Cost-of-Service Rate Study 2007

Public Involvement Committee

Workshop 4: Wastewater Cost Allocations

Austin Water Utility
January 22, 2008
Tonight’s Agenda

1. Welcome
2. Overview of budget and financial policies
3. Overview of wastewater system
4. Decisions by Executive Team
5. PIC comments from last meeting
6. Presentation on wastewater cost allocations
7. PIC member comments and discussion
8. Review Project Schedule
9. Summary of decisions and agreements
10. Public comment period
City of Austin Annual Budget Cycle

Overview of Budget and Financial Policies

- Sept: Council Adopts Budget
- Oct. 1: Start of Fiscal Year
- Nov-Dec: Update Business Plan
- Dec-Feb: Develop Capital Bgt & Financial Forecast
- June-July: Finalize Proposed Budget
- June-July: Finalize Proposed Rates
- Mar-May: Develop Operating Budget
- Early June: Finalize Proposed Rates
Austin Service Area

- Estimated served population
  - Current: ~840,000
  - 2060 Projected: ~2 million
- Approximately 190,000 current accounts
- Current city limits land area: ~285 sq. mi.
- Utility service area boundary: ~537 sq. mi.
- Retail and wholesale, inside and outside city limits
- Wholesale service includes municipal utility districts, cities, and private companies
Wastewater Treatment

- Two major wastewater treatment plants
- Treatment capacity: 150 MGD
  - South Austin Regional WWTP: 75 MGD
  - Walnut Creek WWTP: 75 MGD
- Discharge water quality consistently better than required by TCEQ permits
- Currently return flow wastewater discharges average roughly 100,000 acre-ft./year
- Govalle WWTP built in 1937 was decommissioned in late 2006
- System has ~2,500 mi. of wastewater main
Wastewater Treatment Facilities
Decisions by Executive Team

Public Involvement Committee Workshop
January 22, 2008
Executive Team Decisions

- *Revenue Requirements Issue 1* - cash basis will be used
- *Revenue Requirements Issue 2* - future budgets will be used
- *Revenue Requirements Issues 3-5* – not applicable because cash basis will be used
PIC Comments From Last Meeting

Public Involvement Committee Workshop
January 22, 2008
Comments from Individual PIC Members

- Base/Extra-Capacity and Commodity/Demand methods of allocating water costs appear to produce same results
- A portion of capital and O&M costs associated with water transmission and distribution system should be allocated to all water usage, not peak only
- Economies of scale should be considered, especially for pipelines and pump stations
- Fire charges based on meter size may not accurately represent fire flow needs
- Recommend use of demand data collected by industrial customers
- Disagree with the creation of separate fire charges
Requests from PIC Members

- More innovative and sophisticated method of allocating capital costs should be developed to fairly allocate costs and benefits of facilities to customer classes
- Detailed customer class peak demand calculations
- Fire charges should be studied further outside the PIC cost-of-service process
- Model outputs should be provided in Excel (as values with no formulas), not Adobe Acrobat PDF
Wastewater Cost Allocations

Public Involvement Committee Workshop
January 22, 2008
Wastewater Policies Reviewed

1. Which is the most appropriate overall method?
2. What are the appropriate customer service characteristics?
3. How should I/I be estimated and allocated?
Wastewater Cost Allocation in the Broader Perspective

- Customer Characteristics
- Allocation of Costs to Customer Service Characteristic
- Allocation of Costs to Unit Process
- Flow
- BOD
- TSS
- NH3N
- Customer
- Allocation of Costs to Customer Class
Issue 1: Wastewater Cost Allocation Options

- Design Basis*
- Functional Basis
- Hybrid Approach

* AWU’s current methodology
Design Basis

- AWU’s current methodology
- Allocates costs based on engineering design criteria
- Less administrative burden
- Least implementation risk
- Potential positive impact on conservation due to increased unit cost for wastewater treatment and disposal
Functional Basis

- Allocates costs based on operational or functional purposes
- Minimal administrative burden
Hybrid Approach

- Allocates O&M costs based on function and capital costs based on design
- More acceptable to public and political officials
- Increased administrative burden
- Improved interclass and intraclass equity
- Improved sustainability
- Recommended by consulting team
Issue 2: Customer Service Characteristics

- Flow, BOD, and TSS only*
- Add Total Kjeldahl Nitrogen (TKN)
- Add Phosphorus

*AWU’s current methodology
Flow, BOD, and TSS Only

- AWU’s current methodology
- Least administrative burden
- Most common approach
Add Total Kjeldahl Nitrogen (TKN)

- Difficult to implement without additional data
- Likely to become increasingly important in future (policy durability)
- Improved interclass and intraclass equity
- Improved sustainability
- Recommended by consulting team (once sufficient data is available from industrial pretreatment sampling program)
Add Phosphorus

- Difficult to implement without additional data
- Likely to become increasingly important in future (policy durability)
- Improved interclass and intraclass equity
- Improved sustainability
- Recommended by consulting team (once sufficient data is available from industrial pretreatment sampling program)
Issue 3: I/I Estimation and Allocation

- Combined connections and volume*
- Contributed wastewater volume
- Number of connections
- Land area

*AWU’s current methodology
Combined Connections and Volume

- AWU’s current methodology (50% connections, 50% volume)
- Minimal administrative burden
- Less affordable for residential customers
- Potential increased economic development
Contributed Wastewater Volume

- Easy to implement
- Easy to understand
- More affordable for residential customers
- Potential negative impact on economic development
- Recommended by consulting team
Number of Connections

- Easy to implement
- Easy to understand
- Less affordable for residential customers
- Potential increase in economic development
Land Area

- Greatest administrative burden
- Greatest risk of implementation
- Least common approach
PIC Member Questions, Discussion, and Comments

Public Involvement Committee Workshop
January 22, 2008
Next Steps

- Written comments on tonight’s meeting due 1/29 (to Mike Castillo)
- Customer Characteristics issue paper to PIC (1/28)
- Next PIC Workshop on MONDAY (2/4)
Proposed Schedule Change

- Postpone Next PIC Workshop to Tuesday, Feb. 19th
  - Extend comment period for tonight’s meeting to Feb. 5th
  - Next Issue Paper (Customer Characteristics) will be sent to PIC on Feb. 13th
- March 3rd & 17th (Rate Design)
- March 31st (If Needed)
Summary Of Decisions and Agreements

Public Involvement Committee Workshop
January 22, 2008
Public Involvement Committee Workshop
January 22, 2008