

Valuing Water and Sewer Utilities

Generally Accepted Appraisal Methods

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There are a number of technical and subjective methods used to appraise or ascertain the “fair market value” of a water or sewer utility. These methods, both technical and subjective, have inherent merits and weaknesses. The selection of an appropriate method can be confusing. Furthermore, an appraisal should take into consideration whether the sales transaction is for “assets” or for “stock.” This is because the negotiated price will usually differ depending on the type of sales transaction and seller and buyer goals.

Water and sewer utilities are not high profit ventures. They are capital intensive, reasonable low risk operations. They rely on growth in customer base, operational and administrative economies of scale and a functional, depreciable physical plant that has the capacity to serve the customer on demand.

Today, the basic or more common appraisal approaches applied in determining a fair market or simply a fair value for the purchase of a water and/or sewer utility are usually referred to as the Income Approach, the Market Approach, and the Cost Approach. There are a number of analytical valuation methods within each of these approaches, such as:

1. Total net book value (total assets at original cost less depreciation) basis – normally supports a simple stock purchase and the buyer assumes responsibility for all debt in addition to the purchase price. (Cost Approach)
2. Total net book value plus a premium multiplier – normally applicable to publicly traded water companies. Premiums often range between 10% and 50% if there are value added benefits to the purchase. (Cost / Income Approach hybrid)
3. Historical dividend payment plus dividend growth rate per share; a good public stock market value indicator. (Income Approach)
4. Capitalized pre-tax earnings and cash flows – can be used for an asset or stock purchase; a very reliable indicator of the value to the seller and the affordability to the buyer to pay the negotiated or even the asking price.
5. Amount of Rate Base that a regulating body would allow the owner an annual rate of return (ROR) to be earned upon, or a profit realized. Rate Base includes the book value of allowable

plant assets, working capital and other adjustments to liquid assets, normally excludes all contributed capital, and has an original plant-in-service cost basis. (Income Approach)

6. Adjusted book value – reflects certain appreciation in land, excess water rights and facilities as well as deductions for poor condition and regulatory compliance invest or cost needs. (Cost Approach)
7. Original cost less depreciation of physical infrastructure – ignores other liquid assets such as cash inventory and materials. (Cost Method)
8. Reproduction or replacement cost less accumulated depreciation less projected rehabilitation, replacement and regulatory compliance costs – sometimes applicable in a condemnation or receivership proceeding. The condemner sometimes takes the assets with capacity to serve and avoids the need to build that capacity in today's dollars. This method represents a value or opportunity cost to the buyer but has seldom prevailed in an adjudicated pricing decision in recent years. (Cost Approach)
9. Comparable Sales – a compilation and comparison of period sale and purchase transactions, usually prepared as a price per connection or equivalent unit of service. In the State of Washington, this has become a more and more reliable indicator of fair market value, although there is a significant range of negotiated price per connection results. Requires substantial amount of research and even discussion with sellers and buyers to better understand the negotiated price in relation to the assets and connections acquired. (Market Approach)

In recent years, the more acceptable and common approaches to appraising water and sewer utilities are the first five and the ninth methods.

Key factors that affect the results and the appropriateness of the value tend to revolve around the issue of outstanding long-term debt, the degree that utility assets and working capital are leveraged, and the weighted average cost of capital. There is usually a direct correlation between net pre-tax earnings, cash flow, dividend payments, rate of annual reinvestment, Rate Base and net book value. However, the overriding factor will often be the average age and the condition of the depreciable utility plant in service assets such as wells, pumps and mains. Another critical matter for water systems is the status of the comprehensive planning and identified regulatory compliance related requirements that will need to be addressed by the seller or buyer (usually addressed in the negotiated sale-buy agreement).

In our experience, there are very few regulated buyers that will pay much of a premium above book value unless there is significant cash flow, little debt and a substantial Rate Base to warrant the payment for goodwill if that goodwill cannot be recovered later as a function of allowable costs embedded in the utility rates. This means that regulated buyers will look for values that approximate book value because the premium prices paid above the rate base value will not normally be allowed into the Rate Base or the depreciation cost within the approved tariff. The net result can be that the

buyer might not be allowed to earn a partial or full rate of return or profit on the paid price premium, thus making the investment yield less than other market investment alternatives.

Finally, the ratepayer must be considered in the overall validity check of fair value. I believe that utilities have an implicit charter to provide needed services at a reasonable price, but not at rates that lose money and erode the overall value of the system assets. The test is to identify if the buyer can earn an adequate return without causing rate/tariff increases once a purchase transaction is executed. Customers are expected to pay for the costs of service and the cost of capital, not for prior year losses, nor non-beneficial purchase price premiums. Since a large portion of water and sewer assets have been directly or indirectly contributed by the customers to the utility, there is an ethical expectation that those customers will not be made to pay for those same assets again through rates structured to recover inordinate purchase prices. Regardless, that does not mean that an owner should not be able to sell the utility for a fair value within the framework of a willing seller and a willing buyer negotiation.

Thus we have a definite conclusion: We can assume at the start, a premise that the baseline value will likely approximate the adjusted book value reflecting the age, condition and compliance related attributes of the utility system assets. All three approaches of appraisal need to be used where an independent and objective formal appraisal report is required. However, where each party, seller and buyer, commission an appraisal to best represent their respective positions, one or more approaches and methods might serve the purpose.

At FCS GROUP, we then test the historical and projected earnings and cash flows of the utility to determine if a purchase discount or premium on adjusted book value might be warranted. The issue of an allowable Rate Base should be reconciled, evaluated and then linked to earnings, equity capital reinvestment and perhaps even annual dividend practices. Finally, we perform a market comparison of recent sales transactions and traded stock of public water and/or sewer companies to at a minimum establish the face and content validity of the alternative values derived from the other approaches.

In summary, there is really no one method for determining the appropriate value of a water and/or sewer utility. The buyer is looking for a lower price, the seller a higher price. In the final analysis, the transaction will likely be a win-win for the buyer and seller with neither party getting everything they were hoping for in the agreement. This win-win result will be reflected in the customer/taxpayer's contribution, as the ultimate party, toward paying a fair price.

First Published, July 1992, Last Reviewed and Updated, April 2004

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