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March 17, 2016

Ms. Luly Massaro, Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, RI 02888

***Re: City of Newport, Utilities Department, Water Division  
Docket 4595***

Dear Ms. Massaro:

Enclosed please find an original and nine (9) copies of the following document:

1. City of Newport, Utilities Division, Water Department's Response to the Portsmouth Water And Fire District's Data Request (Set 2).

Please note that an electronic copy of this document has been provided to the service list.

Thank you for your attention to this matter.

Sincerely,



Joseph A. Keough, Jr.

JAK/kf  
Enclosure  
cc: Docket 4595 Service List (*via electronic mail*)



**PWFD 2-1:** Referring to Newport Water's Response to Data Request PWFD 1-4:

- a. Please provide the analysis that showed "very little day to day variability" for the residential class and "slight" variability for the non-residential class.
- b. Please provide any and all analyses that Newport Water performed that demonstrate and/or support Newport Water's assumption that non-residential customers "would only use water six days a week."
- c. Please explain Newport Water's basis for concluding that it is appropriate to use a new calculation for some customers and not others and provide any documents or other materials upon which Newport Water relied to reach that conclusion.
- d. If Newport Water was to apply adjustment factors for PWFD and the Navy, please identify what those adjustment factors would be to permit PWFD to perform an analysis that would apply the same calculations for all customers.

**Response:**

- a. The results of the analysis of daily variability are attached.
- b. Newport did not perform any analysis to demonstrate or support the assumption that non-residential customers "would only use water six days a week". However, since most commercial establishments are typically closed at least one day per week, we believe this is a valid assumption.
- c. Newport calculated new demand factors for all customers; therefore the basis for this question is unclear.
- d. As stated in the response to PWFD 1-4, it would not be appropriate to apply weekly adjustment factors to the Navy and PWFD because their peaks were determined based on daily data such that the actual relationship between the Max Day and Average Day is known. As such



STATE OF RHODE ISLAND  
PUBLIC UTILITIES COMMISSION  
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To The Portsmouth Water And  
Fire District's  
Data Requests  
Set 2

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we cannot identify any adjustment factors that would permit PWFD to perform an analysis.

**Prepared by:** Harold Smith



## Analysis of Daily Variability

2010

## Residential

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	Average
Consumption by Day	255,804	246,671	250,968	257,411	259,266	269,946	281,344	1,821,410	260,201
%/Day	14%	14%	14%	14%	14%	14%	15%	15%	
Max Day of Week	281,344								
Avg Day	260,201								
Min Day of Week	246,671								
Max/Avg	1.08								
Avg/Min	1.05								
Avg. of Variation	1.07								

## Non-Residential

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	Average
Consumption by Day	503,140	547,874	544,875	550,660	632,325	668,736	664,213	4,111,823	587,403
%/Day	12%	13%	13%	13%	13%	15%	16%	16%	
Max Day of Week	668,736								
Avg Day	587,403								
Min Day of Week	503,140								
Max/Avg	1.14								
Avg/Min	1.17								
Avg. of Variation	1.15								

2011

## Residential

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	Average
Consumption by Day	372,061	369,967	362,097	379,152	361,655	405,781	399,862	2,650,575	378,654
%/Day	14%	14%	14%	14%	14%	14%	15%	15%	
Max Day of Week	405,781								
Avg Day	378,654								
Min Day of Week	361,655								
Max/Avg	1.07								
Avg/Min	1.05								
Avg. of Variation	1.06								

## Non-Residential

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	Average
Consumption by Day	1,378,008	1,488,835	1,396,620	1,498,064	1,421,178	1,745,475	1,471,640	10,399,820	1,485,689
%/Day	13%	14%	13%	14%	14%	14%	17%	14%	
Max Day of Week	1,745,475								
Avg Day	1,485,689								
Min Day of Week	1,378,008								
Max/Avg	1.17								
Avg/Min	1.08								
Avg. of Variation	1.13								



2012

**Residential**

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	Average
Consumption by Day	399,035	373,593	358,761	364,916	370,369	379,786	419,909	2,666,369	380,910
%/Day	15%	14%	13%	14%	14%	14%	16%		
Max Day of Week	419,909								
Avg Day	380,910								
Min Day of Week	358,761								
Max/Avg	1.10								
Avg/Min	1.06								
Avg. of Variation	1.08								

**Non-Residential**

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	Average
Consumption by Day	1,571,434	1,522,361	1,537,231	1,551,018	1,734,274	1,964,415	1,789,535	11,670,268	1,667,181
%/Day	13%	13%	13%	13%	15%	17%	15%		
Max Day of Week	1,964,415								
Avg Day	1,667,181								
Min Day of Week	1,522,361								
Max/Avg	1.18								
Avg/Min	1.10								
Avg. of Variation	1.14								

**Three Year Averages****Residential**

Max/Avg	1.09
Avg/Min	1.05
Avg. of Variation	1.07

**Non-Residential**

Max/Avg	1.16
Avg/Min	1.11
Avg. of Variation	1.14



**PWFD 2-2:** Referring to Newport Water's Response to Data Request PWFD 1-5:

- a. Does Newport Water agree that it would be more appropriate to use the same period (two-year average) for the lost water calculation rather than a different three-year period.
- b. If NWD disagrees, please state why using a two-year average for some uses and a three-year average for others is appropriate.

**Response:** a. The cost of service model used for this filing uses the same time periods that were agreed to by all parties in Dockets 4128 and 4355, and Newport did not find a compelling reason to deviate from the agreed to convention.

- b. Please see the response to PWFD 2-2 a. above.

**Prepared by:** Harold Smith



- PWFD 2-3:** Referring to Newport Water's Response to Data Request PWFD 1-10 and the statement in that response indicating that the August 2009 CDM Technical Memorandum formed the basis for assigning treatment capacities:
- a. Please explain why it was appropriate to use this memorandum as the basis for assigning treatment capacities when Page 1 of the memorandum expressly states that detailed recommendations on design capacities would not be possible until after consideration of treatment process changes.
  - b. Did Newport Water update the design capacities after considering the treatment process changes?
  - c. Please provide the separate memorandum referenced in the last sentence of the August 2009 CDM Technical Memorandum.
  - d. Please explain the difference between the PWFD maximum day demand shown on page 5 of the August 2009 CDM Technical Memorandum (2.95 mgd) and the PWFD maximum day demand shown on the base of Schedule B3 (3.00 mgd).
  - e. Please provide a complete copy of the August 2009 CDM Technical Memorandum, which includes all tables referenced therein.
  - f. Please identify where and explain how the analysis provided by Newport Water incorporates the derivation of lost or unaccounted for water in the design basis, which is referenced in the August 2009 CDM Technical Memorandum.

**Response:** a., b., and c. Using the August 2009 CDM Technical Memorandum to assign responsibility for treatment capacities is appropriate because the design capacities were not changed after consideration of treatment process changes.



The historical design capacities of the original treatment plants were 9 mgd at Station 1, and 7 mgd at Lawton Valley, for a total of 16 mgd. A primary purpose of the August 6, 2009 Technical Memorandum ("Technical Memorandum") was to determine whether the historical capacity would be sufficient for the water service area in the future. The Technical Memorandum stated on page 16 that the combined capacity should be "no less than 15 mgd." The Technical Memorandum then concluded with the statement "Following completion of the process review at Station 1, the design capacity of each WTP will be selected and presented in a separate memorandum."

At the time of the Technical Memorandum, it was not yet clear whether it would be possible to achieve the historical capacity of 9 mgd at Station 1 with the new treatment processes. If it was not possible, then Newport would have to consider increasing the Lawton Valley WTP capacity. The nature of recommended improvements at Station 1 was investigated and presented in a CDM memorandum dated January 4, 2010, from John Willis to Carol Rego and Kathy Mello. An electronic copy is attached.

This 2010 memo concluded that it was feasible to upgrade the treatment processes at Station 1 while still providing 9 mgd in capacity. Therefore, the City concluded there was no need to consider increasing the Lawton Valley WTP capacity.

d. The Max Day demand for PWFD was rounded up to 3.0 from 2.95

e. An electronic copy is attached.

f. CDM's recommended total capacity of "no less than 15 mgd" was based on the anticipated consumer demands, plus an allowance for unmetered water (20%), plus a projected 5% WTP plant use, as described in Sections 7, 8 and 11 of the Technical Memorandum. The 20% value for unmetered water was representative of the actual historical values available at that time, as shown in the paragraph that starts at the bottom of page 12. Because there was no guarantee at the time that the unmetered water could be reduced, it was conservatively decided to retain the 20% value.



STATE OF RHODE ISLAND  
PUBLIC UTILITIES COMMISSION  
DOCKET NO. 4595  
Response Of The City Of Newport,  
Utilities Division, Water Department  
To The Portsmouth Water And  
Fire District's  
Data Requests  
Set 2

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**Prepared by:** Julia Forgue



# Memorandum

**To:** Carol Rego, Kathy Mello  
**From:** John Willis  
**Date:** 1/4/2010  
**Re:** Newport, RI – Station 1 Upgrade with DAF

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I have evaluated the feasibility of converting the existing Pulsator Units at Station 1 to DAF (Dissolved Air Flotation) in order to achieve a firm plant pretreatment capacity of 9 mgd with one train out of service. I have done this analysis based on design criteria furnished to me by you as a result of the pilot program undertaken to assess alternative treatment processes. The key criteria for the purposes of my evaluation were the DAF loading rate at 12 gpm and flocculation detention time of 13 minutes. The DAF process is the high rate Aqua Daf available from Infilco Degremont.

The available space in each existing Pulsator, after demolition of the sludge hoppers, influent chamber and effluent collection channel is an area of 54 feet by 46 ft – 6 in. Areas to be demolished are shown on copies of existing drawings attached. I looked at fitting in either three 4 mgd trains or four 3 mgd trains. Using an in line arrangement of flocculation and DAF, the 4.5 mgd train was longer than the available length of 54 feet. While it may be possible to fit a 4.5 mgd train in using a different line up of flocculation and DAF, I did not further investigate this possibility. A three mgd train will fit using the following dimensions as shown on the attached Plan and Section.

Train width	12 ft -0 in
Flocculation Inlet Channel Width	2 ft - 6 in
Flocculation Tank Length	10 ft – 6 in (two tanks in series)
Flocculation Tank Water Depth	14 ft – 0 in
Flocculation Tank Effluent	2 ft – 0 in
DAF Length	15 ft – 0 in
Sludge Collection Channel	1 ft – 0 in
DAF Effluent Control	1 ft – 6 in
DAF Collection Channel	2 ft – 0 in

Walls were assumed to be 1 ft – 4 ins except the sludge channel wall is 12 ins and the weir wall is also 12 inches. I used a thinner wall for these locations to gain some length because I think these walls can have additional laterals support.

The existing pulsators operate with a water depth of about 16 feet. We need a depth of 14 ft +/- for the flocculators. I understand DAF would typically be about 10' or 11 feet water depth. It may be desirable to construct a new slab, which I think would be better structurally for the new walls.

On the attached plans I have shown two alternatives, one with two trains in Clarifier No. 1 as the first stage of construction. This would be followed by two more trains as a second stage of construction.



## ALTERNATIVE 1

Alternative one would provide 6 mgd capacity. There is plenty of room left for Recycle Pumps, Compressors and Air Saturators at the bottom slab level with stairs down to them. The area could be slabbed over for more space. Second stage construction would provide two more 3 mgd trains in Clarifier No. 2.

DAF effluent could be easily tied into the existing Filter feed channels and sludge can be easily piped to the existing sludge collection hoppers in the pipe gallery.

I assume the chemistry for DAF treatment is different from that for the Pulsators. I did not look at rapid mixing for DAF or how the chemically treated water would be brought to the DAF units. I assumed that the chemically treated water would be brought through the gallery as it is now.

## ALTERNATIVE 2

I have also shown a three train alternative for initial construction. This provides 9 mgd after stage one of construction. This approach requires a different layout for recycle pumps and compressors. I have shown the recycle pumps in a wet well adjacent to the DAF units. The unused space in the existing clarifier would be slabbed over. I have assumed there is space for the compressors and saturators in this area and over the flocculators, but I did not verify this. This alternative would require chemically treated water be delivered through the outside wall. While I show the clarified water being delivered to the filters through the existing channel, this may not be adequate hydraulically. An additional connection may be required. A fourth train would be constructed in Clarifier 2 as second stage construction.

## CONSTRUCTION APPROACH

My take on construction is that the work would be undertaken during low the flow period, probably beginning in October. I think the work of installing the walls and equipment plus startup could be easily done in a 6 month period. Work steps would include

- Shutting off flow to Clarifier No. 1 and draining it
- Installation of temporary walls around Clarifier No.1 to isolate it from the rest of the plant
- Demolition of part of the outside wall on the east side of the plant for construction access
- Demolition of Clarifier piping
- Demolition of the sludge hoppers, effluent channels and the influent box
- Installation of new concrete slabs and walls
- Installation of mechanical equipment
- Installation of electrical and instrumentation
- Startup and Testing
- Clean up and repair of outside wall, depending on schedule for work in Clarifier No.2.

If the initial stage includes three trains, work on the fourth train could probably be done at any time. However, if only two trains are constructed initially, the second stage of construction would have to wait until the next low flow period.

## QUESTIONS TO BE ANSWERED

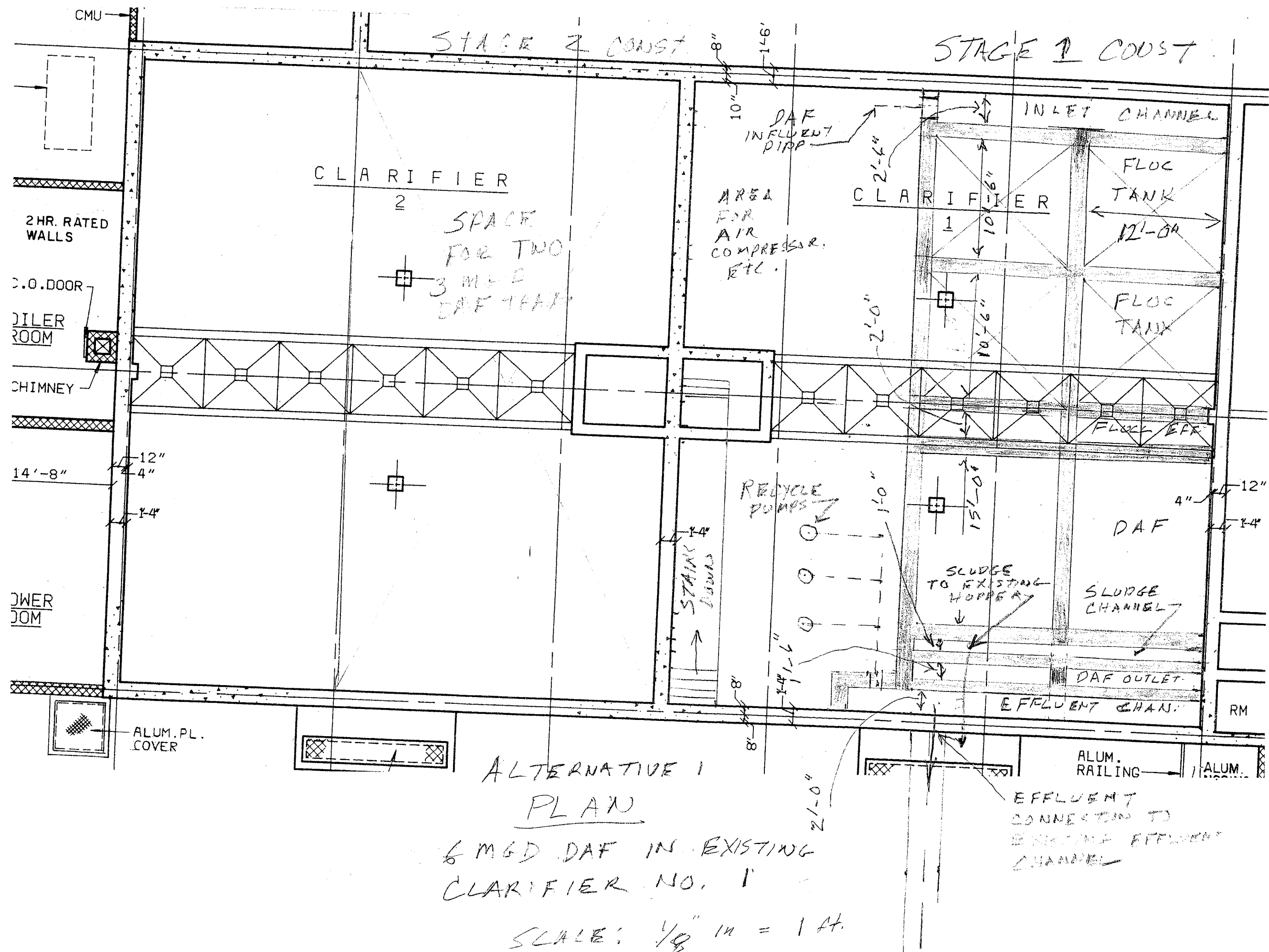
1. Will one Pulsator in operation along with the Lawton Valley Plant provide sufficient flow during the low flow periods?
2. Verification with construction services that the stage 1 work can be completed in 6 months. This is probably conservative as the low flow period is likely at least 7 or 8 months.



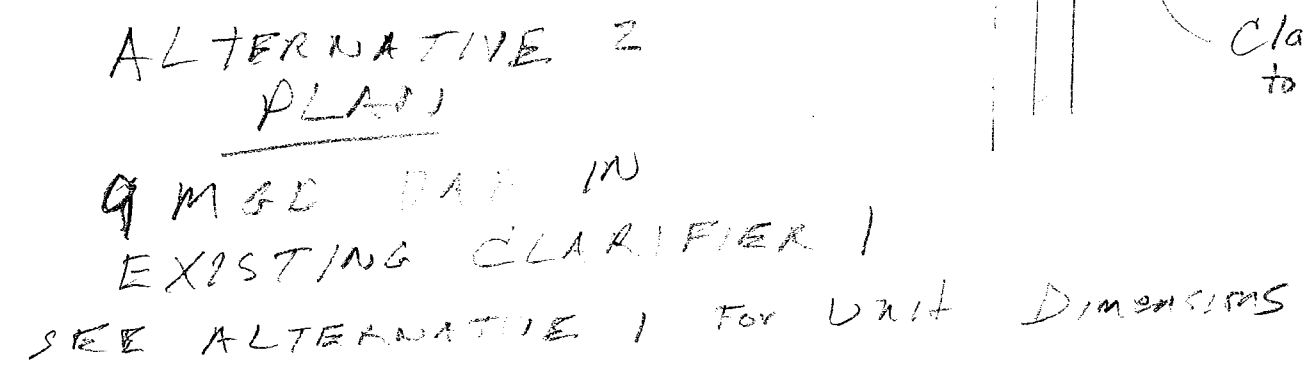
*January 4, 2010*

Please call or email me if you have questions or want to discuss. Also, please let me know what additional work may be necessary.







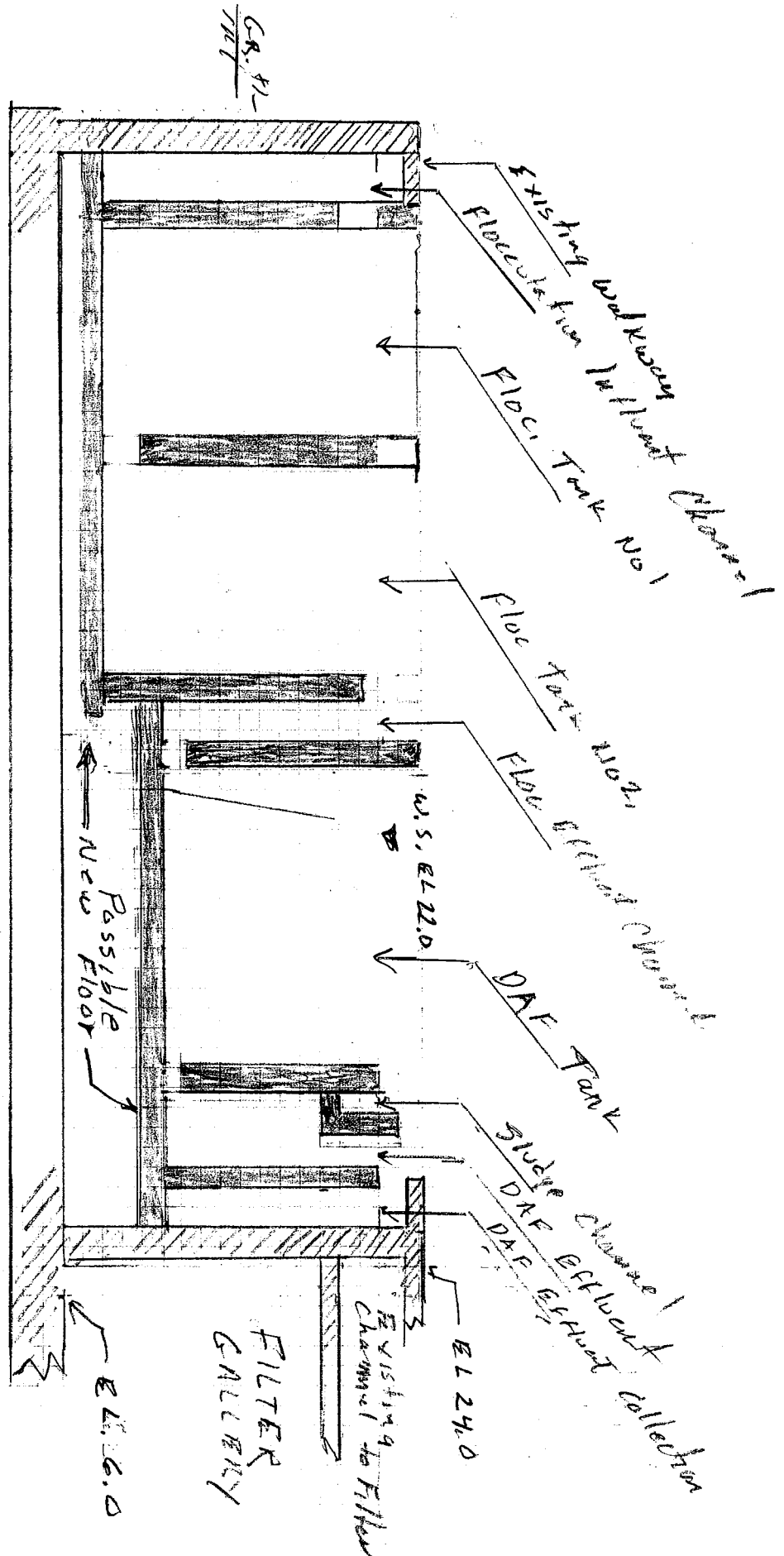


## ALTERNATIVE 2 PLANS

Q MGD DAF IN  
EXISTING CLARIFIER 1



SEE ALTERNATIVE 1 For Unit Dimensions





SECTION

SCALE:  $\frac{1}{8}" = 1' - 0"$

 Existing Concrete  
 New Concrete



SHE  
CON  
FILE  
JOB

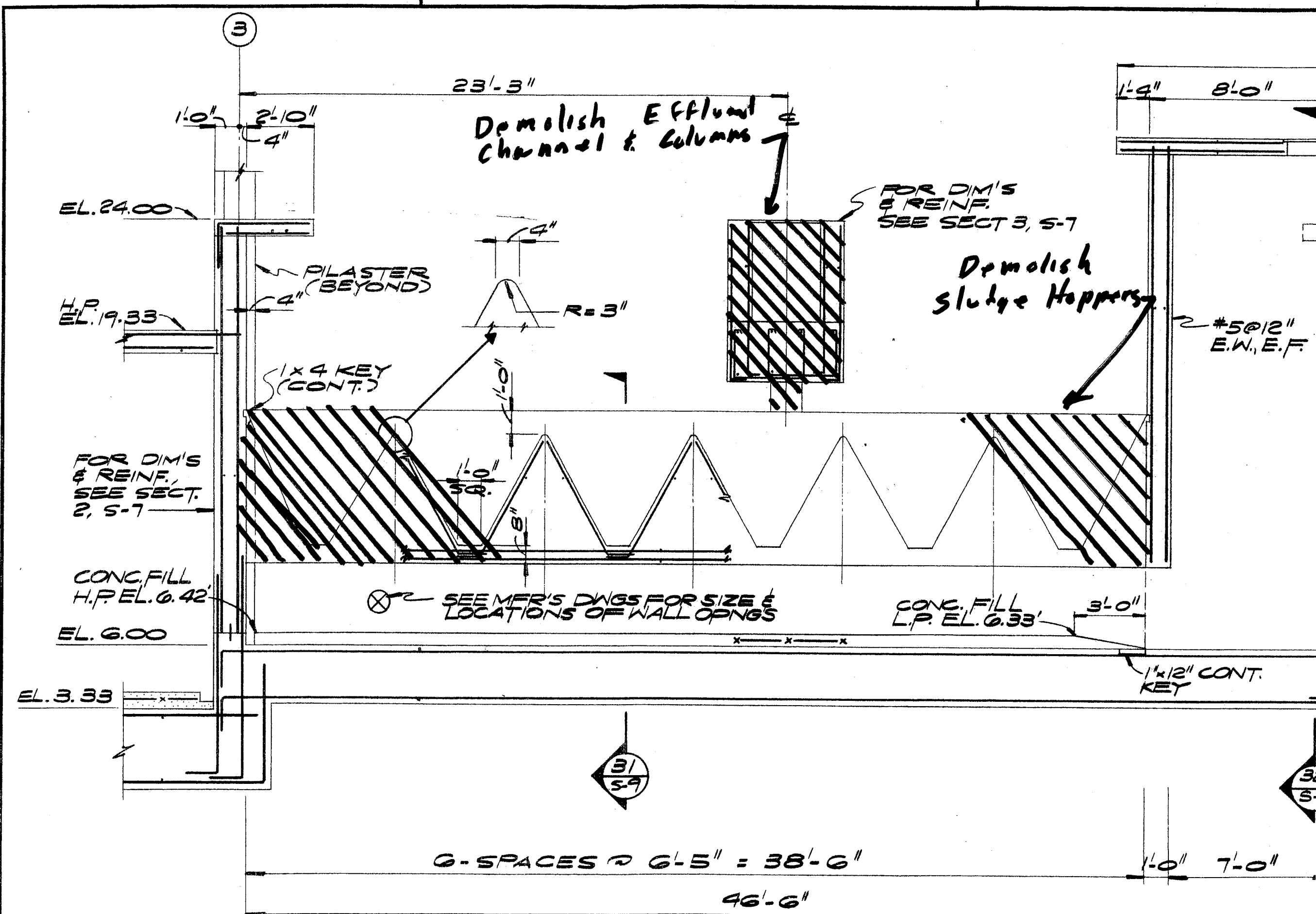
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AS SHOWN  
39A  
S-4  
ELEC.  
GS. FOR  
ADUIT SLVS.

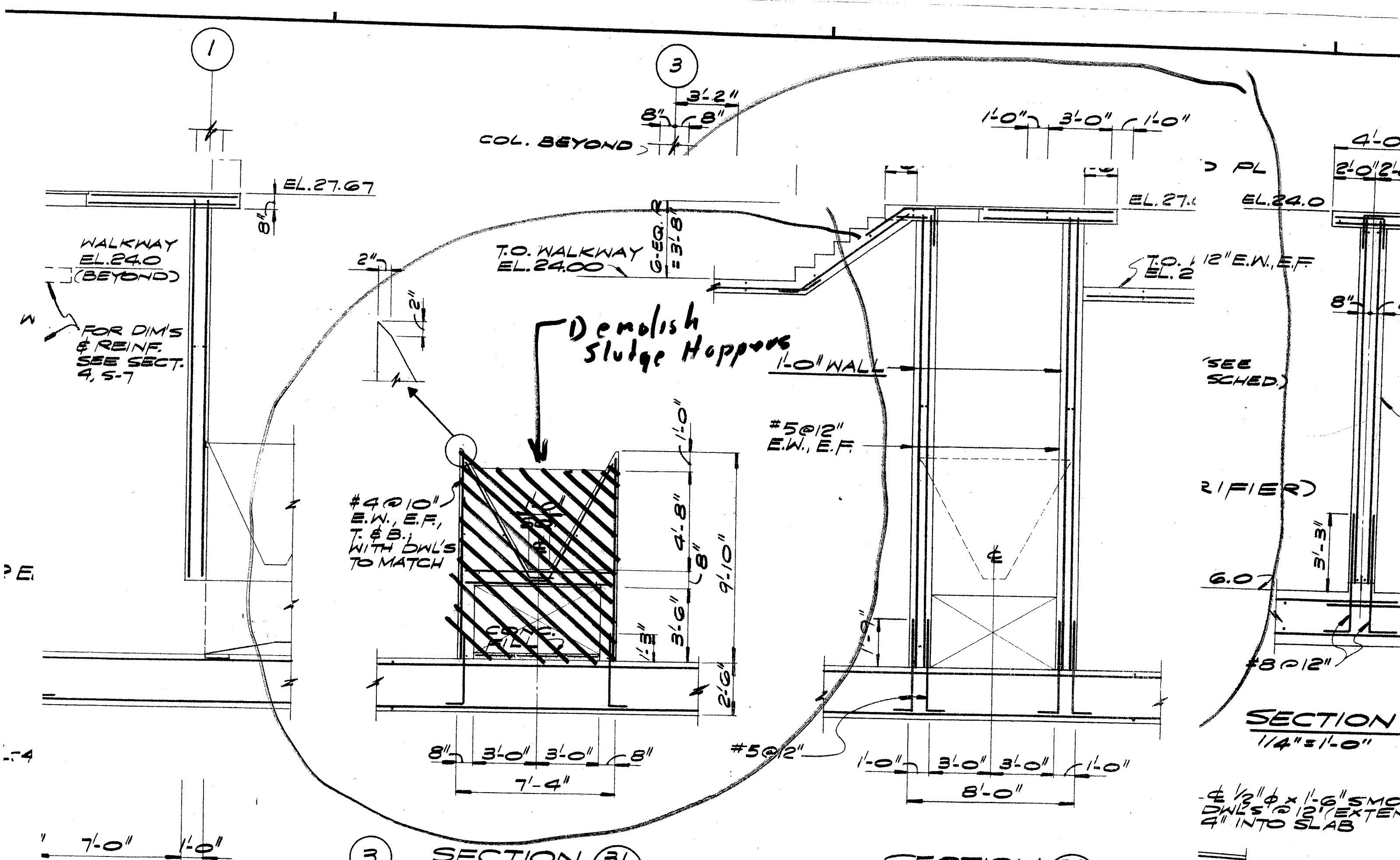
D

C



SECTION (30)





COL. BEYOND

WALKWAY  
EL. 24.0  
(BEYOND)

FOR DIM'S  
& REINF.  
SEE SECT.  
4, 5-7

T.O. WALKWAY  
EL. 24.00

Demolish  
Sludge Hoppers

1'-0" WALL

#5 @ 12"  
E.W., E.F.

#4 @ 10"  
E.W., E.F.,  
T. & B.  
WITH DWLS  
TO MATCH

(SEE  
SCHED.)

RIFIER)

SECTION  
1/4" = 1'-0"

#4 1/2" phi x 1'-6" SMO  
DWLS @ 12" EXTEN  
4" INTO SLAB

SECTION (31)

SECTION (32)







City of Newport, Rhode Island  
Department of Utilities

**City Advisor for Project Delivery of Water  
Treatment Plant Improvements Project 08-028  
Task 3.1 – Review of Demands and Supply**

August 2009

*Technical  
Memorandum*





## **Technical Memorandum**

*To: Julia Forgue, P.E., Director of Utilities*

*From: Carol Rego and Jeff Diercks*

*Date: May 1, 2009 (Finalized August 6, 2009)*

*Subject: Task 3.1 – Water Supply and Demands*

### **1 – Purpose of Memorandum**

The purpose of this memorandum is to develop water demand projections for the Newport Water Division (NWD) service area, as a basis for establishing the design capacities of the two water treatment plants (WTPs). The projections are to be based on a 5-year and 20-year planning horizon. The 5-year horizon corresponds approximately to the Consent Order date of December 31, 2014, for having the two WTPs on-line.

Although other projections have been performed as recently as 2008, it was decided this project should include a more detailed water demand review. This was deemed appropriate in view of the significant financial ramifications of the design capacity decisions.

CDM's original intent was for this memorandum to include specific recommendations for the design capacities of the two WTPs. It has become evident, however, that this should not be done until after detailed consideration of treatment process changes at Station No. 1. These process evaluations will determine the cost-effectiveness of increasing this plant's capacity within its existing footprint. We expect this to be a major factor in capacity selection. Therefore, this memorandum presents demand projections, then concludes with a review of various factors that will be considered when establishing the final design capacities. Once the Station No. 1 process evaluation is completed, the design capacities will be assigned and presented in a separate memorandum.

This final memorandum supersedes the prior draft version dated May 1, 2009. The primary modification following submission of the draft version was the incorporation of water demand projections prepared by Naval Station Newport for their facilities. The Navy's projections superseded placeholder projections prepared by CDM in the draft memorandum.

### **2 – Available Federal and State Population Information**

The U.S. Census Bureau's decennial census provides population data for the three Aquidneck Island communities. The Census Bureau has also prepared annual population estimates for



the communities since 2000. In 2004, the Rhode Island Statewide Planning Program prepared population projections for all communities in the state. These projections extend to the year 2030.

Table 1 (note – all tables are at the end of this section) summarizes the census data, estimates, and projections for each of the three communities and for the island as a whole. For Aquidneck Island as a whole, the State's projections called for essentially no increase in population over the period 2000-2030. Specifically, the cited increase from the 2000 census population of 60,958 was 206 persons, to a population of 61,164 in 2030. This is an increase of merely 0.3% over the 30-year period. The projected change in population was, however, not distributed equally among the three communities. Portsmouth was projected to grow significantly, with the population increasing by more than 2,600 persons during the 30-year period. Middletown's situation appeared static, with only a 97-person increase over the period. Newport was shown as losing more than 2,500 persons during the period.

This information is also discussed later herein when we review the municipal planners' comments.

### **3 – Supply Source Yield**

The most recent evaluation of NWD's supply source yield is that presented in the "Reservoirs Safe Yield Study", dated March 2009, prepared by Wright-Pierce of Providence, RI. The study included a description of the supply source system, a review of historical droughts, documentation of the methods of analysis and the input data, and a description of the yields of each reservoir and of the system as a whole.

The key results of the safe yield evaluation, including contributions from all reservoirs, are listed below:

<u>Climatic Event</u>	<u>Reservoir Yield</u> (million gallons per day, mgd)
Drought of Record (1964-66)	9.40
20-Year Drought	10.48
Average Conditions	14.60

Later in this memorandum, reservoir yield will be compared to the projected water demand.



## 4 – Historical Water Data

NWD maintains its water production and water demand statistics in a number of different databases. Five are described herein, and summary tables are attached for each.

The **total water treatment plant effluent** is tracked in an Excel spreadsheet, which contains data starting with June 1997. Daily data from both WTPs are recorded. Table 2 is a summary of this information, listing the annual totals for 1998-2008, the average day, and the maximum day. We understand that the information from 2006 to date is considered more reliable due to improvements in metering procedures. The “total water treatment plant effluent” statistic includes most of the plant water use.

For calendar years 2007 and 2008, the total WTP effluent was very similar, slightly under 7.2 mgd.

The **water produced available for sale (WPAFS)** statistic is available starting July 2006. The WPAFS spreadsheet tracks monthly values and is organized by fiscal year (July through June). Plant water use is excluded from these values.

Table 3 summarizes the monthly WPAFS records from July 2006 through December 2008, listing totals by both fiscal year and calendar year. For calendar years 2007 and 2008, the WPAFS was virtually identical, at about 6.9 mgd.

Comparing the WPAFS figures to the total WTP effluent, we see that WPAFS represents 96.0% and 95.7% of the total WTP effluent in 2007 and 2008, respectively. Values of 4-5% are reasonable figures for plant water use.

Newport also tracks the **metered consumption of its retail customers** located in Newport and Middletown. The metered consumption is divided into three usage categories: residential, commercial, and governmental. Table 4 lists the information for the three most recent fiscal years. Table 4 also lists the sales to the two wholesale customers discussed below, and compares the total metered sales to the WPAFS statistic for FY2007 and FY2008. The resulting “unmetered water” figure is 20-22% for those two years.

Note that, although this memo will generally refer to retail customers as being in Newport and Middletown, the data also include a very small number of retail customers located in the southwestern corner of Portsmouth.

NWD tracks its daily metered **water sold to Portsmouth Water & Fire District**, and provided CDM with Excel spreadsheets organized by calendar year from 2006 to date. Table 5 summarizes this information on a monthly basis for 2006 through 2008. The annual averages are listed below:



<u>Calendar Year</u>	<u>Annual Average Sale to PWFD (mgd)</u>
2006	1.161
2007	1.294
2008	1.253

NWD provided CDM with an Excel spreadsheet of the **water sold to Naval Station Newport** (NSN) from July 2003 through June 2008. Each meter is separately listed, and totaled by month. The information is organized by fiscal year. In Table 6, CDM has summarized this information, and listed totals by both fiscal year and calendar year. The data demonstrate a clear and significant downward trend, as summarized below:

<u>Fiscal Year</u>	<u>Annual Average Sale to NSN (mgd)</u>	<u>Adjusted Value (mgd)</u>
2004	1.374	1.374
2005	1.148	1.148
2006	1.023	1.023
2007	0.763	0.798
2008	0.677	0.708

Historically, NSN purchased all its water from NWD. However, in September 2006, the Navy began a temporary, emergency purchase from PWFD for the Navy's Melville area. This purchase continues today, but is expected to conclude in December 2009 when the Navy completes upgrades to its water system facilities in the Melville area. The water which NSN purchases from PWFD ultimately originates from NWD. The "Adjusted Value" column above adds this purchase (which averages a little over 0.03 mgd), thereby indicating in FY2007 and FY2008 the total Navy water usage. The data on NSN's purchase from PWFD was taken from PWFD's response to NWD's questions in the ongoing rate case (PUC Docket No. 4025).

The 2008 NSN water use is only 52% of that in 2004. Additional discussion on the downward trend appears elsewhere herein.



## 5 – Discussions with Wholesale Customers

NWD requested its two wholesale customers to provide their own water demand projections and related information to CDM. NWD convened a meeting with both customers (PWFD and NSN) on February 12, 2009, to discuss these issues. A Meeting Summary describing the discussions is presented in Appendix A.

PWFD's water demand projections were furnished to NWD in late 2008 and were very slightly updated in April 2009. Their projections are as follows:

<u>Planning Year</u>	<u>Average Day (mgd)</u>	<u>Maximum Day (mgd)</u>
5-Year Horizon (2013)	1.45	2.61
20-Year Horizon (2028)	1.64	2.95

Additional information beyond that included in Appendix A was received from both PWFD and NSN following the February 12 meeting. The nature of the additional information is summarized below.

### Portsmouth Water & Fire District

PWFD provided their 2004 Water Supply System Management Plan (WSSMP) and 2007 WSSMP update, and their water distribution system map. In addition, PWFD transmitted detailed spreadsheets addressing PWFD's historical demand data, number of customers, daily sales to the Navy since September 2006, unmetered and unaccounted-for water, and the basis of their projections.

It should be noted that NWD's statistics for sales to PWFD are not exactly the same as PWFD's statistics for water demand. PWFD's water demand statistics take into account the change in storage of their tanks. This means that, if some of the water purchased in a given day by PWFD fills a tank to a higher level, then that particular volume of water will not be counted in PWFD's record of that day's customer demand. Also, even though the same meter reading signal is used by both utilities for tracking the metered purchase/sale, there are small differences in the recording instruments which can affect the records as well. Further, the two utilities may use different times-of-day in their recordkeeping, when calculating the flow over a 24-hour period. (PWFD uses 7:45 am as the start of their recordkeeping day.)

PWFD prepared its projections as follows:

1. The year 2000 was selected as a base year, because PWFD's gallons-per-customer usage was the highest in 2000 (77,327 gallons) that it has been since 1994.



2. PWFD performed a regression analysis on its demand data from the period 1994-2008, and assigned a trend line for average day projections. The average day demand from 2000 into the future was calculated on this basis. Because this trend is linear, the projection for years other than the two years provided by PWFD can readily be obtained.
3. PWFD reviewed their maximum day peaking factors (i.e., the ratios of maximum day to average day demands) for the period 1994-2008, and determined that the average peaking factor was 1.80. PWFD utilized this peaking factor for their projected maximum day demands.

Note that the “years” in the foregoing discussion are PWFD’s fiscal years, which end on April 30. Inherent in PWFD’s projection methodology is an assumption that future growth in customers will occur at about the same rate as in the past. PWFD intentionally excluded from its projections any consideration of future development of the Navy’s surplus property and of potential wastewater treatment plant development.

### **Naval Station Newport**

NSN offered the following additional remarks:

- The Navy has several ongoing initiatives to improve its water conservation and demand management. These include continued installation of low-flow water fixtures, returning as much steam condensate as possible to reduce boiler makeup water, and designing all new construction projects to meet LEED requirements.
- The Navy performs comprehensive leak detection surveys on its water system at least every 2-3 years, and repairs identified leaks.

In an email dated July 20, 2009, NSN transmitted water demand projections for its facilities. This email and associated data tables are included in Appendix C. NSN recommended an average day demand projection of 0.90 mgd for both the 5-year and 20-year planning horizons. They also recommended a maximum day demand projection of 1.40 mgd for that same period.

## **6 – Discussions with Municipal Planners**

On March 11, 2009, CDM met with each of the three municipal planners for the three Aquidneck Island communities. The planners offered comments on federal and state population data, reviewing potential changes in zoning, discussed various factors affecting development in both the near-term and far-term, and provided information about various planned developments.



A meeting summary, including all information provided by the planners, is presented in Appendix B.

We offer the following overview of the information provided about upcoming trends from the three communities:

### **Portsmouth**

- The Town Planner does not agree with the Census estimates showing a slight decline since the 2000 Census, but believes instead that the overall population is static.
- He generally concurs with the State projections, which call for a 15% increase in population (more than 2,600 persons) from 2000 to 2030. He notes, however, that those projections assume there will be no wastewater collection and treatment system in Portsmouth. If such a system is constructed, there will be additional development and population increase.
- He believes that, ultimately, a wastewater system will likely be constructed on the West Side, but that similar proposals for a system in the North End will not be successful.
- The surplus Navy property (Tank Farms 1-4) has significant potential for commercial and/or mixed-use development, and there are numerous other potential developments in Portsmouth as documented in Appendix B. The surplus Navy property will not, however, be occupied within the 5-year planning horizon.

### **Middletown**

- The Town Planner does not agree with the Census estimates showing a decline of over 1,000 persons since the 2000 Census. A stable population is more likely.
- The State projections are essentially static, at an increase of merely 92 persons over the 25-year period of 2005 to 2030. The Town Planner believes the actual figures may be slightly greater, but agrees in general with a very-slow-growth scenario. There is minimal subdivision activity and only limited commercial development activity.
- There seems to be no interest by any developers or municipal entities in paying for extending the public water system farther into the eastern portion of the town, where there is more developable land than on the west side. Even in the one recent situation where a subdivision immediately adjacent to the public water system was being constructed, the developer determined it was less expensive to install private wells instead of extending the public water main, and proceeded on that basis.



## **Newport**

- The City's Director of Planning does not concur with the Census estimates for the period since 2000. He believes that when the 2010 Census becomes available, it will show very little change over the decade, or perhaps a slight increase.
- He discounts the State projections which show a significant decline in population to the year 2030. He indicates that Newport has bottomed out in terms of any population decline, and should be essentially stable for some years to come. In the 2020-2030 timeframe, he anticipates an increase in population due to Newport's desirability for retirees. He suggests the 2010-2030 increase in Newport's population may be on the order of 1,000, excluding Navy personnel.
- Newport currently has significant redevelopment activity ongoing, as demonstrated by the fact that FY2008 brought the City its highest permit revenues ever. He anticipates this level of activity will continue for a number of years, as demonstrated on the project list included in Appendix B.

## **7 – Water Demand Projections – Average Day**

The water demand of the NWD service territory can be divided into the following five categories, which will be considered separately:

- Metered sales to PWFD (largest wholesale customer)
- Metered sales to NSN (other wholesale customer)
- Potential future metered sales in Navy surplus property
- Metered sales to retail customers in Newport and Middletown
- Unmetered water

Strictly speaking, the 5-year and 20-year planning horizons should be set at 2014 and 2029. Nevertheless, it is common practice to project parameters of various sorts to target years that are multiples of five, so we have adjusted these years herein to 2015 and 2030. The 5-year horizon thus represents the first full year that both WTPs are expected to be on-line, and the 20-year horizon corresponds with the State's population projection horizon.

For some of the following discussion, CDM assigned values for the future average day water use of various types of developments. No water demand estimates were directly available for any future developments, and in most cases the size and nature of the development has not been established. Our assigned water demand values were based where possible on the following parameters:



<u>Type of Use</u>	<u>Parameter</u>	<u>Data Source</u>
Office	75 gpd/1000 sf	MassDEP septic system regulations*
Retail	50 gpd/1000 sf	MassDEP septic system regulations*
Marina	25 gpd/boat	RI septic system regulations
Residential units	2 persons/unit 65 gpcd	(CDM assumption) (CDM assumption)

\*RI values are not available.

When the use of a potential building was indicated by a Planner simply as “commercial” or as mixed commercial and retail use, we utilized the “office” parameter above. Those parameters listed above which are from state septic system regulations are based on peak water use. To convert those to average use, we utilized half of the listed figures.

### **Metered Sales to PWFD**

If we adjust PWFD’s average day demand projections to the years 2015 and 2030, the values are 1.48 mgd and 1.67 mgd, respectively. These values compare to NWD’s FY2008 sale to PWFD of 1.26 mgd, excluding PWFD’s sales to the Navy. Although the 2015 figure represents a significant (17%) increase over 2008, and although development is slowed during the current recession, examination of the information provided by the Town Planner makes it clear that Portsmouth has the potential for substantial additional development in the near future.

The Planner provided a list of major new developments that are now planned to occur over the next decade. If we exclude the Navy surplus property, and retain the Planner’s figure of 50% of the concept development as an estimate of the ultimate development, then the listed developments total the following:

Condos/townhouses:	659 units
Multi-family buildings:	54 buildings
Single-family residences:	132 units
Retail & restaurants:	60,000 sf
Other commercial buildings:	28,540 sf
Marina:	748 boatslips



These developments would represent an average day water demand of about 0.13 mgd, using the assumptions cited earlier.

Many of the residential units actually are high-value properties that may function as second residences and not be occupied on a continuous basis, thereby leading to less water demand than under usual circumstances. On the other hand, it is possible that some developments could ultimately exceed the 50% assumption cited above. Unquestionably, there is substantial additional land beyond the lands for the listed developments on which additional development could occur. The Planner's list included only "major" developments, and it is to be expected that other development not on the list will occur. The Planner's 2008 "What's Left?" study, which estimated the number of buildable lots in Portsmouth under current zoning if all larger parcels were eventually developed, determined that there were over 2,600 buildable lots remaining in town.

It may well be that the PWFD projection is "conservative", especially in the sense that the ongoing recession may slow down the pace of development such that the projection proves to be higher than the actuality. Nevertheless, CDM believes the projection is reasonable in the light of Portsmouth's overall situation, and in the light of the purposes of NWD's project. Therefore, this memorandum includes the PWFD projection in the overall demand projections.

We note that it is unlikely that PWFD will achieve major reductions in its unmetered and unaccounted-for water percentages in the future, because those values are already low. In FY2007 and FY2008, PWFD had unmetered water of 9.9% and 9.6%, respectively. PWFD then calculated its unaccounted-for water by subtracting estimates of water used in flushing, blowoffs, new main construction, fire department use, tank overflow/maintenance, and meter testing. The resulting unaccounted-for water was 8.8% (FY2007) and 8.7% (FY2008). PWFD already calibrates its master source meter annually, performs an annual leak detection and repair program, and has established a consumer meter replacement program with the goal of keeping all meters under 22 years of age. Therefore, PWFD is already addressing the three primary typical sources of unaccounted-for water. We have not adjusted PWFD's demand projection for these types of issues.

We also have considered the possibility of development of a wastewater treatment plant (WWTP) in Portsmouth. The Town Planner's opinion is that Portsmouth will eventually have a WWTP on the West Side, though not one serving the North End. He provided a map (included in Appendix B) showing the likely area for initial and later connections to a West Side WWTP. Examination of the map shows that most of the area to be connected is represented by the Navy surplus property and the major new developments cited above.



WWTP operation will not occur within the 5-year planning horizon, but is a possibility for the 20-year horizon. Qualitatively, one would expect WWTP construction to affect water demands in its service area as follows:

1. There are some properties that currently experience septic system problems, and thus have reduced their water use to minimize their wastewater disposal issues. In such properties, one would expect an increase in water demand once a WWTP and collection system is constructed.
2. Most properties are not currently experiencing wastewater disposal problems. These properties will see a significant increase in their monthly bills from the new sewer utility charges. Water demand at these properties may decline somewhat, as customers adjust their water use habits in response to the higher costs.
3. There will be additional development pressures within the WWTP service area, particularly in areas that previously could not accommodate on-site wastewater disposal. The degree of development that might result from this factor cannot readily be projected.

On the whole, CDM believes it is likely that WWTP construction, if it were to occur in the 20-year planning horizon, would not significantly alter the water demands projected herein, given that so much of the area proposed to be sewerred has already been accounted for elsewhere in these projections. We have elected not to increase PWFD's demand projection in this memorandum for this factor. If it were preferred instead to include such an increase, we believe that the effect should be kept small, 0.1 mgd or less, given the planned service area. This can be kept in mind when the WTP design capacities are set.

### **Metered Sales to NSN**

As noted earlier, the average day demand projection prepared by Naval Station Newport is 0.90 mgd. This value applies to both the 5-year and 20-year planning horizons.

### **Navy Surplus Property**

Based on discussions with the municipal planners, the Navy surplus properties are not likely to be occupied within the 5-year planning horizon. Therefore, no 2015 water demand will be included for these properties. Within the 20-year planning horizon, however, it is expected that all these properties will be occupied.

To derive a 2030 water demand estimate for the Tank Farms, Melville Backyard, and former Navy Hospital, we used the Planners' figures for potential commercial building sizes on these parcels. No data were available for the small (3-acre) Navy Lodge site in Middletown, so CDM assumed a value. Using the "office" water use parameter above, the average day water demand for the Navy surplus properties would be 90,000 gpd, or 0.09 mgd.



As noted by the Portsmouth Planner, it is possible there could be as many as 100-150 residences eventually constructed in the Tank Farms properties, partially supplanting the commercial development figures above. Residential units may utilize water at a higher rate than commercial development, so rounding the above-listed estimate up appears appropriate. A value of 0.1 mgd was carried for the 20-year horizon.

### **Retail Sales in Newport and Middletown**

As shown on Table 4, the FY2008 metered sales to retail customers was 1,287.6 million gallons, which is an average day demand of 3.52 mgd.

CDM has adopted the Planners' recommendations that population has not decreased since 2000 and will not decrease in the future, despite the Census estimates and State projections. The Newport Planner suggested a population increase on the order of 1,000 in the period 2010-2030. Given the limited development potential in Middletown, we utilized the figure of 1,000 persons as representing the population change between now and 2030 for the entire area of retail sales. As compared to the 2000 Census, this would represent a 2.3% increase in the Newport/Middletown population. Assuming the same overall per-capita demand, the water demand would also increase 2.3% over that period. This would represent an additional 0.08 mgd, above the current usage.

Given the Newport Planner's comments about redevelopment of commercial properties in Newport, we believe it is reasonable to use a higher overall increase in water demand than 2.3%. The developments which he listed for the next decade would be expected to have a water usage of about 0.05 mgd. We have assumed the same would be true for the second decade in the planning period.

Thus the total increase in usage would be 0.18 mgd. We assumed one-fourth of that would occur by the 5-year planning horizon, and the remaining three-fourths by the 20-year horizon.

On that basis, the metered retail sales are projected as 3.57 mgd for the 5-year horizon, and 3.70 mgd for the 20-year horizon.

The foregoing assumes that there is no significant expansion of the water system into the currently-unserved area of Middletown. In view of the Town Planner's comments regarding this issue, this seems to be the most-likely future scenario. Nevertheless, the possibility that an additional portion of Middletown could eventually be served can be considered when setting WTP design capacities.

### **Unmetered Water**

As shown on Table 4, NWD's unmetered water percentage was 21.8% in FY2007, and 20.0% in FY2008.



NWD has a goal of reducing unmetered water to 15% or less. For the sake of considering future water use, CDM will present future average day demands using a range of assumptions for unmetered water. We will assume for the lower-bound figure that NWD is successful in reducing its unmetered water to 15%, and assume for the upper-bound figure that unmetered water stays at 20%.

### Summary of Average Day Demand Projections

Summarizing the foregoing, the average day water demand projection for NWD is as follows:

<u>Component</u>	<u>5-Year Horizon</u> (2015)	<u>20-Year Horizon</u> (2030)
Sales to PWFD	1.48	1.67
Sales to NSN	0.90	0.90
Allowance for Navy surplus land	0.00	0.10
Retail sales, Newport/Middletown	3.57	3.70
Unmetered water (20%)	<u>1.49</u>	<u>1.59</u>
<b>TOTAL</b>	<b>7.44 mgd</b>	<b>7.96 mgd</b>
TOTAL (if 15% unmetered water)	7.00	7.50

## 8 – Water Demand Projections, Maximum Day

Water treatment plant design capacities must ultimately be based on the maximum day demand, not the average day demand, to assure satisfactory service. Therefore, CDM has developed maximum day demand projections from the above-listed average day demands. We recommend that the maximum day demand projection be determined by selecting an overall-system peaking factor to be applied to the average day demand projections.

Other methodologies are possible. For example, one could attempt to assign peaking factors for each of the five categories of average day demand described above. However, simply adding such results to obtain an overall system maximum day demand would be overconservative, because it is unlikely that each of the five components will experience its maximum day demand on the same date. For example, examination of the Navy's monthly demands shows that February has often been a very high-demand month, but that is not true for the rest of the customer base.

Table 2 shows the overall-system maximum day peaking factors for recent years. NWD has reported that the information starting in 2006 is the most reliable. In that period, the highest peaking factor was 1.77, in 2008. Even if the prior data back to 1998 were considered, 2008 would still have the highest peaking factor, though two other years were also above 1.70. We note for reference that NWD, in its 2007 WSSMP update, stated that it utilized a peaking



factor of 1.68 for its projections. We also note for reference that PWFD is utilizing a peaking factor of 1.80 for its projections, which represents their average peaking factor rather than a high-end peaking factor.

The purpose of this memorandum is to establish a basis for the WTP design capacities. Since the WTPs need to be able to produce sufficient water even on high-end maximum demand days, we recommend utilizing the 2008 peaking factor of 1.77 for projections. Given that the previously-utilized value of 1.68 has been surpassed, and given that 2008 was not an unusually dry year (dry years tend to have higher peaking factors), it appears that using a higher value than 1.68 is warranted.

The 5-year and 20-year forecast recommended in this memorandum can then be summarized as follows:

<u>Planning Year</u>	<u>Average Day (mgd)</u>	<u>Maximum Day (mgd)</u>
5-Year Horizon (2015)	7.00-7.44	12.4-13.2
20-Year Horizon (2030)	7.50-7.96	13.3-14.1

The ranges shown are based on the assumed range of 15-to-20% in future unmetered water.

As discussed below, the selection of the WTP design capacities can include consideration of the possibility that future demands could vary somewhat from these figures.

## **9 – Factors That Could Modify These Future Demands**

During the planning horizon of this project, there are many factors that could cause the actual water demands to vary from the projections. The year-to-year variations in climate are of course one such factor. This section of the memorandum lists a number of others, some of which are specific to the Aquidneck Island communities.

### **Factors That Could Cause Lower Demands**

CDM believes that the upper-end projections are “conservative”, in the sense that they contain a reasonable bias toward making sure the figures will be sufficiently-large for selecting WTP design capacities. A conservative approach is common in water system planning, due to the desire among water system owners and engineers to be sure that there is not a need for another improvements project only a few years after the completion of a major WTP program. Therefore, there are a number of factors that could cause lower demands to be realized in the future. Several are noted below:

- The current recession could continue longer than anticipated, resulting in less development activity and lower demands for some years to come.



- PWFD could elect to proceed with a bedrock wellfield or other alternate water supply source, thereby reducing its dependence upon NWD for drinking water.
- Water conservation and demand management practices to be employed in water systems, in residences, in businesses, and at Naval Station Newport, could continue to evolve, thereby resulting in even greater savings in water usage than has already occurred in the past 10-20 years.
- The construction of a WWTP in Portsmouth, or the desirability of Newport to increased numbers of retirees in the period 2020-2030, might not materialize.
- Rate increases, such as those needed to pay for the WTP improvements, can cause consumers to reduce their demands for a period of time after each increase.

### **Factors That Could Cause Higher Demands**

There are also some scenarios in which the demand projections could prove to be too low:

- One or more significant water-using industries could relocate to, or be developed on, Aquidneck Island.
- Due to circumstances affecting the United States and our Armed Forces, Naval Station Newport could need to increase its operations beyond the currently-foreseeable amount.
- A widespread issue affecting private well groundwater quality in eastern Middletown could be discovered, providing impetus for water system expansion into this area.
- WWTP construction could occur sooner than anticipated, and result in somewhat greater increases in demand within the 20-year planning horizon than discussed herein.
- Development, especially in Portsmouth, or the desirability of Newport to the retirement community and/or tourist trade, could exceed expectations.

Issues such as the foregoing can be qualitatively taken into account as the WTP design capacities are established.

## **10 – Comparison to Safe Yield**

In accordance with the procedures of the Rhode Island Water Resources Board (RIWRB), the “available water” should be compared to the projected average day demand. Although the “Reservoirs Safe Yield Study” did not use the term “available water”, we have assumed for the purpose of this memorandum that the study’s “safe yield” is identical to the “available water”.



As noted earlier in this memorandum, the safe yield of NWD's reservoirs during a repeat of the drought of record is 9.40 mgd. The high end of CDM's projected range of average day demand is 7.96 mgd. The safe yield of the reservoirs is thus well in excess of the projected average demand.

NWD's supply sources should therefore be considered to be of adequate quantity, for the planning period of this project.

## **11 - Upcoming Selection of WTP Design Capacities**

The selection of WTP design capacity is affected by the water demand projections developed in this memorandum, by the potential variances from those projections discussed above, by assumptions to be made regarding future plant water use, and by the degree of redundancy desired to be available in the WTPs. Redundancy is beneficial in the event of a supply source disruption affecting one plant, or in the event of any far-future operational problems at one plant that cause reductions in its output during high-demand periods. In addition, as discussed at the beginning of this memorandum, the feasibility and cost-effectiveness of process capacity increase within the existing footprint of Station No. 1 needs to be assessed before assigning the final design capacities.

As noted earlier, the WTP design capacities will be based in part on the projected maximum day demand, not the projected average day demand. CDM recommends using the higher 2030 demand projection (i.e., the one based on 20% unmetered water) in setting the WTP design capacities. We also have assumed a future plant water use of 5%. On this basis, the WTPs would need to have a combined capacity equal to at least 14.8 mgd. In view of the various factors that could possibly increase demands, we recommend using a figure no less than 15 mgd.

Following completion of the process review at Station No. 1, the design capacity of each WTP will be selected and presented in a separate memorandum.

cc: Jack Keaney, CDM  
Pat Gallagher, CDM  
Kathy Mello, CDM  
John Willis, CDM



**TABLE 1**  
**FEDERAL AND STATE POPULATION DATA**

		<u>Middletown</u>	<u>Newport</u>	<u>Portsmouth</u>	<u>Aquidneck Island Total</u>
<b>COUNTS</b>	<b><u>U.S. Census</u></b>				
	1950	7,382	37,564	6,578	51,524
	1960	12,675	47,049	8,251	67,975
	1970	29,290	34,562	12,521	76,373
	1980	17,216	29,259	14,257	60,732
	1990	19,460	28,227	16,857	64,544
	2000	17,334	26,475	17,149	60,958
	2000 Avg. Household	2.43	2.11	2.53	2.32
	2000 Avg. Family	3.01	2.86	3.00	2.94
<b>ESTIMATES</b>	<b><u>U.S. Census Population Estimates</u></b>				
	7/1/2001	17,289	26,343	17,242	60,874
	7/1/2002	17,285	26,218	17,353	60,856
	7/1/2003	17,207	25,969	17,410	60,586
	7/1/2004	16,986	25,605	17,261	59,852
	7/1/2005	16,697	24,648	17,090	58,435
	7/1/2006	16,419	25,644	16,999	59,062
	7/1/2007	16,259	25,359	17,030	58,648
<b>PROJECTIONS</b>	<b><u>R.I. Statewide Planning Program, 2004</u></b>				
	2005	17,350	26,086	17,553	60,989
	2010	17,364	25,763	17,889	61,016
	2015	17,385	25,278	18,392	61,055
	2020	17,408	24,737	18,954	61,099
	2025	17,427	24,275	19,434	61,136
	2030	17,442	23,937	19,785	61,164



**TABLE 2**  
**TOTAL WATER TREATMENT PLANT EFFLUENT, 1998-2008**

Calendar <u>Year</u>	Total WTP <u>Effluent</u>	Average Day <u>in MGD</u>	<u>Maximum Day Demand</u>		
			<u>MGD</u>	<u>Date</u>	<u>Ratio</u>
1998	2,384,901,000	6.534	9.63	8/10/1998	1.47
1999	2,708,565,000	7.421	12.68	8/5/1999	1.71
2000	2,619,357,000	7.157	11.63	7/14/2000	1.63
2001	2,698,791,000	7.394	11.46	6/28/2001	1.55
2002	2,629,855,000	7.205	12.55	7/19/2002	1.74
2003	2,668,281,000	7.310	10.60	7/18/2003	1.45
2004	2,813,286,000	7.687	10.57	7/9/2004	1.38
2005	2,725,273,000	7.467	12.10	8/12/2005	1.62
2006	2,514,430,000	6.889	9.95	8/14/2006	1.44
2007	2,626,296,000	7.195	10.97	8/4/2007	1.52
2008	2,619,375,000	7.157	12.64	7/18/2008	1.77

**Notes:**

1. "MGD" = million gallons per day.
2. Data are from City's "Annual Summary" worksheet, included in its daily WTP production record workbook.
3. The "Total WTP Effluent" includes some (though not all) plant water use, and is distinct from the City's "Water Produced Available for Sale (WPAFS)" statistic in Table 3 which does not include any plant water use. In 2008, the WPAFS represented 95.7% of the "Total WTP Effluent". In 2007, WPAFS was 96.0% of "Total WTP Effluent".



**TABLE 3**  
**WATER PRODUCED AVAILABLE FOR SALE (WPAFS)**

<u>Month</u>	<u>Water Produced Available for Sale</u>	
	<u>Gallons</u>	<u>MGD</u>
Jul 2006	237,059,600	7.65
Aug 2006	254,970,300	8.22
Sep 2006	208,115,000	6.94
Oct 2006	204,216,400	6.59
Nov 2006	179,439,400	5.98
Dec 2006	174,450,700	5.63
<i>6-month total</i>	<i>1,258,251,400</i>	<i>6.84</i>
Jan 2007	182,597,700	5.89
Feb 2007	169,937,500	6.07
Mar 2007	188,676,300	6.09
Apr 2007	193,637,100	6.45
May 2007	215,481,700	6.95
Jun 2007	232,392,700	7.75
<i>6-month total</i>	<i>1,182,723,000</i>	<i>6.53</i>
<b>Total FY 2007</b>	<b>2,440,974,400</b>	<b>6.69</b>
Jul 2007	268,896,000	8.67
Aug 2007	263,969,000	8.52
Sep 2007	240,073,000	8.00
Oct 2007	210,517,000	6.79
Nov 2007	175,924,000	5.86
Dec 2007	179,861,000	5.80
<i>6-month total</i>	<i>1,339,240,000</i>	<i>7.28</i>
<b>Total CY 2007</b>	<b>2,521,963,000</b>	<b>6.91</b>
Jan 2008	188,705,500	6.09
Feb 2008	163,235,000	5.63
Mar 2008	177,567,900	5.73
Apr 2008	190,030,700	6.33
May 2008	208,274,500	6.72
Jun 2008	240,923,700	8.03
<i>6-month total</i>	<i>1,168,737,300</i>	<i>6.42</i>
<b>Total FY 2008</b>	<b>2,507,977,300</b>	<b>6.85</b>
Jul 2008	293,024,700	9.45
Aug 2008	259,727,500	8.38
Sep 2008	221,207,800	7.37
Oct 2008	211,153,400	6.81
Nov 2008	187,276,800	6.24
Dec 2008	185,556,000	5.99
<i>6-month total</i>	<i>1,357,946,200</i>	<i>7.38</i>
<b>Total CY 2008</b>	<b>2,526,683,500</b>	<b>6.90</b>

Abbreviations:  
MGD = million gallons per day  
FY = fiscal year  
CY = calendar year



**TABLE 4**  
**METERED CONSUMPTION IN MILLION GALLONS**

<u>Fiscal Year</u>	<u>Retail Customers in Newport &amp; Middletown</u>				<u>Wholesale Customers</u>		<u>Total</u>	<u>WPAFS</u>	<u>Unmetered Water</u>	
	<u>Residential</u>	<u>Commercial</u>	<u>Governmental</u>	<u>Subtotal</u>	<u>PWFD</u>	<u>NSN</u>	<u>Metered</u>		<u>Amount</u>	<u>Percentage</u>
2006	749.4	472.2	21.4	1,243.0	N/A	373.3	N/A	N/A	N/A	N/A
2007	734.9	429.8	25.9	1,190.6	443.7	278.4	1,912.7	2,441.0	528.2	21.6%
2008	777.9	486.1	23.6	1,287.6	472.1	247.7	2,007.4	2,508.0	500.6	20.0%

Note: There are also a very small number of retail customers in southwestern Portsmouth, which are included in the figures above.



**TABLE 5**  
**MONTHLY WATER SALES TO PORTSMOUTH WATER & FIRE DISTRICT**

<u>Month</u>	<u>Water Sales to PWFD</u>		<u>Maximum Day Demand</u>	
	<u>MG</u>	<u>MGD</u>	<u>Amount</u>	<u>Date</u>
Jan 2006	31.494	1.016		
Feb 2006	27.491	0.982		
Mar 2006	30.088	0.971		
Apr 2006	31.872	1.062		
May 2006	34.284	1.106		
Jun 2006	36.800	1.227		
Jul 2006	44.226	1.427		
Aug 2006	48.664	1.570		
Sep 2006	37.806	1.260		
Oct 2006	37.340	1.205		
Nov 2006	32.197	1.073		
Dec 2006	31.725	1.023		
<b>CY2006</b>	<b>423.987</b>	<b>1.162</b>	<b>2.083</b>	<b>8/1/2006</b>
Jan 207	32.095	1.035		
Feb 2007	28.215	1.008		
Mar 2007	30.086	0.971		
Apr 2007	31.756	1.059		
May 2007	39.771	1.283		
Jun 2007	49.846	1.662		
<b>FY2007</b>	<b>443.727</b>	<b>1.216</b>		
<b>FY2007 minus Navy:</b>	<b>431.063</b>	<b>1.181</b>		
Jul 2007	55.976	1.806		
Aug 2007	56.136	1.811		
Sep 2007	47.208	1.574		
Oct 2007	40.645	1.311		
Nov 2007	29.688	0.990		
Dec 2007	30.738	0.992		
<b>CY2007</b>	<b>472.160</b>	<b>1.294</b>	<b>2.522</b>	<b>6/27/2007</b>
Jan 2008	28.856	0.931		
Feb 2008	28.803	0.993		
Mar 2008	30.152	0.973		
Apr 2008	33.735	1.125		
May 2008	38.370	1.238		
Jun 2008	51.777	1.726		
<b>FY2008</b>	<b>472.084</b>	<b>1.290</b>		
<b>FY2008 minus Navy:</b>	<b>460.635</b>	<b>1.259</b>		
Jul 2008	62.444	2.014		
Aug 2008	46.883	1.512		
Sep 2008	37.343	1.245		
Oct 2008	38.318	1.236		
Nov 2008	30.808	1.027		
Dec 2008	31.153	1.005		
<b>CY2008</b>	<b>458.642</b>	<b>1.253</b>	<b>2.615</b>	<b>7/19/2008</b>

Note: The two "minus Navy" rows subtract out PWFD's sales to the Navy.



**TABLE 6**  
**CITY RECORDS OF NAVY'S WATER USAGE, FY 2004 - CY 2008**

Period	Meters:										Monthly Usage		Annual Usage	
	B089-01200	B089-01300	B089-01400	B089-01500	B089-01700	B089-01800	B089-01804	B089-01900	B089-01901	B089-01902	Gallons	MGD	Gallons	MGD
2003-07	7,494,000	8,607,200	2,083,000	1,923,000	2,254,000	364,000	0	8,699,000	0	0	31,424,200	1.014		
2003-08	8,621,300	0	1,749,000	84,000	2,120,000	607,000	0	10,145,000	0	0	23,326,300	0.752		
2003-09	7,054,000	1,330,500	1,788,000	27,000	3,631,000	349,000	0	10,486,000	0	0	24,665,500	0.822		
2003-10	9,115,000	8,886,500	2,370,000	10,000	3,802,000	346,000	0	10,875,000	0	0	35,404,500	1.142		
2003-11	7,972,000	36,202,700	1,582,000	18,500	3,069,000	820,000	0	7,760,000	0	0	57,424,200	1.914		
2003-12	8,833,000	1,768,600	2,252,000	0	6,389,000	87,000	0	12,532,000	0	0	31,861,600	1.028		
2004-01	2,935,000	10,903,200	2,485,000		9,012,000	291,000	0	8,770,000	0	0	34,396,200	1.110		
2004-02	17,286,000	11,644,800	2,296,000	14,500	12,733,000	99,000	0	7,146,000	0	0	51,219,300	1.766		
2004-03	13,319,000	15,028,400	2,754,100	3,000	17,810,000	142,000	0	22,391,000	0	0	71,447,500	2.305		
2004-04	10,201,000	990,080	2,284,900	6,000	12,095,000	173,000	0	23,574,000	0	0	49,323,980	1.644		
2004-05	9,638,000	9,125,000	2,071,000	3,000	11,282,000	153,000	0	23,189,000	0	0	55,461,000	1.789		
2004-06	10,387,000	5,448,800	2,185,000	10,000	11,353,000	554,000	0	6,864,000	0	0	36,801,800	1.227	<b>FY 2004:</b> <b>502,756,080</b>	<b>1.374</b>
2004-07	9,923,000	1,557,900	2,268,000	22,000	8,058,000	288,000	0	8,939,000	0	0	31,055,900	1.002		
2004-08	6,470,000		1,338,000	20,000	1,607,000	1,050,000	2,000	5,000,000	243,000	4,745,000	20,475,000	0.660		
2004-09	7,409,000	1,270,600	1,950,000	20,000	2,728,000	270,000	15,000	4,550,000	113,000	4,919,000	23,244,600	0.775		
2004-10	8,333,000	1,870,600	1,846,380	20,000	3,589,000	268,000	4,000	4,775,000	155,000	4,938,000	25,798,980	0.832		
2004-11	7,555,000	1,329,150	2,377,000	20,000	4,104,000	284,000	1,000	4,662,500	96,000	5,598,000	26,026,650	0.868		
2004-12	8,151,000	2,001,400	2,500,000	0	6,142,000	260,000	1,000	3,211,400	143,000	5,002,000	27,411,800	0.884	<b>CY 2004:</b> <b>452,662,710</b>	<b>1.237</b>
2005-01	7,985,000	1,665,275	3,145,620	20,000	6,473,000	531,000	0	3,276,720	121,000	3,723,000	26,940,615	0.869		
2005-02	7,573,000	82,894,000	2,934,000	37,000	6,502,000	579,000	1,000	3,211,400	134,000	3,274,000	107,139,400	3.826		
2005-03	11,762,000	5,977,000	5,823,000	143,000	11,951,000	205,000	1,000	7,874,800	211,000	5,069,000	49,016,800	1.581		
2005-04	3,941,000	5,320,000	2,094,000	46,000	3,617,000	45,000	0	2,470,000	74,000	1,994,000	19,601,000	0.653		
2005-05	6,737,000	15,372,000	3,958,750	89,000	5,120,000	125,000	2,000	3,207,890	125,000	3,522,000	38,258,640	1.234		
2005-06	6,867,000	4,576,000		613,000	3,621,000	1,281,000	2,000	2,989,900	412,000	3,766,000	24,127,900	0.804	<b>FY 2005:</b> <b>419,097,285</b>	<b>1.148</b>
2005-07	5,225,000	10,767,000	4,034,066	21,000	1,608,000	347,000	5,000	3,028,630	179,000	3,637,000	28,851,696	0.931		
2005-08	3,644,000	12,090,000	1,535,500	12,000	335,000	344,000	8,000	3,370,810	151,000	3,966,000	25,456,310	0.821		
2005-09	4,827,000	11,979,000	1,863,000	27,000	492,000	303,000	8,000	4,804,170	148,000	4,533,000	28,984,170	0.966		
2005-10	8,442,000	12,034,500	1,692,250	19,500	1,280,000	324,000	1,000	6,102,960	260,000	7,679,000	37,835,210	1.220		
2005-11	1,985,000	12,006,750	0	2,500	582,000	43,000	1,000	1,121,090	41,000	1,493,000	17,275,340	0.576		
2005-12	7,371,000	12,020,625	4,870,000	11,000	3,359,000	133,000	1,000	5,759,750	114,000	4,669,000	38,308,375	1.236	<b>CY 2005:</b> <b>441,795,456</b>	<b>1.210</b>
2006-01	6,646,000	12,013,688	288,000	6,750	3,561,000	88,000	1,000	3,693,500	189,000	4,250,000	30,736,938	0.992		
2006-02	9,581,000	12,017,157	5,426,310	8,875	5,756,000	110,500	1,000	2,842,552	151,500	3,817,000	39,711,894	1.418		
2006-03	5,303,000	12,015,423	2,855,155	7,813	3,255,000	146,500	1,000	2,999,006	185,500	1,965,000	28,733,397	0.927		
2006-04	8,656,000	12,016,290	4,139,733	18,000	4,996,000	676,000	1,000	1,849,810	454,000	3,657,000	36,463,833	1.215		
2006-05	8,011,800	2,207,567	2,999,000	30,082	4,333,760	411,250	1,000	3,790,309	299,980	2,811,000	24,895,748	0.803		
2006-06	6,732,900	11,840,000	3,567,367	7,480	6,243,450	1,000	11,000	3,595,286	143,110	3,911,870	36,053,463	1.202	<b>FY 2006:</b> <b>373,306,374</b>	<b>1.023</b>
2006-07	7,372,350	7,023,784	3,276,184	100,000	5,288,605	206,125	6,000	3,358,168	221,545	3,361,435	30,214,196	0.975		
2006-08	7,052,625	9,431,892	6,962,000	71,200	817,835	397,625	8,500	3,204,337	182,328	3,636,653	31,764,995	1.025		
2006-09	7,212,488	8,227,838	1,923,993	100,100	2,575,350	260,800	7,250	2,818,699	201,937	3,499,044	26,827,499	0.894		
2006-10	7,132,557	8,829,865	4,804,258	100,900	3,344,540	547,200	(14,750)	2,450,141	192,133	3,567,849	30,954,693	0.999		
2006-11	7,172,523	8,528,852	2,867,000	94,000	2,990,440	161,870	2,000	2,265,161	197,035	3,533,447	27,812,328	0.927		
2006-12	7,152,540	8,679,359	5,730,000	100,000	3,327,340	80,110	0	2,007,095	194,584	3,550,648	30,821,676	0.994	<b>CY 2006:</b> <b>374,990,660</b>	<b>1.027</b>
2007-01	(16,168,783)	8,604,106	(3,466,000)	492,140	3,434,660	177,020	1,000	1,593,404	195,810	1,006,704	(4,129,939)	-0.133		
2007-02	2,807,400	8,641,733	532,000	5,329,620	2,848,340	65,650	1,000	1,595,696	195,197	1,743,220	23,759,856	0.849		
2007-03	4,583,700	8,622,920	536,000	(1,110)	4,843,220	121,335	1,000	1,408,343	195,504	3,236,340	23,547,252	0.760		
2007-04	3,877,700	8,000,000	937,000	399,350	3,789,550	93,493	0	1,200,141	195,351	2,489,780	20,982,365	0.699		
2007-05	4,230,700	7,400,000	1,006,000	399,350	4,703,560	107,414	0	990,046	195,428	2,613,880	21,646,378	0.698		
2007-06	3,464,500	5,200,000	626,000	100,000	2,179,000	100,454	0	547,214	195,390	1,827,560	14,240,118	0.475	<b>FY 2007:</b> <b>278,441,417</b>	<b>0.763</b>
2007-07	3,847,600	5,900,000	908,000	1,001,000	3,441,280	103,934	4,000	(71,830)	195,409	2,220,720	17,550,113	0.566		
2007-08	1,403,900	7,000,000	568,000	1,000,000	(299,170)	102,194	1,000	(320,435)	195,400	3,115,850	12,766,739	0.412		
2007-09	3,467,900	4,900,000	1,224,000	100,000	1,035,040	103,064	3,000	15,105,652	57,839	4,478,090	30,474,585	1.016		
2007-10	2,443,000	4,700,000	785,000	1,000,000	1,175,630	1,850,892	5,000	2,356,155	200,110	3,539,890	18,055,677	0.582		
2007-11	3,930,200	5,800,000	1,466,000	500,000	343,780	504,220	4,000	2,169,075	290,340	4,012,890	19,020,505	0.634		
2007-12	3,527,900	5,700,000	635,000	100,000	2,557,440	157,780	3,000	1,202,918	268,780	3,482,670	17,635,488	0.569	<b>CY 2007:</b> <b>215,549,137</b>	<b>0.591</b>
2008-01	1,567,004	6,200,000	782,000	100,000	2,187,097	253,804	5,000	1,574,511	157,660	3,494,890	16,321,966	0.527		
2008-02	6,301,696	8,300,000	1,032,000	100,000	5,370,013	131,196	2,000	1,855,032	137,110	3,732,670	26,961,717	0.930		
2008-03	3,978,200	7,300,000	996,000	1,059,328	4,801,340	235,000	5,000	2,287,628	127,120	3,673,660	24,463,276	0.789		
2008-04	2,672,800	6,200,000	799,000	100,000	3,767,000	211,660	2,000	1,829,245	83,330	3,895,890	19,560,925	0.652		
2008-05	3,548,700	6,200,000	799,000	100,000	3,894,220	457,340	0	3,199,333	120,220	4,473,440	22,792,253	0.735		
2008-06	2,836,400	7,700,000	999,000	0	2,545,770	713,890	1,000	2,672,412	224,094	4,432,120	22,124,686	0.737	<b>FY 2008:</b> <b>247,727,930</b>	<b>0.677</b>
2008-07	2,749,300	5,200,000	988,490	0	1,456,560	964,780	1,000	1,926,068	(12,534)	3,785,000	17,058,664	0.550		
2008-08	2,951,100	5,600,000	602,510	0	96,780	712,900	5,000	2,357,902	75,690	3,817,790	16,219,672	0.523		
2008-09	3,192,100	6,200,000	594,000	0	70,330	859,980	2,000	2,023,443	106,420	3,970,980	17,019,253	0.567		
2008-10	3,162,200	6,200,000	992,000	0	123,000	729,450	5,000	1,894,660	122,220	4,400,780	17,629,310	0.569		
2008-11	2,361,400	4,900,000	965,000	0	1,178,670	1,100,550	2,000	2,909,859	137,890	4,394,340	17,949,709	0.598		
2008-12	2,497,600	5,300,000	712,000	0	2,564,890	440,780	3,000	1,948,258	97,660	2,843,000	16,407,188	0.529	<b>CY 2008:</b> <b>234,508,619</b>	<b>0.641</b>



# Appendices

- A. Summary of Meeting with Wholesale Customers
- B. Summary of Meetings with City and Town Planners
- C. Water Demand Projection from Naval Station Newport



# **Appendix A**

## **Summary of Meeting with Wholesale Customers**





## Meeting Summary

*To: Julia Forgue, P.E., Director of Utilities*

*From: Carol Rego and Jeff Diercks*

*Date: February 18, 2009*

*Subject: Meeting with Portsmouth Water & Fire District and  
Naval Station Newport – Task 3.1, Review of Demands and Supply*

On Thursday, February 12, 2009, the Newport Water Division convened a meeting at the Station No. 1 Water Treatment Plant with its two wholesale customers to discuss aspects of the City Advisor project. The two wholesale customers are Naval Station Newport and the Portsmouth Water & Fire District (PWFD).

### Purpose of Meeting

The primary purpose of the meeting was to review Task 3.1 of the City Advisor project, which includes preparing water demand projections and comparing those projections to the available supply source yield. The ultimate goal of Task 3.1 is to establish design capacities for the two water treatment plants.

The meeting was intended to advise the two wholesale customers of Newport's need for information about their future water demands. The meeting attendees included:

- Newport: Julia Forgue\*
- Navy: Joanne Galuska, Jim Carlson\*, Jeremy Jones
- PWFD: Bill McGlinn\*, Phil Driscoll
- CDM: Carol Rego, Jeff Diercks\*

\*Primary contact on water demand issues.

The Attendance List and Agenda Handout are attached. The major discussion items are presented below.

### Discussion at Meeting

#### Introduction

Julia began with an overview of the City Advisor project as a whole, referring to the handout's schedule chart, which lists the various tasks. The overall schedule goal of the program is to have water treatment plant improvements done by the end of 2014, per the



City's Consent Agreement on compliance with disinfection byproduct regulations. Carol briefly discussed the scope of Task 3.1, indicating that Newport wished to obtain the best projections possible from the wholesale customers themselves.

Jeff then reviewed each of the agenda items for the two wholesale customers, to learn more about issues with each customer that affect their water demands and to identify needed information. He indicated that, in a consistent manner with prior studies, this study would eventually adopt demand projections on a 5-year and 20-year timeframe (2014 and 2029).

### **Portsmouth Water & Fire District**

Bill McGlinn indicated that PWFD serves the entire Town, except for the few customers who receive water directly from Newport and a few customers with private wells. A count of the number of private wells is not available, but Bill thought it was less than 200. Water system expansions are not funded by the District, but by interested developers. The major streets all have PWFD water mains, but as areas in-between are developed, developers may fund new water mains in those areas.

PWFD obtains all of its water from Newport. In past years, PWFD obtained some water from the Stone Bridge Fire District (SBFD). PWFD does not regard SBFD as a significant potential supply source for PWFD's future needs because their supply is limited, but PWFD maintains an emergency interconnection with SBFD. PWFD did perform some studies of potential surface water supply about 20 years ago, and has had been conducting a bedrock well feasibility study though it is currently on hold. It is not expected that bedrock wells, even if they were demonstrated to be feasible, would totally replace the Newport supply. PWFD has thought about desalination also.

Bill asked about the results of Newport's safe yield study. Julia reviewed some of the basic conclusions regarding yield. The results of the study include the following:

- Drought of Record (1964-66) Yield is 9.39 mgd
- 20-Year Recurrence Drought Yield is 10.66 mgd
- Average Conditions Yield is 14.71 mgd

She said the study is still in draft form and not yet ready for public release.

Jeff indicated that it appeared a 5-year projection of PWFD demand should assume that 100% of PWFD's water would still be coming from Newport, because of the long duration needed to study, permit, design and construct alternative water supplies. Bill agreed that was reasonable, but that it is not possible to project what PWFD's stance toward alternative supply sources might be in the 20-year timeframe. This will depend in part upon the quantity and quality of water available from Newport.



Bill reviewed various water conservation and demand management measures practiced by PWFD including the following:

- The master meter with Newport is calibrated twice per year.
- Unaccounted-for water is under 10%.
- A full-system leak detection survey is performed every year. The District is considering a program of using in-field leak correlators (M-logs) that transmit leakage information by radio in the near future.
- PWFD has reviewed the economic feasibility of consumer meter replacement, and has adopted a goal of having a maximum meter age of 21 years. PWFD is nearing the end of a 10-year program to achieve that goal. The District will consider transitioning to an AMR (automatic meter reading) system in the next five years.
- PWFD monitors the pumpage and storage levels daily.
- PWFD does not necessarily adopt summer water use restrictions such as outdoor watering controls, but considers doing this when the demands rise to 1.8-2.0 million gallons per day (mgd). The pumping capacity is 2.5 mgd.

Normally, PWFD does not sell water to the Navy. There has, however, been a temporary sale from PWFD to the Navy since September 2006 that will conclude around September 2009. The amount is about 12 million gallons per year.

Jeff asked if CDM could obtain a PWFD water system map and the latest Water Supply System Management Plan (WSSMP). Bill said yes, and that the WSMMP will be updated in May 2010. Jeff asked for background information on the basis of the projection Bill provided to Newport in November 2008. Bill said he would provide that. He indicated he had not worked directly with the Town Planner on that update, but that PWFD instead believes a review of trends in customer tie-ins is best for projections. He reported there is concern in Portsmouth regarding the accuracy of the 2000 federal census and state projections.

Phil and Bill discussed the possibility of a future wastewater treatment plant and sewers in Portsmouth. Jeff mentioned a newspaper article from mid-January about this issue. Phil said he was on a Committee examining this issue and reported that the current Town Council is very much against having sewers. There is much concern that sewers would open up more land for development. RIDEM would like sewers built in the Portsmouth Island Park area because of pollution there. It is expected that various Navy properties will be released in 2011 and that environmental cleanup will be needed. The West Side Master Plan indicated that these areas may eventually be sewered. There was general agreement that the potential sewers and the potential WWTP in Portsmouth are not an issue within the 5-year planning horizon, but anything could happen within the 20-year horizon.



Bill suggested Bob Gilstein (Town Planner) and Tina Dolen (Executive Director, Aquidneck Island Planning Commission) as contacts about development in Portsmouth, including potential development on Navy land and its schedule. Ed Lopes is a contact if information is desired about a proposed O'Neill Properties marina development just south of the Navy's Melville Backyard property.

### **Naval Station Newport**

Naval Station Newport derives all of its water supply from the Newport water system. There are ten active metered connections, and 14 connections total.

With respect to water conservation and demand management measures, Navy officials noted the following:

- The meters at the Newport connections are calibrated annually by the City. Meters are read monthly for billing purposes.
- The Navy's water system has about 170 consumer meters, including area meters in some parts of the base. The Navy has a program of updating and downsizing these meters, and calibrating some of their higher-usage meters. There is also a nationwide Navy program to meter all Naval housing.
- An estimate of unaccounted-for water was not available at the meeting, but Navy officials will provide this. A water audit (comparing purchase at the Newport meters to metered use) has not been performed for at least six months.
- A leak detection survey was performed in 2006, and another is scheduled for 2009. The Navy's goal is to perform such surveys every two years.
- The Navy feels it has an excess of water storage in its system. They perform an annual flushing of the system in the fall. This is not intended to address water age issues, but just to clean the pipelines.

Jeff noted that because there are no daily readings at the Navy's ten master meters, information about historical maximum day demand is not available. He said that the available information would allow calculation of a peak-month-to-average-day factor, and that an estimate of maximum day demand could be derived from that. Julia noted that a demand study would be done in the summer of 2009 as a requirement of the PUC settlement agreement.

Jim indicated the base was trending downward in consumption. The Navy housing in Middletown was down from 2,000 to 800. Further, recent federal Executive Orders for water conservation and reduction have replaced former Best Management Practices (BMPs) and are reducing water use. The Navy is increasing its use of condensate water for heating systems, reducing the need for makeup water from the public water system. A Honeywell Energy



Project will result in increased use of efficient plumbing fixtures such as low-flow flushometers, showerheads, and faucets.

Jim said there is an annual energy report which has information on Navy water use. He will request clearance to get us the portions of that report which address water use.

Jeff asked if it was possible to get an overview of the excessing process, by which the Navy declares property surplus and disposes of it. Joanne offered to get back to us on that.

The group looked at a map in the handout showing the properties that are recommended to be designated as excess. Jeff asked if there was existing water use on these parcels. Joanne said there was essentially none and that most of those parcels are now vacant.

Jeff mentioned a discrepancy between information about current base population in a mid-2008 presentation slide included in the handout (6,470) and in a November 2008 email to Newport (7,800). Joanne said she would check to get the correct figure, and the best available estimate of future base population. There is nothing else in the BRAC (Base Realignment and Closure) process that would significantly affect water demand, beyond the change in personnel numbers.

### **Information Requested**

The information requested from PWFD was the following:

- Water system map
- Latest Water Supply System Management Plan
- Details on the basis of the November 2008 demand projection

The information requested from Naval Station Newport was the following:

- Existing and future base population
- Information on unaccounted-for water
- Information on water use from the annual energy report
- Background on the excessing process

Navy and District officials indicated this information could be provided within two weeks.

Attachments: Attendance List and Meeting Handout



CITY OF NEWPORT, RHODE ISLAND  
DEPARTMENT OF UTILITIES

CITY ADVISOR PROJECT MEETING  
February 12, 2009

ATTENDANCE LIST

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CITY OF NEWPORT, RHODE ISLAND  
DEPARTMENT OF UTILITIES

CITY ADVISOR PROJECT MEETING  
February 12, 2009

Agenda

1. Introductions, and Purpose of Meeting
2. Scope of Task 3.1 – Review of Demands and Supply
3. Portsmouth Water & Fire District
  - a. Area served; planned water system expansions; growth policies
  - b. Future source status
  - c. Current & future water conservation and demand management activities
  - d. Basis of prior demand projection (Nov. 2008)
4. Naval Station Newport
  - a. Connections to municipal mains, and metering arrangements
  - b. Current & future water conservation and demand management activities
  - c. Master Plan 2008
  - d. “Excess property”
    - i. Status of “excess property”: Tank Farms 1-4, Melville Backyard, former Navy Hospital, former Navy Lodge.
    - ii. Types of potential development on excess property; development controls
  - e. Changes planned on “retained” lands
5. Discussion of WWTP in Portsmouth
6. Remaining information needed
7. Next Steps, and Schedule
  - a. Meetings with Planning Departments in Newport, Middletown, Portsmouth
  - b. Other



Exhibit B  
Amendment No. 1  
Professional Services as City Advisor for Water Utility Strategic Options and  
Delivery of Water Treatment Facilities, Project 08-028

Project Schedule

		2009											
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Phase 2 - Utility Financing													
2.1	Comparison of Life Cycle Costs												
2.2	Update Financial Projections												
2.3	Develop Financing Plan												
2.4	Develop Master Loan Documents												
2.5	Support PUC Approval Process												
2.6	Institutional Support												
2.7	Fin Plan Implementation												
2.8	Support New Water Sale Contracts												
Phase 3 - Engineering Studies and Technical Project Development Requirements													
3.1	Demands/Supply/Plant Capacity												
3.2	LVWTP Siting Study and Engineering												
3.3	Station No. 1 Improvements Engineering Investigation												
3.4	Permitting												
3.5	Analysis of WQ Data; Technology Screening; Pilot Testing												
3.6	Project Definition, Quality and Performance (RFP Vol III)												
3.7	Pipe Loop Testing												
3.8	Conceptual Cost Estimate												
3.9	Prepare QA/QC Program												
3.10	Project Management and Schedule												
Phase 4 - Design-Build Procurement Documents and Process													
4.1	Request for Qualifications												
4.2	Conduct RFQ Process												
4.3	Prepare RFP Volume I												
4.4	Support Draft DB Contract												
4.5	Conduct RFP Process												
4.6	Support DB Contract Negotiations												
4.7	Coordinate Procurement Team												
4.8	Prepare Risk Register												

Tasks shown in bold are fully or partly authorized by Amendment 1.  
Schedule is based on January 16, 2009 start date.



# Portsmouth Water and Fire District

1944 East Main Road  
P.O. Box 99  
Portsmouth, Rhode Island 02871-0099

(401) 683-2090  
Fax (401) 682-1550  
E-mail: info@portsmouthwater.org

RECEIVED  
NOV 21

November 19, 2008

Director of Utilities  
City of Newport, RI

Kenneth Mason, P.E.  
Deputy Director of Utilities  
70 Halsey Street  
Newport, RI 02840

Re: Newport Water Department Safe Yield Study

Dear Mr. Mason:

Per your telcon request we have projected the District's 5-year and 20-year demand, based on historical data, for use in your safe yield study. The projected District demand is as follows:

YEAR	AVERAGE DAY (MGD)	MAX DAY (MGD)
2013 (5 Year)	1.43	2.58
2028 (20 Year)	1.62	2.92

If you have any questions on the above or require any additional information, please do not hesitate to contact me.

Sincerely,  
PORTSMOUTH WATER AND FIRE DISTRICT



William J. McGlinn, P.E.  
General Manager and Chief Engineer

WJM/wjm

cc: [illegible]

[illegible text]



## Mason, Kenneth

---

**From:** Monaco, William O CIV NAVFAC MIDLANT [william.monaco@navy.mil]  
**Sent:** Tuesday, November 18, 2008 3:39 PM  
**To:** Mason, Kenneth; Carlson, James F CIV NAVFAC MIDLANT, NWPT  
**Cc:** Davis, Michelle L CIV NAVFAC MIDLANT  
**Subject:** FW: 5 and 20 year projections

Ken I can give you rough numbers for population growth for the near future. Our current population, from our water permit, is about 7800. Because of BRAC there will be some people coming and going and it is estimated that in the next 5 years the population will be increasing about 20% from our current numbers. Therefore increasing to a population of about 9660. I'm sorry I don't have anything for 20 years out.

Jim if you have a better feel of the water usage for 5 and 20 years out please provide to Ken.

Thanks  
Woody

William Monaco, PE  
Civil Engineer / Planning  
Naval Station Newport  
401-841-7618  
William.Monaco@navy.mil

-----Original Message-----

**From:** Mason, Kenneth [mailto:kmason@CityofNewport.com]  
**Sent:** Tuesday, November 18, 2008 14:56  
**To:** Monaco, William O CIV NAVFAC MIDLANT  
**Subject:** 5 and 20 year projections

Hi Woody,

Was wondering if you had a chance to see if the Navy has a 5 and 20 year projection for water usage on the base? If not for water usage, I could use a population projection. Just trying to finish up our reservoir safe yield analysis and future population growth is a pretty big factor in forecasting ahead.

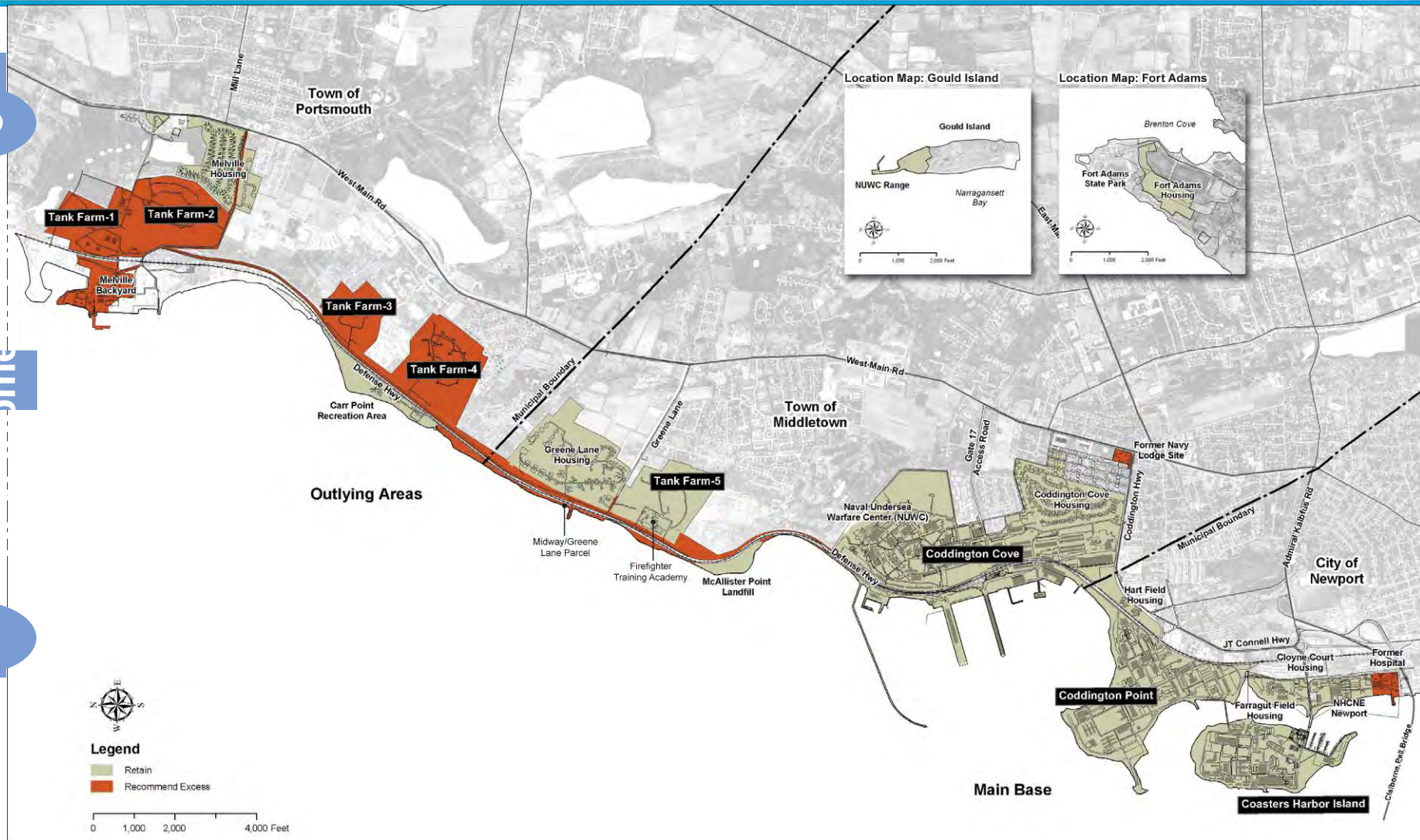
Thanks for your help,

Ken

Kenneth R. Mason PE  
Deputy Utilities Director-Engineering  
City of Newport  
70 Halsey Street  
Newport RI 02840  
401-845-5614



# Recommended Property Disposition





# Recommended Property Disposition



Area	Acreage	EVS Recommendation
Melville Backyard	35	Excess
Tank Farm 1	49	Excess
Tank Farm 2	96	Excess
Tank Farm 3	41	Excess
Tank Farm 4	83	Excess
Defense Highway (north of NUWC)	67	Excess
Former Navy Lodge	3	Excess
Former Navy Hospital*	10	Excess
Tank Farm 5 and Firefighter Training Area	72	Retain
Carr Point Recreation Area	29	Retain
McAllister Landfill	11	Retain
Gould Island	13	Retain
Family Housing Areas	301	Retain
<b>Total Excess</b>	<b>384</b>	
<b>Total Retain</b>	<b>426</b>	

*\*Three of the total 10 acres are beneath the water surface*

*Source: Recommendations from Executive Visioning Session, Washington Navy Yard, June 2007.*

*Acreages derived from GIS mapping provided to EDAW by NAVSTA Public Works Dept.*

Note: Tank Farms 3 and 4 are proposed for excess with the exception that approximately 30 acres may be retained for renewable energy projects.



# Population Changes (BRAC & Non-BRAC)



Backup

GROUP	IN	OUT
• Army Reserve*	34	
• CSS	75	
• MARDET	104	
• NWC (MOC-T)**	198	
• NUWC	164	
• NSCS**	333	
• OTC**	369	
• SEA**	73	
• CHAPS**		-62
• NWDC***		-116
• REDCOM		-21
<b>Totals (+/-)</b>	<b>1,350 PN</b>	<b>-199 PN</b>

\* Does not include weekend reservists

\*\* Includes Average-on-Board Student Loading

\*\*\* NWDC has a significant contractor population. Actual loading lost is approximately 260 personnel.

Existing  
Base Loading  
6,470

Additional  
Personnel  
1,150

Future (2011) Total  
7,620



## **Appendix B**

### **Summary of Meetings with City and Town Planners**





## Meeting Summary

*To: Julia Forgue, P.E., Director of Utilities*

*From: Carol Rego and Jeff Diercks*

*Date: March 26, 2009*

*Subject: Meetings with City/Town Planners  
Task 3.1, Review of Demands and Supply*

On Wednesday, March 11, 2009, Jeff Diercks of CDM met separately with each of the three City/Town Planners to discuss issues related to population and water demand projections. The purpose of these meetings was to solicit the opinions of the Planners about:

- Historical population data and existing State population projections for their communities
- Current and anticipated future development trends in their communities

Prior to the meetings, CDM sent each planner a copy of Table 1 (attached) which lists the historical and projected populations for the three municipalities on Aquidneck Island, and also a suggested agenda for the discussion. The agenda for one discussion is attached as a representative example.

### Portsmouth

CDM met with Mr. Robert W. Gilstein at Town Hall (2200 East Main Road, Portsmouth, RI 02871). Mr. Gilstein is the Town Planner. His phone number is 401-683-0888, and his email address is [rgilstein@portsmouthri.com](mailto:rgilstein@portsmouthri.com).

### Census and State Information

The U.S. Census 2000 population count was 17,149. The Census' annual estimates since that time have varied up and down somewhat but can be characterized overall as steady. Mr. Gilstein noted that the school population has decreased in the last few years, and that new home construction is definitely down in the past 2-3 years. He provided a list of building permits in the 1993-2008 period (attached) which clearly shows this. He indicated he had no way of contesting the 2000 Census, and does not feel there has been a population decline since then. There is no annual Town census, and no other population projection information.



He does not have an issue with the State projections, but notes that they assume that there will be no wastewater collection and treatment system in Portsmouth. If instead such a system is eventually constructed, then he would expect some additional infill development beyond what would otherwise occur, and the resultant population would be somewhat higher.

It is not clear whether the State's projections handled the Navy population in the same way as the U.S. Census or in a different manner. The person to talk to at the State to determine their procedures would be Mark Brown, 401-222-6183, [mbrown@doa.ri.gov](mailto:mbrown@doa.ri.gov).

### **Navy Surplus Property**

Mr. Gilstein provided an update to the information in the West Side Master Plan (WSMP) regarding the eventual re-use of the four Tank Farms and the Melville Backyard. The attached table shows the current estimates of developable areas and building size.

A key question is whether residential development will be included in the re-use plan. Tank Farms 1 and 2 are the most likely to be pursued. The upper part of the tank farms may be suitable for residential development or residential/mixed use development. At Tank Farm 4, there is significant concern about prior site use (underground storage tanks) but underground conditions are currently unknown as no testing has been done yet. The USTs were as much as 30 feet deep and were imploded by the Navy. It is possible the upper part of Tank Farm 4 will prove to be usable.

The Town is not particularly interested in additional residential development, with the possible exception of high-end development for second homes which does not place much burden on Town services. But the Town recognizes the need for workforce housing, such as for the boatbuilding enterprises in Melville. Mr. Gilstein suggested that there could be as many as 100-150 residential units total in the surplus property area. None of these will exist in CDM's 5-year planning horizon, but probably all of them will in the 20-year horizon.

Portsmouth intends to do a targeted market analysis within a year for these Navy properties. He noted that they could double the commercial land use in the Melville area.

### **Wastewater Planning**

The WSMP showed a potential wastewater treatment plant (WWTP) on the Tank Farm 3 property. Today, the leading candidate for WWTP site is the nearby Raytheon Property. Raytheon already has an outfall for their WWTP.

Mr. Gilstein had just received a copy of the wastewater master plan. He provided a copy of some sewer flow estimates prepared in 2007 for that project (attached), which ranged from 1.53 to 1.88 mgd on a maximum day basis, excluding infiltration/inflow. He indicated he would provide a map showing the area of the Town included in those estimates. (This was



received on March 25 and is attached.) He mentioned the controversy around the WWTP project because of the concern about increasing growth.

He offered his “guess” that the Town would ultimately, reluctantly, decide a WWTP is needed on the west side. He expects that a similar proposal that has been considered for the North End would not succeed.

He will send us a projection of development in the North End assuming sewerage succeeded. (This was received March 25 and is attached.) But the preliminary numbers from 1.5 years ago indicated costs that were considered by many to be “outrageous”. The State has been pushing for sewerage here because of marine pollution in the area, but their data are showing improved conditions, which works against the argument for a WWTP.

### **Other Development**

There is no rezoning in the works that would significantly affect development trends.

Mr. Gilstein provided a list of planned major developments in Portsmouth, and supplemented it with additional information the next day (see attachments).

In 2008, Mr. Gilstein did a “What’s Left?” study for other potential developable lands in Portsmouth. The intent was to show how many buildable lots there may be under current zoning if all larger parcels were eventually developed. The results are attached.

He also mentioned the proposed “Little Town Center” development just down the street from Town Hall, and said he would mail the buildout analysis of this area. Currently the area consists of vacant land and defunct buildings. He mentioned that originally Portsmouth was just a farm town with no defined town center. In 1960 the town was still 75% farms. It only developed and began to get a town center once the bridges were built.

### **Conclusion**

Mr. Gilstein said that he and the Town have “more than a general interest” in water and wastewater planning issues. The water supply planning issue is particularly critical to him right now as a new plan is being developed for the re-use of the Navy surplus property and there is concern about sufficient supply being available for the eventual re-use. The new plan is due to be completed in fifteen months and will, as needed, modify the approach presented in the West Side Master Plan.

He requested to be informed about the progress of the Newport project, and to receive a copy of the final deliverable on Task 3.1. He also would like to see the Safe Yield Study when it is finalized, and requested information on which State regulators would be reviewing that study.



## **Middletown**

CDM met with Mr. Ronald M. Wolanski at Town Hall (350 East Main Road, Middletown, RI 02842). Mr. Wolanski is the Director of Planning and Economic Development. His phone number is 401-849-4027, and his email address is [rwolanski@middletownri.com](mailto:rwolanski@middletownri.com).

### **Census and State Information**

Mr. Wolanski discussed the apparent 2,100-person decline in Middletown's population from 1990 to 2000. The Town discussed this at length with the Census Bureau. It turned out that the methodology of counting military personnel, which had been consistent for many decades, was changed for the 2000 Census. The duration for which such personnel have lived in a particular place now affects where they are considered to be residing, for Census enumeration purposes. Since no significant changes occurred in Middletown during the decade, and since the Town feels the population during that period was essentially stable, the 2,100-person decline has been attributed to this change in methodology.

Mr. Wolanski noted that the Census Bureau's estimates since 2000 show a continuing decline. He does not agree that this is actually happening. It may be an extrapolation of the apparent 1990-2000 trend.

The State projections are essentially static, with only a tiny (92-person) increase from 2005 to 2030. Mr. Wolanski said he believes the Town's situation going forward will be one of slow growth -- not a decline but not fast-growing either. He thinks the projected increase is a little low. He would expect that there may be on the order of two dozen new single-family residences going annually forward, but that the continuing decline in overall household size will partially offset the associated population growth.

He commented on the Navy's BRAC process, indicating that some small growth from that may occur in Middletown.

There is no annual Town census, and a buildout analysis has not been conducted.

### **Upcoming Development**

There is little activity anticipated in Middletown, and no rezoning of any consequence is planned. There is always a trickle of one-to-two-lot subdivisions, but no significant subdivision developments. The following are the only two residential developments being pursued at this time:

- A 14-lot subdivision has been approved in an area off Bailey Avenue, bounded by Trout Drive to the north and Sachuest Drive to the south. This area is right on the line dividing the area of Middletown served by public water from the part that has no public water. The



developer gave some consideration to connecting to the Newport water mains but decided against it due to cost. Private wells are now planned.

- A 60-unit, age-55+ development has been approved off Forest Avenue. The area is bounded by the Forest Avenue School on the northeast, and Sundown Lane on the southwest. The development is connected to the public water system. About 6-10 units are built, but none have yet been occupied.

Mr. Wolanski noted that there is more developable land on the east side of town, where there is no water system. In the long run, there will be more residential development there, but this will not affect the water system.

Regarding commercial development, the largest project in motion is the Aquidneck Corporate Park. This area is located just east of Green End Pond, and appears in purple on the zoning map. Originally developed about 30 years ago, the corporate park is transitioning to a high tech/defense contracting area, and the Town wants more development here. The current buildings total about 650,000 square feet. Some are likely to come down and be rebuilt in the future. The Town's goal is to double-or-better the current square footage. Mr. Wolanski indicated, however, that he did not expect much of this to be occupied during CDM's 5-year planning horizon.

There are two other corporate parks in Middletown. They appear in blue on the zoning map, and are smaller than the Aquidneck Corporate Park. One is off the Gate 17 Access Road, and the other is adjacent to Town Hall. The Town desires some of the vacant land in these areas to be developed.

One large parcel of interest along West Main Road is the Rhode Island Nurseries parcel, which also abuts the Wanumetonomy Country Club. The landowner has no plans to sell or to change the land use at this time, but should that happen in the future the Town would like to see a mixed-use development in this area.

Along and east of the western edge of the area served by Newport water mains are many parcels which are now conserved. The zoning map labels some of them, such as the Sachuest Point National Wildlife Refuge and the Norman Bird Sanctuary. But there are other large parcels in this area, including various farms and vineyards, which are protected from future development.

### **Fire Chief's Interest in Water System Extension**

The Middletown Fire Chief has expressed interest in expansion of the public water system into the currently-unserved area. The Chief is not enamored of the use of cisterns for fire protection, and has proposed extensions in particular areas where he would like to see hydrants. Mr. Wolanski indicated that, if there were a major extension project, this would go



before the Planning Board. There is some concern about whether water system extension would increase growth pressure, and it does not appear likely there will be water main extensions for this purpose in the near future.

## **Newport**

CDM met with Mr. Paige R. Bronk at City Hall (43 Broadway, Newport, RI 02840). Mr. Bronk is the Director of Planning, Zoning, Development and Inspection. His phone number is 401-845-5450, and his email address is [pbronk@cityofnewport.com](mailto:pbronk@cityofnewport.com).

### **Census and State Information**

The 2000 U.S. Census showed a decline of over 1,700 persons in Newport. Newport did not contest this, because it was not considered a significant difference in terms of any implications for the City. Mr. Bronk pointed out that there are a substantial number of transients in Newport, plus many persons with second homes here, which complicates the count.

Mr. Bronk did not put much weight on the subsequent Census population estimates. He mentioned the 2008 data may be of better quality for communities like Newport which are under 30,000 in population, and should be available soon on the Census website. He believes that there will not be much change in the Census figures between 2000 and 2010 -- if anything, perhaps a slight increase.

He feels that Newport has bottomed out in terms of any population decline, and will hold its current population figures for some years to come. However, in the period from 10 to 20 years from now, he anticipates an uptick in population. The reason for this is that Newport is a very desirable location for retirees, who are expected to have a significant impact on the population. Mr. Bronk disagrees with the State's projections which show a steady decline in the period 2005-2030, for this reason. He suggested the increase during the 20-year planning horizon may be on the order of 1,000, not including the Navy population.

There is no annual census in Newport, and no significant rezoning anticipated with the exception of the North End of the City.

### **Development Trends**

Newport still has a reasonable amount of development activity for a community of its size. For the fiscal year ending June 30, 2008, Newport had its highest permit revenue ever, due to the significant redevelopment activity. Among the prominent recent redevelopment projects have been various waterfront properties, including the Hyatt Hotel on Goat Island and an old ice house which is becoming a mixed-use facility. Newport has eight old elementary schools in the process of being converted to other uses (two completed, two in process, and four to go). One of the largest downtown buildings, the Post Office building at Thames Street and Memorial Boulevard, will soon be on the market. Another major project is the Bellevue



Gardens shopping center, a \$40 million mixed-use development with about 40 residential units plus small retail space.

Mr. Bronk considers the former Navy Hospital to be the “crown jewel” of the properties now under consideration. This is waterfront property within the City limits -- a great location with buildings in good condition. The City intends to acquire the property and work with a developer. This will not be completed within the City Advisor Project’s 5-year planning horizon, but will be completed within the 20-year horizon.

There are a number of publicly-owned parcels which are being turned over for development. Several are near the Pell Bridge interchange, including the site to which the area’s microbrewery (Coastal Extreme Brewing Company) will relocate from Middletown. Another example is the future home of the BankNewport headquarters adjacent to the CCRI campus on J.T. Connell Highway. In such cases, the City typically issues an RFP for a developer, and works to change zoning in the area to suit the needs of the project. For example, the Navy Hospital will be rezoned from residential to mixed-use development.

Mr. Bronk offered to send a list of various upcoming projects in Newport, and did so later that same day (email is attached).

### **Issues Regarding Demand Projections**

Mr. Bronk expressed interest in water conservation issues and wondered how they would affect the demand projections. We discussed several aspects of water conservation and demand management programs, and how they may factor into the demand projections. This included the possibility of focusing conservation efforts in particular market sectors. Mr. Bronk thought that addressing how those in the tourist trade conserved water was particularly important, due to the prevalence of hotels, bed & breakfasts, and timeshares in Newport.

Mr. Bronk offered comments on two factors that argue in favor of being conservative in the demand projections – that is, in favor of building in a small contingency. One factor is Newport’s historical record, which demonstrates significant population swings in both directions. The other is the tourist trade, which is a major driver for the economy. Upward movement in the average occupancy rate over time could significantly affect water use.



## ATTACHMENTS

- Table 1, Federal and State Population Data
- Sample Agenda for Meetings with Planners
- Information Received from Mr. Gilstein, Portsmouth
  - Table of Tank Farm Data
  - Planned Major New Developments
  - Building Permits, 1992-2006
  - West Side Flow Estimates
  - 2008 “What’s Left?” Study (3 pages)
  - Email from Mr. Gilstein, dated March 12
  - Email from Mr. Gilstein, dated March 25, including sewer service map and wastewater flows and loads (10 pages)
- Email from Mr. Bronk, Newport, dated March 11



**TABLE 1**  
**FEDERAL AND STATE POPULATION DATA**

		<u>Middletown</u>	<u>Newport</u>	<u>Portsmouth</u>	<u>Aquidneck Island Total</u>
<b>COUNTS</b>	<b><u>U.S. Census</u></b>				
	1950	7,382	37,564	6,578	51,524
	1960	12,675	47,049	8,251	67,975
	1970	29,290	34,562	12,521	76,373
	1980	17,216	29,259	14,257	60,732
	1990	19,460	28,227	16,857	64,544
	2000	17,334	26,475	17,149	60,958
	2000 Avg. Household	2.43	2.11	2.53	2.32
	2000 Avg. Family	3.01	2.86	3.00	2.94
<b>ESTIMATES</b>	<b><u>U.S. Census Population Estimates</u></b>				
	7/1/2001	17,289	26,343	17,242	60,874
	7/1/2002	17,285	26,218	17,353	60,856
	7/1/2003	17,207	25,969	17,410	60,586
	7/1/2004	16,986	25,605	17,261	59,852
	7/1/2005	16,697	24,648	17,090	58,435
	7/1/2006	16,419	25,644	16,999	59,062
	7/1/2007	16,259	25,359	17,030	58,648
<b>PROJECTIONS</b>	<b><u>R.I. Statewide Planning Program, 2004</u></b>				
	2005	17,350	26,086	17,553	60,989
	2010	17,364	25,763	17,889	61,016
	2015	17,385	25,278	18,392	61,055
	2020	17,408	24,737	18,954	61,099
	2025	17,427	24,275	19,434	61,136
	2030	17,442	23,937	19,785	61,164



**CITY OF NEWPORT, RHODE ISLAND  
CITY ADVISOR PROJECT  
REVIEW OF POPULATION AND WATER DEMAND PROJECTIONS**

**POTENTIAL DISCUSSION ITEMS  
TOWN OF PORTSMOUTH**

1. Available Population Data
  - a. Comments/concerns on accuracy of 2000 Census and of subsequent Census population estimates? (See Table 1.)
  - b. Comments/concerns on the 2004 RI population projections?
  - c. Is there an annual Town Census?
  - d. Are there other available population projections?
2. Expected Navy Surplus Property in Portsmouth (Tank Farms 1-4, and Melville Backyard)
  - a. Current expectations regarding the type of development?
  - b. Possible timing of development?
  - c. Any other information that might be useful in estimating a future water demand for these properties?
3. Other major projects/developments in Portsmouth
  - a. Could we get a list of ongoing and potential developments in Portsmouth, with information on type, size (no. of residential units, area of commercial space, etc.), timing, and/or other information?
  - b. Are there any water demand projections that have already been prepared by developers for any such projects?
4. Thoughts on the potential Portsmouth Wastewater Treatment Plant, and impacts upon future development?
5. Any other information or thoughts on matters that may affect future water demands in Portsmouth?



# EST. SITE CAPACITY

	Tank Farm #1	Tank Farm #2	Tank Farm #3	Tank Farm #4
Site Area	45 acres	93 acres	29 acres	94 acres
Non-Developable	8.5 ac.	15 ac.	12.5 ac.	14 ac.
Developable	36.5 ac.	78 ac.	16.5 ac.	80 ac.
Development 20%	318,000	679,500	143,750	697,000
Lot Coverage	SF	SF	SF	SF
Total		997,500		
TF 1 & 2		SF		

TANK FARM  
IMPROVEMENT  
- WASTEWATER

MIN. 4 YRS TO FIRST GROUND  
ESTIMATE BUILDOUT DURING 10  
OFFICE LIGHT IMPROVEMENT R-8, OVERHEAD LIGHTS  
UP TO 100 UNITS OF HOUSING (TANK FARM #1 & #2)



# PORTSMOUTH - PLANNED MAJOR NEW DEVELOPMENTS - 3/09

## CURRENT STATUS

### O'NEILL - CARNEGIE HEIGHTS AREA

No. 3 bdrm units	90	tower
No. 3 bdrm units	24	townhouses
	<u>114</u>	

### TIMING

3 mos.  
2 yrs.

under construction

### O'NEILL - WEAVER COVE

	Full -in concept	Half	
No. 1 bdrm units	383	192	2-10 yrs.
No. 2 bdrm units	383	192	2-10 yrs.
No. 3 bdrm units	165	83	2-10 yrs.
No. 4 bdrm units	40	20	2-10 yrs.
Total New Units:	<u>971</u>	<u>486</u>	

master  
plan  
approved

250  
135

385

YR.	% BUILT	NEW UNITS	
1	0%		
2	0%		
3	14%	141	70
4	29%	141	70
5	43%	141	70
6	58%	141	70
7	72%	141	70
8	87%	141	70
9	100%	128	64
		<u>971</u>	<u>486</u>

retail & restaurants	120,000	60,000	SF	3-10 yrs.
Boat slips	1495	748		2-10 yrs.

1495 permit

### O'NEILL - WEYERHAEUSER

Single Family	98
Multi-Family	54
	<u>152</u>

2-5 yrs.  
2-5 yrs.

master  
plan  
approved

Dockmaster Bldg.	3,500	SF	2-5 yrs.
Function Room	10,640		2-5 yrs.
Health, swim club	14,400		2-5 yrs.
	<u>28,540</u>	SF	

### WOODMEISTER - FORMER ALBIN - W. SHORE RD.

Single Family	40	2-4 yrs.
---------------	----	----------

master plan  
under review

### "BACK YARD" MELVILLE AREA

28 buildable acres	
short term: outdoor boat storage	
buildout	243,936 SF 1-story bldgs
	3-10 yrs.

purchase from  
Navy in process

Not including development of former Navy tank farms.







SEWER  
DONE FOR WWFP 2007

**Attachment G: Summary of West Side Flow Estimates**

Best Case	TR-16 Estimates - WWTF (gpd)	Maximum Day WWTF (gpd)	Max Day Sanitary Flow	ISDS Estimates - Collection System (gpd)	Peak Factor	Peak Hourly Flow - Collection System (gpd)
<b>Expected to Initially Connect</b>						
Abbey - Industrial / Arnold's Point	32,469			51,150	3	153,450
Remainder of West Side	344,787			488,457	2	976,914
Initial Connection Total (gpd):	377,256	2.5	943,140	539,607	2	1,079,214
<b>Expected to Connect within 20 Years</b>						
Abbey - Industrial / Arnold's Point	7,084			12,000	4	48,000
Remainder of West Side	279,683			307,083	2	614,165
20 Year Connection Total (gpd):	286,767	2.6	745,594	319,083	2	638,165
<b>Total Expected to Connect</b>						
Abbey - Industrial / Arnold's Point	39,553			63,150	3	189,450
Remainder of West Side	624,470			795,540	2	1,591,079
Total Expected to Connect (gpd):	664,023	2.3	1,527,253	858,690	2	1,717,379

Worst Case	TR-16 Estimates - WWTF (gpd)	Maximum Day WWTF (gpd)	Max Day Sanitary Flow	ISDS Estimates - Collection System (gpd)	Peak Factor	Peak Hourly Flow - Collection System (gpd)
<b>Expected to Initially Connect</b>						
Abbey - Industrial / Arnold's Point	32,469			51,150	3	153,450
Remainder of West Side	416,100			567,390	2	1,134,780
Initial Connection Total (gpd):	448,569	2.4	1,076,566	618,540	2	1,237,080
<b>Expected to Connect within 20 Years</b>						
Abbey - Industrial / Arnold's Point	7,084			12,000	4	48,000
Remainder of West Side	397,610			414,570	2	829,140
20 Year Connection Total (gpd):	404,694	2.5	1,011,735	426,570	2	853,140
<b>Total Expected to Connect</b>						
Abbey - Industrial / Arnold's Point	39,553			63,150	3	189,450
Remainder of West Side	813,710			981,960	2	1,963,920
Total Expected to Connect (gpd):	853,263	2.2	1,877,179	1,045,110	2	2,090,220

Note: Due to the conceptual nature of the flow estimates, infiltration/inflow is not considered.



WHAT'S LEFT STUDY 2005

PLAT / LOT	STREET NAME	TOTAL GIS ACRES	BUILDABLE GIS ACRES	ZONE	# OF BUILDABLE LOTS
132	BOYDS LANE	20.32	19.96	R-20	36
135	BOYDS LANE	3.70	3.70	R-20	6
137	ANTHONY ROAD	2.75	2.68	R-10	9
139	BOYDS LANE	128.94	47.82	R-10	177
1640	EVANS WAY	14.32	13.86	R-40	12
2210	MARE TERRACE	8.95	8.94	R-20	16
2318	TERMINAL ROAD	5.13	5.10	R-20	9
2319	BRISTOL FERRY ROAD	18.36	17.19	R-20	31
233	BRISTOL FERRY ROAD	4.23	4.23	R-20	7
2733	WEST MAIN ROAD	4.30	3.72	R-20	6
2817	BRISTOL FERRY ROAD	37.55	19.88	R-20	36
2834A	BRIDGEVIEW WAY	3.61	3.61	R-20	6
308	WEST MAIN ROAD	24.05	17.76	R-20	32
3094	ANSELMO DRIVE	9.35	4.78	R-20	8
324	WEST MAIN ROAD	14.07	5.52	R-20	10
3314	WEST MAIN ROAD	3.88	3.88	R-20	7
3341	FREEBORN STREET	11.69	5.56	R-20	10
3347	EAST MAIN ROAD	12.11	5.77	R-20	10
3418	EAST MAIN ROAD	4.88	4.88	R-20	9
3512B	CHASE TERRACE	7.96	7.87	R-20	14
3610	IMMOKOLEE DRIVE	6.00	4.61	R-20	8
3810	HEDLEY STREET	36.94	26.10	R-20	48
3811C	WEST MAIN ROAD	4.55	4.55	R-20	8
382	WEST MAIN ROAD	22.19	22.19	R-20	41
3835	HEDLEY STREET	10.06	2.11	R-20	3
384	WEST MAIN ROAD	3.27	3.27	R-20	6
384B	WEST MAIN ROAD	21.62	21.62	R-20	40
4292	MASSACHUSETTS BOUL	4.99	4.51	R-10	16
4135	EAST MAIN ROAD	3.87	3.87	R-20	7
4446A	MIDDLE ROAD	16.46	16.46	R-20	30
448A	WEST MAIN ROAD	35.86	34.31	R-20	63
4527	MIDDLE ROAD	3.66	3.66	R-20	6
4596	FAIRVIEW LANE	13.70	12.83	R-20	23
4835	MCCORRIE LANE	14.37	9.72	R-20	17
5117	MIDDLE ROAD	34.37	30.05	R-30	37
51259	STONEGATE DRIVE	7.70	1.66	R-30	2
5128A	RUSSET ROAD	12.03	11.56	R-20	21
5137	LOCUST AVENUE	19.38	8.05	R-20	14
5218	MIDDLE ROAD	11.72	11.72	R-20	21
5219	MIDDLE ROAD	6.16	6.16	R-20	11



PLAT / LOT	STREET NAME	TOTAL GIS ACRES	BUILDABLE GIS ACRES	ZONE	#OF BUILDABLE LOTS
52 23	MIDDLE ROAD	9.00	9.00	R-20	16
52 4A	MIDDLE ROAD	10.03	10.03	R-20	18
54 15	EAST MAIN ROAD	37.36	31.10	R-40	28
54 17	VANDEBILT LANE	11.23	11.23	R-40	10
54 18	VANDEBILT LANE	8.25	8.25	R-40	7
54 20A	EAST MAIN ROAD	3.23	2.72	R-20	5
56 16	LOCUST AVENUE	7.07	4.70	R-30	5
56 31	UNION STREET	93.83	93.79	R-30	115
56 62	UNION STREET	7.70	7.70	R-30	9
57 10	EAST MAIN ROAD	12.54	12.54	R-30	15
57 11	EAST MAIN ROAD	16.37	16.37	R-30	20
57 12	EAST MAIN ROAD	19.35	19.35	R-30	23
57 18	UNION STREET	17.54	15.43	R-30	19
57 19	UNION STREET	12.13	11.68	R-30	14
57 27	UNION STREET	28.85	26.53	R-30	32
57 30	MIDDLE ROAD	6.53	6.53	R-20	12
59 2	GLEN ROAD	16.30	14.04	R-30	17
59 22	GLEN ROAD	13.41	11.25	R-30	13
59 27	GLEN ROAD	10.76	8.73	R-30	10
59 28	GLEN ROAD	12.58	12.58	R-30	15
59 29	GLEN ROAD	10.29	7.18	R-30	8
59 5	GLEN ROAD	85.22	75.12	R-30	92
59 6	GLEN ROAD	9.70	4.39	R-30	5
60 3	JEPSON LANE	22.20	13.54	R-30	16
61 2	EAST MAIN ROAD	12.00	9.74	R-30	12
62 17	SANDY POINT AVENUE	12.68	7.30	R-40	6
62 186	GLEN FARM ROAD	8.31	8.31	R-40	7
62 6	GLEN FARM ROAD	37.76	23.30	R-60	14
63 12	MOITOZA LANE	39.72	39.25	R-30	48
63 15	EAST MAIN ROAD	7.61	7.61	R-30	9
63 20	MOITOZA LANE	6.32	6.32	R-30	7
63 21	MOITOZA LANE	5.63	5.63	R-30	6
63 4	EAST MAIN ROAD	12.77	12.77	R-30	15
64 14	PAQUINS LANE	19.51	19.51	R-30	24
64 28B	EAST MAIN ROAD	14.81	13.40	R-30	16
64 56	MALEE TERRACE	6.59	5.97	R-30	7
64 71	BRAMANS LANE	16.67	4.97	R-30	6
65 1	WAPPING ROAD	160.85	153.66	R-40	18
65 15	WAPPING ROAD	58.78	23.67	R-30	29
65 16	WAPPING ROAD	4.88	4.88	R-30	6



PLAT / LOT	STREET NAME	TOTAL GIS ACRES	BUILDABLE GIS ACRES	ZONE	# OF BUILDABLE LOTS
65 3	FARMLANDS DRIVE	12.41	12.41	R-40	11
65 4	GREENVALE LANE	49.59	46.39	R-40	42
65 5	GREENVALE LANE	11.52	11.52	R-40	10
65 6	GREENVALE LANE	14.63	14.43	R-40	13
65 7	WAPPING ROAD	17.04	17.04	R-40	15
66 21	MITCHELLS LANE	13.35	4.79	R-30	5
67 37	INDIAN AVENUE	9.00	9.00	R-40	8
67 39	SWAN DRIVE	8.35	6.22	R-40	5
67 44	BRIARWOOD LANE	8.17	8.11	R-40	7
67 65A	WAPPING ROAD	7.48	7.48	R-40	6
67 66	WAPPING ROAD	8.79	7.55	R-40	6
67 66A	BRIARWOOD LANE	7.64	6.07	R-40	5
67 66C	BRIARWOOD LANE	6.55	3.51	R-40	3
67 72	OLD MILL LANE	14.42	7.52	R-40	6
68 71	CORNELIUS DRIVE	15.31	10.38	R-40	9
8 1	ANTHONY ROAD	116.95	111.78	R-10	413
					2191

PLUS 431 SCATTERED  
VACANT + CHALLENGE  
RRS. ZONE LOTS



## Diercks, Jeffrey

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**From:** Robert W. Gilstein [rgilstein@portsmouthri.com]  
**Sent:** Thursday, March 12, 2009 1:51 PM  
**To:** Diercks, Jeffrey  
**Subject:** FW: Pending & Prospective developments - Portsmouth

Jeff,

This just received from the Administrative Officer of the Planning Bd.

Bob Gilstein

(Albin is Woodmeister)

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**From:** Glenn W. Russell Jr.  
**Sent:** Thursday, March 12, 2009 11:58 AM  
**To:** Robert W. Gilstein  
**Subject:** RE: Pending & Prospective developments

Bob

Albin should be twenty single family units vice 40

Carnegie Harbor Village should be: 90- Tower; 22 - Stand alone residences; 21 - Village; and 24 Townhouses (where sales office is now located)

Weyerhaeuser - total of 152

Weaver Cove - revised is 385; future proposed is 1003

RI Nurseries (between Seaberry Farm and Stanton farm (Heidi Drive) - 14 single family units (Concept Plan - 3/18/2009)

Glenn

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**From:** Robert W. Gilstein  
**Sent:** Monday, March 09, 2009 11:07 AM  
**To:** Glenn W. Russell Jr.; George L. Medeiros  
**Subject:** Pending & Prospective developments

The City of Newport has hired a consultant to estimate future water uses for the island.

I have been asked to prepare a list of pending developments and some guesstimates.

Attached is the best I have. Can you please check it, correct it, add to it, etc.

No need to detail minor projects or single family construction.

Need for Wed. morning 3/9.

Thanks,

Bob Gilstein



## Diercks, Jeffrey

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**From:** Robert W. Gilstein [rgilstein@portsmouthri.com]  
**Sent:** Wednesday, March 25, 2009 3:25 PM  
**To:** Diercks, Jeffrey  
**Subject:** Portsmouth - Map & Flows n Loads  
**Attachments:** Figure 2\_1.pdf; Table 7-10.pdf; Table 7-7.pdf; Table 7-8.pdf

Jeff,

As promised, attached is a map showing the sewer service areas, along with the flows & loads calculations. Does not include the small cluster areas in the middle of the town, which are built out.

Flows show 3 time phases:

- "Initial" is now or in process. < 2 yrs.
- "Likely" is a) the most logical for additional houses in the north end. Small vacant lots are assumed buildable if they are 30 ft. wide. We do not assume any tear-downs where a house straddles two lots. b) is planning is well underway & we do expect development 3-10 yrs. out.
- "Buildout" is just that or 10+ yrs..

Please contact me with any questions,  
Bob

Robert Gilstein, Town Planner  
Town of Portsmouth  
2200 East Main Road  
Portsmouth, RI 02871

401-683-0888  
401-683-6804 (fax)  
[rgilstein@portsmouthri.com](mailto:rgilstein@portsmouthri.com)







Table 7-7: Summary of WWTF Flows, Loads, and Connection Timeframe by Alternative

Alternative	Sewer Service Area	Treatment Plant Location	Period	Connection Duration (years)	From completion of WWTF FM and Construction (years)	Connection Area	WWTF		
							gpd	ADF	
								Cumulative	MGD
1	North End	Founders Grove	Initial	2	2	Portsmouth Park, West of Chase Road	71,200	71,200	0.07
1	North End	Founders Grove	Initial	1	3	Island Park, Bristol Ferry and Bay View Avenue	111,000	182,200	0.18
1	North End	Founders Grove	Initial	2	5	Common Fence Point, Hummocks	138,900	321,100	0.32
1	North End	Founders Grove	Likely	before 10		Portsmouth Park, West of Chase Road	9,100	330,200	0.33
1	North End	Founders Grove	Likely	before 10		Island Park, Bristol Ferry and Bay View Avenue	22,600	352,800	0.35
1	North End	Founders Grove	Likely	before 10		Common Fence Point, Hummocks	22,600	375,400	0.38
1	North End	Founders Grove	Full	10+		Portsmouth Park, West of Chase Road	0	375,400	0.38
1	North End	Founders Grove	Full	10+		Island Park, Bristol Ferry and Bay View Avenue	58,300	433,700	0.43
1	North End	Founders Grove	Full	10+		Common Fence Point, Hummocks	22,000	455,700	0.46
2	North End and West Side	West Side	Initial	2	2	Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	199,800	199,800	0.20
2	North End and West Side	West Side	Initial	2	4	Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	331,548	531,348	0.53
2	North End and West Side	West Side	Initial	2	6	Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	196,000	727,348	0.73
2	North End and West Side	West Side	Initial	2	8	Redwood Farms, Cluster C1	39,339	766,687	0.77
2	North End and West Side	West Side	Likely	before 10		Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	71,100	837,787	0.84
2	North End and West Side	West Side	Likely	before 10		Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	49,852	887,639	0.89
2	North End and West Side	West Side	Likely	before 10		Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	22,600	910,239	0.91
2	North End and West Side	West Side	Likely	before 10		Redwood Farms, Cluster C1	0	910,239	0.91
2	North End and West Side	West Side	Likely	before 10		Van Hoff, Addl Raytheon, Founders Home, tank Farms	233,300	1,143,539	1.14
2	North End and West Side	West Side	Full	10+		Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	0	1,143,539	1.14
2	North End and West Side	West Side	Full	10+		Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	164,400	1,307,939	1.31
2	North End and West Side	West Side	Full	10+		Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	22,000	1,329,939	1.33
2	North End and West Side	West Side	Full	10+		Redwood Farms, Cluster C1	0	1,329,939	1.33
2	North End and West Side	West Side	Full	10+		Van Hoff, Addl Raytheon, Founders Home, tank Farms	154,100	1,484,039	1.48
3	North End and West Side	North End	Initial	2	2	Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	199,800	199,800	0.20
3	North End and West Side	North End	Initial	2	4	Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	331,548	531,348	0.53
3	North End and West Side	North End	Initial	2	6	Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	196,000	727,348	0.73
3	North End and West Side	North End	Initial	2	8	Redwood Farms, Cluster C1	39,339	766,687	0.77
3	North End and West Side	North End	Likely	before 10		Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	71,100	837,787	0.84
3	North End and West Side	North End	Likely	before 10		Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	49,852	887,639	0.89
3	North End and West Side	North End	Likely	before 10		Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	22,600	910,239	0.91
3	North End and West Side	North End	Likely	before 10		Redwood Farms, Cluster C1	0	910,239	0.91
3	North End and West Side	North End	Likely	before 10		Van Hoff, Addl Raytheon, Founders Home, tank Farms	233,300	1,143,539	1.14
3	North End and West Side	North End	Full	10+		Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	0	1,143,539	1.14
3	North End and West Side	North End	Full	10+		Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	164,400	1,307,939	1.31
3	North End and West Side	North End	Full	10+		Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	22,000	1,329,939	1.33
3	North End and West Side	North End	Full	10+		Redwood Farms, Cluster C1	0	1,329,939	1.33
3	North End and West Side	North End	Full	10+		Van Hoff, Addl Raytheon, Founders Home, tank Farms	154,100	1,484,039	1.48



Table 7-7: Summary of WWTF Flows, Loads, and Connection Timeframe by Alternative

Alternative	Sewer Service Area	Treatment Plant Location	Period	Connection Duration (years)	From completion of WWTF FM and Construction (years)	Connection Area	WWTF		
							gpd	ADF	
								Cumulative	MGD
4	North End	Founders Grove	Initial	2	2	Portsmouth Park, West of Chase Road	71,200	71,200	0.07
4	North End	Founders Grove	Initial	1	3	Island Park, Bristol Ferry and Bay View Avenue	111,000	182,200	0.18
4	North End	Founders Grove	Initial	2	5	Common Fence Point, Hummocks	138,900	321,100	0.32
4	North End	Founders Grove	Likely	before 10		Portsmouth Park, West of Chase Road	9,100	330,200	0.33
4	North End	Founders Grove	Likely	before 10		Island Park, Bristol Ferry and Bay View Avenue	22,600	352,800	0.35
4	North End	Founders Grove	Likely	before 10		Common Fence Point, Hummocks	22,600	375,400	0.38
4	North End	Founders Grove	Full	10+		Portsmouth Park, West of Chase Road	0	375,400	0.38
4	North End	Founders Grove	Full	10+		Island Park, Bristol Ferry and Bay View Avenue	58,300	433,700	0.43
4	North End	Founders Grove	Full	10+		Common Fence Point, Hummocks	22,000	455,700	0.46
4	West Side	West Side	Initial	2	2	Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	128,600	128,600	0.13
4	West Side	West Side	Initial	2	4	Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	220,548	349,148	0.35
4	West Side	West Side	Initial	2	6	Other Raytheon-Navy-Melville	57,100	406,248	0.41
4	West Side	West Side	Initial	2	8	Redwood Farms, Cluster C1	39,339	445,587	0.45
4	West Side	West Side	Likely	before 10		Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	62,000	507,587	0.51
4	West Side	West Side	Likely	before 10		Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	27,252	534,839	0.53
4	West Side	West Side	Likely	before 10		Other Raytheon-Navy-Melville	0	534,839	0.53
4	West Side	West Side	Likely	before 10		Redwood Farms, Cluster C1	0	534,839	0.53
4	West Side	West Side	Likely	before 10		Van Hoff, Addl Raytheon, Founders Home, tank Farms	233,300	768,139	0.77
4	West Side	West Side	Full	10+		Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	0	768,139	0.77
4	West Side	West Side	Full	10+		Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	106,100	874,239	0.87
4	West Side	West Side	Full	10+		Other Raytheon-Navy-Melville	0	874,239	0.87
4	West Side	West Side	Full	10+		Redwood Farms, Cluster C1	0	874,239	0.87
4	West Side	West Side	Full	10+		Van Hoff, Addl Raytheon, Founders Home, tank Farms	154,100	1,028,339	1.03



Table 7-7: Summary of WWTF Flows, Loads, and Connection Timeframe by Alternative

				Loads							
Alternative	Sewer Service Area	Treatment Plant Location	Period	Residential BOD Loading (lb/day)	Commercial /Industrial BOD Loading (lb/day)	Total BOD Loading (lb/day)	Residential TSS Loading (lb/day)	Commercial/ Industrial TSS Loading (lb/day)	Total TSS Loading (lb/day)	Total Phosphorus (lb/day)	Total Ammonia Nitrogen (lb/day)
1	North End	Founders Grove	Initial	108	16	124	108	19	127	5	15
1	North End	Founders Grove	Initial	160	38	198	160	44	204	7	23
1	North End	Founders Grove	Initial	232	0	232	232	0	232	9	29
1	North End	Founders Grove	Likely	116	28	143	116	32	148	5	17
1	North End	Founders Grove	Likely	198	38	236	198	44	242	9	28
1	North End	Founders Grove	Likely	270	0	270	270	0	270	11	34
1	North End	Founders Grove	Full	116	28	143	116	32	148	5	17
1	North End	Founders Grove	Full	295	38	333	295	44	339	13	40
1	North End	Founders Grove	Full	306	0	306	306	0	306	12	38
2	North End and West Side	West Side	Initial	298	16	351	298	19	354	13	42
2	North End and West Side	West Side	Initial	225	214	625	225	236	646	22	69
2	North End and West Side	West Side	Initial	232	0	375	232	0	399	13	41
2	North End and West Side	West Side	Initial	66	0	66	66	0	66	3	8
2	North End and West Side	West Side	Likely	116	28	526	116	32	562	18	57
2	North End and West Side	West Side	Likely	285	253	721	285	295	763	25	80
2	North End and West Side	West Side	Likely	270	143	413	270	167	436	15	46
2	North End and West Side	West Side	Likely	66	0	66	66	0	66	3	8
2	North End and West Side	West Side	Likely	37	529	578	37	617	673	16	49
2	North End and West Side	West Side	Full	116	28	526	116	32	562	18	57
2	North End and West Side	West Side	Full	382	253	995	382	295	1,037	36	114
2	North End and West Side	West Side	Full	306	143	449	306	167	473	16	50
2	North End and West Side	West Side	Full	66	0	66	66	0	66	3	8
2	North End and West Side	West Side	Full	24	934	958	24	1,090	1,114	26	81
3	North End and West Side	North End	Initial	298	16	351	298	19	354	13	42
3	North End and West Side	North End	Initial	225	214	625	225	236	646	22	69
3	North End and West Side	North End	Initial	232	0	375	232	0	399	13	41
3	North End and West Side	North End	Initial	66	0	66	66	0	66	3	8
3	North End and West Side	North End	Likely	116	28	526	116	32	562	18	57
3	North End and West Side	North End	Likely	285	253	721	285	295	763	25	80
3	North End and West Side	North End	Likely	270	143	413	270	167	436	15	46
3	North End and West Side	North End	Likely	66	0	66	66	0	66	3	8
3	North End and West Side	North End	Likely	37	529	578	37	617	673	16	49
3	North End and West Side	North End	Full	116	28	526	116	32	562	18	57
3	North End and West Side	North End	Full	382	253	995	382	295	1,037	36	114
3	North End and West Side	North End	Full	306	143	449	306	167	473	16	50
3	North End and West Side	North End	Full	66	0	66	66	0	66	3	8
3	North End and West Side	North End	Full	24	934	958	24	1,090	1,114	26	81



Table 7-7: Summary of WWTF Flows, Loads, and Connection Timeframe by Alternative

				Loads							
Alternative	Sewer Service Area	Treatment Plant Location	Period	Residential	Commercial	Total BOD Loading (lb/day)	Residential	Commercial/	Total TSS Loading (lb/day)	Total Phosphorus (lb/day)	Total Ammonia Nitrogen (lb/day)
				BOD Loading (lb/day)	/Industrial BOD Loading (lb/day)		TSS Loading (lb/day)	Industrial TSS Loading (lb/day)			
4	North End	Founders Grove	Initial	108	16	124	108	19	127	5	15
4	North End	Founders Grove	Initial	160	38	198	160	44	204	7	23
4	North End	Founders Grove	Initial	232	0	232	232	0	232	9	29
4	North End	Founders Grove	Likely	116	28	143	116	32	148	5	17
4	North End	Founders Grove	Likely	198	38	236	198	44	242	9	28
4	North End	Founders Grove	Likely	270	0	270	270	0	270	11	34
4	North End	Founders Grove	Full	116	28	143	116	32	148	5	17
4	North End	Founders Grove	Full	295	38	333	295	44	339	13	40
4	North End	Founders Grove	Full	306	0	306	306	0	306	12	38
4	West Side	West Side	Initial	190	0	227	190	0	227	9	27
4	West Side	West Side	Initial	65	177	427	65	192	442	15	46
4	West Side	West Side	Initial	0	0	143	0	0	167	4	12
4	West Side	West Side	Initial	66	0	66	66	0	66	3	8
4	West Side	West Side	Likely	0	0	382	0	0	415	13	40
4	West Side	West Side	Likely	87	215	485	87	251	521	17	52
4	West Side	West Side	Likely	0	143	143	0	167	167	4	12
4	West Side	West Side	Likely	66	0	66	66	0	66	3	8
4	West Side	West Side	Likely	37	529	578	37	617	673	16	49
4	West Side	West Side	Full	0	0	382	0	0	415	13	40
4	West Side	West Side	Full	87	215	662	87	251	698	24	74
4	West Side	West Side	Full	0	143	143	0	167	167	4	12
4	West Side	West Side	Full	66	0	66	66	0	66	3	8
4	West Side	West Side	Full	24	934	958	24	1,090	1,114	26	81



Table 7-8: Summary of Collection System Flows and Connection Timeframe by Alternative

Alternative	Sewer Service Area	Treatment Plant Location	Period	Connection Duration (years)	From completion of WWTF FM and Construction (years)	Connection Area	Collection System		
							Max Day Flow		
							gpd	Cumulative	MGD
1	North End	Founders Grove	Initial	2	2	Portsmouth Park, West of Chase Road	124,090	124,090	0.12
1	North End	Founders Grove	Initial	1	3	Island Park, Bristol Ferry and Bay View Avenue	201,990	326,080	0.33
1	North End	Founders Grove	Initial	2	5	Common Fence Point, Hummocks	270,480	596,560	0.60
1	North End	Founders Grove	Likely	before 10		Portsmouth Park, West of Chase Road	13,308	609,867	0.61
1	North End	Founders Grove	Likely	before 10		Island Park, Bristol Ferry and Bay View Avenue	44,160	654,027	0.65
1	North End	Founders Grove	Likely	before 10		Common Fence Point, Hummocks	44,160	698,187	0.70
1	North End	Founders Grove	Full	10+		Portsmouth Park, West of Chase Road	0	698,187	0.70
1	North End	Founders Grove	Full	10+		Island Park, Bristol Ferry and Bay View Avenue	113,505	811,692	0.81
1	North End	Founders Grove	Full	10+		Common Fence Point, Hummocks	42,780	854,472	0.85
2	North End and West Side	West Side	Initial	2	2	Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	362,309	362,309	0.36
2	North End and West Side	West Side	Initial	2	4	Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	542,381	904,690	0.90
2	North End and West Side	West Side	Initial	2	6	Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	327,580	1,232,270	1.23
2	North End and West Side	West Side	Initial	2	8	Redwood Farms, Cluster C1	76,550	1,308,820	1.31
2	North End and West Side	West Side	Likely	before 10		Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	75,308	1,384,127	1.38
2	North End and West Side	West Side	Likely	before 10		Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	84,088	1,468,215	1.47
2	North End and West Side	West Side	Likely	before 10		Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	44,160	1,512,375	1.51
2	North End and West Side	West Side	Likely	before 10		Redwood Farms, Cluster C1	0	1,512,375	1.51
2	North End and West Side	West Side	Likely	before 10		Van Hoff, Addl Raytheon, Founders Home, tank Farms	254,400	1,766,775	1.77
2	North End and West Side	West Side	Full	10+		Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	0	1,766,775	1.77
2	North End and West Side	West Side	Full	10+		Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	302,560	2,069,335	2.07
2	North End and West Side	West Side	Full	10+		Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	42,780	2,112,115	2.11
2	North End and West Side	West Side	Full	10+		Redwood Farms, Cluster C1	0	2,112,115	2.11
2	North End and West Side	West Side	Full	10+		Van Hoff, Addl Raytheon, Founders Home, tank Farms	146,400	2,258,515	2.26
3	North End and West Side	North End	Initial	2	2	Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	362,309	362,309	0.36
3	North End and West Side	North End	Initial	2	4	Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	542,381	904,690	0.90
3	North End and West Side	North End	Initial	2	6	Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	327,580	1,232,270	1.23
3	North End and West Side	North End	Initial	2	8	Redwood Farms, Cluster C1	76,550	1,308,820	1.31
3	North End and West Side	North End	Likely	before 10		Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	75,308	1,384,127	1.38
3	North End and West Side	North End	Likely	before 10		Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	84,088	1,468,215	1.47
3	North End and West Side	North End	Likely	before 10		Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	44,160	1,512,375	1.51
3	North End and West Side	North End	Likely	before 10		Redwood Farms, Cluster C1	0	1,512,375	1.51
3	North End and West Side	North End	Likely	before 10		Van Hoff, Addl Raytheon, Founders Home, tank Farms	254,400	1,766,775	1.77
3	North End and West Side	North End	Full	10+		Portsmouth Park, West of Chase Road, Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	0	1,766,775	1.77
3	North End and West Side	North End	Full	10+		Island Park, Bristol/Bay View Ave, Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	302,560	2,069,335	2.07
3	North End and West Side	North End	Full	10+		Common Fence Point, Hummocks, and other Raytheon-Navy-Melville	42,780	2,112,115	2.11
3	North End and West Side	North End	Full	10+		Redwood Farms, Cluster C1	0	2,112,115	2.11
3	North End and West Side	North End	Full	10+		Van Hoff, Addl Raytheon, Founders Home, tank Farms	146,400	2,258,515	2.26



Table 7-8: Summary of Collection System Flows and Connection Timeframe by Alternative

Alternative	Sewer Service Area	Treatment Plant Location	Period	Connection Duration (years)	From completion of WWTF FM and Construction (years)	Connection Area	Collection System		
							Max Day Flow		
							gpd	Cumulative	MGD
4	North End	Founders Grove	Initial	2	2	Portsmouth Park, West of Chase Road	124,090	124,090	0.12
4	North End	Founders Grove	Initial	1	3	Island Park, Bristol Ferry and Bay View Avenue	201,990	326,080	0.33
4	North End	Founders Grove	Initial	2	5	Common Fence Point, Hummocks	270,480	596,560	0.60
4	North End	Founders Grove	Likely	before 10		Portsmouth Park, West of Chase Road	13,308	609,867	0.61
4	North End	Founders Grove	Likely	before 10		Island Park, Bristol Ferry and Bay View Avenue	44,160	654,027	0.65
4	North End	Founders Grove	Likely	before 10		Common Fence Point, Hummocks	44,160	698,187	0.70
4	North End	Founders Grove	Full	10+		Portsmouth Park, West of Chase Road	0	698,187	0.70
4	North End	Founders Grove	Full	10+		Island Park, Bristol Ferry and Bay View Avenue	113,505	811,692	0.81
4	North End	Founders Grove	Full	10+		Common Fence Point, Hummocks	42,780	854,472	0.85
4	West Side	West Side	Initial	2	2	Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	238,219	238,219	0.24
4	West Side	West Side	Initial	2	4	Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	340,391	578,610	0.58
4	West Side	West Side	Initial	2	6	Other Raytheon-Navy-Melville	57,100	635,710	0.64
4	West Side	West Side	Initial	2	8	Redwood Farms, Cluster C1	76,550	712,260	0.71
4	West Side	West Side	Likely	before 10		Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	62,000	774,260	0.77
4	West Side	West Side	Likely	before 10		Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	39,928	814,188	0.81
4	West Side	West Side	Likely	before 10		Other Raytheon-Navy-Melville	0	814,188	0.81
4	West Side	West Side	Likely	before 10		Redwood Farms, Cluster C1	0	814,188	0.81
4	West Side	West Side	Likely	before 10		Van Hoff, Addl Raytheon, Founders Home, tank Farms	254,400	1,068,588	1.07
4	West Side	West Side	Full	10+		Abbey Industrial OPG properties (Weyerhauser and Carnegie), and Raytheon	0	1,068,588	1.07
4	West Side	West Side	Full	10+		Arnold's Pt, other Abbey-Industrial, and Navy, Weavers Cove	189,055	1,257,643	1.26
4	West Side	West Side	Full	10+		Other Raytheon-Navy-Melville	0	1,257,643	1.26
4	West Side	West Side	Full	10+		Redwood Farms, Cluster C1	0	1,257,643	1.26
4	West Side	West Side	Full	10+		Van Hoff, Addl Raytheon, Founders Home, tank Farms	146,400	1,404,043	1.40



Table 7-10: North End - Flows and Loads

## TR-16 Estimates - WWTF - Average Daily Flow and Maximum Daily Flow

	Total Res Parcels	Res Flow	Total Comm Parcels	Comm Acres	Comm Flow	Total Flow	Max Day Factor	Max Day Sanitary Flow	Infiltration	Max Day Flow	Residential BOD Loading (lb/day)	Commercial/ Industrial BOD (lb/day)	Total BOD Loading (lb/day)	Residential TSS Loading (lb/day)	Commercial/ Industrial TSS Loading (lb/day)	Total Total TSS Loading (lb/day)	Total Phosphorus (lb/day)	Total Ammonia Nitrogen (lb/day)
Initial Connection (Developed/By Right Parcels)									GPD	GPD								
Island Park	504	89,258	73	15	15,000	104,300		0	0	0	149	38	187	149	44	193	7	22
Portsmouth Park	233	50,264	15	6	6,415	56,700		0	5,500	5,500	84	16	100	84	19	103	4	12
Common Fence Point	700	123,970	-	0	0	124,000		0	0	0	207	0	207	207	0	207	8	26
Hummocks	84	14,876	-	0	0	14,900		0	0	0	25	0	25	25	0	25	1	3
West of Chase Road	82	14,522	-	0	0	14,500		0	2,700	2,700	24	0	24	24	0	24	1	3
						<b>314,400</b>		0	<b>8,200</b>	<b>10,000</b>			<b>542</b>			<b>551</b>	<b>21</b>	<b>66</b>
"Likely" Connection																		
Island Park	632	111,927	73	15	15,000	126,900		0	0	0	187	38	224	187	44	231	8	26
Portsmouth Park	245	52,390	21	11	10,548	62,900		0	5,500	5,500	87	26	114	87	31	118	4	13
Common Fence Point	816	144,514	-	0	0	144,500		0	0	0	241	0	241	241	0	241	10	30
Hummocks	96	17,002	-	0	0	17,000		0	0	0	28	0	28	28	0	28	1	4
West of Chase Road	95	16,825	1	1	549	17,400		0	2,700	2,700	28	1	29	28	2	30	1	4
						<b>368,700</b>		0	<b>8,200</b>	<b>10,000</b>			<b>637</b>			<b>648</b>	<b>25</b>	<b>77</b>
Full Buildout (All Parcels)																		
Island Park	961	170,193	73	15	15,000	185,200		0	0	0	284	38	322	284	44	328	12	39
Portsmouth Park	245	52,390	21	11	10,548	62,900		0	5,500	5,500	87	26	114	87	31	118	4	13
Common Fence Point	940	166,474	-	0	0	166,500		0	0	0	278	0	278	278	0	278	11	35
Hummocks	96	17,002	-	0	0	17,000		0	0	0	28	0	28	28	0	28	1	4
West of Chase Road	95	16,825	1	1	549	17,400		0	2,700	2,700	28	1	29	28	2	30	1	4
						<b>449,000</b>		0	<b>8,200</b>	<b>10,000</b>			<b>771</b>			<b>782</b>	<b>30</b>	<b>94</b>
70 gpcd 2.53 persons per household per 2000 Census 9000 gpd for Hathaway School (450 * 20) 1000 gpad for commercial properties 73 commercial properties 454 residential metered parcels (DP count) 58 commercial metered properties (62-4 DP count)																		
IP residential lot potential 50 new lots by right 255 new lots "practical" 457 maximum new lots 127 straddle dotted lines PP residential lot potential 7 vacant buildable lots																		

## OWTS Estimates - Collection System - Max Day Flow and Peak Hourly Flow

	Total Res Parcels	Res Flow	Total Comm Parcels	Comm Acres	Comm Flow	Total Flow	Peak Factor	Peak Sanitary Flow	Infiltration	Peak Hourly Flow
Developed/By Right Parcels									GPD	GPD
Island Park	504	173,880	73	15	15,000	188,880	5.2	982,176	0	982,176
Portsmouth Park	233	89,385	15	6	6,415	95,800	5.6	536,479	5,500	541,979
Common Fence Point	700	241,500	-	-	0	241,500	4.8	1,159,200	0	1,159,200
Hummocks	84	28,980	-	-	0	28,980	5.6	162,288	0	162,288
West of Chase Road	82	28,290	-	-	0	28,290	5.6	158,424	2,700	161,124
Bristol Ferry/Bay View Ave	38	13,110	-	-	0	13,110	5.6	73,416	1,300	74,716
						<b>596,560</b>		0	<b>9,500</b>	<b>9,500</b>
"Likely" Parcels										
Island Park	632	218,040	73	15	15,000	233,040	4.80	1,118,592	0	1,118,592
Portsmouth Park	245	93,525	21	11	10,548	104,073	5.60	582,809	5,500	588,309
Common Fence Point	816	281,520	-	-	0	281,520	4.60	1,294,992	0	1,294,992
Hummocks	96	33,120	-	-	0	33,120	5.60	185,472	0	185,472
West of Chase Road	95	32,775	1	1	549	33,324	5.60	186,616	2,700	189,316
Bristol Ferry/Bay View Ave	38	13,110	-	-	0	13,110	5.60	73,416	1,300	74,716
						<b>698,187</b>		0	<b>9,500</b>	<b>1,710,000</b>
All Parcels										
Island Park	961	331,545	73	15	15,000	346,545	4.4	1,524,798	0	1,524,798
Portsmouth Park	245	93,525	21	11	10,548	104,073	5.6	582,809	5,500	588,309
Common Fence Point	940	324,300	-	-	0	324,300	4.0	1,297,200	0	1,297,200
Hummocks	96	33,120	-	-	0	33,120	5.6	185,472	0	185,472
West of Chase Road	95	32,775	1	1	549	33,324	5.6	186,616	2,700	189,316
Bristol Ferry/Bay View Ave	38	13,110	-	-	0	13,110	5.6	73,416	1,300	74,716
						<b>854,472</b>		0	<b>8,200</b>	<b>2,110,000</b>
345 gpd per res parcel 1000 gpad for commercial properties 9000 gpd for Hathaway School (450 * 20) per ISDS regs										



Table 7-10: North End - Flows and Loads

Loading Characteristics	Residential	Commercial/Industrial
	mg/L	mg/L
BOD	200	300
TSS	200	350
Total Phosphorus	8	8
Ammonia Nitrogen	25	25
Based on Metcalf & Eddy		

Inch/Diameter Calculations to Determine Infiltration Component						
					250 gpd per idm	
Sewer Area	Diameter (in)	Length (ft)	Length (miles)	idm	gpd	Notes:
Island Park						0 Not applicable - all low pressure sewer
Portsmouth Park	8	14,500	2.75	21.97	5,500	
Common Fence Point						0 Not applicable - all low pressure sewer
Hummocks						0 Not applicable - all low pressure sewer
West of Chase Road Alt 1	8	7200	1.36	10.91	2,700	
Chase Road (Alt 2, 3, and 4)	8	10,500	1.99	15.91	4,000	
Briston Ferry/Bay View Ave	8	3500	0.66	5.30	1,300	



## Diercks, Jeffrey

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**From:** Bronk, Paige [pbronk@cityofnewport.com]  
**Sent:** Wednesday, March 11, 2009 7:56 PM  
**To:** Diercks, Jeffrey  
**Cc:** Forgue, Julia; Lavallee, Ed  
**Subject:** Meeting on Demographics and Development

**Importance:** High

Jeff,

It was a pleasure meeting with you today regarding the City's water treatment facility planning. I hope that the information that was provided will be helpful.

As promised, I am providing a rough listing of anticipated future projects in Newport. I have separated them into two timeframes below.

### < 5 years

- 2009 – Coddington Cove Residential Project – 24+/- affordable residential units
- 2009 – Lenthal School Condominiums – 13 residential condominium units
- 2009 – 41 Degrees North Mixed Use – Hotel, restaurant, spa, and marina
- 2009 – Coastal Extreme Brewing – 8,500 square foot brewery and rum manufacturing facility
- 2010 – Sheffield School Economic Development – 33,000 square feet of commercial space
- 2010 – BankNewport Office Headquarters – 75,000 square feet of office space for 120 employees
- 2010 – Icehouse Property – Mixed use with restaurant, retail and office
- 2011 - Newport Heights (Phase V) – approximately 80 affordable residential housing units
- 2011 – Bellevue Gardens – 43 Residential condominiums plus some commercial
- 2011 – Old Post Office Building – about 70,000 square foot commercial use likely for hotel, residential or office uses.
- 2011 – Carey School Development Project – likely residential use – about 8 units.

### 5 – 10 years

- Former U.S. Navy Hospital Property and Buildings – 7 acres of land/3 acres of water - about 200,000 square feet mixed use development likely to contain a hotel (100 rooms), offices, retail and residences plus marina
- Pell Bridge Realignment Parcel (North) – 12 acres of land – about 125,000 square foot commercial building
- Pell Bridge Realignment Parcel (South) – 19 acres of land – about 300,000 square feet of mixed use development including retail, office, and housing plus a parking garage and transit center.

Please let me know if you need any further details to assist with your calculations.

Thanks.

Paige

Paige R. Bronk, AICP  
Director of Planning, Zoning, Development & Inspections  
City of Newport, RI 02840  
(401) 845-5450



## **Appendix C**

### **Water Demand Projection from Naval Station Newport**



## **Diercks, Jeffrey**

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**From:** Poisson, Roger N CIV NAVFAC MIDLANT, NWPT [roger.poisson@navy.mil]  
**Sent:** Monday, July 20, 2009 8:46 AM  
**To:** Diercks, Jeffrey  
**Cc:** Reichert, John C CIV NAVFAC MIDLANT; Carlson, James F CIV NAVFAC MIDLANT, NWPT; Bo, Gregor S CDR NAVFAC MIDLANT, NWPT; Galuska, Joanne S CIV NAVFAC MIDLANT; Smith, Donald CIV NAVFAC MIDLANT; Weber, Michael L NAVFAC; Jones, J. B. CIV NAVFAC MIDLAN; Sullivan, Daniel L CIV NAVFAC MIDLANT, NWPT; Sprague, James CIV NAVFAC MIDLANT, NWPT  
**Subject:** RE: Materials from Feb 12 Newport meeting  
**Attachments:** 7-14-09ASSEMBLY OF WATER DATA.xls

Jeffrey,

Jim asked if I could assist him on developing reasonable numbers for future Navy water requirements.

Let me give you the process and information I used.

In the above attachment you will find:

TAB 1: SUMMARY (Addressed in DISCUSSION below)

TAB 2: Don's Data ... Our crackerjack utility analyst put this together for us. We went back and retrieved the water usage data for the past ten years. In addition to obtaining the total amounts used each year by the Navy, I also had him divide it up by the source of the water. If you're determining the safe yield of either the Lawton Valley or the Eaton Pond systems, than it would be good for you to know the demand on each one in particular.

TAB 3: PORTSMOUTH DATA provides the water data for the period that the Navy received water from the Portsmouth Water and Fire District. This information also provided us the average daily flows for the month in addition to the flows per day so a maximum day could be determined. The max day ranged from 114% to 435%. These readings were added to the Newport amounts to determine total flows.

TAB 4: NPT MONTH DATA is similar to the Portsmouth data above, except that it is only for the month of June. Like the above TAB 3, the info was used to determine the percent over the average for the MAX day. Those percentages ran from 118% to 360%.

TAB 5: charts - This tab plots the Navy water usage for the past ten years by total flows and by source reservoir systems.

### **DISCUSSION:**

As noted on TAB 5, three graphs are provided. One for water received through the Eaton Pond System, a second for the flows supplied through the Lawton Valley system and a third chart showing both flows collectively. The Eaton Pond System supplies flows to the southerly portion of the Station which includes: Fort Adams, Naval Health Care New England, Cloyne Court & Farragut Field Housing Areas, and Coasters Harbor Island. The remaining portion of the Station to the north is fed via the Lawton Valley System. This is the normal split of the systems, though through valving at the main Station, this split can be changed; but is only done so during periods of emergency. These numbers also represent the Navy usage and excludes the private customers billed directly by Newport but fed through the Navy system. In any sound analysis of the draw by the Navy system on Newport, you will need to obtain and include the data for the private customers served by Newport via the Navy system. In the past, Newport provided us that data but now we are not made privy of that information so it will need to be obtained directly from the City. What we do know is that O'Neill properties in Portsmouth (on the Lawton System) is planning a major development which will require significant increases in water flows.



A review of the graph for the ten year period indicates that out flow usages have been up and down over the years with one low period followed by a higher period. We reviewed the peak in the FY 2004 time period to determine if this was an anomaly that could be explained by a break or some other event that had occurred out of the norm. But since the flow charts from the both sources mirror each other significantly, this would indicate a global event throughout the entire Station or a change in water usage estimating methods used by the City.

Your recommendation to use the latest full year of readings, FY2008, as the base year is flawed. What if your study was being done in FY2003 and the last full reading you had was FY2002; which was .856 MGD; and used this flow as your base year. If you had chosen that reading then and designed accordingly, how would we have handled the FY2004 requirement of 1.333 MGD; a 55%+ increase from FY2002. Our ten year average daily flows are .992 MGD and our latest 5 year average daily flows, the period where water saving measures have been implemented, is .952 MGD. That latter being not significantly different from the former.

TABS 3 and 4 provide daily flows over a period. These charts show Maximum Daily Flows that range from 114% to 435% over the Average Daily Flows. A reasonable maximum average day was determined to be 155% over the Daily Average. This Maximum Average will need to be considered also in any safe yield study for either system.

RECOMMENDATION:

Based on the records for the past 10 years, conservation measures being implemented and our foreseen increases in the next 5 years, we project our flows to be in the .900 MGD range. This flow would be broken out as follows:

Eaton Pond System: Flow: .310 MGD	Average Daily Flow: .200 MGD	Maximum Daily
Lawton Valley System: Flow: 1.085 MGD	Average Daily Flow: .700 MGD	Maximum Daily
TOTALS: Flow: 1.395 MGD	Average Daily Flow: .900 MGD	Maximum Daily

Based on the Navy's Master Plan which gives a vision of the Navy in Newport into 2035, I would anticipate the projected flows in the future to be relatively steady to what is noted above.

Further recommend that sewerage treatment totals be reviewed as they parallel water usages and that the information on the private customers served by Newport via the Navy system be obtained.

Roger N. Poisson, PE  
NAVSTA BRAC Coordinator  
Community Plans and Liaison Officer  
Naval Station Newport  
Newport, Rhode Island 02841-1711  
DSN: 948-7609  
Comm: (401) 841-7609



TAB 1

7/16/2009	LAWTON VALLEY			EASTON POND		TOTAL FLOW				
FY		TOTAL	DAILY AVERAGE	TOTAL	DAILY AVERAGE	TOTAL	DAILY AVERAGE	DELTA		
FY99	N	306,632,000	840,088	60,904,000	166,860	367,536,000	1,006,948			
FY00	N	359,128,405	981,225	75,407,000	206,030	434,535,405	1,187,255	66,999,405		
FY01	N	340,651,400	933,292	85,450,000	234,110	426,101,400	1,167,401	(8,434,005)		
FY02	N	242,979,000	665,696	69,501,000	190,414	312,480,000	856,110	(113,621,400)		
FY03	N	269,326,000	737,879	73,814,000	202,230	343,140,000	940,110	30,660,000		
FY04	N	362,726,900	991,057	125,294,380	342,334	488,021,280	1,333,391	144,881,280		
FY05	N	278,643,225	763,406	92,247,056	252,732	370,890,281	1,016,138	(117,130,999)		
FY06	N	258,513,700	708,257	63,160,616	173,043	321,816,376	952,329	(49,073,905)		
	P	142,060	71,030							
FY07	N	212,511,649	582,224	45,927,436	125,829	274,973,135	753,351	(46,843,241)		
	P	16,534,050	45,299							
FY08	N	190,084,028	519,355	55,610,120	151,940	257,423,136	703,342	(17,549,999)		
	P	11,728,988	32,046							
PARTIAL YEAR	FY09	140,908,159	516,147	36,938,048	135,304	183,509,787	672,197	244,679,716.00		
	P	5,663,580	20,746							
MAXIMUM DAY SHOULD BE ASSUMED AT 155% AVERAGE DAILY										
BASED ON 10 YEAR AVERAGE										
AVERAGE		284,960,141	787,085	74,731,561	204,552	359,691,701	991,638	359,691,701	991,638	700
AVE X 155%			1,219,982		317,056		1,537,038		1,537,038	175
BASED ON 5 YEAR AVERAGE										
AVERAGE		266,176,920	742,535	76,447,922	209,176	342,624,842	951,710			875
AVE X 155%			1,150,929		324,222		1,475,151			1356.25

700

175

875    1356.25



TAB 2

	31 OCT	30 NOV	31 DEC	31 JAN	28 / 29 FEB	31 MAR	30 APR	31 MAY	30 JUN	31 JUL	31 AUG	30 SEPT
<b>FY 99</b>												
NRMC BOILER RM	-	-	-	-	-	-	-	-	-	-	-	-
NRMC GATE 7	350,000	278,000	168,000	-	17,000	4,000	-	13,000	65,000	300,000	4,000	-
NRMC QTRS H	12,000	4,000	2,000	4,000	4,000	-	7,000	4,000	4,000	3,000	5,000	4,000
CHI RSD PIT	3,367,000	5,171,000	3,012,000	2,628,000	2,084,000	1,773,000	1,963,000	2,697,000	3,716,000	3,981,000	4,658,000	4,568,000
CHI CLN CRT	91,000	88,000	90,000	102,000	100,000	110,000	121,000	126,000	162,000	163,000	155,000	124,000
FORT ADAMS	1,262,000	1,609,000	1,427,000	1,729,000	1,570,000	1,527,000	1,645,000	1,576,000	1,750,000	1,287,000	1,690,000	1,530,000
MONTHLY TOTALS	5,082,000	7,150,000	4,699,000	4,463,000	3,775,000	3,414,000	3,736,000	4,416,000	5,697,000	5,734,000	6,512,000	6,226,000
DAILY AVERAGE	163,935	238,333	151,581	143,968	134,821	110,129	124,533	142,452	189,900	184,968	210,065	207,533
QUARTERLY TOTALS			16,931,000			11,652,000			13,849,000			18,472,000
CHASE LANE	2,651,000	-	-	-	-	-	2,000	-	-	-	11,000	-
N. ANCHORAGE	-	-	-	-	-	-	-	-	-	-	-	-
S. ANCHORAGE	2,116,000	4,028,000	3,796,000	4,395,000	4,436,000	4,143,000	5,030,000	4,508,000	4,731,000	4,530,000	5,069,000	4,898,000
CODD HWY	772,000	2,388,000	2,380,000	3,031,000	2,739,000	2,653,000	3,491,000	2,726,000	2,757,000	2,935,000	3,839,000	3,225,000
GATE 4 CP	4,406,000	4,499,000	4,034,000	4,092,000	4,366,000	3,921,000	4,357,000	3,708,000	4,046,000	4,638,000	4,957,000	4,895,000
GREENE LANE	-	-	3,700,000	14,100,000	12,100,000	11,561,000	12,980,000	14,490,000	16,674,000	29,895,000	17,800,000	12,000,000
LAWTON VALLEY	488,000	32,000	17,000	3,000	-	3,000	2,000	-	-	-	21,588,000	-
MONTHLY TOTALS	10,433,000	10,947,000	13,927,000	25,621,000	23,641,000	22,281,000	25,862,000	25,432,000	28,208,000	41,998,000	53,264,000	25,018,000
DAILY AVERAGE	336,548	364,900	449,258	826,484	844,321	718,742	862,067	820,387	940,267	1,354,774	1,718,194	833,933
QUARTERLY TOTALS			35,307,000			71,543,000			79,502,000			120,280,000
<b>FY 00</b>												
NRMC BOILER RM	-	-	-	-	-	-	-	-	29,000	1,000	-	-
NRMC GATE 7	1,802,000	-	-	-	7,000	-	-	-	-	-	388,000	732,000
NRMC QTRS H	3,000	4,000	3,000	4,000	4,000	3,000	4,000	2,000	4,000	6,000	4,000	3,000
CHI RSD PIT	3,276,000	3,066,000	2,388,000	1,949,000	3,664,000	2,533,000	2,711,000	3,350,000	5,233,000	8,001,000	9,151,000	7,759,000
CHI CLN CRT	99,000	125,000	105,000	122,000	-	305,000	143,000	172,000	152,000	128,000	142,000	101,000
FORT ADAMS	1,469,000	1,640,000	1,410,000	1,602,000	1,746,000	1,349,000	1,460,000	1,654,000	1,480,000	1,140,000	1,382,000	1,397,000
MONTHLY TOTALS	6,649,000	4,835,000	3,906,000	3,677,000	5,421,000	4,190,000	4,318,000	5,178,000	6,898,000	9,276,000	11,067,000	9,992,000
DAILY AVERAGE	214,484	161,167	126,000	118,613	186,931	135,161	143,933	167,032	229,933	299,226	357,000	333,067
QUARTERLY TOTALS			15,390,000			13,288,000			16,394,000			30,335,000
CHASE LANE	965,000	4,100,000	4,300,000	-	-	4,100,000	4,200,000	4,100,000	-	8,325,000	4,200,000	4,300,000
N. ANCHORAGE	-	-	-	-	-	-	-	-	-	-	-	-
S. ANCHORAGE	4,621,000	9,778,000	290,500	4,606,000	5,694,500	4,630,000	5,056,000	5,106,000	-	7,495,000	3,781,000	3,174,000
CODD HWY	2,845,000	4,312,000	3,802,000	5,132,000	5,719,000	4,782,000	4,817,000	4,310,000	2,717,000	691,000	848,000	770,000
GATE 4 CP	4,963,000	4,854,000	3,680,000	4,075,000	5,464,000	3,680,000	4,245,000	4,632,000	4,391,000	4,758,000	4,870,000	4,248,000
GREENE LANE	10,800,000	12,200,000	9,600,000	11,900,000	11,500,000	-	11,600,000	10,467,700	11,200,000	12,100,000	11,900,000	10,300,000
LAWTON VALLEY	5,622,105	4,500,000	4,153,800	-	7,205,200	4,010,000	3,784,700	3,619,400	3,623,900	3,622,300	3,792,300	4,200,000
MONTHLY TOTALS	29,816,105	39,744,000	25,826,300	25,713,000	35,582,700	21,202,000	33,702,700	32,235,100	21,931,900	36,991,300	29,391,300	26,992,000
DAILY AVERAGE	961,810	1,324,800	833,106	829,452	1,226,990	683,935	1,123,423	1,039,842	731,063	1,193,268	948,106	899,733
QUARTERLY TOTALS			95,386,405			82,497,700			87,869,700			93,374,600
<b>FY 01</b>												
NRMC BOILER RM	-	-	-	-	-	-	-	-	-	-	-	-
NRMC GATE 7	284,000	611,000	475,000	561,000	1,204,000	573,000	828,000	1,253,000	1,571,000	1,672,000	1,972,000	1,627,000
NRMC QTRS H	3,000	4,000	3,000	5,000	3,000	4,000	3,000	4,000	3,000	2,000	-	9,000
CHI RSD PIT	7,251,000	3,214,000	2,354,000	2,691,000	3,530,000	2,656,000	3,016,000	3,497,000	5,920,000	6,247,000	6,638,000	6,182,000
CHI CLN CRT	101,000	96,000	86,000	106,000	106,000	101,000	115,000	143,000	124,000	202,000	177,000	246,000
FORT ADAMS	1,460,000	1,476,000	1,469,000	1,626,000	1,391,000	1,429,000	1,523,000	1,291,000	1,916,000	1,172,000	1,432,000	1,792,000
MONTHLY TOTALS	9,099,000	5,401,000	4,387,000	4,989,000	6,234,000	4,763,000	5,485,000	6,188,000	9,534,000	9,295,000	10,219,000	9,856,000
DAILY AVERAGE	293,516	180,033	141,516	160,935	222,643	153,645	182,833	199,613	317,800	299,839	329,645	328,533
QUARTERLY TOTALS			18,887,000			15,986,000			21,207,000			29,370,000
CHASE LANE	4,100,000	4,000,000	4,200,000	4,200,000	4,200,000	4,200,000	4,200,000	-	-	-	-	-
N. ANCHORAGE	-	-	-	-	-	-	-	-	-	-	-	-
S. ANCHORAGE	3,338,000	4,653,000	3,995,500	4,324,200	7,352,300	5,100,000	4,969,000	5,034,500	5,001,700	-	-	-
CODD HWY	1,019,000	3,415,000	4,327,000	5,703,000	5,672,000	5,850,000	5,761,000	3,868,000	1,465,000	4,548,000	5,466,000	5,302,000
GATE 4 CP	5,257,000	4,637,000	4,838,000	4,343,000	4,508,000	4,188,000	4,600,000	5,272,000	4,936,000	4,797,000	4,810,000	6,321,000
GREENE LANE	10,400,000	11,200,000	11,300,000	14,000,000	11,400,000	9,100,000	9,600,000	9,300,000	9,800,000	10,200,000	8,900,000	8,500,000
LAWTON VALLEY	3,700,300	3,703,200	3,762,795	3,844,205	3,824,400	3,795,300	3,665,900	3,416,800	3,348,300	99,000	-	20,000
MONTHLY TOTALS	27,814,300	31,608,200	32,423,295	36,414,405	36,956,700	32,233,300	32,795,900	26,891,300	24,551,000	19,644,000	19,176,000	20,143,000
DAILY AVERAGE	897,235	1,053,607	1,045,913	1,174,658	1,319,882	1,039,784	1,093,197	867,461	818,367	633,677	618,581	671,433



	31 OCT	30 NOV	31 DEC	31 JAN	28 / 29 FEB	31 MAR	30 APR	31 MAY	30 JUN	31 JUL	31 AUG	30 SEPT
QUARTERLY TOTALS			91,845,795			105,604,405			84,238,200			58,963,000
FY 02												
NRMC BOILER RM	-	-	-	-	-	-	-	-	-	-	-	-
NRMC GATE 7	931,000	597,000	974,000	466,000	527,000	473,000	875,000	782,000	728,000	900,000	1,427,000	943,000
NRMC QTRS H	9,000		19,000	14,000	8,000	9,000	7,000	9,000	10,000			30,000
CHI RSD PIT	3,633,000	2,589,000	2,292,000	2,137,000	2,220,000	2,113,000	2,666,000	2,616,000	3,147,000	3,703,000	4,933,000	3,530,000
FORT ADAMS	1,361,000	1,986,000	1,912,000	2,137,000	1,806,000	1,741,000	1,678,000	1,833,000	1,821,000	1,519,000	1,684,000	2,264,000
CHI CLN CRT	170,000	227,000	186,000	232,000	179,000	176,000	191,000	195,000	201,000	231,000	251,000	202,000
MONTHLY TOTALS	6,104,000	5,399,000	5,383,000	4,986,000	4,740,000	4,512,000	5,418,000	5,435,000	5,907,000	6,353,000	8,295,000	6,969,000
DAILY AVERAGE	196,903	179,967	173,645	160,839	169,286	145,548	180,600	175,323	196,900	204,935	267,581	232,300
QUARTERLY TOTALS			16,886,000			14,238,000			16,760,000			21,617,000
CHASE LANE	-	-	-	-	-	-	-	-	-	-	-	-
CODD HWY	4,842,000	10,029,000	9,874,000	11,764,000	10,189,000	9,367,000	9,646,000	9,697,000	8,434,000	7,581,000	7,197,000	5,383,000
GATE 4 CP	3,701,000	4,562,000	4,214,000	4,189,000	4,273,000	3,908,000	4,038,000	4,578,000	4,333,000	4,608,000	10,749,000	4,730,000
GREENE LANE	5,500,000	7,200,000	6,100,000	6,300,000	5,500,000	5,500,000	6,135,000	6,965,000	2,102,000	10,227,000	10,943,000	10,677,000
LAWTON VALLEY	40,000	187,000	193,000	239,000	8,000	5,000	6,000	10,000	13,000	179,000	-	64,000
MONTHLY TOTALS	14,083,000	21,978,000	20,381,000	22,492,000	19,970,000	18,780,000	19,825,000	21,250,000	11,882,000	22,595,000	28,889,000	20,854,000
DAILY AVERAGE	454,290	732,600	657,452	725,548	713,214	605,806	660,833	685,484	396,067	728,871	931,903	695,133
QUARTERLY TOTALS			56,442,000			61,242,000			52,957,000			72,338,000
FY 03												
NRMC BOILER RM	-	-	-	-	-	-	-	-	-	-	-	-
NRMC GATE 7	723,000	550,000	582,000	371,000	908,000	446,000	676,000	676,000	353,000	599,000	332,000	336,000
NRMC QTRS H		48,000	6,000	13,000	6,000	10,000	4,000	6,000	11,000		25,000	10,000
CHI RSD PIT	2,974,000	2,328,000	2,198,000	1,532,000	2,031,000	2,166,000	3,089,000	2,619,000	3,990,000	4,916,000	5,110,000	4,967,000
CHI CLN CRT	190,000	163,000	172,000	178,000	175,000	158,000	351,000	565,000	543,000	573,000	514,000	580,000
FORT ADAMS	2,431,000	2,015,000	1,945,000	2,207,000	1,861,000	2,227,000	2,384,000	1,981,000	2,083,000	1,748,000	1,788,000	2,370,000
MONTHLY TOTALS	6,318,000	5,104,000	4,903,000	4,301,000	4,981,000	5,007,000	6,504,000	5,847,000	6,980,000	7,837,000	7,769,000	8,263,000
DAILY AVERAGE	203,806	170,133	158,161	138,742	177,893	161,516	216,800	188,613	232,667	252,806	250,613	275,433
QUARTERLY TOTALS			16,325,000			14,289,000			19,331,000			23,869,000
CHASE LANE	-	-	33,407	9,887,593	6,755,000	6,211,000	7,989,000	7,370,000	7,494,000	9,248,000	7,054,000	9,115,000
N. ANCHORAGE	-	-	-	-	-	-	-	-	-	-	-	-
S. ANCHORAGE	-	-	-	-	-	-	-	-	-	-	-	-
CODD HWY	7,319,000	3,445,000	3,257,000	4,263,000	5,196,000	4,758,000	4,397,000	2,550,000	2,254,000	2,720,000	3,631,000	3,802,000
GATE 4 CP	4,633,000	1,402,000	-	12,040,600	4,714,200	4,522,300	5,217,900	4,551,000	4,166,000	4,656,000	4,862,000	5,328,000
GREENE LANE	10,837,000	9,139,000	8,325,000	7,812,000	8,891,000	7,537,000	9,837,000	8,163,000	8,607,200	-	1,979,800	9,491,000
LAWTON VALLEY	4,000	4,000	5,000	-	-	9,000	151,000	1,648,000	1,923,000	84,000	27,000	10,000
MONTHLY TOTALS	22,793,000	13,990,000	11,620,407	34,003,193	25,556,200	23,037,300	27,591,900	24,282,000	24,444,200	16,708,000	17,553,800	27,746,000
DAILY AVERAGE	735,258	466,333	374,852	1,096,877	912,721	743,139	919,730	783,290	814,807	538,968	566,252	924,867
QUARTERLY TOTALS			48,403,407			82,596,693			76,318,100			62,007,800
FY 04												
NRMC BOILER RM	-	-	-	-	-	-	-	-	-	-	-	-
NRMC GATE 7		894,000	284,000	89,000	135,000	167,000	145,000	300,000	288,000	300,000	270,000	268,000
NRMC QTRS H	6,000	7,000	7,000	10,000	7,000	6,000	8,000	6,000	7,000	2,000	15,000	4,000
CHI RAISED PIT	3,225,000	3,741,000	3,470,000	2,904,000	16,728,000	18,665,000	18,343,000	2,056,000	8,939,000	5,000,000	4,550,000	5,000,000
CHI CLOYNE CT	574,000	1,020,000	465,000	150,000	170,000	153,000	133,000	127,000	171,000	243,000	200,000	68,000
FORT ADAMS	1,582,000	2,252,000	2,485,000	2,296,000	2,754,100	2,284,900	2,071,000	2,185,000	2,268,000	2,000,000	1,950,000	1,846,380
MONTHLY TOTALS	5,387,000	7,914,000	6,711,000	5,449,000	19,794,100	21,275,900	20,700,000	4,674,000	11,673,000	7,545,000	6,985,000	7,186,380
DAILY AVERAGE	173,774	263,800	216,484	175,774	682,555	686,319	690,000	150,774	389,100	243,387	225,323	239,546
QUARTERLY TOTALS			20,912,000			46,519,000			37,047,000			21,716,380
CHASE LANE	7,972,000	8,833,000	2,935,000	17,286,000	13,319,000	10,201,000	9,638,000	10,387,000	9,923,000	8,000,000	7,409,000	8,333,000
N. ANCHORAGE	-	-	-	-	-	-	-	-	-	-	-	-
S. ANCHORAGE	-	-	-	-	-	-	-	-	-	-	-	-
CODD HWY	3,069,000	6,389,000	9,012,000	12,733,000	17,810,000	12,095,000	11,282,000	11,353,000	8,058,000	8,000,000	2,728,000	3,589,000
GATE 4 CP	3,961,000	7,771,000	4,835,000	4,092,000	5,483,000	4,716,000	4,713,000	4,681,000	4,668,000	3,300,000	6,557,000	6,557,000
GREENE LANE	3,667,800	2,033,000	11,084,000	11,754,000	15,180,000	10,099,000	9,364,000	5,833,000	1,557,900	9,000,000	1,270,600	1,870,600
LAWTON VALLEY	18,500	-	-	14,500	3,000	6,000	3,000	10,000	22,000	10,000	20,000	20,000
MONTHLY TOTALS	18,688,300	25,026,000	27,866,000	45,879,500	51,805,000	37,117,000	35,000,000	32,264,000	24,228,900	29,755,000	14,727,600	20,369,600
DAILY AVERAGE	602,848	834,200	898,903	1,479,984	1,786,379	1,197,323	1,166,667	1,040,774	807,630	959,839	475,084	678,987
QUARTERLY TOTALS			71,580,300			134,801,500			91,492,900			64,852,200



	31 OCT	30 NOV	31 DEC	31 JAN	28 / 29 FEB	31 MAR	30 APR	31 MAY	30 JUN	31 JUL	31 AUG	30 SEPT
<b>FY 05</b>												
NRMC BOILER RM	-	-	-	-	-	-	-	-	-	-	-	-
NRMC GATE 7	284,000	260,000	531,000	350,000	434,000	45,000	125,000	1,281,000	347,000	344,000	303,000	324,000
NRMC QTRS H	1,000	1,000	-	-	2,000	-	2,000	2,000	5,000	8,000	8,000	1,000
CHI RAISED PIT	4,662,500	3,211,400	3,276,720	4,000,000	7,874,800	2,470,000	3,561,200	3,366,000	3,028,630	4,534,370	4,804,170	7,786,630
CHI CLOYNE CT	96,000	143,000	121,000	180,000	165,000	74,000	125,000	412,000	179,000	151,000	146,000	280,000
FORT ADAMS	2,377,000	2,500,000	3,146,620	2,934,000	5,823,000	2,094,000	3,964,000	959,250	4,034,066	1,557,250	1,863,000	1,705,250
MONTHLY TOTALS	7,420,500	6,115,400	7,074,340	7,464,000	14,298,800	4,683,000	7,777,200	6,010,250	7,593,696	6,594,620	7,126,170	10,089,080
DAILY AVERAGE	239,371	203,847	228,205	240,774	510,671	151,065	259,240	193,879	253,123	212,730	229,876	336,303
QUARTERLY TOTALS			20,610,240			26,445,800			21,381,146			23,809,870
CHASE LANE	7,555,000	8,151,000	7,985,000	7,573,000	11,762,000	3,941,000	6,737,000	6,867,000	5,225,000	3,644,000	4,827,000	8,442,000
CODD HWY	4,104,000	6,142,000	6,473,000	8,000,000	10,453,000	3,617,000	-	8,741,000	1,608,000	335,000	492,000	1,280,000
GATE 4 CP	5,596,000	5,002,000	3,723,000	4,000,000	4,343,000	1,994,000	4,000,000	3,766,000	3,637,000	3,966,000	4,533,000	7,679,000
GREENE LANE	1,329,150	2,001,400	1,665,275	8,289,400	5,977,000	5,320,000	15,372,000	4,576,000	-	22,857,000	11,979,000	12,034,500
LAWTON VALLEY	20,000	-	20,000	37,000	143,000	46,000	89,000	613,000	-	33,000	27,000	19,500
MONTHLY TOTALS	18,606,150	21,296,400	19,866,275	27,899,400	32,678,000	14,918,000	26,198,000	24,563,000	10,470,000	30,835,000	21,858,000	29,455,000
DAILY AVERAGE	600,198	709,880	640,848	899,981	1,167,071	481,226	873,267	792,355	349,000	994,677	705,097	981,833
QUARTERLY TOTALS			59,768,825			75,495,400			61,231,000			82,148,000
<b>FY 06</b>												
NRMC BOILER RM	-	-	-	-	-	-	-	-	-	-	-	-
NRMC GATE 7	380,000	43,000	133,000	88,000	110,500	300,000	100,000	422,500	411,250	250,000	100,000	220,000
NRMC QTRS H	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	2,000	1,000	9,000	2,000
CHI RAISED PIT	3,300,000	1,152,000	6,060,000	3,913,000	3,090,000	1,800,000	2,000,000	1,617,000	3,984,000	3,800,000	3,808,000	4,012,798
CHI CLOYNE CT	200,000	41,000	114,000	189,000	151,500	165,000	150,000	324,500	200,000	170,000	113,090	181,545
FORT ADAMS	1,000,000	500,000	(4,022,816)	4,311,816	1,405,494	1,500,000	1,000,000	4,497,888	3,000,000	2,000,000	3,569,367	1,283,184
MONTHLY TOTALS	4,881,000	1,737,000	2,285,184	8,502,816	4,758,494	3,766,000	3,251,000	6,861,888	7,597,250	6,221,000	7,599,457	5,699,527
DAILY AVERAGE	157,452	57,900	73,716	274,284	169,946	121,484	108,367	221,351	253,242	200,677	245,144	189,984
QUARTERLY TOTALS			8,903,164			17,027,310			17,710,136			19,519,984
CHASE LANE	3,000,000	5,000,000	4,356,000	6,646,000	9,581,000	6,000,000	4,000,000	3,959,000	5,000,000	4,000,000	8,744,700	2,000,000
CODD HWY	3,000,000	582,000	3,359,000	3,561,000	5,756,000	6,000,000	4,000,000	6,000,000	5,000,000	4,000,000	3,000,000	3,000,000
GATE 4 CP	3,000,000	1,493,000	4,669,000	4,250,000	3,817,000	4,000,000	2,000,000	3,800,000	2,500,000	2,700,000	3,200,000	5,200,000
GREENE LANE	6,000,000	-	24,026,750	12,013,688	12,017,782	10,000,000	10,000,000	4,031,713	2,207,567	10,000,000	11,840,000	9,000,000
LAWTON VALLEY	10,000	-	13,500	6,750	-	10,000	10,000	14,688	30,082	10,000	-	97,480
MONTHLY TOTALS	15,010,000	7,075,000	36,424,250	26,477,438	31,171,782	26,010,000	20,010,000	17,805,401	14,737,649	20,710,000	23,784,700	19,297,480
DAILY AVERAGE	484,194	235,833	1,174,976	854,111	1,113,278	839,032	667,000	574,368	491,255	668,065	767,248	643,249
QUARTERLY TOTALS			58,509,250			83,659,220			52,553,050			63,792,180
<b>FY 07</b>												
NRMC BOILER RM	-	-	-	-	-	-	-	-	-	-	-	-
NRMC GATE 7	262,750	161,870	80,110	177,020	65,650	121,000	400,000	209,000	100,000	319,000	202,194	500,000
NRMC QTRS H	4,000	-	-	3,000	1,000	1,000	1,000	-	-	3,000	1,000	3,000
CHI RAISED PIT	2,469,498	2,634,420	2,357,651	2,136,128	1,800,250	1,594,550	3,000,000	2,000,000	1,500,000	4,000,000	3,500,000	3,200,000
CHI CLOYNE CT	376,398	197,035	194,584	195,810	195,197	195,504	300,000	90,779	195,390	195,409	195,400	57,839
FORT ADAMS	2,000,000	-	2,867,000	-	835,000	-	1,500,000	825,000	825,000	626,000	626,000	626,000
MONTHLY TOTALS	5,112,646	2,993,325	5,499,345	2,511,958	2,897,097	1,912,054	5,201,000	3,124,779	2,620,390	5,143,409	4,524,594	4,386,839
DAILY AVERAGE	164,924	99,778	177,398	81,031	103,468	61,679	173,367	100,799	87,346	165,916	145,955	146,228
QUARTERLY TOTALS			13,605,316			7,321,109			10,946,169			14,054,842
CHASE LANE	2,770,020	10,000,000	5,000,000	1,156,280	2,807,400	4,583,700	3,500,000	4,608,400	3,464,500	3,847,600	1,403,900	3,467,900
CODD HWY	3,269,780	2,990,440	3,327,340	3,434,660	2,848,340	4,843,220	5,000,000	3,493,110	2,179,000	3,441,280	1,000,000	-
GATE 4 CP	2,209,851	3,533,447	3,550,648	1,006,704	1,743,220	3,236,340	3,500,000	1,603,660	1,827,560	2,220,720	3,115,850	4,478,090
GREENE LANE	8,513,379	8,528,852	8,000,000	9,283,465	8,641,733	8,622,920	4,000,000	15,400,000	5,200,000	5,900,000	7,000,000	4,900,000
LAWTON VALLEY	262,200	94,000	100,000	492,140	-	-	10,000	-	100,000	1,000,000	1,000,000	1,000,000
MONTHLY TOTALS	17,025,230	25,146,739	19,977,988	15,373,249	16,040,693	21,286,180	16,010,000	25,105,170	12,771,060	16,409,600	13,519,750	13,845,990
DAILY AVERAGE	549,201	838,225	644,451	495,911	572,882	686,651	533,667	809,844	425,702	529,342	436,121	461,533
QUARTERLY TOTALS			62,149,957			52,700,122			53,886,230			43,775,340
<b>FY08</b>												
NRMC GATE 7	500,000	731,586	504,220	157,780	254,000	131,000	235,000	211,660	457,340	713,890	964,780	712,900
CLOYNE CT	57,839	200,110	290,340	268,780	157,660	137,110	127,120	83,330	120,220	224,094	2,000	61,156
CHI RSD PIT	3,200,000	8,386,705	3,242,000	2,026,000	1,877,000	2,265,000	2,899,000	2,447,000	3,389,000	3,297,183	2,571,817	3,133,000
FORT ADAMS	626,000	626,000	635,500	635,000	781,000	1,033,000	1,000,000	800,000	800,000	1,000,000	992,000	608,000



	<sup>31</sup> OCT	<sup>30</sup> NOV	<sup>31</sup> DEC	<sup>31</sup> JAN	<sup>28 / 29</sup> FEB	<sup>31</sup> MAR	<sup>30</sup> APR	<sup>31</sup> MAY	<sup>30</sup> JUN	<sup>31</sup> JUL	<sup>31</sup> AUG	<sup>30</sup> SEPT
QTRS H	3,000	5,000	4,000	3,000	5,000	2,000	5,000	2,000	0	1,000	1,000	5,000
MONTHLY TOTALS	4,386,839	9,949,401	4,676,060	3,090,560	3,074,660	3,568,110	4,266,120	3,543,990	4,766,560	5,236,167	4,531,597	4,520,056
MONTHLY AVERAGE	141,511	331,647	150,841	99,695	106,023	115,100	142,204	114,322	158,885	168,909	146,181	150,669
QUARTERLY TOTALS			19,012,300			9,733,330			12,576,670			14,287,820
CHASE LANE	3,467,900	1,500,000	4,873,200	3,527,900	1,567,004	6,301,696	3,978,200	2,672,800	3,548,700	2,836,400	2,749,300	2,951,100
CODD HWY	-	1,211,500	43,780	2,557,440	4,187,097	3,370,013	4,801,340	3,767,000	3,894,220	2,545,770	1,456,560	96,780
GATE 4	4,478,090	3,539,890	4,012,890	3,482,670	494,890	6,732,670	3,673,660	3,895,890	4,473,440	4,432,120	3,785,000	3,817,790
GREENE LANE	4,900,000	1,000,000	9,500,000	5,700,000	6,200,000	8,300,000	7,300,000	6,200,000	6,200,000	7,700,000	5,200,000	5,600,000
LAWTON VALLEY	1,000,000	0	0	100,000	100,000	0	159,328	100,000	100,000	0	0	0
MONTHLY TOTALS	13,845,990	7,251,390	18,429,870	15,368,010	12,548,991	24,704,379	19,912,528	16,635,690	18,216,360	17,514,290	13,190,860	12,465,670
DAILY AVERAGE	446,645	241,713	594,512	495,742	432,724	796,915	663,751	536,635	607,212	564,977	425,512	415,522
QUARTERLY TOTALS			39,527,250			52,621,380			54,764,578			43,170,820
FY 09												
NRMC GATE 7	859,980	729,450	1,100,550	440,780	781,626	391,130	221,130	174,800	166,740			
CLOYNE CT	106,420	122,220	137,890	97,660	125,670	134,126	137,614	221,260	109,540			
CHI RSD PIT	2,651,000	2,617,000	3,410,000	2,324,000	3,000,000	2,437,960	1,961,940	2,501,000	2,891,000			
FORT ADAMS	600,000	1,000,000	967,000	712,000	662,000	967,000	703,000	708,000	750,000			
QTRS H	1,000	6,000	2,000	3,000	3,000	3,000	3,000	2,821	2,741			
MONTHLY TOTAL	4,218,400	4,474,670	5,617,440	3,577,440	4,572,296	3,923,216	3,026,684	3,607,881	3,920,021			
MONTHLY AVERAGE	136,077	149,156	181,208	115,401	163,296	126,555	100,889	116,383	130,667	-	-	-
QUARTERLY TOTAL			14,310,510			12,072,952			10,554,586			



NSN MELVILLE NORTH SALES (GALLONS)

NSN MELVILLE NORTH SALES (GALLONS)

TAB 3

Date	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09
1		75,800	75,420	49,540	52,870	46,220	36,780	34,010	27,470	24,210	38580	68,380	43,680	31,200	19,610	17,860	22,170	32,440	38,390	19,520	20,180	32,210	43,060	29,770	28,190	113,140	20,760	21,840	20,590	19,200	17,450	18,330	21,920	26,490
2		69,580	69,210	56,020	57,190	51,570	35,300	33,480	23,970	31,770	40050	51,730	41,410	32,440	18,930	22,170	21,970	33,520	40,860	19,380	19,120	36,790	40,990	27,860	22,690	27,210	21,950	20,000	18,510	19,660	20,940	18,500	22,920	19,330
3		69,530	57,510	62,220	63,200	59,480	36,760	33,710	22,730	26,760	51080	66,310	50,870	32,810	22,820	24,140	23,760	35,680	38,370	18,490	31,860	37,330	39,420	32,690	35,240	34,540	19,090	20,580	19,900	19,210	17,340	15,240	27,090	18,050
4		76,540	63,140	59,630	55,030	53,640	36,740	31,050	24,880	25,410	32240	62,480	45,130	35,670	22,630	19,770	22,810	35,060	39,870	16,490	27,090	18,500	37,220	38,680	31,360	37,190	20,700	19,950	23,950	17,770	16,520	16,770	24,320	20,240
5		72,860	66,330	60,770	54,060	55,480	31,690	36,660	25,230	26,770	30700	61,840	40,480	30,940	23,440	26,360	22,230	36,120	39,000	16,990	20,680	20,530	33,140	26,750	32,720	28,340	18,570	15,750	22,510	18,370	18,030	20,710	17,880	20,350
6		70,400	64,330	56,900	58,090	50,600	30,690	33,530	29,360	24,270	37450	44,620	47,360	35,180	21,990	22,070	26,910	36,830	39,100	20,450	23,850	18,480	33,900	18,760	21,020	35,300	20,020	18,430	23,140	15,690	15,050	18,340	20,650	20,240
7		69,750	64,240	66,350	58,500	52,360	27,350	37,000	31,830	26,920	49960	32,160	49,720	28,680	21,110	18,890	24,460	34,680	37,540	19,300	28,090	32,890	51,300	19,580	31,730	22,960	17,690	21,330	21,010	15,910	15,630	17,790	18,610	26,470
8		71,080	56,770	63,160	61,160	44,070	34,220	34,560	26,610	28,060	63700	31,060	43,690	36,200	18,870	22,010	26,950	33,450	36,750	18,420	19,490	41,140	57,230	19,770	21,920	22,540	19,280	20,940	20,610	19,460	18,980	18,250	19,090	25,230
9		69,440	60,860	65,210	59,180	44,870	35,690	37,360	27,010	29,550	44160	42,180	45,440	30,690	17,770	24,360	25,080	34,870	40,980	18,790	16,920	55,560	54,730	25,230	17,930	22,080	24,070	21,560	19,830	22,620	17,260	16,850	20,710	29,000
10		67,710	60,182	65,200	65,230	50,750	42,810	33,950	28,930	39,150	54430	28,880	35,140	33,360	18,390	22,570	29,290	36,890	40,760	18,050	19,410	48,760	43,130	32,550	21,610	20,110	17,810	20,240	17,960	17,460	18,350	15,020	23,020	23,850
11		72,250	64,568	57,130	70,260	50,910	34,200	29,490	25,650	30,190	38320	33,230	32,800	30,080	19,510	22,470	27,750	35,010	40,750	16,110	23,040	46,120	44,510	25,090	20,740	17,830	23,060	18,900	24,390	18,530	16,800	14,820	20,500	21,100
12		73,400	66,250	57,220	67,140	53,180	34,790	29,530	30,610	34,150	39590	39,480	35,740	31,650	23,100	20,830	27,160	34,990	40,160	18,050	18,690	49,180	56,670	18,770	20,390	19,690	20,480	17,240	24,310	19,040	18,060	16,920	19,110	21,240
13		58,150	71,170	56,750	42,170	59,470	29,880	30,200	35,530	31,150	45430	31,510	35,200	30,870	17,910	21,180	32,490	35,970	21,990	17,610	20,360	42,890	42,610	20,310	19,490	25,790	20,490	20,920	24,310	15,760	14,780	16,340	20,100	22,140
14		67,970	59,730	59,430	44,400	58,360	30,150	24,490	28,070	43,860	52920	22,310	33,970	32,460	18,130	20,920	29,780	33,510	14,780	15,840	22,990	42,170	50,820	18,080	22,520	22,200	17,120	22,210	18,750	16,070	15,820	14,220	18,280	29,020
15	S	68,120	65,500	60,250	49,460	63,390	26,630	25,620	26,440	39,870	49630	37,900	32,800	37,880	19,610	19,210	32,410	32,970	16,840	17,340	20,700	21,690	65,390	19,420	21,580	19,980	22,030	19,670	18,120	15,630	19,490	13,710	20,400	25,090
16	M	57,830	59,270	63,150	40,000	58,350	25,120	28,430	22,600	44,120	41440	28,890	36,670	34,010	17,200	25,560	30,950	35,030	18,430	17,310	18,710	21,780	88,070	25,660	30,260	20,850	22,390	20,690	17,220	19,130	19,600	14,960	21,050	23,640
17	T	61,180	56,570	61,260	49,330	46,400	29,140	27,620	27,810	40,530	43590	30,320	33,690	35,570	18,010	21,600	32,520	34,380	17,640	18,640	20,040	20,910	61,920	32,500	36,220	18,110	19,820	19,450	19,040	16,540	17,940	14,630	23,850	26,050
18	W	53,870	55,860	59,230	46,080	48,170	35,530	28,800	30,740	42,460	31140	31,070	35,580	30,590	21,930	21,070	31,040	35,710	16,780	16,980	27,160	31,660	51,770	30,470	24,580	22,910	19,620	20,320	24,450	14,870	19,290	16,100	22,370	23,280
19	T	55,910	60,440	55,170	36,230	54,370	29,430	29,110	36,600	39,550	34340	32,840	33,870	31,480	20,030	21,450	31,060	35,110	18,110	25,480	20,870	25,780	47,960	23,680	33,460	22,500	20,310	18,730	52,370	15,950	18,800	22,830	19,960	24,050
20	F	57,590	64,280	62,330	50,130	47,320	24,960	25,470	40,480	25,160	37910	31,770	39,950	31,830	21,330	21,990	30,410	35,160	14,550	24,550	22,230	30,070	48,950	35,980	34,830	22,960	21,200	18,870	31,860	14,390	14,610	17,320	19,470	27,130
21	S	50,730	61,280	70,370	45,960	50,440	26,370	28,130	36,330	42,910	44980	35,300	29,890	33,990	20,500	21,850	34,520	38,990	14,480	21,440	20,520	52,430	61,220	33,400	38,630	20,620	15,460	20,550	18,100	14,710	22,200	17,780	20,950	24,220
22		65,750	53,110	70,430	48,240	33,650	29,320	28,560	41,320	28,310	52990	31,610	41,070	96,770	19,380	19,290	58,460	32,960	16,710	21,750	19,040	32,720	56,720	42,670	37,490	22,170	21,010	18,800	17,940	20,660	20,020	16,910	21,280	27,870
23		58,910	53,100	66,300	41,940	36,270	22,560	26,050	37,180	38,590	35730	34,020	35,660	42,880	18,550	19,740	39,990	36,260	18,710	22,730	21,330	37,920	24,550	40,520	35,580	20,480	21,440	17,670	14,190	18,860	19,030	17,220	19,960	27,130
24		68,300	55,200	62,220	48,160	36,780	24,140	30,230	36,840	37,520	53030	39,420	37,320	37,190	16,720	18,880	33,200	37,950	16,780	29,550	27,800	21,400	24,220	43,260	34,920	20,920	19,750	18,110	17,000	17,990	17,440	20,590	20,640	22,640
25		67,300	56,840	64,310	46,570	35,950	29,500	29,200	43,050	39,820	48780	54,180	34,730	38,500	20,060	18,870	30,680	37,490	17,900	24,780	23,570	41,980	30,660	31,400	23,120	23,950	21,540	18,400	21,410	16,910	19,450	22,690	28,080	23,790
26		57,770	61,440	58,180	44,900	44,020	25,910	30,350	47,230	42,420	48010	56,010	36,810	33,870	19,320	18,530	32,390	39,470	15,630	32,630	27,000	26,590	44,460	37,410	17,540	23,050	18,250	17,950	19,520	17,330	18,570	31,620	21,870	20,510
27		57,280	57,220	55,000	51,550	43,080	25,320	33,170	34,640	33,720	43740	49,550	29,360	35,090	19,600	20,240	34,350	37,040	17,990	23,510	21,950	29,010	30,680	22,510	22,500	21,760	19,090	17,510	17,570	15,470	14,080	23,910	19,320	25,920
28		63,500	60,680	50,040	58,260	42,470	27,120	33,990	41,230	36,520	56660	43,890	28,080	37,520	23,850	19,000	35,410	38,100	16,020	32,260	20,170	43,250	30,230	33,510	22,000	20,250	17,160	19,390	17,010	16,530	18,540	25,600	21,170	22,510
29	57,190	64,470	52,260	53,430	49,860	30,480	27,400	34,180	31,590	49930	36,260	33,670	29,890	20,440	21,720	33,300	33,300	35,970	20,030	23,130	25,740	35,170	37,190	38,630	22,480	19,310	18,990	19,060	20,490	20,490	20,490	20,490	20,490	25,050
30	84,870	67,270	54,420	59,000	53,440	29,990	24,620	34,470	53,250	44710	43,720	32,070	24,540	16,390	19,180	33,560	33,560		18,710	29,240	24,330	40,540	43,520	21,930	27,508	19,940	20,980	20,250	16,020	21,780	19,650	24,650	24,950	
31		64,500	58,000	57,400	21,810	33,230	21,810	33,230	33,230	54460	36,850	23,170	23,170	20,170	20,170	34,400	34,400		17,180	29,240	25,030	25,030	28,190	24,460	17,490	20,820	20,820	17,540	19,360	19,360	29,430			
TOTAL	142,060	2,024,740	1,827,180	1,864,200	1,625,990	1,371,620	940,380	915,770	992,250	1,038,560	1,389,680	1,269,770	1,131,850	1,087,000	597,130	653,950	951,460	1,031,610	801,790	634,81														



	Fort Adams ID# 81892010	Green Lane ID# 81764462	Chases Lane C# 30355	Anchorage C# 29725	Lawtons Valley ID# 81831196	Training Station Rd C# 16536	Cloyne Court C# 29730	Bowlers Gate C# 30133
1-Jun-09	26536000	171000000	442444100	447213430	1000	516683000	19925540	333529090
	23,000	100,000	102,700	3,780	-	89,000	30,980	115,230
2-Jun-09	26559000	171100000	442546800	447217210	1000	516772000	19956520	333644320
	26,000	200,000	67,600	45,550	-	85,000	3,580	114,890
3-Jun-09	26585000	171300000	442614400	447262760	1000	516857000	19960100	333759210
	29,000	100,000	64,300	32,450	-	108,000	3,330	116,220
4-Jun-09	26614000	171400000	442678700	447295210	1000	516965000	19963430	333875430
	28,000	200,000	92,600	39,990	-	98,000	3,370	102,070
5-Jun-09	26642000	171600000	442771300	447335200	1000	517063000	19966800	333977500
	22,000	100,000	54,100	63,560	-	81,000	2,520	102,930
6-Jun-09	26664000	171700000	442825400	447398760	1000	517144000	19969320	334080430
	31,000	200,000	59,100	44,980	-	72,000	2,660	91,670
7-Jun-09	26695000	171900000	442884500	447443740	1000	517216000	19971980	334172100
	35,000	100,000	79,500	38,800	-	86,000	3,890	115,550
8-Jun-09	26730000	172000000	442964000	447482540	1000	517302000	19975870	334287650
	27,000	200,000	69,400	51,890	-	96,000	31,230	101,670
9-Jun-09	26757000	172200000	443033400	447534430	1000	517398000	20007100	334389320
	21,000	100,000	62,600	57,220	-	91,000	29,550	131,890
10-Jun-09	26778000	172300000	443096000	447591650	1000	517489000	20036650	334521210
	20,000	200,000	79,900	27,440	-	103,000	36,440	117,330
11-Jun-09	26798000	172500000	443175900	447619090	1000	517592000	20073090	334638540
	23,000	100,000	85,500	34,450	-	128,000	34,120	121,550
12-Jun-09	26821000	172600000	443261400	447653540	1000	517720000	20107210	334760090
	21,000	200,000	65,500	43,330	-	93,000	53,660	101,890
13-Jun-09	26842000	172800000	443326900	447696870	1000	517813000	20160870	334861980
	26,000	100,000	66,100	35,230	-	78,000	38,340	86,110
14-Jun-09	26868000	172900000	443393000	447732100	1000	517891000	20199210	334948090
	28,000	200,000	84,600	34,660	-	105,000	43,550	120,230
15-Jun-09	26896000	173100000	443477600	447766760	1000	517996000	20242760	335068320
	20,000	100,000	59,700	51,560	-	93,000	37,340	113,770
16-Jun-09	26916000	173200000	443537300	447818320	1000	518089000	20280100	335182090
	23,000	200,000	77,400	35,780	-	94,000	34,440	111,340
17-Jun-09	26939000	173400000	443614700	447854100	1000	518183000	20314540	335293430
	24,000	100,000	70,900	43,770	-	110,000	3,560	120,780
18-Jun-09	26963000	173500000	443685600	447897870	1000	518293000	20318100	335414210
	18,000	100,000	61,500	38,110	-	88,000	3,110	109,110
19-Jun-09	26981000	173600000	443747100	447935980	1000	518381000	20321210	335523320
	18,000	200,000	70,200	53,340	-	101,000	2,440	100,440
20-Jun-09	26999000	173800000	443817300	447989320	1000	518482000	20323650	335623760
	28,000	200,000	72,000	46,280	-	105,000	3,950	95,040
21-Jun-09	27027000	174000000	443889300	448035600	1000	518587000	20327600	335718800
	17,000	100,000	59,400	37,940	-	80,000	3,160	84,850
22-Jun-09	27044000	174100000	443948700	448073540	1000	518667000	20330760	335803650
	20,000	100,000	60,100	47,460	-	93,000	3,000	116,052
23-Jun-09	27064000	174200000	444008800	448121000	1000	518760000	20333760	335919702
	16,000	200,000	61,600	41,540	-	105,000	13,220	102,278
24-Jun-09	27080000	174400000	444070400	448162540	1000	518865000	20346980	336021980
	17,000	100,000	62,000	46,560	-	44,000	4,000	113,780
25-Jun-09	27097000	174500000	444132400	448209100	1000	518909000	20350980	336135760
	17,000	200,000	63,900	47,660	-	80,000	10,120	105,890
26-Jun-09	27114000	174700000	444196300	448256760	1000	518989000	20361100	336241650
	19,000	100,000	71,600	43,140	-	78,000	2,700	111,550
27-Jun-09	27133000	174800000	444267900	448299900	1000	519067000	20363800	336353200
	15,000	200,000	73,400	50,033,750	-	58,000	3,290	84,890
28-Jun-09	27148000	175000000	444341300	498333650	1000	519125000	20367090	336438090
	18,000	100,000	67,000	(49,972,560)	-	66,000	3,000	86,450
29-Jun-09	27166000	175100000	444408300	448361090	1000	519191000	20370090	336524540
	19,000	200,000	66,800	44,010	-	75,000	2,780	97,000
30-Jun-09	27185000	175300000	444475100	448405100	1000	519266000	20372870	336621540
TOTAL	649,000	4,300,000	2,031,000	1,191,670	0	2,583,000	447,330	3,092,450
AVE DAILY	21633	143333	67700	39722	0	86100	14911	103082
MAX DAY	35000	200000	102700	57220		128000	53660	121550
		QUESTION THE READINGS				q	QUESTION THE READINGS	
	161.79%		151.70%	144.05%		148.66%	359.87%	117.92%

14,294,450

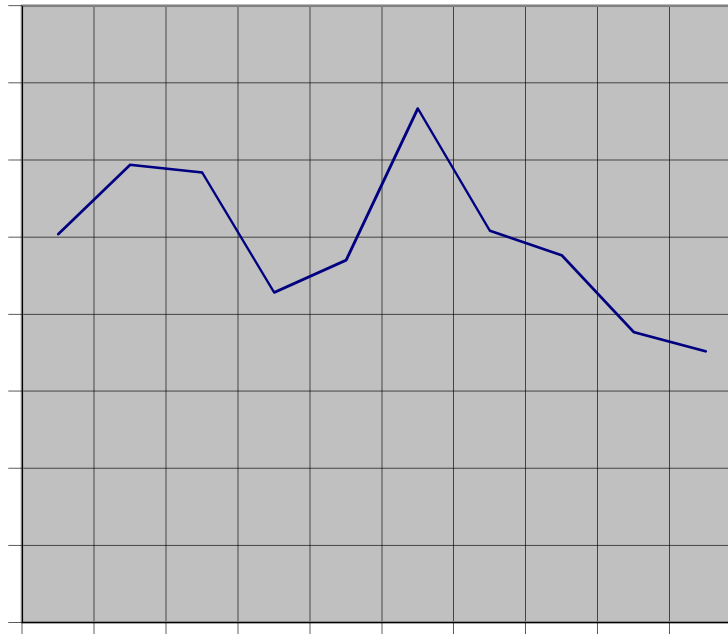


FY	AVE Daily FLOW
FY99	1,006,947.95
FY00	1,187,255.20
FY01	1,167,401.10
FY02	856,109.59
FY03	940,109.59
FY04	1,333,391.48
FY05	1,016,137.76
FY06	952,329.50
FY07	753,351.05
FY08	703,341.90

AVERAGE DAILY FLOWS

## ADF WATER CHART TOTAL FLOWS

1,600,000.00  
1,400,000.00  
1,200,000.00  
1,000,000.00  
800,000.00  
600,000.00  
400,000.00  
200,000.00  
-



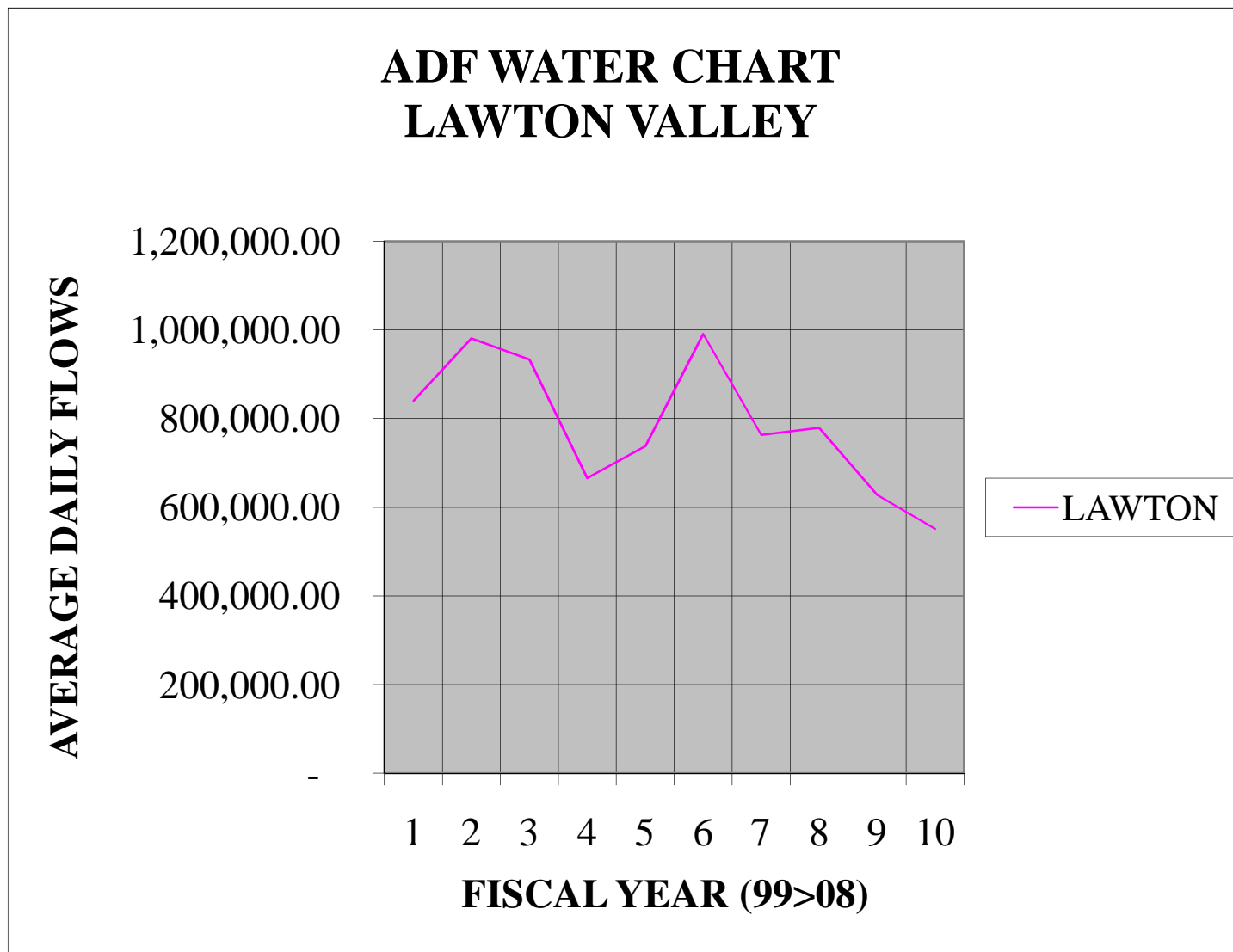
— TOTAL

1 2 3 4 5 6 7 8 9 10

FISCAL YEARS (99>08)

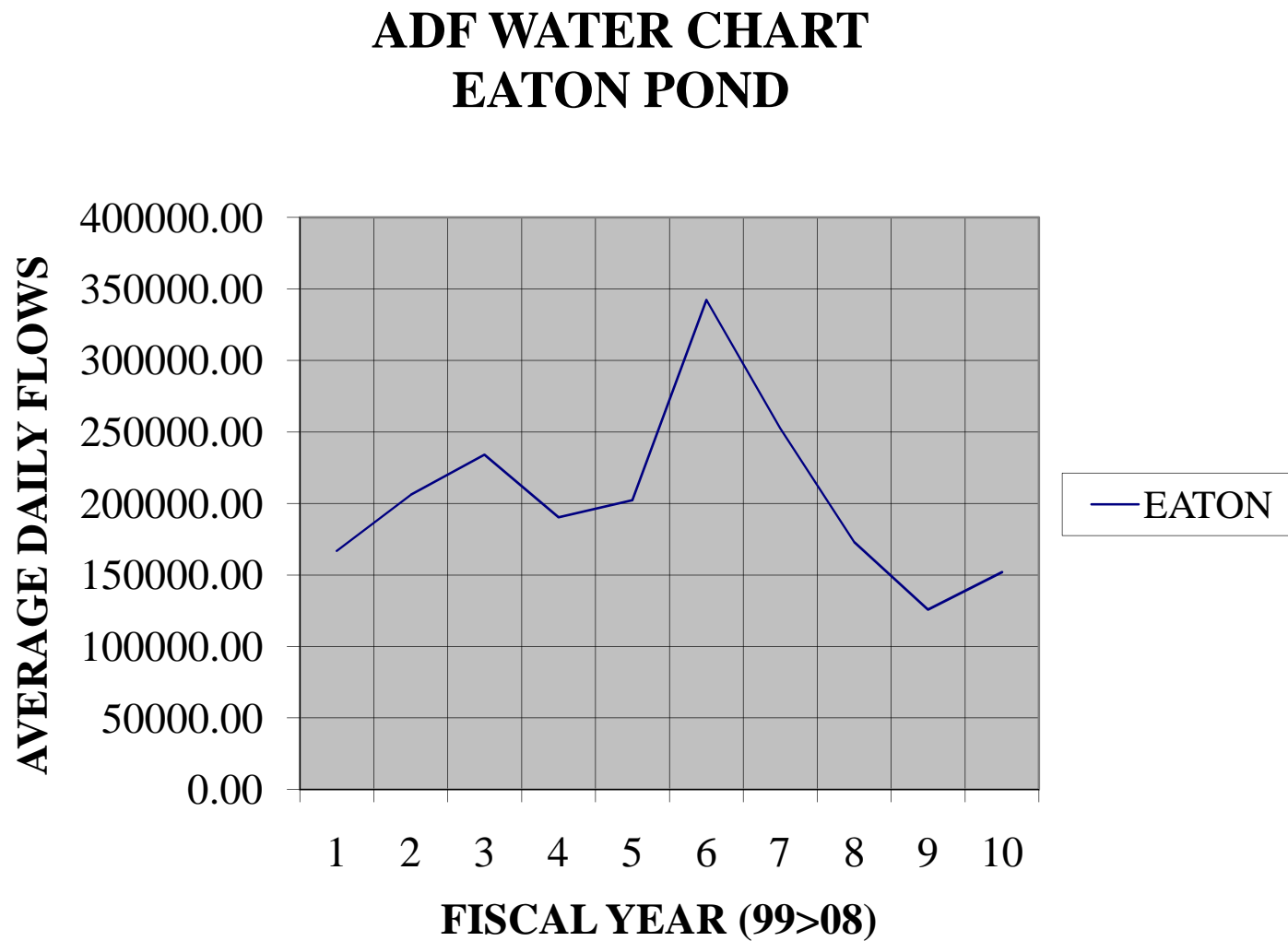


FY	AVE Daily FLOW
FY99	840,087.67
FY00	981,225.15
FY01	933,291.51
FY02	665,695.89
FY03	737,879.45
FY04	991,057.10
FY05	763,406.10
FY06	779,286.71
FY07	627,522.46
FY08	551,401.68



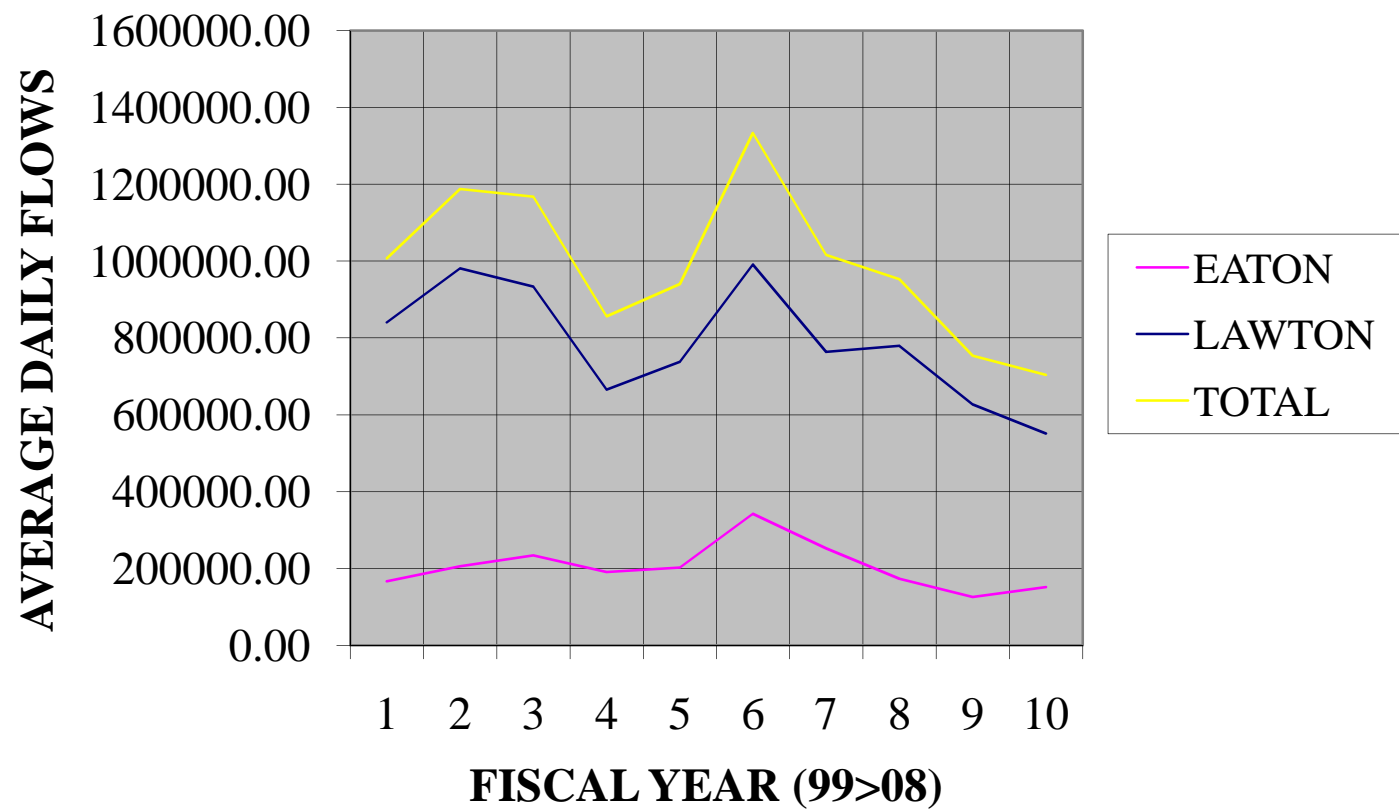


FY	AVE Daily FLOW
FY99	166860.27
FY00	206030.05
FY01	234109.59
FY02	190413.70
FY03	202230.14
FY04	342334.37
FY05	252731.66
FY06	173042.78
FY07	125828.59
FY08	151940.22





## ADF WATER CHART COMBINED





**PWFD 2-4:** Referring to Newport Water's Response to Data Request PWFD 1-12, and in light of the activity described in part (a) of that response that Newport Water asserts decreased the available balance at the end of July 2016:

a. Please provide an update to the Capital Plan for 2016 that is presented on the "2016 CIP" tab of Newport Water's rate model.

b. Please provide updates for all subsequent years that reflect the increased costs.

c. Please reconcile the \$1,974,665 in projected deductions from the Capital Account (called "Vendor Payments" on the "Cap Restricted Cash Flow" tab of the spreadsheet) for FY 2016 with the \$3,243,200 in rate financed capital set forth in the Capital Plan (see "2016 CIP" tab).

**Response:** a. There is no update to the Capital Improvement Plan presented on the "2016 CIP" tab of the electronic version of the rate model.

b. See response to a. above.

c. The schedules on the "Cap Restricted Cash Flow" tab of the cost of service model were not submitted as testimony and were never intended to be. As such, the information in these schedules was not updated prior to the submission of the rate filing. Versions of these schedules updated through December 31, 2015 were prepared for Newport's response to Commission Data Request 1-24. As shown in those schedules the sum of the Actual and Projected "Vendor Payments" for FY 2016 is \$3,243,200.

**Prepared by:** Harold Smith



**PWFD 2-5:** Is NWD seeking any step increase as part of this filing?

- a. If so, how much?
- b. If not, why not?

**Response:** a. No.

b. Newport filed for a step increase in Docket 4243 to fund extensive borrowings for the new Lawton Valley Treatment Plant and improvements to the Station One Plant. The same circumstances were not present in this rate filing. Newport assumes that this question is directed toward Newport's requested increase for Capital Spending. Newport did not request a multi-year step increase because it used a multi-year average of future Capital Spending requirements consistent with past Dockets.

**Prepared by:** Harold Smith



STATE OF RHODE ISLAND  
PUBLIC UTILITIES COMMISSION  
DOCKET NO. 4595  
Response Of The City Of Newport,  
Utilities Division, Water Department  
To The Portsmouth Water And  
Fire District's  
Data Requests  
Set 2

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**PWFD 2-6:** Referring to Newport Water's Response to Data Request Comm. 1-24, which states that the requested amount for Capital Spending is the average of FY 2016 through FY 2021, please identify the authority upon which you rely to use projections that run four years beyond the rate year, including without limitation any provisions in the Commission Rules that authorize the use of such projections.

**Response:** Newport used a multi-year average for the Capital Spending Account consistent with past Dockets. For example, in Docket 4025 both PWFD and the Division suggested that Newport fund its Capital Spending Account based on multi-year averages. Please also see Rule 2.6 (c) of the Commission's Rules of Practice and Procedure.

**Prepared by:** Harold Smith



**PWFD 2-7:** Please explain why Newport Water used the FY 2014 budget to derive expenses to be allocated to the Water Fund and did not use the actual costs for FY 2014.

- a. Please provide an analysis using actual costs for FY 2014.
- b. Please provide an analysis using actual costs for FY 2015, considering that FY 2015 is the test year.

**Response:** The Newport Finance Department did actual counts as of November 4, 2014. The counts were, primarily, of items in FY2014 that began on July 1, 2013 and ended on June 30, 2014. The current (at that time) FY2015 budget was used for the allocation. The 2014 Comprehensive Annual Financial Report with the audited actual operating results for FY2014 was filed on December 31, 2014, after the allocation was completed.

The analyses using FY2014 and FY2015 actual results are attached, along with the supporting schedules. As set forth in these schedules, the allocations to Newport Water would be higher in both cases than the amounts used in the rate filing.

**Prepared by:** Laura Sitrin



City of Newport  
Cost Allocation  
Based on FY2014 Actual Operating Results

PWFD 2-7  
Schedule A

*See Cost Allocation Manual for Methodology and Discussion*

Allocated Item	Cost To Be Allocated	Water Percent	Water Fund
Audit Fees	68,500	6.18%	4,233
OPEB Contribution (1)	500,000	3.84%	19,200
City Council	128,246	3.42%	4,386
City Clerk	390,713	1.00%	3,907
City Manager	396,433	14.18%	56,214
Human Resources	304,954	1.74%	5,306
City Solicitor	321,800	14.18%	45,631
Finance Admin 50%	200,418	14.18%	28,419
Finance - 5% RICWFA	6,155	50.00%	3,078
Finance Admin 10% Inv/Debt	40,084	30.77%	12,334
Purchasing	87,454	18.47%	16,153
Collections	307,979	21.50%	66,215
Accounting - Wires - 5%	12,738	70.00%	8,917
Accounting	396,459	10.97%	43,492
MIS	1,390,225	14.18%	197,134
Totals	4,552,158		514,619

(1) Based on July 1, 2014 Actuarial Report



City Council Actual Costs  
Based on FY2014 and FY2015 Actual Operating Results

PWFD 2-7  
Schedule A-1

	<b>FY2014</b>	<b>FY2015</b>
Total Mayor and City Council Expenditures	129,122	100,685
Less:		
Public Celebrations	-	-
Navy Affairs Expense	276	322
Board of Tenant Affairs	600	810
	<hr/>	<hr/>
Total	128,246	99,553



City Clerk Actual Expenditures  
Based on FY2014 and FY2015 Actual Operating Results

PWFD 2-7  
Schedule A-2

	<b>FY2014</b>	<b>FY2015</b>
Total City Clerk	468,908	376,217
Less:		
Probate Court Salary and Benefits as of 10/15/14	78,195	78,195
Total	390,713	298,022



City Solicitor Actual Expenditures  
Based on FY2014 and FY2015 Actual Operating Results

PWFD 2-7  
Schedule A-3

	<b>FY2014</b>	<b>FY2015</b>
Total City Solicitor	461,772	370,009
Less:		
Salaries and Benefits Municipal Court Assistant		-
Solicitor, Municipal Court Judge and Probate Judge as of 10/15/14	139,972	139,972
Total	321,800	230,037



Finance Admin and Purchasing Actual Expenditures  
Based on FY2014 and FY2015 Actual Operating Results

PWFD 2-7  
Schedule A-4

	<b>FY2014</b>	<b>FY2015</b>
<b>Finance Admin Costs</b>	413,340	438,678
Less:		
10% of Salary and Benefits of Senior Accountant	12,505	12,505
Total	400,835	426,173
To Be Allocated as Follows:		
50% of costs based on Percentage of Budget	200,418	213,087
10% of costs based on Investment Counts	40,084	42,617
Balance not to be allocated	160,334	170,469
<b>RIIB (formerly RICWFA) Allocation</b>		
5% of salary for Budget and Finance Analyst	6,155	6,155
<b>Purchasing Costs</b>	87,454	92,795



Collections Actual Costs  
Based on FY2014 and FY2015 Actual Operating Results

PWFD 2-7  
Schedule A-5

	<b>FY2014</b>	<b>FY2015</b>
<b>Collections Actual Costs</b>	307,979	312,923
Allocation Expense per Last Approved Rate Filing of 21.5%	66,215	
Timesheet percentage of 11.6%		36,299



Accounting Actual Costs  
Based on FY2014 and FY2015 Actual Operating Results

PWFD 2-7  
Schedule A-6

	<b>FY2014</b>	<b>FY2015</b>
Accounting Actual Costs	409,197	411,500
To be allocated as follows:		
5% allocation for wires	12,738	12,738
95% allocation based on check counts	396,459	398,762
Controller and Senior Accountant Salaries and Benefits	254,753	254,753
5% allocation for wires	12,738	12,738



MIS Actual Costs  
Based on FY2014 and FY2015 Actual Operating Results

PWFD 2-7  
Schedule A -7

	<b>FY2014</b>	<b>FY2015</b>
MIS Operating Budget	1,308,602	1,436,875
Less:		
School Share of ERP System	131,673	151,848
Vision Appraisal Web Hosting	3,200	3,200
Judicial Case Software	5,795	5,795
Maritime Domain	80	80
Boston Computer Scanning	2,000	2,000
Copiers	20,000	20,062
Equipment	52,000	62,000
Subtotal	<u>214,748</u>	<u>244,985</u>
Total MIS Operating Budget to Allocate	1,093,854	1,191,890
Capital Budget:	<u>296,371</u>	<u>422,773</u>
	1,390,225	1,614,663
ERP System:		
Lawson	93,450	93,450
Velocity	192,682	237,517
MHC	<u>6,474</u>	<u>6,474</u>
	292,606	337,441
45% to Schools	131,673	151,848



City of Newport  
Cost Allocation - Percentage of Budgets  
Based on Actual Results for FY2014

PWFD 2-7  
Schedule A-8

	<b>FY2014 Actual Results</b>	<b>Less School</b>	<b>Less Civic Support</b>	<b>Less Debt Service</b>	<b>Less Capital</b>		<b>Percentage</b>
General Fund	84,322,270	18,367,326	1,813,725	4,552,191	4,573,036	55,015,992	71.07%
Water Fund Total Operating Expenses	10,979,297	-	-	Already removed	Already removed	10,979,297	14.18%
WPC Fund	9,311,164			-	-	9,311,164	12.03%
Maritime Fund	795,943				-	795,943	1.03%
Parking Fund	<u>1,311,463</u>				-	<u>1,311,463</u>	1.69%
Total	106,720,137					77,413,859	
School Appropriation:	22,959,157						
20% appropriation left in general fund	<u>4,591,831</u>						
	18,367,326						



City of Newport  
Cost Allocation  
Based on FY2015 Actual Operating Results

PWFD 2-7  
Schedule B

*See Cost Allocation Manual for Methodology and Discussion*

Allocated Item	Cost To Be Allocated	Water Percent	Water Fund
Audit Fees	68,500	6.18%	4,233
OPEB Contribution (1)	500,000	3.84%	19,200
City Council	99,553	3.42%	3,405
City Clerk	298,022	1.00%	2,980
City Manager	480,674	12.79%	61,478
Human Resources	336,556	1.74%	5,856
City Solicitor	230,037	12.79%	29,422
Finance Admin 50%	213,087	12.79%	27,254
Finance - 5% RICWFA	6,155	50.00%	3,078
Finance Admin 10% Inv/Debt	42,617	30.77%	13,113
Purchasing	92,795	18.47%	17,139
Collections	312,923	11.60%	36,299
Accounting - Wires - 5%	12,738	70.00%	8,917
Accounting	398,762	10.97%	43,744
MIS	1,614,663	12.79%	206,515
Totals	4,707,082		482,633

(1) Based on July 1, 2014 Actuarial Report



City of Newport  
Cost Allocation - Percentage of Budgets  
Based on Actual Results for FY2015

PWFD 2-7  
Schedule B-1

	<b>FY2015 Actual Results</b>	<b>Less School</b>	<b>Less Civic Support</b>	<b>Less Debt Service</b>	<b>Less Capital</b>		<b>Percentage</b>
General Fund	86,530,351	18,701,726	1,851,475	5,020,694	4,044,900	56,911,556	72.10%
Water Fund Total Operating Expenses	10,091,631	-	-	Already removed	Already removed	10,091,631	12.79%
WPC Fund	9,471,298			-	-	9,471,298	12.00%
Maritime Fund	998,983				-	998,983	1.27%
Parking Fund	<u>1,457,049</u>				-	<u>1,457,049</u>	1.85%
Total	108,549,312					78,930,517	
School Appropriation:	23,377,157						
20% appropriation left in general fund	<u>4,675,431</u>						
	18,701,726						



**PWFD 2-8:** Referring to Newport Water's Response to Data Request PWFD 1-14 (c), and specifically the explanation that Newport Water did not use FY 2016 or FY 2017 budgets because "the City does periodic counts to determine allocations to enterprise funds":

- a. Considering new "counts" were used for items such as City Council (minutes), Finance Administration (bond issues), Collections (hours), Accounting Wires (# of wires), Accounting (deposits), OPEB, and Purchasing, why not use the more recent budgets?
- b. Please provide a copy of the City Services analysis using the current (FY 2016) and proposed (FY 2017) budgets. For items where new "counts" were not done, please use the older or existing "counts".

**Response:** a. With regard to the "new counts":

- Council minutes were reviewed beginning with the July 10, 2013 Council meeting and ending with the June 25, 2014 Council meeting.
- Finance Administration bank and investment accounts were tallied as of November 4, 2014.
- The Collection calculation was done in January 2015 in order to use Collection timesheets for December 2014, the only available at the time, since lockbox services didn't begin until October 2014.
- The OPEB Valuation was as of July 1, 2014.
- The accounting wires were counted using FY2014 wires.
- Accounting Deposits are not applicable since they are not used for any allocations.
- The count of purchase orders was for the period beginning 07/01/13 through 06/30/14.



STATE OF RHODE ISLAND  
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The FY2015 Budget was used because that was the budget we were operating under at the time of the counts.

b. See Attached.

**Prepared by:** Laura Sitrin



City of Newport  
Cost Allocation  
Based on FY2016 Adopted Budget

PWFD 2-8  
Schedule A

Allocated Item	Cost To Be Allocated	Water Percent	Water Fund
Audit Fees	70,555	6.18%	4,360
OPEB Contribution (1)	500,000	3.84%	19,200
City Council	91,495	3.42%	3,129
City Clerk	368,599	1.00%	3,686
City Manager	550,699	13.79%	75,941
Human Resources	328,818	1.74%	5,721
City Solicitor	402,321	13.79%	55,480
Finance Admin 50%	227,338	13.79%	31,350
Finance - 5% RICWFA	6,248	50.00%	3,124
Finance Admin 10% Inv/Debt	45,468	30.77%	13,991
Purchasing	94,830	18.47%	17,515
Collections	41,029	100.00%	41,029
Accounting - Wires - 5%	12,998	70.00%	9,099
Accounting	439,538	10.97%	48,217
MIS	1,622,559	13.79%	223,751
Totals	4,802,495		555,594

(1) Based on July 1, 2014 Actuarial Report



City Council Actual Costs  
Based on FY2016 and FY2017 Budget

PWFD 2-8  
Schedule A-1

	<b>FY2016</b>	<b>FY2017</b>
Total Mayor and City Council Expenditures	94,655	95,422
Less:		
Public Celebrations	-	-
Navy Affairs Expense	910	910
Board of Tenant Affairs	<u>2,250</u>	<u>2,250</u>
Total	91,495	92,262



City Clerk Actual Expenditures  
Based on FY2016 and FY2017 Budget

PWFD 2-8  
Schedule A-2

	<b>FY2016</b>	<b>FY2017</b>
Total City Clerk	447,830	459,420
Less:		
Probate Court Salary and Benefits as of 10/15/14	79,231	91,175
Total	368,599	368,245



City Solicitor Actual Expenditures  
Based on FY2016 and FY2017 Budget

PWFD 2-8  
Schedule A-3

	<b>FY2016</b>	<b>FY2017</b>
Total City Solicitor	545,794	557,677
Less:		
Salaries and Benefits Municipal Court Assistant		-
Solicitor, Municipal Court Judge and Probate Judge as of 10/15/14	143,473 *	143,595
Total	402,321	414,082



Finance Admin and Purchasing Actual Expenditures  
Based on FY2016 and FY2017 Budget

PWFD 2-8  
Schedule A-4

	<b>FY2016</b>	<b>FY2017</b>
<b>Finance Admin Costs less Purchasing</b>	467,561	458,457
Less:		
10% of Salary and Benefits of Senior Accountant	12,886	12,886
Total	454,675	445,571
To Be Allocated as Follows:		
50% of costs based on Percentage of Budget	227,338	222,786
10% of costs based on Investment Counts	45,468	44,557
Balance not to be allocated	181,870	178,228
<b>RIIB (formerly RICWFA) Allocation</b>		
5% of salary for Budget and Finance Analyst	6,248	6,155
<b>Purchasing Costs</b>	94,830	112,547



Collections Actual Costs  
Based on FY2016 and FY2017 Budget

PWFD 2-8  
Schedule A-5

	<b>FY2016</b>	<b>FY2017</b>
<b>Collections Actual Costs</b>	353,698	364,532
Timesheet percentage of 11.6%	41,029	42,286



Accounting Actual Costs  
Based on FY2016 and FY2017 Budgets

PWFD 2-8  
Schedule A-6

	<b>FY2016</b>	<b>FY2017</b>
Accounting Actual Costs	452,536	463,345
To be allocated as follows:		
5% allocation for wires	12,998	13,508
95% allocation based on check counts	439,538	449,837
Controller and Senior Accountant Salaries and Benefits	259,958	270,154
5% allocation for wires	12,998	13,508



MIS Actual Costs  
Based on FY2016 and FY2017 Budget

PWFD 2-8  
Schedule A -7

	<b>FY2016</b>	<b>FY2017</b>
MIS Operating Budget	1,609,280	1,606,163
Capital Budget	354,524	271,071
Less:		
School Share of ERP System	139,681	162,377
Other	10,515	10,815
Vision Appraisal Web Hosting	6,400	6,900
Judicial Case Software	520	520
Maritime Domain	80	80
Boston Computer Scanning	2,000	2,000
Copiers	14,925	13,125
Equipment in Capital that is not applicable	167,124	22,571
Subtotal	<u>341,245</u>	<u>218,388</u>
Total MIS Operating Budget to Allocate	1,622,559	1,658,846

ERP System:		
Lawson	98,322	113,030
Velocity	203,981	239,407
MHC	8,100	8,400
	<u>310,403</u>	<u>360,837</u>
45% to Schools	139,681	162,377



City of Newport  
Cost Allocation - Percentage of Budgets  
Based on FY2016 Adopted Budget

PWFD 2-8  
Schedule A-8

	<b>FY2016 Adopted Budget</b>	<b>Less School</b>	<b>Less Civic Support</b>	<b>Less Debt Service</b>	<b>Less Capital</b>		<b>Percentage</b>
General Fund	88,995,459	19,449,794	1,896,223	5,360,272	3,522,431	58,766,739	71.48%
Water Fund Total Operating Expenses	20,647,293	-	-	6,810,179	2,499,743	11,337,371	13.79%
WPC Fund	19,897,115			3,003,197	7,086,590	9,807,328	11.93%
Maritime Fund	1,050,138				200,000	850,138	1.03%
Parking Fund	<u>1,944,251</u>				490,000	<u>1,454,251</u>	1.77%
Total	132,534,256					82,215,827	
School Appropriation:	24,312,243						
20% appropriation left in general fund	<u>4,862,449</u>						
	19,449,794						



City of Newport  
Cost Allocation  
Based on FY2017 Proposed Budget

PWFD 2-8  
Schedule B

Allocated Item	Cost To Be Allocated	Water Percent	Water Fund
Audit Fees	73,771	6.18%	4,559
OPEB Contribution (1)	500,000	3.84%	19,200
City Council	92,262	3.42%	3,155
City Clerk	368,245	1.00%	3,682
City Manager	586,235	13.96%	81,838
Human Resources	335,842	1.74%	5,844
City Solicitor	414,082	13.96%	57,806
Finance Admin 50%	222,786	13.96%	31,101
Finance - 5% RICWFA	6,155	50.00%	3,078
Finance Admin 10% Inv/Debt	44,557	30.77%	13,710
Purchasing	112,547	18.47%	20,787
Collections	42,286	100.00%	42,286
Accounting - Wires - 5%	13,508	70.00%	9,456
Accounting	449,837	10.97%	49,347
MIS	1,658,846	13.96%	231,575
Totals	4,920,959		577,424

(1) Based on July 1, 2014 Actuarial Report



City of Newport  
 Cost Allocation - Percentage of Budgets  
 Based on FY2017 Proposed Budget

PWFD 2-8  
 Schedule B-1

	<b>FY2017 Proposed Budget</b>	<b>Less School</b>	<b>Less Civic Support</b>	<b>Less Debt Service</b>	<b>Less Capital</b>		<b>Percentage</b>
General Fund	90,792,669	19,936,039	1,941,111	5,307,610	3,766,442	59,841,467	70.87%
Water Fund Total Operating Expenses	20,845,221	-	-	6,839,199	2,221,657	11,784,365	13.96%
WPC Fund	30,153,962			3,161,383	16,517,500	10,475,079	12.41%
Maritime Fund	1,048,429				190,000	858,429	1.02%
Parking Fund	<u>1,802,868</u>				326,000	<u>1,476,868</u>	1.75%
Total	144,643,149					84,436,208	
School Appropriation:	24,920,049						
20% appropriation left in general fund	<u>4,984,010</u>						
	19,936,039						



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**PWFD 2-9:** Has NWD updated the Cost Allocation Manual that was approved by the Commission? If so, please provide a copy with all changes highlighted or noted.

**Response:** The Cost Allocation Manual is attached. Please note that there are many wordsmithing and organizational changes that do not change the method of allocation. The changes from the 2008 Manual were not highlighted in the new manual, thus it is impossible to provide a version with each change highlighted or noted. Please also note that this document is the City's Allocation Manual used for all enterprise funds, and that specific Water Fund allocations approved or disapproved by the Public Utilities Commission are not necessarily included or changed in the Manual itself, but are incorporated by the City of Newport when the Water Fund's share is allocated.

**Prepared by:** Laura Sitrin



# **CITY OF NEWPORT COST ALLOCATION MANUAL**

Prepared by: Finance Department  
Updated October 27, 2014



City of Newport  
Cost Allocation Process  
General Fund Costs to Other Funds

**Audit:** The audit covers all funds and the school department. The process is to get an estimate from the auditors every three years as to how much time was spent on each fund. That time will be billed back to each fund. The percentage will be carried forward in the two in-between years unless significant issues arise in a particular fund. Costs related to any such issues will be requested from the auditor.

**Other Post-Employment Benefits (OPEB):** The City has established an OPEB Trust and is making an annual required contribution (ARC) as determined by the City's actuaries. The actuarial report includes a schedule that shows the total liability by fund and or department. Each fund will be responsible for its share of the ARC on an annual basis.

**Affiliated Organizations:** The Newport School Department is combined with the City for financial reporting but is a separate and distinct organization with its own elected board, administration and staff. The Newport Public Library no longer qualifies as a component unit under governmental standards. The only interaction with the City is when the Council appropriates civic support and capital funding that helps supplement their revenue.

**City Council:** The City Council is elected by residents to enact legislation, establish policy and to lend support to various civic causes. The Council is the policy setting board for all funds. Some funds have Council appointed commissions which assist them, but all authority rests with the City Council. The Council is responsible to approve all legal budgets for the City and to approve all contracts over \$10,000. They also approve all bargaining contracts.

The expenditure lines of salaries and benefits, temporary services, dues and subscriptions and office supplies will be allocated to all funds on the basis of the fund's share of items addressed at the Council meetings for a fiscal year. That count is required to be done every three years. An additional cost allocation may be made for the fund's number of hours spent in workshops to the total number of hours in workshops, not including budget and CIP workshops. Those discussions relate to all funds and will be eliminated from the total workshop hours for purposes of calculating the percentage. Note that items applying to all funds such as budget public hearings or discussions of labor contracts for AFSCME or NEA will not be counted.

The Citizen Survey cost will only be allocated, in arrears, if a question was specific to the appropriate fund. The allocation will be the number of fund-specific questions to total questions.



**City Clerk:** The City Clerk serves as the Clerk of the Council and other State mandated functions. The Clerk gives notice of the meetings, certifies by signature all actions of the Council and prepares all official minutes of Council meetings and workshops. The City Clerk also has the official copy of all contracts.

Costs from the City Clerk will be allocated in the same manner as those allocated for the City Council. The allocated costs will be salary and benefits, legal ads generally required by State and local law, contract services (generally consist of costs of taping meetings for public television) and operating and office supplies. Any probate costs included in these accounts will be removed prior to allocation.

**City Manager:** The City Manager is the chief administrative officer of the City. The City Manager carries out the policies and goals of the City Council and performs the administrative functions of City government. The City Manager is responsible for hiring, firing and evaluating all City staff. All Department Directors report directly to the City Manager. The Human Resources and Special Events divisions are under the City Manager. The Office of Human Resources responsibilities include employee relations; safety and other training programs; compliance with the provisions of various labor contracts; City Manager representative in union grievance proceedings and arbitrations; benefits administration; municipal recruitment and selection; promotional and entry-level civil service testing procedures and implementation; updates and adherence to local, state and federal labor laws; administration of Workers' Compensation and Return-To-Work programs; and certification of employment records. The Special Event Division accumulates general fund costs related to specific events held in the City. It is not allocable to the other funds.

All costs in the City Manager division will be allocated to other funds on the basis of the percentage of the fund's budget to the combined total budgets. For this purpose, appropriations for the school and other civic support will be removed from the budget in determining the percentages as the City Manager does not provide administration to any of these organizations.

All costs in the Human Resources division will be allocated to other funds on the basis of the percentage of full-time, temporary and permanent part-time employees in the fund to total full-time, temporary and permanent part-time employees in the City. A periodic count (every five years) of annual personnel action forms will be undertaken to confirm that the allocation method above is reasonable.



**City Solicitor:** The City Solicitor's Office provides expert legal advice and advocacy to and on behalf of the City Council, City Manager, Boards and Commissions, Bureaus and all City Departments thereof, relating to their official powers and duties. The School Department has their own legal counsel and the City Solicitor does not provide support or advice to them.

The staffing in the Solicitor's Office consists of the Solicitor, a legal and administrative assistant, one assistant City Solicitor who is responsible for standing in stead of the Solicitor when needed and handling claims and labor issues, one assistant City Solicitor who is responsible for representing the City in Municipal Court, the Municipal Court Judge and the Probate Judge. Salaries and benefits for the Solicitor, legal and administrative assistant and the Assistant City Solicitor who is responsible for claims, labor and the duties of the Solicitor as required (three main employees) will be allocated to other funds. The other personnel costs will not be allocated.

The dues, conferences and training, contract services (legal service), cell phone, mileage and office supplies expenditures relate almost exclusively to the three main employees. Those costs will be allocated to other funds.

The appropriate costs will be allocated in the same manner as the costs in the City Manager Division.

### **Finance:**

**Administration and Purchasing:** This division provides funds for the operation of the Office of the Director of Finance which is responsible for the overall administration of the Finance Department and provision of support to all other City Departments. Responsibilities include the review and analysis of all Departmental Capital and Operating Budget requests, the preparation of the 5-year Capital Improvement Plan, the Annual Operating Budget, the 3-year Projections, and the 20-year projections; monitoring of expenditures during the course of the year, oversight and/or investment of all City funds, financial reporting for all Departments, financing for all Departments and funds, including debt, and financial direction, advice and support for all departments and funds. The division's time is spent as follows: budget 35%; investment 5%; financial reporting 35%, debt related functions 5%; management of the other finance divisions 10% and other 10%.



### **Finance Administration and Purchasing (continued)**

The following items will be separately allocated:

- Senior Accountant Salary and Benefits – 10% to police and fire pensions, trusts and scholarships
- Budget and Finance Analyst Salary and Benefits – 5% to Water and WPC for RICWFA requisitions and tracking

80% (budget, reporting and management) of the remaining costs related to Finance Administration except for the Purchasing Agent salary and benefits and legal ads will be allocated to other funds on the basis of their percentage of budget to all budgets. The investment and debt related functions will be allocated on the basis of their share of bank/investment accounts to total bank/investment accounts in a given year. The remaining 10% will not be allocated.

This division is also responsible for city-wide purchasing, advertising and legal purchasing requirements. The Purchasing Agent is also responsible for the timely submission of insurance claims for damages incurred to city property and for the sale of surplus property.

The purchasing agent salary and benefits will be allocated based on the fund's share of purchase orders. Legal advertising related to purchasing will be charged back to the appropriate fund and will not be allocated.

**Assessment:** The assessor doesn't perform many functions related to other funds except that he does file and defend tax appeals for property owned by the water division. This cost cannot be separately determined; therefore no costs will be allocated to other funds from this division.

**Collections:** This division collects taxes, license fees, water and sewer charges, fines and most other revenues and receipts of the City. All costs in this division will be allocated to the maritime and parking funds based on the number of payments processed to combined tax, general revenues and tickets payments processed. The City recently engaged the services of a lockbox for water and sewer collections. The Collection office will still be responsible for daily upload of processed utility payments, any utility payments mailed directly to the City and any utility payments received at the counter. The Collection office will track time spent on utilities collection in order to determine a reasonable allocation. The cost of the lockbox services will be split between the water fund and the water pollution control fund.



**Accounting:** This division is responsible for the timely processing of City vendor and payroll checks; W-2 preparation, all quarterly and annual tax requirements; administration of the deferred compensation and Section 125 Plan programs; and the accounting for of all revenues, expenditures, transfers and journal entries. A small percentage of the Controller and Accounting Supervisor time and benefits (5%) will be specifically allocated to other funds based on the percentage of wires to total wires. All remaining costs in this division will be allocated to other departments on the basis of combined payroll, ACH and vendor checks by fund to total ACH, vendor and payroll checks. This will be counted every five years.

**Management Information Systems (MIS):** All communication and information systems with the exception of hand held radios and cell phones are the responsibility of this division. The division is also responsible for the maintenance and supplies related to postage systems.

MIS costs need to be evaluated each year in the areas of software maintenance fees, software license fees, and hardware maintenance fees to determine if there are specific items that apply only to one or two functions (ie Tree Inventory Software or Fire Department projector). Those costs should be removed from the bottom line of MIS as well as the lease purchase costs associated with City Hall copiers. MIS capital projects should be included in the cost allocation schedule since these generally deal with all departments and functions. The MIS equipment line will be removed from the bottom line and the costs of equipment will be specifically charged back to the funds.

Newport Public Schools have their own systems, infrastructure, website, phone systems, mail systems and MIS staffing. However, they do use the City's ERP system. Forty-five percent (45%) of the maintenance and hosting costs related to the ERP system should be specifically assigned to the school. Note that the City has contracted support out to the hosting company and it is no longer done by City staff. Therefore MIS personnel costs do not apply to the Schools.

All costs other than those identified above should be allocated on the basis of the percentage of fund budget to total budget. An evaluation was made as to whether the rest of MIS costs could be allocated based on the number of computers to total computers. However, different funds and departments use different servers, software, and infrastructure, some requiring more support than others. Therefore, it was determined to be an unfair method of allocation.

ERP and Payroll Systems, including all ancillary hardware such as specialized printers, should definitely be allocated on the basis of budget since those systems track and report financial and budgetary information.



**Public Safety:** Police and fire services are provided to all properties in the City except for military properties. State and local governments have no jurisdiction on federal land unless specifically granted. The City does not have jurisdiction over U.S. Navy property.

Police and fire costs will not be allocated to other funds.



**PWFD 2-10:** Please explain why Newport Water included OPEB contributions in this filing when the no such contributions were allowed in previous dockets (0.00% allocation to Water Fund).

- a. Please identify the amount of the OPEB contributions contributed by the Water Fund in each of the past three fiscal years?
- b. Please identify the amount of the OPEB contributions contributed by the Water Fund this year to date??

**Response:** Contributions to OPEB were not disallowed in previous dockets. There was a 0.00% allocation to the Water Fund because Newport Water specifically did not ask for OPEB Funds. As set forth in my direct testimony in Docket 4025:

“Pursuant to the GASB 43 and 45 on Other Post Employment Benefits (OPEB), the City has established an OPEB Trust and is making an Annual Required Contribution (ARC) as determined by the City’s actuaries. The actuarial report includes a schedule that shows the total liability by fund and/or department. Each fund, including the School Department and Library, will be responsible for its share of the ARC. This rate filing does not include a request for the Water Fund’s share of the ARC.” (See Docket 4025, Direct Testimony of Laura Sitrin, p. 4, ll. 5-11)

It is my understanding that Newport did not change the requested allocation of City Services in subsequent dockets. Thus, this 0.00% allocation simply carried over, rather than being disallowed.

The fact that Newport Water did not make contributions to the OPEB Trust does not mean the liability doesn’t exist or isn’t continuing to accrue. In fact, Newport Water is the only City department that does not make contributions into the OPEB Trust because it was not included in Docket 4025, or subsequent dockets. The total Newport Water liability as of July 1, 2015 (the most recent actuarial valuation) is \$5,152,296.



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a. Newport Water did not make any contributions to the OPEB Trust in the past three years as no funds were included in rates to make such payments.

b. Newport Water has not made any contributions to the OPEB Trust in this year to date as no funds were included in rates to make such payments.

**Prepared by:** Laura Sitrin



**PWFD 2-11:** Referring to Ms. Sitrin's prefiled testimony (pages 4-5):

- a. Please explain why the GASB ruling concerning the Library supports removing the Library budget allocation from the calculation.
- b. How many times is the City Library mentioned in City Council minutes?
- c. Please update the schedule included in the response to PWFD 1-14 that shows the count of items in minutes for various departments.
- d. Please provide a copy of the City Council minutes from 7/10/2013 to 6/25/2014 that are referenced, including any notes, highlights or annotations that were used to determine the 16 times the Water Fund was included.
- e. Did anyone in Newport attempt any analysis of the amount of time at City Council meetings that Water Fund items were discussed?
  - i. If Newport Water performed any such analysis, please provide it.

**Response:** a. Statement No. 61 of the Governmental Accounting Standards Board (GASB) states that "the requirements of this Statement results in financial reporting entity financial statements being more relevant by improving guidance for including, presenting, and disclosing information about component units...ensuring that the financial reporting entity includes only organizations for which the elected officials are financially accountable or are so intertwined with the primary government that they are considered part of the government" The Statement further defines financial accountability as existing if the elected officials appoint a voting majority of the organization's government body and it is able to impose its will on that organization or the organization can impose specific financial benefit or burden. The City auditors contacted the GASB to determine if the Library met the definition of component unit as it had historically been reported that way. The GASB experts determined that there wasn't sufficient connection on any level to include them as a



component unit, and that an annual gift of funding by the City did not constitute any type of control. This ruling supports the position that since the City has no control over the Newport Public Library, nothing should be allocated to the Library.

b. The Newport Public Library (NPL) was mentioned twice in FY2014:

- A citizen questioned a Councilor's membership on the Library Board and the Mayor explained that the Councilor was appointed an "ex officio" member and as such had no official role or responsibilities.
- The second time was to indicate that a water department public hearing would take place at the NPL on May 5th.

The NPL was mentioned 6 times in FY2015

- One person indicated that a copy of the video recording of a Council Meeting was available at the NPL for viewing.
- One mention was a letter of support from the NPL in support of the garden club centennial garden gift to the City.
- One was where the Director addressed the Council about funding included for Library improvements in a facilities bond.
- One was a Council Liaison appointment on a list after the election.
- One announced a public information meeting on Broadway streetscape that would be held at the NPL.
- One was approval of an event license on the consent calendar.

Copies of the mentioned are attached.

c. The minutes have not changed for FY2014 so the numbers in the schedule are accurate and do not require updating.



d. Copies of the minutes can be found on the City's Website - Council Agendas and Minutes.

<http://www.cityofnewport.com/services/council-agendas-and-minutes>

e. The PUC approved allocation is based on counts so, to my knowledge, no one has attempted an analysis of the amount of time at City Council meetings that Water Fund items were discussed.

**Prepared by:** Laura Sitrin



**CITY OF NEWPORT  
MINUTES OF THE COUNCIL MEETING  
HELD JANUARY 8, 2014  
(Approved 1/22/2013)**

The following items of business, filed with the City Clerk under the Rules of the Council, came before the Council at its regular meeting held on January 8, 2014.

The MAYOR called the meeting to order at 6:30 p.m.

The CITY CLERK called the roll and the following members were present:

MARCO T. CAMACHO	JUSTIN S. MC LAUGHLIN
MICHAEL T. FARLEY	NAOMI NEVILLE
KATHRYN E. LEONARD	HENRY F. WINTHROP

ABSENT: JEANNE-MARIE NAPOLITANO

**CITIZEN'S FORUM:** WANDA JEAN LORD, 21 Burdick Ave., read from her letter to the Council, dated January 8, 2014, that cited Section 2.06.020(F) of the Codified Ordinance, and questioned Councilor McLaughlin's membership on the Board of Trustees of the Newport Public **Library**. MAYOR WINTHROP responded that Councilor McLaughlin was appointed an "ex office" member of the Board and, as ex officio, he has no official role or responsibilities.



April 9, 2014

Discussion followed between COUNCILOR FARLEY and UTILITIES DIRETOR JULIA FORGUE, wherein DIRECTOR FORGUE said the Portsmouth Water & Fire District is a participant in the project, which was included as part of a previous rate filing. She also noted that there would be a public hearing on the matter on May 5<sup>th</sup> at the Newport Public Library.



July 23<sup>rd</sup>, 2014**RESOLUTIONS**

5. COUNCILOR MC LAUGHLIN moved for **RECONSIDERATION** of the resolution requesting a referendum on the November 4, 2014, for proposed Charter Changes. (Considered at the opening of the meeting)

(Before, during, and after votes on the items there was lengthy discussion and comments by members of the Council explaining the reasons for their votes. A copy of the video recording is available at the Newport Public Library for public viewing.)



## COMMUNICATIONS AND PETITIONS

3. Communication from Newport Garden Club, re: Centennial Reading Garden gift to the City of Newport and the Newport Public Library (Receive)

Letters of Support:

- Newport City Tree and Open Space Commission
- The Edward King House Senior Center
- Newport Public Library



October 22, 2014

**RESOLUTIONS**

4. Expressing Support of Question #8 on the local ballot –J. Napolitano, M. Camacho, J. McLaughlin, N. Neville, H. Winthrop

COUNCILOR NAPOLITANO introduced the resolution and moved for its passage. Seconded by COUNCILOR MCLAUGHLIN. COUNCILOR NAPOLITANO commented on the projects that will be completed in various city buildings. COUNCILOR NEVILLE thanked COUNCILOR NAPOLITANO for bringing the resolution forward and further commented that some estimates received are lower and all of the bond money might not need to be used.

Ann Shepard, Director of the Newport Public Library, addressed the Council and stated the improvements proposed for the library would make a big difference as they are serving more people and further she appreciates the support. The motion to approve the resolution was voted UNANIMOUSLY.



December 10, 2014

**APPOINTMENTS TO BOARDS AND COMMISSIONS****Council Liaison Appointments:**

Brenton Point Commission: Councilor Leonard

City Council-School Committee Liaison Committee: Councilors Ceglie, Florez and Neville

East Bay Community Action Program: Councilor Camacho

Edward King House Senior Center: Mayor Napolitano and Councilor Ceglie

Fort Adams Trust: Councilor Leonard

Legislative Liaison: Councilors Ceglie and McLaughlin

Military Affairs Liaison: Councilors Camacho and McLaughlin

Newport County Chamber of Commerce: Councilors Florez and Leonard

Newport Partnership for Families: Councilor Florez

Newport Public Education Foundation: Councilor Ceglie

Newport Public Library: Councilor McLaughlin

Newport Substance Abuse Prevention Task Force: Councilor Camacho

Washington Square Advisory Commission: Councilor Neville



April 8, 2015

**COMMUNICATIONS AND PETITIONS****8. City Manager Update- Broadway Streetscape Project**

CITY MANAGER NICHOLSON addressed the council and gave a brief update of the project and indicated there is a public information meeting scheduled for April 16, 2015 at 9:30 a.m. at the Newport Public Library and also there will be an email notification system for those who wish to register to receive ongoing project updates. COUNCILOR MCLAUGHLIN requested there be an invitation circulated to local businesses.



**CITY OF NEWPORT  
MINUTES OF THE COUNCIL MEETING  
MAY 13, 2015  
(Approved 6/10/2015)**

The following items of business, filed with the City Clerk under the Rules of the Council, came before the Council at its regular meeting held on May 13, 2015 at 6:30 p.m. at the Pell School, 35 Dexter St.

The Mayor called the meeting to order at 6:30 p.m.

The CITY CLERK called the roll and the following members were present:

JEANNE MARIE NAPOLITANO

JOHN F. FLOREZ

JUSTIN S. MCLAUGHLIN

MARCO T. CAMACHO

**ABSENT:**

KATHYN E. LEONARD

NAOMI NEVILLE

LYNN UNDERWOOD CEGLIE

**1. PUBLIC HEARING: Draft Environmental Assessment Review (System Master Plan SMP)- Wellington Combined Sewer Overflow (CSO) Facility Improvements**

MAYOR NAPOLITANO opened the public hearing. Hearing no comments from the public, COUNCILOR CAMACHO made a motion to close the hearing. Seconded by COUNCILOR MCLAUGHLIN and VOTED UNANIMOUSLY.

**2. PUBLIC HEARING: Recommended 2016-2017 Operating Budget**

MAYOR NAPOLITANO opened the public hearing. CITY MANAGER JOSEPH NICHOLSON addressed the council to indicate there will be a \$300,000 reduction in the Department of Public Services budget for structural repairs to the Easton's Beach Rotunda. He indicated there will need to be an updated structural assessment and envelope study as the current assessment is outdated, as it was performed in September 2010.

COUNCILOR CAMACHO made a motion to close the public hearing. Seconded by COUNCILOR FLOREZ and VOTED UNANIMOUSLY.

**3. CONSENT CALENDAR.**

(THE CONSENT CALENDAR IS APPROVED IN ITS ENTIRETY UNLESS THE COUNCIL REMOVES AN ITEM FOR DISCUSSION. ALL LICENSES ARE GRANTED SUBJECT TO COMPLIANCE WITH ORDINANCES #31-80 AND #98-40.)

a. Minutes of the Meetings held March 25, 2015 and April 8, 2015 (Approve)

b. Special Event Licenses:

1. Elmwal Associates, LLC, d/b/a Free Summer Concert Series, Shops at Long Wharf; May 16, 23, 30, June 6, 13, 20, 27, July 4, 5, 11, 18, 25, August 1, 8, 15, 18, 25, September 5, 12, 19, 29 and October 3, 10 & 11, 2015 from 1:00 p.m. to 5:00 p.m.



~Request to waive Section 5.70.040 of the codified ordinances, entitled "License Application Fee"- which states a special event license can be granted for not more than (14) fourteen days. Applicant is requesting 24 days total.

2. Bike Newport, d/b/a Bike to Work Day 2015, Streets of Newport; May 15, 2015 from 7:00 a.m. to 9:30 a.m. and 3:30 p.m. to 5:00 p.m.
  3. Iglesia Cristiana Peniel, d/b/a Musical Concert, Newport Marriott Hotel; America's Cup Ave., May 30, 2015 from 6:30 p.m. to 10:00 p.m.
  4. Child and Family Services of Newport County, d/b/a Au Courant-Fundraising Event; Ochre Court, 100 Ochre Point Ave., June 26, 2015 from 6:30 p.m. to 11:00 p.m.
  5. Festival Fete, d/b/a Newport Art Festival, 33 Bowens Wharf (The Landing parking lot); June 27 & 28, 2015 from 10:00 a.m. to 6:00 p.m.
  6. Michael Russo, d/b/a Think Pink! Chase Away Breast Cancer, beginning at the Elks Lodge, 141 Pelham St., June 27, 2015 from 8:00 a.m. to 5:30 p.m. (Race between 10:00 a.m. to 12:00 p.m.) Two proposed routes attached (Approve subject to details being worked out with city administration)
  7. The Confetti Foundation, d/b/a Boats & Bowties, Newport Yachting Center, August 4, 2015 from 7:00 p.m. to 9:00 p.m.
  8. Newport Public Library, d/b/a Literacy Blooms at A Novel Evening; Newport Public Library, 300 Spring St., August 16, 2015 from 6:00 p.m. to 8:30 p.m.
  9. Festival Fete, d/b/a Newport Art Festival, 33 Bowen's Wharf (The Landing parking lot); August 29 & 30, 2015 from 10:00 a.m. to 6:00 p.m.
- c. Holiday Selling Licenses, New:
1. Sukhy's Threading #5, LLC, d/b/a Sukhy's Threading, 213 Goddard Row
  2. SSND Inc., d/b/a Ships Store and Rigging, Bowens Wharf, 1a Bowen's Landing
  3. Wicker Designs LTD, d/b/a Hey Sailor, 129 Swinburne Row
  4. L'Occitane Inc., d/b/a L'Occitane en Provence, 21 Long Wharf Mall
  5. Spice of Life Management LLC, d/b/a The Spice & Tea Exchange of Newport, 192-B Thames St. (new owner)
- d. Holiday Selling License, New Location, Wild Orchid LLC, d/b/a Wild Orchid, 492 Thames St. Unit 1
- e. Second-hand License, New, Newport Style Inc., d/b/a Newport Style, 59 Bellevue Ave.
- f. Second-hand License, Renewal, Stella Martin, d/b/a Design Newport, 121 Bellevue Ave.
- g. Holiday Selling License Renewals:
1. Bailey T's Resortwear, LLC, d/b/a Bailey T's Resortwear, 12 Long Wharf Mall
  2. Stella Martin, d/b/a Design Newport, 121 Bellevue Ave.
  3. NEHC, LLC, d/b/a New England Harbour Club, 65 Long Wharf



4. Wagon Wheel Corporation, d/b/a Newport Best Sportswear, 246 Thames St.
  5. Wicker Designs LTD, d/b/a P.S. Gear 2, 359 Thames St.
  6. Wicker Designs LTD, d/b/a P.S. Gear Division, 113 Swinburne Row
  7. Wicker Designs LTD, d/b/a Pleasant Surprise, 121 Swinburne Row
  8. Zara Trading Inc., d/b/a Rib & Rhein, 86 William St.
- h. Communication from Dave McLaughlin, Clean Ocean Access, re: Quarterly Report on Adopted CRMC Public rights-of-way (2015/Q1) (Receive)
- i. Communication from John A. Murphy, Esq., Morneau & Murphy, Attorneys at Law, requesting on behalf of Conanicut Marine Services, Inc., permission for the ferries, The Jamestown and the MV Katherine, to sell alcoholic beverages dockside in conjunction with their State Class G Marine Vessel Beverage Licenses (Approve)

COUNCILOR CAMACHO made a motion to approve the consent calendar in its entirety. Seconded by COUNCILOR MCLAUGHLIN and VOTED UNANIMOUSLY.



**PWFD 2-12:** Referring to Exhibit 1 to Ms. Sitrin's pre-filed testimony, Newport Water has added a new item – Accounting Wires:

- a. Please explain what this item is.
- b. Please explain whether the costs for this item include costs for wires for payroll, health insurance, and dental insurance.
  - i. If this item includes the costs for wires for payroll, health insurance, and dental insurance, please explain why these amounts are not allocated based on the percentage of total city employees that are part of the Water Fund.
  - ii. If this item does not include the costs for payroll, health insurance, and dental insurance, please identify where the costs associated with those items are allocated in Newport Water's filing.
- c. Please explain the reason that Newport Water allocated these expenses based on the count of transfers instead of the percentage of city employees that are part of the Water Fund, including in your answer:
  - i. Whether 70% of City employees are part of the Water Fund; and
  - ii. If 70% of City employees are not a part of the Water Fund, an allocation of the Accounting Wires expense based on the percentage of city employees that are a part of the Water Fund.
- d. Has Newport Water reduced the other Finance Administration items as a result of this new Accounting Wires item?
- e. Please provide a breakdown of the total Finance Administration budget broken down to the 50% Administration, 5% RICWFA, and 10% Inv/Debt for FY 2014 and FY 2015.



STATE OF RHODE ISLAND  
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- Response:**
- a. This is not a new item. In past Dockets, this Allocation was labeled "Accounting 5%" and did not have the word "Wires" in the title, but this is the same allocation as in previous Dockets.
  - b. This item does not include wires for payroll, health insurance or dental insurance. Those items are excluded from any counts related to allocation since they apply equally to all funds, and there is no cost differential between funds.
  - c. See above.
  - d. No. See above
  - e. Please see the schedules attached to the response to PWFD 1-14 for FY2014, and the schedule attached to PWFD 2-7 for FY2015.

**Prepared by:** Laura Sitrin



**PWFD 2-13:** Regarding MIS services, please:

- a. Explain why Newport Water did not provide a breakdown of the MIS services between "Communications" and "Other" as it has in prior dockets, as these categories have been allocated differently, and
- b. Provide a breakdown of the MIS Budget that shows Communications Items and all "Other" items.

**Response:** a. While MIS was broken down between "Communications" and "Other" in Docket 4025, these categories were combined in a single "Data Processing" line item in the Docket 4355 Settlement Agreement (See Docket 4355 Joint Settlement Schedule A-1).

- b. The line item for Communications in the FY2015 Budget is \$338,841.

**Prepared by:** Laura Sitrin



**PWFD 2-14:** Referring to the attachment detailing MIS in response to Data Request Comm. 1-17:

- a. Why is \$385,950 of capital included (see PWFD 1-14(d))?
- b. Explain why Newport Water included anything more than the \$1,382,050 of operating costs?

**Response:**

- a. Information technology includes major equipment, infrastructure and communications lines that meet the definition of capital expenditures or improvements. The capital improvements apply to all departments and functions in the City. The total capital of \$385,950 was reduced to \$130,000 for purposes of allocation. This includes \$130,000 to upgrade fiber optic lines to 10GB for all departments and include additional switching and wiring needed for the new phone and communications systems.
- b. See answer to a.

**Prepared by:** Laura Sitrin



**PWFD 2-15:** Please explain in detail why Newport Water has proposed to change the allocation of the City Solicitor's office from 50% to 100%, contrary to the determination in previous dockets that only 50% of such costs should be included in Newport Water's rates.

If Newport Water is relying on the portions of Ms. Sitrin's prefiled testimony indicating that some costs were moved from Human Resources to City Solicitor, please explain and provide any analysis that supports departing from the previously agreed-to allocation.

**Response:** The total FY2015 budget for the Solicitor's office is \$511,050. We removed costs related to municipal court and probate leaving costs to allocate of \$391,847. Thus, 100% of the City Solicitor's costs are not allocated. The remaining costs are primarily related to certain personnel in that office, all of whom spend a majority of their time on labor issues and City Council docket items/issues. Labor issues apply to all departments with the exception of Water Pollution Control which has no unionized employees. Water Department employees make up close to 50% of all employees in the AFSCME bargaining unit. Similarly, legal issues that arise from City Council docket items or Council policy questions could apply to any topic or department. In fact, while we can't quantify it, much time was spent by the Solicitor, Manager and Council on drinking water compliance issues, the consent decree and major improvements and costs of over \$85 million in the water department. These costs should be applied in the same manner as that of the City Council and City Manager.

Budgeted labor costs of \$50,000 were moved from the human resources budget to the City Solicitor's budget since that office negotiates all labor contracts, handles most labor grievances and authorizes expenditure of that money.

**Prepared by:** Laura Sitrin



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**PWFD 2-16:** Please explain why Newport Water did not use the actual FY 2015 operating expenses of \$8,734,259 set forth in HJS Schedule A-1A instead of the budgeted FY 2015 operating expenses of \$10,843,753 reflected on Exhibit 2 to Ms. Sitrin's pre-filed testimony to determine allocations to the Water Fund.

**Response:** Actual FY2015 operating expenses were not available on November 4, 2014 when the counts and allocations were done. Please see responses to PWFD 2-7 and 2-8. Additionally, the Cost Allocation Manual calls for percentage of budget, not actuals.

**Prepared by:** Laura Sitrin



**PWFD 2-17:** Referring to Ms. Sitrin's prefiled testimony regarding the reduction in allocations because of the use of a lockbox and the assertion that such lockbox fees were split between the Water department and WPC:

Is the \$344,654 of Collections costs just for lockbox services?

Where is this expense identified in the budget document referenced in the response to Data Request PWFD 1-14?

**Response:** The \$344,654 is the total Collections Division budget. The lockbox services fee of \$50,000 is being paid directly by the Water and Water Pollution Control funds. It is being subtracted from the allocation to those two funds since it is presumed that lockbox has replaced some of the services previously provided by Collections. The \$344,654 can be found on page 65 of the FY2015 Budget.

**Prepared by:** Laura Sitrin



**PWFD 2-18:** Regarding the Consultant Fees in Administration:

- a. Please explain what is included in the \$40,000 for "Other Committed in 2015" and provide the detail of what will be spent in the rate year?
- b. Why aren't "bond advisor" costs included in the proceeds of bond issue?
  - i. Does Newport Water anticipate any new bonds through the rate year?
  - ii. Why should this cost be included as an ongoing expense?

- Response:**
- a. The amounts shown in "other Committed in 2015" represents the balance of Purchase Orders for Keough + Sweeney and Raftelis which were budgeted at the beginning of fiscal year 2015, but were not subsequently paid.
  - b. Generally "bond advisor" costs are deducted from bond proceeds. The caption was mislabeled and should be bond bank trustee fees.
    - i. Newport Water does not expect any new bonds through the rate year.
    - ii. If there were bond advisor fees they would not be included as an ongoing expense. However, bond trustee fees are an ongoing expense.

**Prepared by:** William Yost



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**PWFD 2-19:** Regarding HJS Schedule A-1A (revenue requirements), please provide the basis for each of the Revenue Offsets or Miscellaneous revenue items.

**Response:** The Revenue Offsets or Miscellaneous revenue items used in this Docket are the same as those established in Docket 4243.

**Prepared by:** William Yost



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**CERTIFICATION**

I hereby certify that on March 17, 2016, I sent a copy of the within to all parties set forth on the attached Service List by electronic mail and copies to Luly Massaro, Commission Clerk, by electronic mail and regular mail.

<b>Parties/Address</b>	<b>E-mail Distribution</b>	<b>Phone</b>
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<b>File an original and nine (9) copies w/:</b> Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	<a href="mailto:Luly.massaro@puc.ri.gov">Luly.massaro@puc.ri.gov</a> ; <a href="mailto:Cynthia.WilsonFrias@puc.ri.gov">Cynthia.WilsonFrias@puc.ri.gov</a> ; <a href="mailto:Sharon.ColbyCamara@puc.ri.gov">Sharon.ColbyCamara@puc.ri.gov</a> ;	401-780-2107



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