

CRC Summary Meeting Notes

Meeting: Portland Water Conservation Rate Structure CRC
Meeting Date: October 18, 2012
Meeting Time: 2:00 pm
Location: Chinook Conference Room, Portland Building
Attendees: Hossein Parandvash, City of Portland
Edward Campbell, City of Portland
Cecelia Huynh, City of Portland
Lorna Stickel, City of Portland

CRC Members

John Davis (CRC Chairperson)
Ann Widmer (via WebEx)
Janis Adler (via WebEx)
Jesse Stegman
Tom Foley

Other Attendees

Gary Fiske (Consultant)
Tom Chesnutt (Consultant)
Trudy Cooper (Facilitation/Documentation)
Jamison Cavallaro (Facilitation/Documentation)

The fourth Portland Water Conservation Rate Structure Study Citizen Review Committee (CRC) meeting was held on Thursday, October 18th at 2:00 p.m. in the Portland Building. The primary purpose of this fourth meeting was to solicit feedback from the CRC on *Task B Technical Memorandum* as well as give the CRC an opportunity to review some preliminary, illustrative rate options generated by the consultant team. (NOTE: *Task Memos* are prepared by the consultant team.) The meeting agenda is attached. Other handouts provided prior to and during the meeting included:

- Task B Memo: Retail Demand Modeling by Tom Chesnutt and Gary Fiske
- September 20, 2012 CRC Meeting #3 (Draft) Summary Notes by Jamison Cavallaro/PWB

Introduction and Housekeeping

Hossein Parandvash opened the meeting at approximately 2:00 PM. Parandvash thanked the CRC and consultants for all their good work. He informed the group that restaurateur, Jim Hall, has stepped down from his seat on the CRC. The seat will not be reassigned.

CRC DECISION

- September 20, 2012 CRC Meeting (Draft) Summary Notes approved without corrections.

I. STUDY Feedback // Key Points // Decisions Made

A. Task B Technical Memorandum

Tom Chesnutt gave a PowerPoint presentation about *Task B* Technical Memorandum to explain the demand modeling approach and his conclusions about this task. The introduction of *Task B* Memo reads as followed:

“This technical memorandum statistically evaluates trends in total PWB retail water usage. This analysis identifies annual and seasonal patterns, removes the effect of weather and the business cycle from identified trends, and identifies factors that contribute toward long-term trends. This analysis builds upon Water Demand modeling conducted by the Portland Water Bureau (PWB). Specifically, this application of empirical water demand modeling builds upon the analysis reported in the following documents:

- *Water Management and Conservation Plan for the City of Portland*, Portland Water Bureau, July 2010.
- *Using Structural Time Series Model For Short-Term And Long-Term Water Demand Forecasting*, G. Hossein Parandvash, Portland Water Bureau, 2009.
- *Analysis of Retail Water Consumption by Customer Class: Report Based on Analyses of the Billing and Production Data*, G. Hossein Parandvash, PWB, 2012.”

Using graphs and charts within the Powerpoint presentation, Chesnutt explained a decade of water use trends and corresponding trend components. The closing of *Task B* memo states:

“Figure 11 (on the last page of the memo) can be used to summarize the decomposition in trends in PWB retail water demand from 2000 to 2011:

- After adjusting for weather and employment cycle Portland per capita retail demand declined 33 gallons per capita per day (from 144 gpcd to 111 gpcd).
- About 12 gpcd or 36 percent of the decline was estimated to be attributable to quantified passive conservation due to 1992 changes in the plumbing code.
- Another 9 gpcd or about 27 percent of the decline was estimated as the predictable response to the increase in the real price of water and sewer service.
- The remaining 12 gpcd of decline is attributable to other not yet quantified factors.”

Some long-term forces suggested by the consultants, staff, and the CRC as likely “not yet quantified factors” include the following:

- Land use (i.e. transit-oriented development patterns and regional urban growth boundary to meet urban growth management goals; comp plan and zoning updates to increase housing choice options for multi-family residential units as well as smaller minimum lot sizes. NOTE: See Chesnutt’s explanation in CRC Meeting #3 Summary Notes pg. 4.),
- Social behavior (e.g. brown lawns; more water efficient landscaping),
- Penetration of indoor and outdoor water efficiency technologies, beyond those mandated by the plumbing code, in households and professional trades (e.g. modern dishwashers and washing machines; drip-irrigation system installation), and
- Active conservation due to PWB conservation programs.

CRC DECISION

- None.

KEY POINTS

- From 2000-2011, the real price of water and sewer service increased 4.6% annually.
- Estimated cumulative daily passive conservation savings increased from approximately 1.0 mgd in 1992 to 13.0 mgd in 2012. (NOTE: See Figure 10 of Task B memo for graph.)
- Comment by staff: The PWB has not conducted a study of technology/trades penetration.
- Comment by all: An in-depth understanding of “non-1992 plumbing code-related” penetration of water saving technology/trades might help forecast future water use trends.

B. Overview of Work in Progress: Alternative Rate Designs

Gary Fiske presented his work in progress on rate structure design alternatives. In part, Fiske offered a related analysis and discussed some illustrative rate option examples that are revenue neutral. Fiske explained that all rate structures examined in the study will be designed to generate the actual revenues collected in FY11-12.

Mr. Fiske provided a PowerPoint presentation to showcase illustrative increasing block rates and seasonal rates. He described the preliminary nature of the illustrative rates, and hoped that the CRC and staff find it useful to see the work in progress. (NOTE: Go to the PWB’s Water Conservation Rate Study web page located at www.portlandoregon.gov/water/59171 for the ppt.)

Fiske explained how the rate model program is used to generate the rate options.

The CRC members understood that that the project will develop illustrative examples of the following types of rate structures:

- Increasing Block Rates,
- Seasonal Rates,
- Seasonal Block Rates,
- Rate structures that assume different levels of Fixed Charge Revenue.

In addition, there will be qualitative discussion of customer-specific budget-based rates. The consultants explained that they would continue to work closely with PWB staff on the rate design structure examples, analytic methods, and approach used for applying the software to generate the best options. The CRC can expect to receive more refined alternative rate design examples at the next CRC meeting.

CRC DECISION

- Agreement on the set of rate structures to be evaluated

KEY POINTS

- 5-6 ccf/month is a typical residential customer’s water use.
- All block rate design structure examples will integrate peak and off-peak options.
- Non-residential block rate design structures will be not be modeled.
- Non-residential seasonal options will be modeled.
- Wholesale rates will not be analyzed in this study.
- Comment by Fiske: Based on the literature, commercial customers are more responsive to water pricing than residential customers.

C. City Council’s Request to Consider Discount Rate for the CII customers

Hossein Parandvash opened a preliminary discussion about the Council’s interest in exploring the possibility of a discount rate for high volume commercial/industrial/institutional (CII) customers. Gary Fiske provided a PowerPoint presentation which showed the results of an analysis of water/sewer expenditures as a percentage of total commodity expenditures for key industrial sectors in Multnomah County. Parandvash said that a memo on the topic would be distributed and thanked the CRC for its assistance.

CRC DECISION

- o None.

KEY POINTS

- o Water and sewer services are not a major production expense for the sectors examined. However, it was pointed out that water/sewer may be more critical as a fraction of profit margins for some businesses.

Next Steps and Next Meeting Date

Hossein Parandvash summed up the meeting, and offered closing thoughts, announcements, and next steps. All in all, Mr. Parandvash explained that more work would be done in the coming month(s) on alternative rate designs and on evaluating those designs against the agreed-upon evaluation criteria.

The next CRC meeting will be held on Thursday, November 15 at 2:00 p.m., Chinook Room, 14th floor, Portland Building.

Issue Date October 26, 2012 **Prepared for PWB by** Jamison Cavallaro

Final Date November 5, 2012 **Final Version by** PWB Staff