



SMASHING SILOS

What Comes First in Design-Build Water Infrastructure Projects


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WATER DESIGN-BUILD COUNCIL
AN ASSOCIATION OF LEADING DESIGN BUILDERS

Overview

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- A vertical image on the left side of the slide shows water splashing into a pool, creating a column of bubbles and ripples. The background of the slide is white with a horizontal bar at the top composed of several colored segments: black, blue, teal, purple, green, and yellow.
- What Comes First - - Financing or Project Decisions
 - Where “Silos” exist in Water Infrastructure Decision-Making
 - Influencing Factors
 - Making the Change
 - Case Study

Topics

- The Business Case
- Conventional Water Agency Practices “Silos”
- Financial Opportunities
- Case Study – Changing a Regulatory Agency’s Policy



Typical Scenario



- Utility/Agency Approved Project
- Engage in Decision-Making Process
 1. Financing Options
 2. Consultant Selection
 3. Project Delivery Method

Traditional Practices (Norms)

- Elongated preparation/organization
 - Insufficient information
 - Vague goals priorities
- Unproductive decisions
 - Confused path



Resulting Silos

- Overlooked opportunities for innovative technology
- Wasted resources (time/money)
- Restricted financial prospects
- Neglected ROI considerations




Smashing Financial Silos

Pursue Adaptive Management

- Change Norms (Practices)
 - Information/decision-making
- Openness (examine) Risk Sharing
 - Technology/financial
- Engage in Partnerships



Changing Norms (Practices)

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- A vertical image on the left side of the slide shows water splashing into a pool, creating a column of bubbles and ripples. The water is clear and blue, and the background is a light blue gradient.
- Agreement on Project Priorities/Goals
 - Weighting/Ranking
 - Project Delivery Methods
 - Innovative and
 - Engage Consultant Selection
 - Explore Financing Options

Collaborative Project Delivery



- Facilitates effective decision-making
 - Defining priorities
- Fosters collaborative partnerships
 - Technology/Financing Opportunities
- Smashes Silos with Business Approach
 - ROI

Opens Financing Opportunities

- Municipal Bonds
- SRF/DWRF
- Public/Private Partnerships
- Revenue Bonds
- WIFIA (future)
- Pension Funds (potential)
- Private Activity Bonds
- Off balance sheet, p3's, etc...



Collaborative Partnership

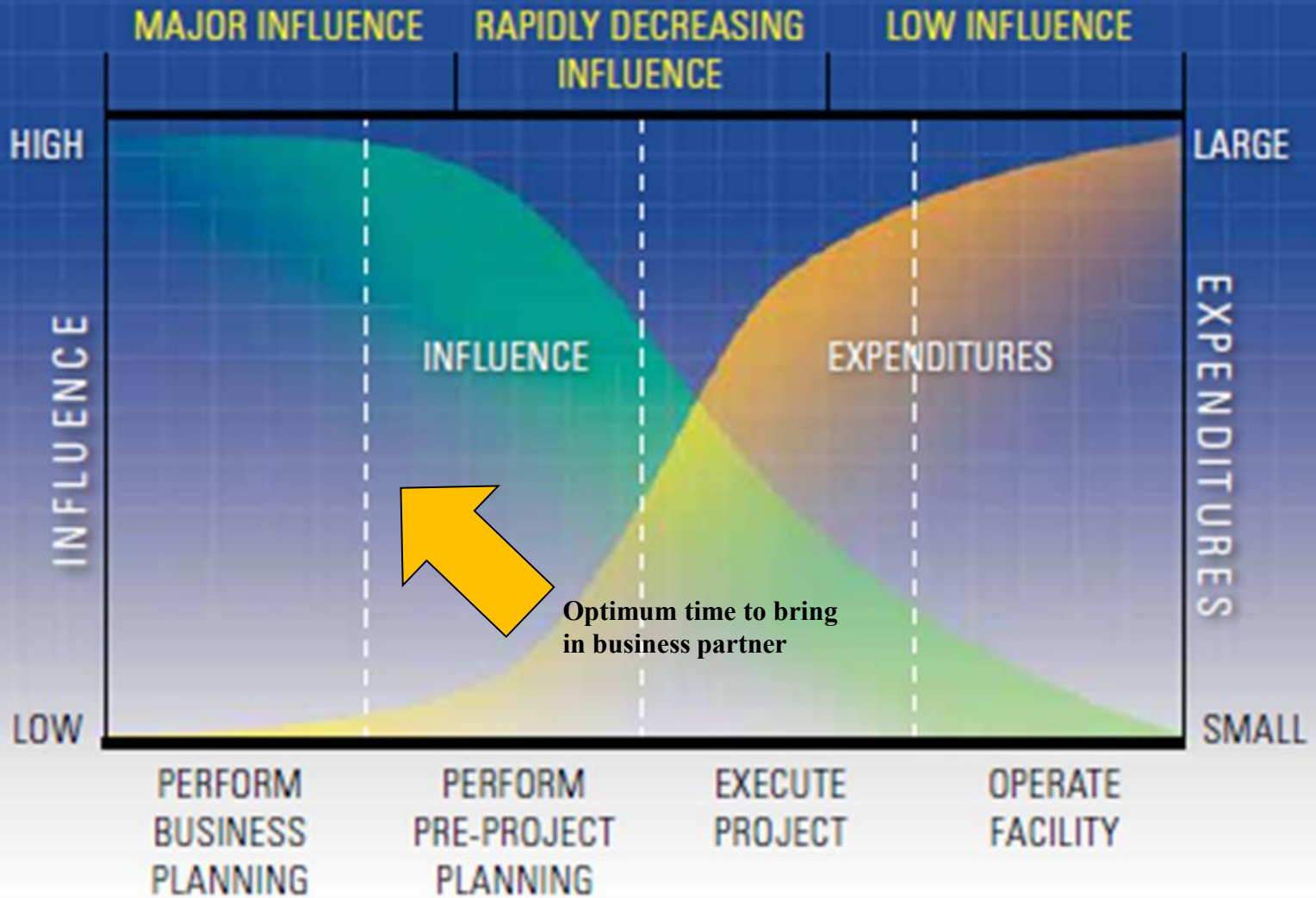
Integrates a “Business Case” Decision-Making Process that takes into consideration

1. Life-cycle Costs
2. Asset Management
3. Use of Innovative Technology
4. Financial Impacts to Customers

True cost of money



EXHIBIT 7: INFLUENCE VS. EXPENDITURES



WHEN MATTERS!!!

Adaptive Management – Revenue Potential

Use of Innovative Technology

- Integrates reuse of system products
- Enables energy recovery
- Supports watershed initiatives
- Makes a true balanced business case opening up multiple business opportunities (P-recovery, CHP, THP, etc...)



Case Study: Smashing Silos

State Regulatory Agency

- Provides financial loans for water infrastructure projects
- Existing policy constraining financial approval of projects
- Impacting industry (engineering community) work



Case Study: Smashing Silos

WDBC Facilitating Resolution

- Addressing confusion of decision-making process for selecting delivery method
- Integrating steps for “Best Practices” in the use of **collaborative delivery** into regulatory approval process for financing projects
- Changing “Norms” through education

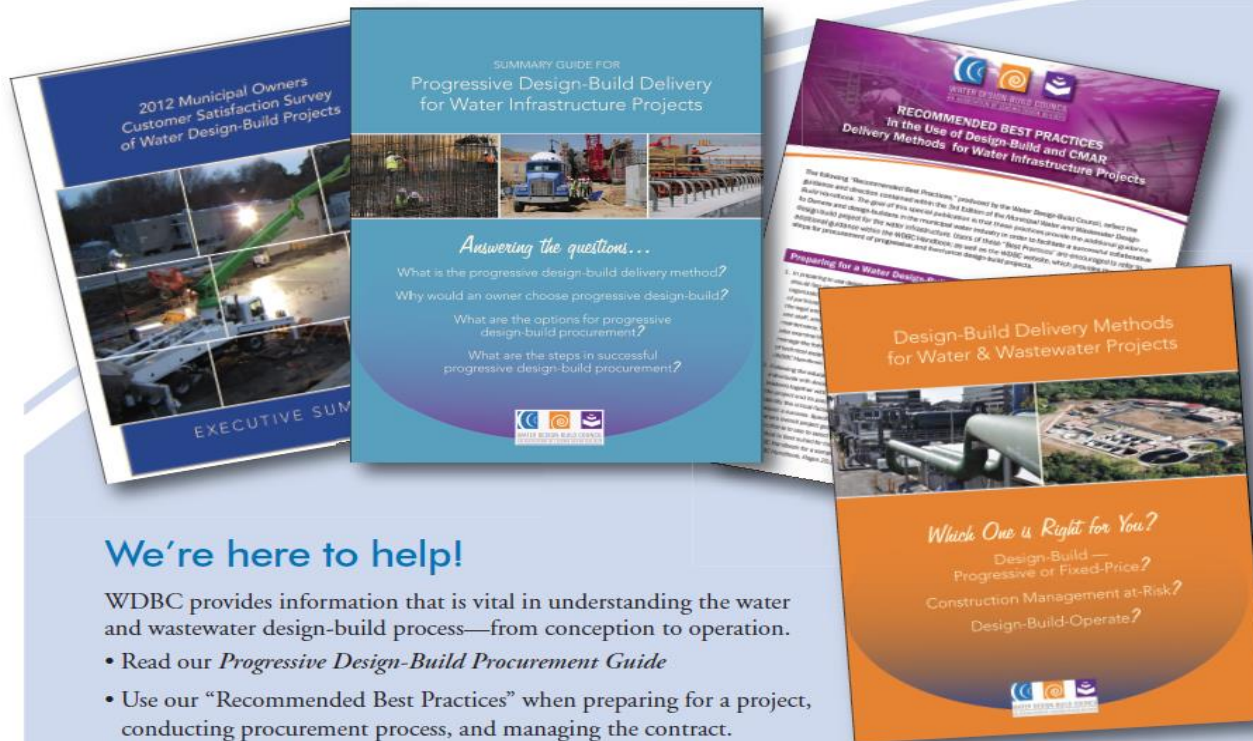


Conclusions

- Corroborated with WDBC Research Findings
- Ongoing Data Collection Documents Project Successes through Education
- Current Case Study – A Pivotal Model



The Water Design-Build Council seeks to advance the development and rehabilitation of the nation's municipal water and wastewater systems through the use of the design-build and construction management at-risk (CMAR) methods of collaborative project delivery. Those who have used design-build, design-build-operate, and CMAR approaches praise them for their ability to save time and reduce life-cycle costs and promote integrated and collaborative working relationships.



We're here to help!

WDWC provides information that is vital in understanding the water and wastewater design-build process—from conception to operation.

- Read our *Progressive Design-Build Procurement Guide*
- Use our “Recommended Best Practices” when preparing for a project, conducting procurement process, and managing the contract.
- View our educational videos.
 1. “Project Delivery Methods for Design-Build and CMAR Projects”
 2. “Conducting the Procurement Process for Design-Build and CMAR Projects”
 3. “Managing the Risk and Liability Process for Design-Build and CMAR Projects”
- Attend one of our education and training workshops (visit our WDWC.org for schedule)

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