13.15	\$ 67.84
3/4	\$ 19.73	\$ 101.76
1	\$ 32.88	\$ 169.60
1 1/2	\$ 65.76	\$ 339.20
2	\$ 105.21	\$ 542.71
3	\$ 230.14	\$ 1,167.18
4	\$ 414.25	\$ 2,136.93
6	\$ 920.55	\$ 4,748.73

**KACHEMAK CITY**

Customer Charge	\$
Commodity Charge based on 3,500 gallons of wastewater/month	\$ 15.53
Service Charge	\$ 13.15
Septage Pumping Charge	\$ 5.71
<b>Total Charge</b>	<b>\$ 34.39</b>

**WASTEWATER ONLY CUSTOMERS WITH CITY SEPTAGE SERVICE**

Customer Charge	\$ 6.84
Commodity Charge based on 3,500 gallons of wastewater/month	\$ 15.53
Service Charge	\$ 13.15
Septage Pumping Charge	\$ 5.71
<b>Total Charge</b>	<b>\$ 31.23</b>

**WASTEWATER ONLY CUSTOMERS WITHOUT CITY SEPTAGE SERVICE**

Customer Charge	\$ 6.84
Commodity Charge based on 3,500 gallons of wastewater/month	\$ 15.53
Service Charge	\$ 13.15
Septage Pumping Charge	\$
<b>Total Charge</b>	<b>\$ 35.52</b>

CITY OF JAMER  
1996 UTILITY RATE STUDY  
WASTEWATER UTILITY

Annual Revenue Requirement		Revenue Requirement
Dept.	Expenditure Component	
	O&M Expenses:	
500	Administrative and General	\$ 435,190
501	Sewer Treatment Plant Operations	\$ 261,870
502	Sewer Treatment Plant Testing	\$ 41,970
503	Pump Station Operations	\$ 70,950
504	Collection System	\$ 67,140
	Capital Requirements:	
500	Debt Service	\$ -
500	Capital Reserve	\$ 50,000
500	Fleet Allocation	\$ 20,000
	Total	\$ 947,120
	Monthly Revenue Requirements	\$ 78,927

Allocation						
Meter and Billing Costs	Variable Costs	Fixed Costs	Spit Fixed Costs	Percent Spit Fixed Costs	Kachemak City Septage	
\$ 87,059	\$ 348,131	\$ -	\$ -		\$ -	
	\$ 106,590	\$ 155,280	\$ -		\$ -	
	\$ 41,970	\$ -	\$ -		\$ -	
	\$ 12,000	\$ 31,244	\$ 27,707	47	\$ -	
	\$ -	\$ 44,312	\$ 22,828	34	\$ 5,000	
	\$ 50,000	\$ -				
		\$ 20,000				
\$ 87,059	\$ 558,691	\$ 250,836	\$ 50,534		\$ 5,000	
\$ 7,255	\$ 46,558	\$ 20,903	\$ 4,211		\$ 417	

Check:  
\$ 947,121  
\$ 78,927

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WASTEWATER UTILITY

**DETERMINATION OF CUSTOMER CHARGE**

Monthly Meter and Billing Costs:	\$7,255	
Average Number of Sewer Bills	1060	(Kachemak City treated as one customer)
Monthly Customer Rate	\$6.84	

**DETERMINATION OF COMMODITY CHARGE**

Annual Variable Cost \$558,691

Annual Water Sales in Gallons	146,810,160
Contribution from Kachemak City and others (82 @ 3230 gallons per month)	3,444,000
Water sold to non-sewer customers	20,000,000
Icicle Seafoods water that is not sent to the Plant	4,350,840

- This information is shown only for an example of how to calculate flows to the Plant.

Total estimated Wastewater flow to the Plant 125,903,320

Commodity Rate Per 1000 Gallons \$4.44

**SPECIAL NOTE:**

1. Kachemak city and other residences that are not hooked up to the water system shall pay a commodity charge based upon an average monthly household flow of 3,500 gallons.

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WASTEWATER UTILITY

**DETERMINATION OF SERVICE CHARGE**

Total annual revenue requirement to be covered by service charges: \$ 250,836

Monthly revenue requirement: \$ 20,903

Meter Size	No. of Cust.	Equiv. Meters	Index Number	Fixed Rate	Monthly Revenue
5/8	971	1	1.00	\$ 13.15	\$ 12,769.33
3/4	42	1.5	1.50	\$ 19.73	\$ 828.49
1	65	2.5	2.50	\$ 32.88	\$ 2,136.99
1 1/2	33	5	5.00	\$ 65.75	\$ 2,169.87
2	18	8	8.00	\$ 105.21	\$ 1,893.70
3	3	17.5	17.50	\$ 230.14	\$ 690.41
4	1	31.5	31.50	\$ 414.25	\$ 414.25
6	0	70	70.00	\$ 920.55	\$ -
<b>Totals</b>	<b>1133</b>				<b>\$ 20,903.03</b>

**SPIT SURCHARGE**

Total annual revenue requirement to be covered by spit service charge: \$ 50,534

Monthly revenue requirement: \$ 4,211

Meter Size	No. of Cust.	Equiv. Meters	Index Number	Surcharge	Monthly Revenue
5/8	15	1	1.00	\$ 54.69	\$ 820.32
3/4	5	1.5	1.50	\$ 82.03	\$ 410.16
1	0	2.5	2.50	\$ 136.72	\$ -
1 1/2	1	5	5.00	\$ 273.44	\$ 273.44
2	4	8	8.00	\$ 437.51	\$ 1,750.03
3	1	17.5	17.50	\$ 957.05	\$ 957.05
4	0	31.5	31.50	\$ 1,722.68	\$ -
6	0	70	70.00	\$ 3,828.18	\$ -
<b>Totals</b>	<b>26</b>				<b>\$ 4,211.00</b>

**TOTAL SPIT SERVICE CHARGE**

Meter Size	Fixed Rate
5/8	\$ 67.84
3/4	\$ 101.76
1	\$ 169.60
1 1/2	\$ 339.20
2	\$ 542.71
3	\$ 1,187.18
4	\$ 2,136.93
6	\$ 4,748.73

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WASTEWATER UTILITY

**DETERMINATION OF KACHEMAK CITY RATE**

Annual revenue requirement associated with septage pumping:	<u>\$ 5,000</u>
Monthly revenue requirement:	<u>\$ 417</u>
Number of Kachemak City customers:	73
Monthly cost per customer for septage pumping:	\$ 5.71
The monthly bill for a Kachemak City sewer customer:	
Customer Rate:	\$ -
Variable Rate based on 3,500 gallons of wastewater/month:	\$ 15.53
Fixed Rate:	\$ 13.15
Septage Cost:	<u>\$ 5.71</u>
Total:	\$34.39

The monthly bill sent to Kachemak City for Sewer Service:

(Number of customers \* monthly rate) + one customer charge = \$ 2,517

**OTHER SEPTAGE CUSTOMERS**

Customer Rate:	\$ 6.84
Variable Rate based on 3,500 gallons of wastewater/month:	\$ 15.53
Fixed Rate:	\$ 13.15
Septage Cost:	<u>\$ 5.71</u>
Total:	\$41.23
Without city septage pumping service:	\$35.53

CITY OF HOMER  
1996 UTILITY RATE STUDY  
WASTEWATER UTILITY

**CURRENT RATE STRUCTURE**

The following information is from the 1994 rate structure:

Most wastewater users are charged as follows:

<u>Customer Class</u>	<u>Cost per thousand gallons</u>
Restaurants and Bakeries	\$6.47
All other domestic-strength discharges	\$5.19
Other non-domestic strength discharges	\$4.19 + \$.00211 mg/l BOD
Septage Customers	\$134.57

Kachemak City customers are currently charged \$21.41 a month which includes the cost for pumping septage.

The following are the only wastewater customers that are charged something other than the \$5.19 volumetric charge:

<u>Customer</u>	<u>Rate</u>
GLACIBU001: Small grocery store and cocktail lounge outside City limits	\$92.52/month
WHITERL001: Residence located outside of town	\$28.70/month
MAININV001:	\$5.25/1000 gal
MILARCO001:	\$5.02/1000 gal
WASHBOA001:	\$5.19/1000 gal
HOMELKS001:	\$5.95/1000 gal

