

Successful Procurement and Finance Methods: The Southwest Florida Experience

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The focus of this paper is to share a few thoughts based on my 30 years of participating in various public-private partnerships, most importantly, since 1996, in helping to structure the design-build-own-operate-transfer (DBOOT) Tampa Bay Desalination project.

First, I will discuss effectively managing risks, which is the key to any successful public-private partnership. Our Water Management District, one of five in Florida, has more than 800 public and public/private partnerships totaling almost \$1.4 billion in our 16-county, 10,000-square-mile area of Southwest Florida with a population of 4.1 million. The Southwest Florida Water Management District (SWFWMD) has \$279 million, pay-as-you-go annual budget. SWFWMD has no debt. The District has not increased the ad valorem (property) tax rate in 13 years at the same time the District has experienced legislative-delegated doubling of responsibilities without increasing staff. The SWFWMD outsources 25 percent or approximately \$60 million of its operating budget. SWFWMD will need another \$1.2 billion in leveraged partnership-funded projects through 2020 to develop another 220 million gallons a day (mgd) of sustainable potable water capacity, which the District plans to accomplish without debt or tax increases. Second, I will briefly discuss the do's and don'ts of effective public-private procurements. Finally, I will cover some of the good business ideas being learned from the Tampa Bay DBOOT desalination project experience.

Risk Management

The key to a successful public/private partnership is the efficient management of risks. To ensure the success of the public/private partnership, any deal and agreement, since the agreements could last decades, there is a need to (1) allocate risks among the public and private partners in a fair and efficient manner, (2) ensure the provision of quality service by the provider or system operator throughout the term of the agreement, and (3) provide an efficient framework for addressing changes that will inevitably occur during the term of the agreement to protect the public interest.

There are common risks to every public/private partnership, whether it involves the construction of new facilities or the outsourcing or privatization of the operation's existing facilities, either through a design and development lease-type arrangement, the sale of municipal assets, or the operation of municipal water facilities by a private firm. These risks fall into the following categories:

- Permit Risks – Who is responsible for obtaining and maintaining permits, including construction permit(s) and operations permit(s), environmental, etc.? The Tampa Bay Water seawater desalination project required more than 20 permits.

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- Design and Technology Risks – Who is responsible for design and/or technology flaws, environmental impact, etc.?
- Construction Risks – Who is responsible for completing construction activities according to plans, within budget, and on time? What performance bonds will be required?
- Operations Risk – Who is responsible for the day-to-day operation of the system?
- Economic/Financial Risks – Is there and will there be a sufficient income stream to pay for all expenses and debt service?
- Force Majeure (casualty and business interruption) – Insurance proceeds can provide the funds necessary to rebuild. However, is it possible and necessary to insure the expected income stream derived from operations?

Flexibility on all sides to achieve a win-win deal is a must. The original construction agreement for the Construction and Operation of the Tampa Bay Desalination Plant and Water Purchase Agreement was 195 pages and was basically developed without a model. The agreement for the construction and operation of a Tampa seawater desalination plant and the water purchase agreement contain 25 articles from the schedule through miscellaneous provisions.

Procurement

The Water Partnership Council in its book, “Establishing Public-Private Partnership for Water and Wastewater System: A Blueprint for Success,” has an excellent list of do’s and don’ts of effective procurements for public/private partnerships (Water Partnership Council: www.waterpartners.org) for those of us in the public sector.

Do’s	Don’ts
Do clearly define the desired scope of services.	Don’t use the RFP as a fishing expedition to check prices or capture improvement ideas.
Do plan on awarding a contract at the end of the process.	Don’t expect proposers to spend time and money to participate in a procurement that may not result in the award of a project.
Do disclose the rules of the procurement process in advance.	Don’t define the rules after the process is underway or modify the rules during the process.
Do establish a transparent proposal evaluation process.	Don’t keep proposers in the dark on how their proposals will be evaluated.
Do develop a Request for Proposal that invites innovative approaches to meeting performance objectives.	Don’t specify how objectives are to be met or at least provide for “alternatives.”
Do involve stakeholders in all aspects of the process.	Don’t allow stakeholder concerns to fester; communicate continuously.
Do benefit from the advice of communities that have entered into partnerships.	Don’t allow private consultants and lawyers to delay the process unduly and increase cost unnecessarily.
Do establish a balanced, fair contract that shares risks and rewards.	Don’t shift all risks and liabilities to the private sector.
Do keep it simple.	Don’t introduce unnecessary complexity that can stifle competition, increased costs, or delay the process.

Tampa Bay Seawater Desalination: The Business Model

Questions asked since inception of the Tampa Bay seawater desalination project in the mid-1990s include why the water management district has been promoting seawater desalination as a water supply source and can the cost effective project in Tampa Bay be duplicated in other locations.

Why is seawater desalination needed in Tampa Bay? Seawater desalination is an environmentally safe, sustainable, drought-proof portion of the water supply. The Southwest Florida Water Management District (SWFWMD) is the regional government agency, established by Florida state statute, primarily responsible for managing water resources necessary to maintain a balance between the water needs of current and future water users without damaging the environment. Tampa Bay Water is the regional wholesale water supply agency responsible for developing and supplying potable water to its members who serve six communities, with approximately two million customers in the Tampa Bay area, with a permitted capacity of 242 mgd. Estimated annual growth in demand requires 2.5 mgd of additional annual supply.

The SWFWMD has legislative ad valorem taxing authority. In the mid-1990s, the SWFWMD offered to help fund a large scale seawater desalination project in the Tampa Bay area after determining it could be permitted and could provide a safe, sustainable alternative supply to help offset damaging groundwater pumping from 11 regional wellfields. A partnership agreement successfully negotiated in April 1998 among the SWFWMD, Tampa Bay Water and the six member governments resulted in the SWFWMD agreeing to provide a matching grant (27 percent of total capital cost) of \$183 million to develop sustainable alternative supplies, of which \$85 million would be contributed to offset the then estimated 90 percent capital cost of a 25 mgd, expandable to 35 mgd, seawater desalination facility co-located with a conventional electric power station. Tampa Bay Water agreed to reduce groundwater pumping (40 percent) from 158 mgd to 121 mgd by 2003 and to 90 mgd by 2007. Tampa Bay Water is currently achieving groundwater pumping of less the 90 mgd and the current mix of alternative water supply projects, including the seawater desalination system, should provide an adequate sustainable supply of potable water through 2012 while maintaining the reduced groundwater pumping levels. And, additional supplies, like a regional reuse partnership, are under active consideration and negotiations to help extend the timeline further. The SWFWMD funds will enable Tampa Bay Water to further reduce its wholesale price for seawater-desalinated water by \$0.61 per thousand gallons to offset the capital costs over 30 years. Current projected first year prices are \$2.54 to \$2.63 per thousand gallons with SWFWMD buying down \$85 million of the approximately \$140 plus million estimated final capital cost of the project. This results in a maximum final first year wholesale price of an estimated \$1.93 to \$2.02 per thousand gallons. Again, what the District is doing is creating an incentive by helping to fund the development of the safe, sustainable, alternative supply, and providing for environmental recovery.

What is being learned in developing the Tampa Bay desalination project that can help others in determining whether other projects are economically viable? In general, the low cost at approximately 25 percent to 30 percent of the world price compared to various large scale seawater desalination facilities to develop the Tampa Bay large-scale seawater desalination project can be attributed to:

- Agreement among key local stakeholders up front to provide "partnership" leadership and resources (money, staff and third party experienced owners)

engineering consultants) is necessary to explore and create a shared vision, along with a project funding agreement (discussions and scientific studies started in 1995). Constructive public and private sector participation, clear public and media communications, along with solid science and business practices throughout the process, helped to keep all focused together on the collective need for success to reduce groundwater pumping while providing a sustainable alternative supply of potable water. Projects need adequate lead time invested up front to develop collective language for agreements created. Having everyone focus on one "sheet of music" makes the partnership a reality.

- Support from the 2001 Florida State Legislature approving a "Desal Bill," Senate Bill 536 which became Chapter 2001-188, Laws of Florida, which:
 - Encourages the use and advancement of membrane technology.
 - Clearly defines demineralization concentrate discharge as a "potable water bi-product" regardless of quality or facility size.
 - Directs the Florida Department of Environmental Protection to create a specific rule addressing membrane facility and associated disposal practices.

- Learning much about the methods and value of developing the public-private partnerships in the form of a DBOOT, DBO, etc., selected through the competitive negotiations process that can provide an opportunity to:
 - Reduce costs while keeping tight government control utilizing a market-driven risk/reward (take or pay) commodity purchase agreement with guarantees to flush out flaws in proposals and achieve lower prices through tough negotiations with multiple potential providers.
 - Reduce risk to participating governments by requiring contractors to use proven technology; provide and ensure performance after completion and testing; and indemnify government customers from casualty loss, labor interruption, and change in regulatory laws. The SWFWMD dollars will not be provided through the funding agreement with Tampa Bay Water until the plant is fully operational after achieving environmentally-safe, high-quality water production. Not one penny of the \$85 million pledged to the seawater desalination project has been paid to Tampa Bay Water, regional authority, as of this date. Public money is not at risk. The SWFWMD retains the interest earned on the \$85 million in the trust account to help offset the \$85 million obligation. Payment will be made when plant is accepted and in production which is now estimated to be mid-2006.
 - Co-locating with a large conventional power facility was determined during the development of the request for proposals to create the best economic model.

Finally, it has been shown that public/private partnerships provide a method to:

- Seek advantageous financial instruments/conditions and contracts to get best of both worlds with state-of-the-art private sector construction and operating

efficiencies combined with tax-free financing available to governments including low interest, federal, tax-free Private Activity Bonds through the State of Florida. It resulted in guaranteed amortized capital cost over original 30-year life of contract which could be called at a set price at any time. Tampa Bay Water decided to take ownership early due to a unique set of market conditions post 9-11. However, Tampa Bay Water is currently developing a similar public/private agreement to complete construction and operate the plant.

Conclusion

Much remains to be learned about best practices for creating cost-effective, long-term public-private partnerships to help deliver environmentally safe potable water using reverse osmosis technology and other sustainable water supply and waste water methods. It is a work in progress that is as much about money as it is about water. However, the first Tampa Bay Desalination project, I believe, is helping to create an economically viable model for delivering potable water from seawater. But, we must be vigilant in managing the DBOOT or DBO process in order to benefit from its reduced risk to government, and lower cost to taxpayers and water rate payers alike. Public-private partnerships can provide an innovative workable solution for developing environmentally sustainable alternate water supplies like reverse osmosis desalination, while allowing the private sector to assume reasonable risk and the government to maintain control in the public interest. The National Council for Public-Private Partnerships (www.ncppp.org) has many excellent resources for you to access to help you in your efforts to create successful public-private partnerships

But, you need to pick your partners carefully and communicate, communicate, communicate, and write good contracts protecting all parties involved.

End Quote: “It’s easy to get the players. Gettin’ them to play together, that’s the hard part.”

-- Casey Stengel