Beyond Rates:
Other Finance Strategies

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UNC ENVIRONMENTAL FINANCE CENTER

Session Objectives

- Learn about other common sources of water system revenue
- Understand the debt market
- Discuss available loan and grant programs

Ways To Pay

- Pay as you go (current receipts)
- Save in advance and pay
- Pay later (someone loans you money)
- Grants (let someone else pay)

Grants Aren't Completely Free Money

- Application for the grant can be expensive – staff time and money
- Applications can take months to process
- Often lots of strings attached
- Often require a percentage match
- Lots of competition
- Difficult to sustain

Quick Thought on Grants

- This presentation is about ***sustainable*** program finance

- Grants are not sustainable finance

The Main Source: Your Revenue

- Pay as you go (current receipts)
- Save in advance and pay
- Pay later (someone loans you money)
- ~~Grants (let someone else pay)~~

Assessments

- A recurrent charge to a sub-group of the population
- The sub-group receives benefits from an environmental service or improvement not enjoyed by others in the area
- Close cost/benefit relationship → equity

Tap & System Development Fees

- One-time charges to new users
- Typically assessed when building permits are issued
- Close cost/benefit relationship → equity

Periodic Charges

- Deposits on new accounts
- Penalties for late payment
- Cutoff/reconnection fees
- Meter re-reading fees

Innovative Funding Sources

- For example, rent out your water tower for cellphone receivers or put ads on the tower itself

When You Need Cash Now: The Debt Market

- Lenders will look at your creditworthiness, your ability to repay the debt, in determining whether to loan to you and your interest rate

Common Debt Options

	Advantage	Disadvantage
G.O. Bonds:	Low Relative Interest Cost; Lower Issuance Cost	Referendum Required (Politically Sensitive); Lower Structuring Flexibility
Revenue Bonds:	Greater Flexibility (Term, Amortization); No Referendum; Advantageous for Self Supporting Systems	Higher Issuance Cost Higher Relative Interest Cost; Feasibility Study
Installment Purchase/Certificate of Participation	No Referendum; Lower Cost of Issuance for Private Placements	Secured by asset, Placement, limits future options

The Debt Market

- Two types—Loans and Bonds
  - Loans are universally available
  - Bonds are typically only available to large systems with significant revenues and managerial capacity

Loans

- Typically from a bank
- Can be from a government-sponsored program such as the Drinking Water State Revolving Fund

Bonds

- A written promise to repay borrowed money (on a definite schedule and usually at a fixed rate of interest for the life of the bond)

- Different types exist:
  - General Obligation (GO)
  - Revenue

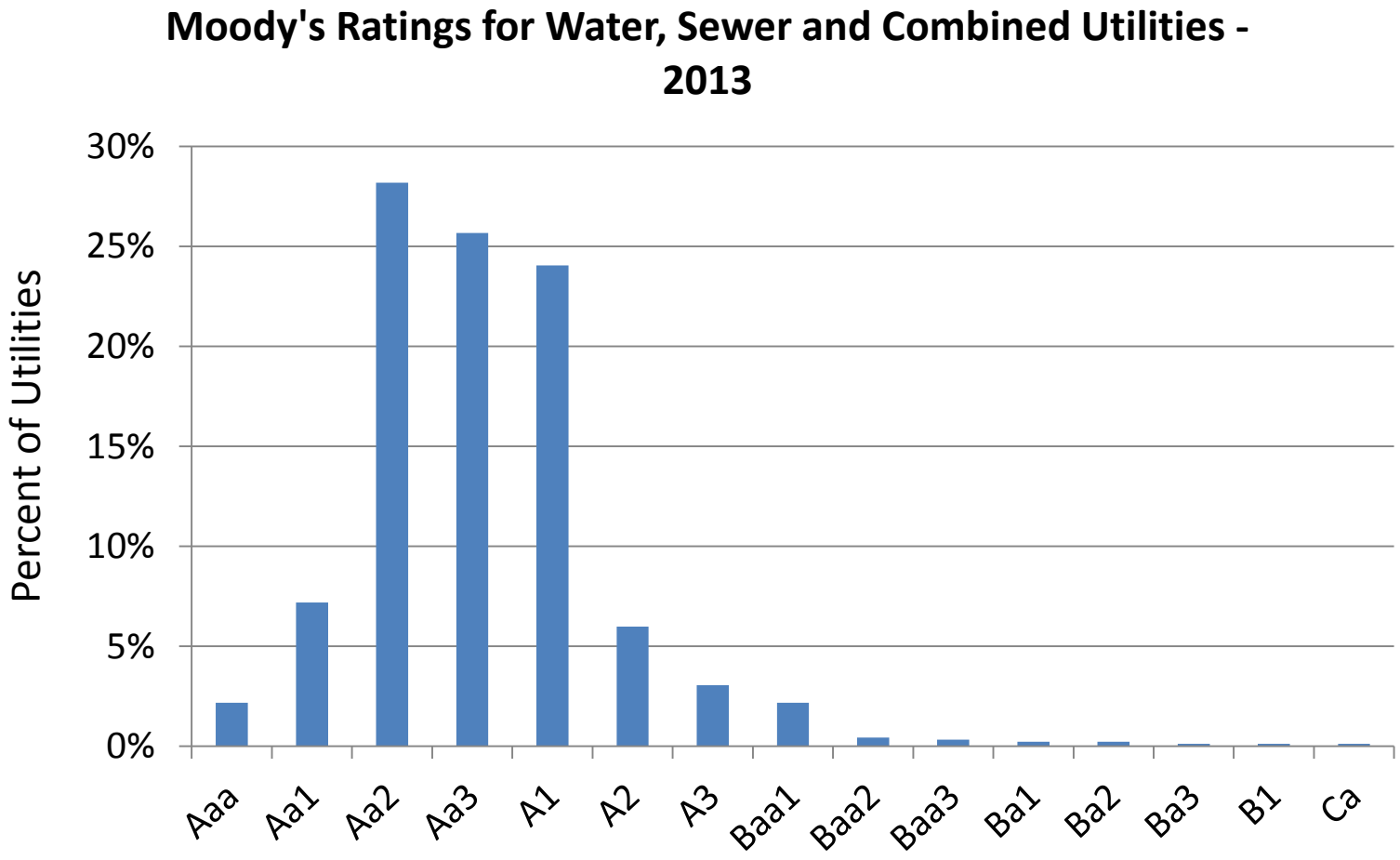
Source: bettermondays.com

Ratings

Credit Quality	Moody's	S&P	Fitch IBCA
Prime	Aaa	AAA	AAA
Excellent	Aa	AA	AA
Upper medium	A	A	A
Lower medium	Baa	BBB	BBB
Speculative	Ba	BB	BB
Very speculative	B	B	B

Source: The Bond Market Association

Moody's Water & Sewer Rating Distributions 2013



Source: Moody's Investor Service

Cumulative Default Rates

Only 71 Moody's-rated municipal issuers defaulted on their bonded debts during the period 1970-2011.[7] Exhibit 11 shows the default counts by purpose. The vast majority of defaults were in the health care and housing sectors.

EXHIBIT 11

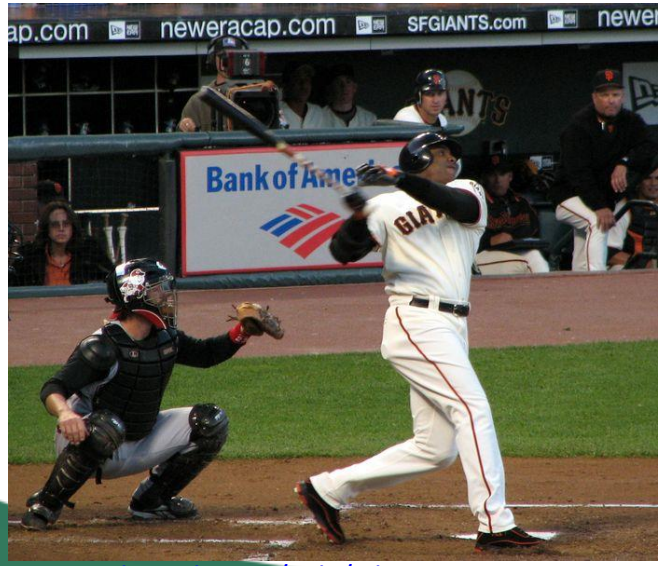
Default Counts by Sale Purpose, 1970-2011

Purpose	Number of Defaults	Percentage
Housing	29	40.8%
Hospitals & Health Service Providers	22	31.0%
Education	3	4.2%
Infrastructure	4	5.6%
Utilities	2	2.8%
Cities	2	2.8%
Counties	1	1.4%
Special Districts	1	1.4%
Water & Sewer	1	1.4%
State Governments	1	1.4%
NON GENERAL OBLIGATION	66	93.0%
GENERAL OBLIGATION	5	7.0%
TOTAL	71	100%

Source: Moody's "U.S. Municipal Bond Defaults and Recoveries, 1970-2011"

A Quick Aside On Debt...

- The only way “the bonds” pay for anything is if one of these people lives in your community...



Source: commons.wikimedia.org/wiki/File:20060825_Barr...

Source: picasaweb.google.com/.../fLQy4iWz7ZNrMaDwZG13iA

Loan & Grant Programs

Subsidized Loan & Grant Programs

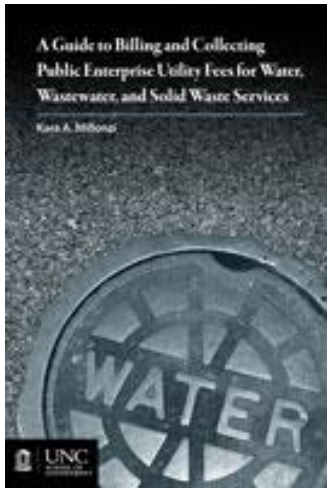
- Division of Water Infrastructure (NCDENR)
- USDA
- NC Dept of Commerce (EDA, ARC)
- Golden Leaf Foundation

See matrix with contacts and information at http://efcnetwork.org/resources/funding-sources-by-state/

CLOSING

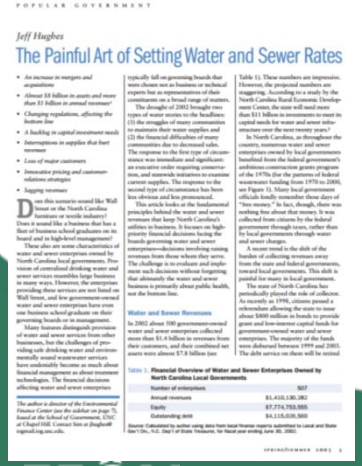
School of Government resources on Enterprise Funds

http://www.sog.unc.edu/, click on Publications



A Guide to Billing and Collecting Public Enterprise Utility Fees for Water, Wastewater, and Solid Waste Services

(Kara Millonzi)


POPULAR GOVERNMENT

Jeff Hughes

The Painful Art of Setting Water and Sewer Rates

- An increase in mergers and acquisitions
- Almost $8 billion in assets and more than $1 billion in annual revenues
- Changing regulations, affecting the bottom line
- A backlog in capital investment needs
- Interruptions in supplies that hurt revenues
- Loss of major customers
- Innovative pricing and customer-relations strategies
- Sagging revenues

Does this scenario sound like Wall Street or the North Carolina furniture or textile industry? Does it sound like a business that has a fleet of business school graduates on its board and in high-level management?

These also are some characteristics of water and sewer enterprises owned by North Carolina local governments. Provision of centralized drinking water and sewer services resembles large business in many ways. However, the enterprises providing these services are not listed on Wall Street, and few government-owned water and sewer enterprises have even one business school graduate on their governing boards or in management.

Many features distinguish provision of water and sewer services from other businesses, but the challenges of providing safe drinking water and environmentally sound wastewater services have undeniably become as much about financial management as about treatment technologies. The financial decisions affecting water and sewer enterprises typically fall on governing boards that were chosen not as business or technical experts but as representatives of their constituents on a broad range of matters.

The drought of 2002 brought two types of water stories to the headlines: (1) the struggles of many communities to maintain their water supplies and (2) the financial difficulties of many communities due to decreased sales. The response to the first type of circumstance was immediate and significant: an executive order requiring conservation, and statewide initiatives to examine current supplies. The response to the second type of circumstance has been less obvious and less pronounced.

This article looks at the fundamental principles behind the water and sewer revenues that keep North Carolina's utilities in business. It focuses on high-priority financial decisions facing the boards governing water and sewer enterprises—decisions involving raising revenues from those whom they serve. The challenge is to evaluate and implement such decisions without forgetting that ultimately the water and sewer business is primarily about public health, not the bottom line.

Water and Sewer Revenues

In 2002 about 100 government-owned water and sewer enterprises collected more than $1.4 billion in revenues from their customers, and their combined net assets were almost $7.8 billion (see Table 1). These numbers are impressive. However, the projected numbers are staggering. According to a study by the North Carolina Rural Economic Development Center, the state will need more than $11 billion in investments to meet its capital needs for water and sewer infrastructure over the next twenty years.

In North Carolina, as throughout the country, numerous water and sewer enterprises owned by local governments benefited from the federal government's ambitious construction grants program of the 1970s (for the patterns of federal wastewater funding from 1970 to 2000, see Figure 1). Many local government officials fondly remember those days of "free money." In fact, though, there was nothing free about that money. It was collected from citizens by the federal government through taxes, rather than by local governments through water and sewer charges.

A recent trend is the shift of the burden of collecting revenues away from the state and federal governments, toward local governments. This shift is painful for many in local government.

The state of North Carolina has periodically played the role of collector. As recently as 1998, citizens passed a referendum allowing the state to issue about $800 million in bonds to provide grant and low-interest capital funds for government-owned water and sewer enterprises. The majority of the funds were disbursed between 1999 and 2003. The debt service on these will be retired

Table 1. Financial Overview of Water and Sewer Enterprises Owned by North Carolina Local Governments

Number of enterprises	507
Annual revenues	$1,410,130,282
Equity	$7,774,783,955
Outstanding debt	$4,115,036,560

Source: Calculated by author using data from local finance reports submitted to Local and State Gov't Div., N.C. Dep't of State Treasurer, for fiscal year ending June 30, 2002.

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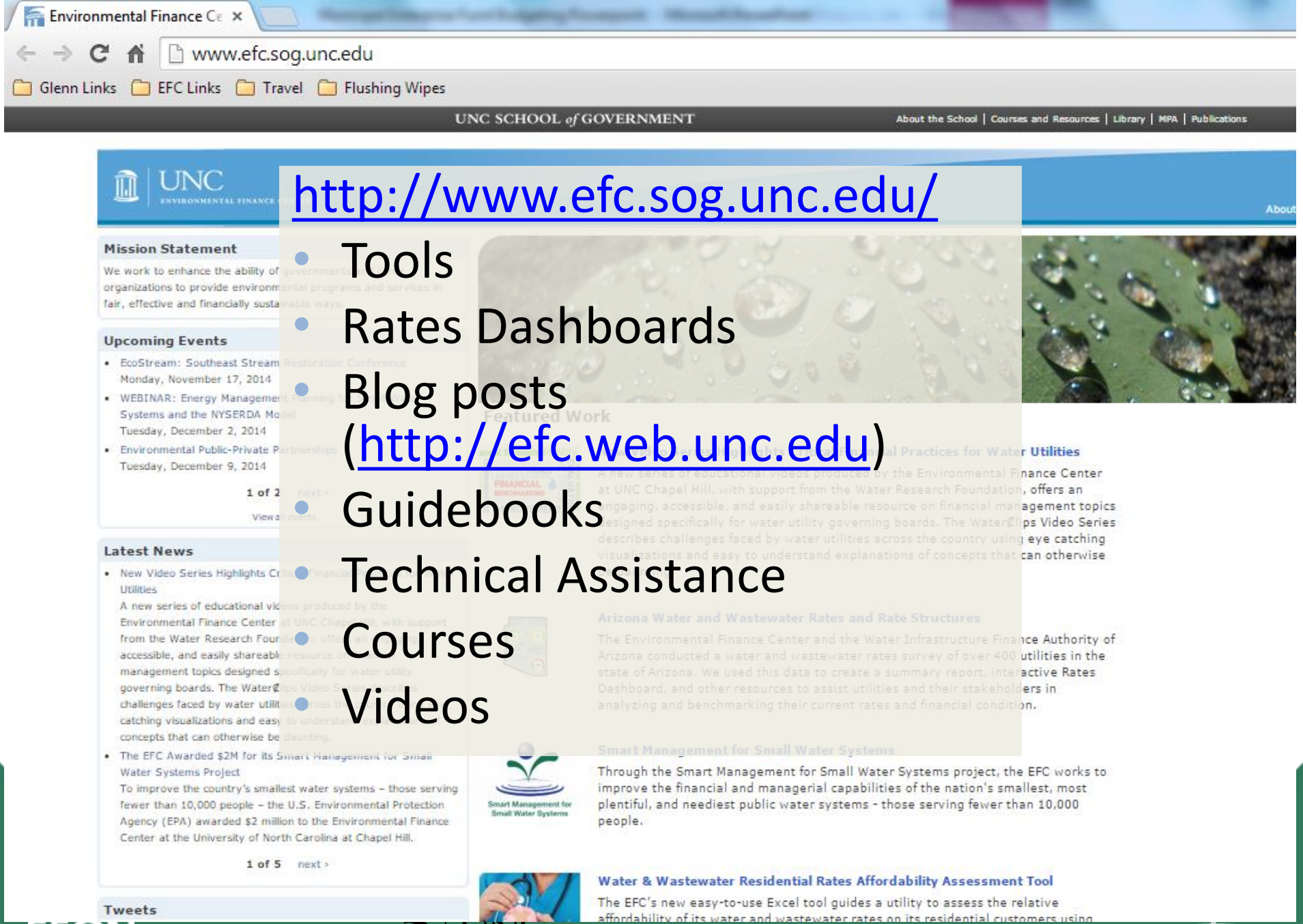
SPRING/SUMMER 2004 3

"The Painful Art of Setting Water and Sewer Rates"

(Jeff Hughes)



http://www.efc.sog.unc.edu/

- Tools
- Rates Dashboards
- Blog posts (http://efc.web.unc.edu)
- Guidebooks
- Technical Assistance
- Courses
- Videos

Smart Management for Small Water Systems

***under a Cooperative Agreement with the US EPA**

http://efcnetwork.org

- The EFCN (including the EFC at the UNC School of Government) will provide free trainings, webinars, tools and direct assistance to small water systems serving fewer than 10,000 people on:
  - Asset Management
  - Water Loss Reduction
  - Water System Collaboration
  - **Fiscal Planning and Rate Setting**
  - Energy Management
  - Funding Coordination, and
  - Managerial and Financial Leadership

- **Free in-depth (multi-day or multi-hour) assistance available. Sign up at http://efcnetwork.org/assistance/request-assistance/**

Thank you!

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