



GROUNDWATER RELIABILITY  
IMPROVEMENT PROGRAM

# Advanced Water Treatment Facility Alternative Project Delivery... A Better Way...

**Service Area = 420 Square Miles**

**43 Cities**

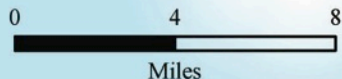
**Population = 4 Million**

**720,000 acre feet used per year**

**40% Groundwater from local water wells**

**60% Imported water**

**WRD supplements natural  
groundwater recharge**



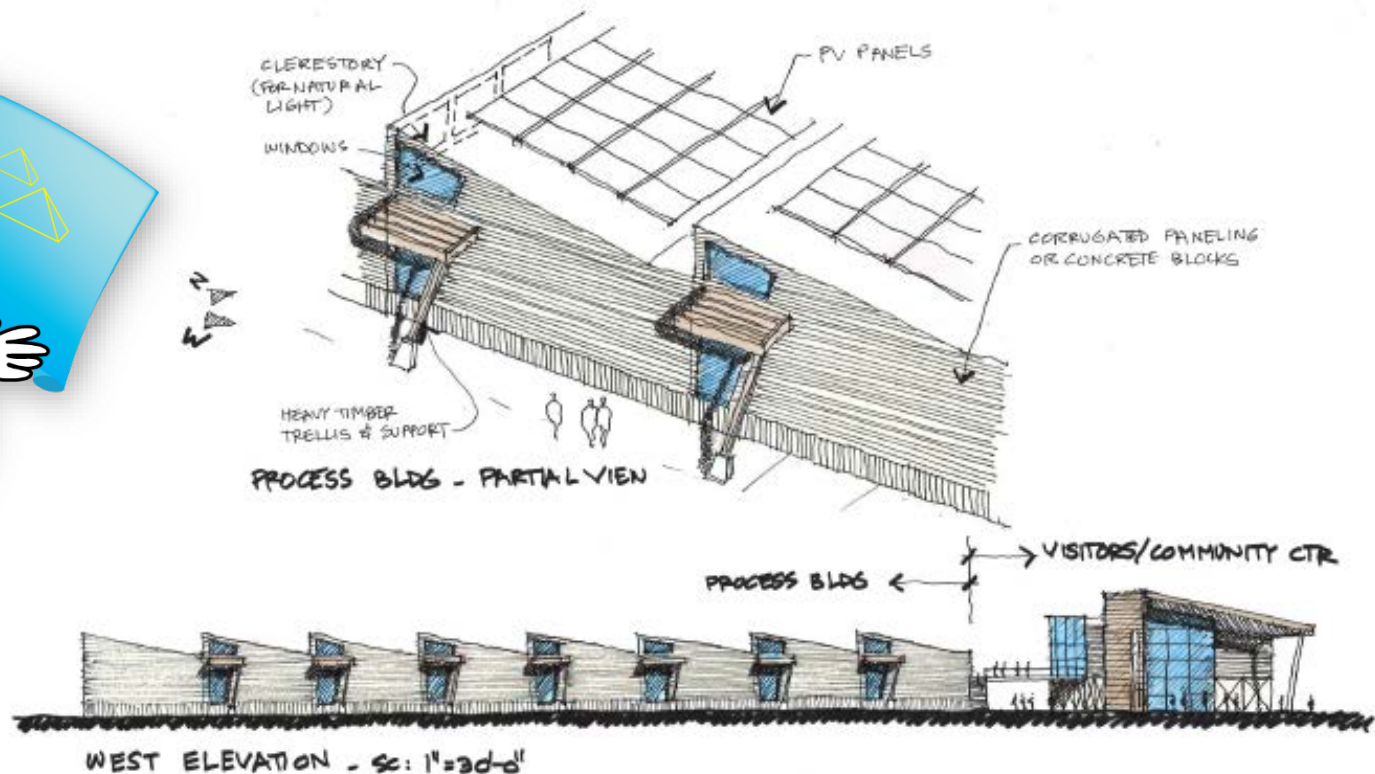
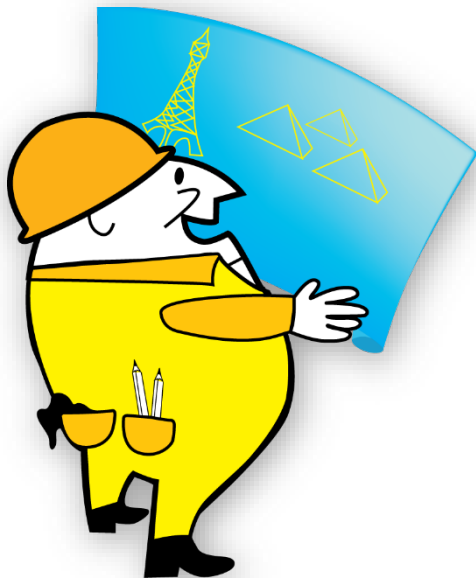
# Water Independence Now Initiative

- Goal to replace imported water with locally available water (e.g. recycled water) for aquifer replenishment.
- Benefits of recycled water over imported water:
  - ✓ increased reliability
  - ✓ cost-effective
  - ✓ locally controlled
  - ✓ drought proof





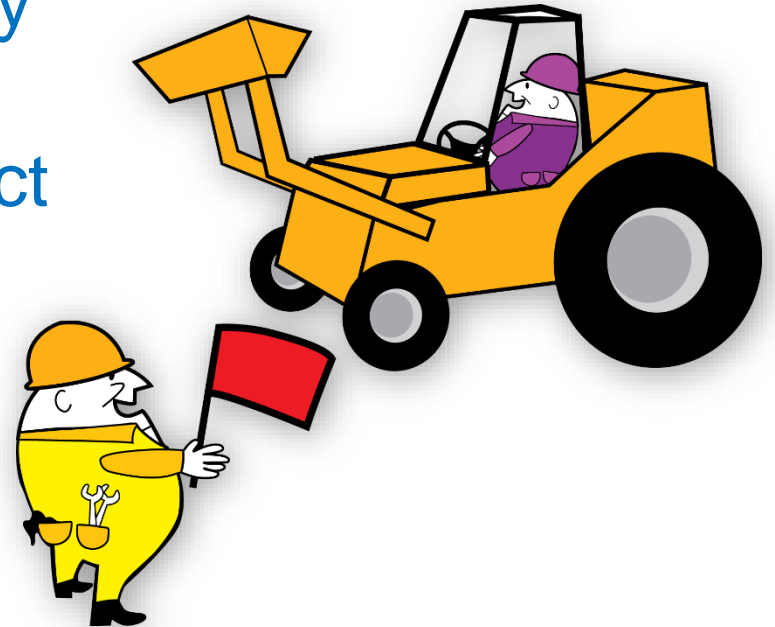
# Advanced Water Treatment Facility



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# Why Consider Alternative Project Delivery?

- Prior DBB project was stalled
- Schedule control
- Limited staff
- Desire to have more control
- Future operational optionality
- Price control
- Master Plan and other project alignment(s)



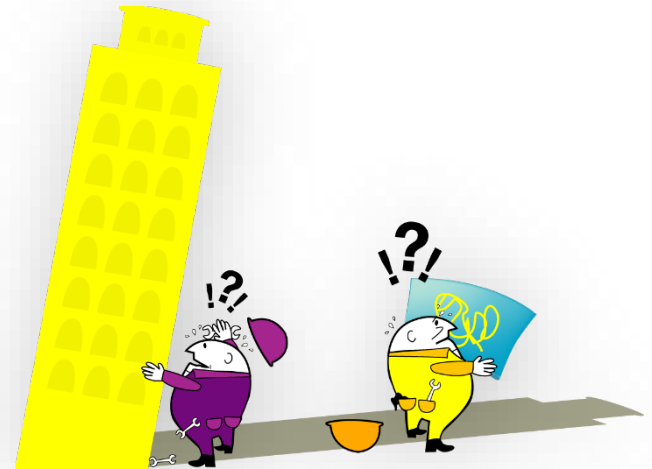
# D-B-B: What's really the Difference?

## “Traditional”

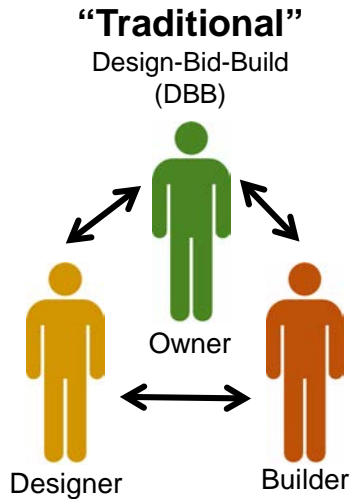
Design-Bid-Build  
(DBB)



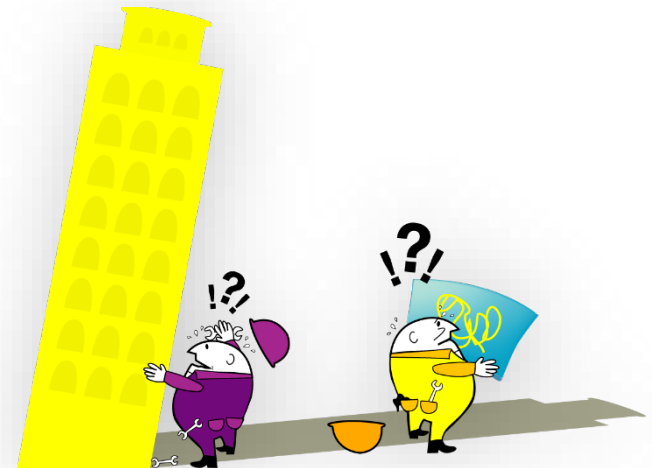
- Owner always owns the risk



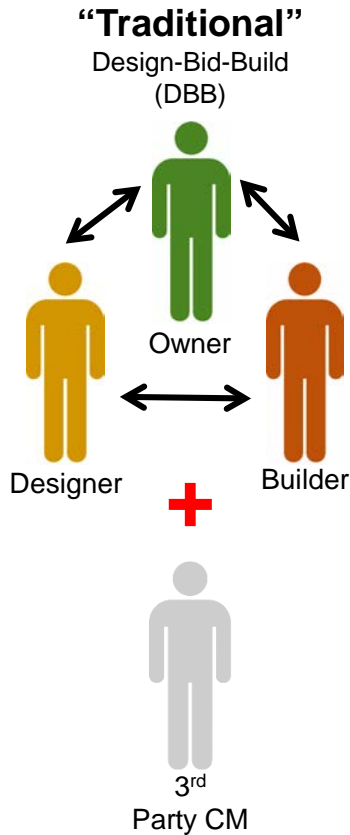
# D-B-B: What's really the Difference?



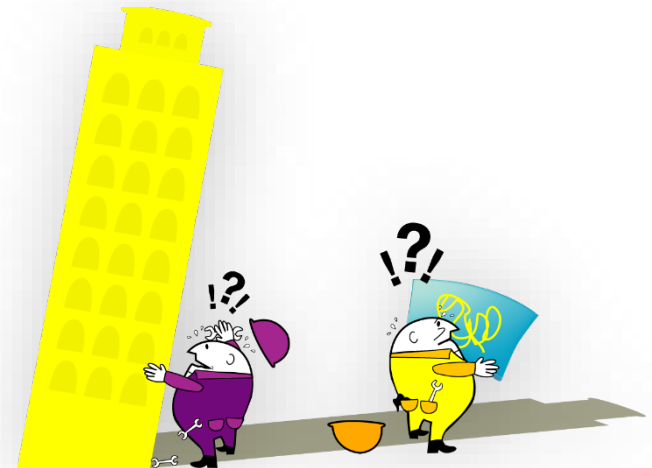
- Owner always owns the risk
- Transferred/assigned risk (myth versus reality)
- Owner must be willing to accept consequences for decision making



# D-B-B: What's the really the point?



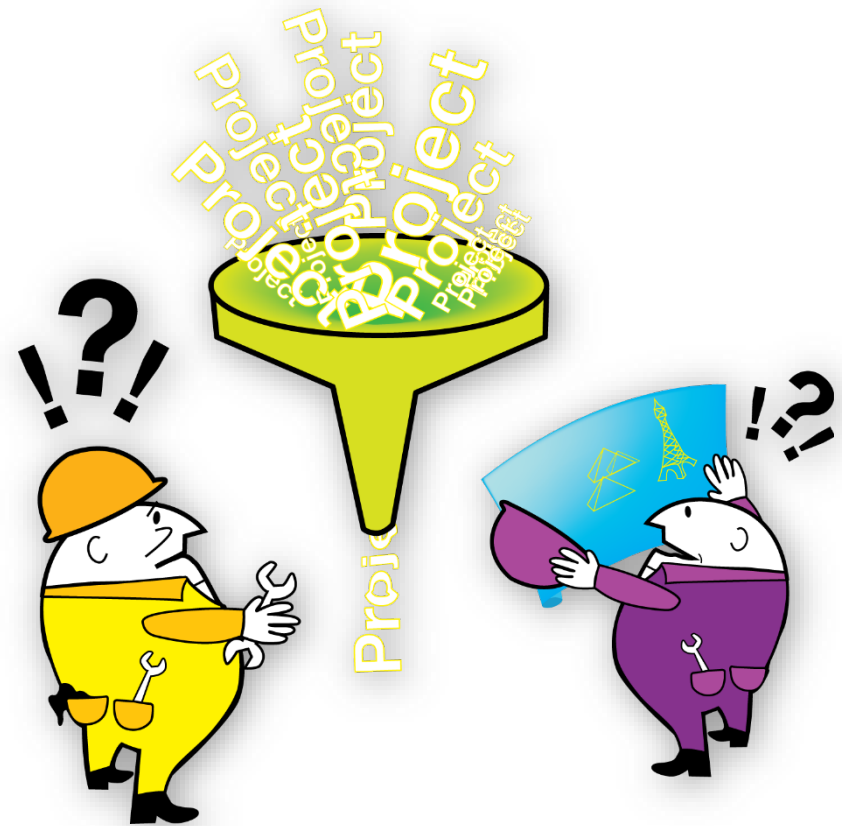
- Owner always owns the risk
- Transferred/assigned risk (myth versus reality)
- Owner must be willing to accept consequences for decision making
- ***Does partnering under D-B-B really make a difference?***



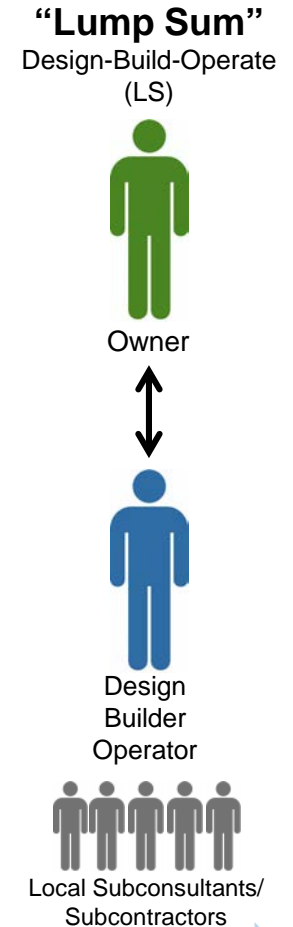
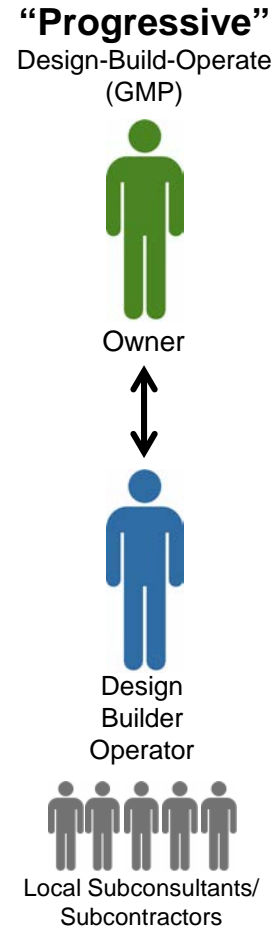
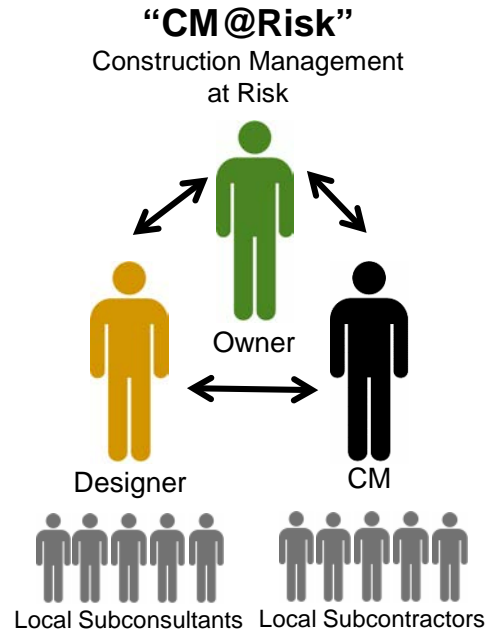
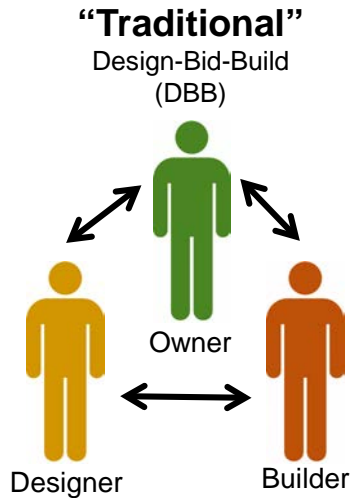


# Key Points: Other Delivery Options

- There are multiple forms of allowable alternative project delivery formats
- Each form has strengths and weaknesses
- Owner must pick the best approach for individual project needs



# Alternative Project Delivery Methods



Traditional Delivery

Alternative Delivery

# Key Points: Prescriptive vs. Non-Prescriptive

**“Lump Sum”**  
Design-Build-Operate  
(LS)



Owner



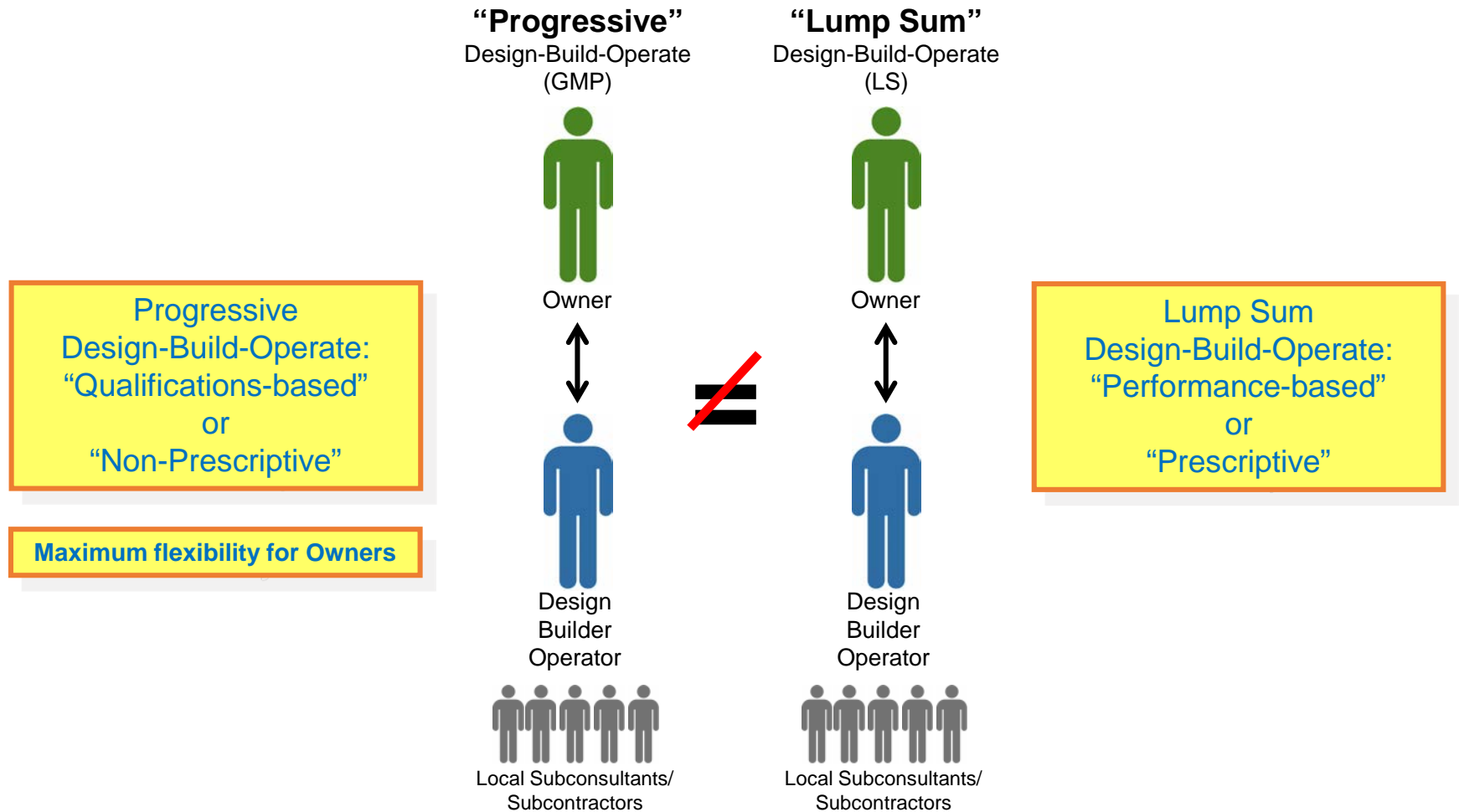
Design  
Builder  
Operator



Local Subconsultants/  
Subcontractors

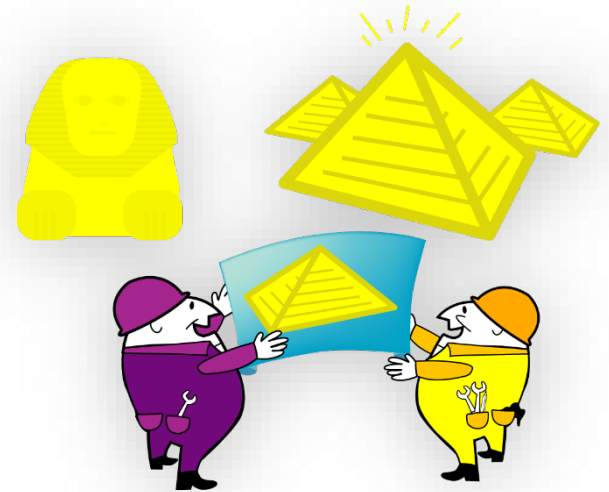
Lump Sum  
Design-Build-Operate:  
“Performance-based”  
or  
“Prescriptive”

# Key Points: Prescriptive vs. Non-Prescriptive



# Key Points: Managed Risk

- Owner enjoys maximum flexibility/opportunity to collaborate on permitting/design
- Adds flexibility for budget constraints
- Owner has multiple “off-ramps” in case of permitting issues or if GMP can’t be successfully negotiated
- Progressive (non-prescriptive) Design-Build-Operate reduces the time it takes to select a Design-Builder-Operator
- Procurement can run in tandem with other critical path efforts (e.g., permits)
- Accelerates concept development evaluation and pricing





# Key Points: Managed Risk



**The Delivery Process is Less Likely to Drive Project Success than the Resolve of the Owner Managing it**

# Key Points: Managed Risk



Client

- Buyer of services
- Defines project
- Defines success
- Creates contract
- Establishes scope
- Determines schedule
- **Accurate risk assignment**
- **Determines rules of engagement**
- Has the “end in mind”



Service  
Provider

- Stewards of public trust and resources
- Share all relevant project data/info
- Administer contract fairly
- Make timely decisions
- Pay timely
- Communicate with third party stakeholders
- Secure funding
- “In-House” needs
- Community politics/issues



Teammate

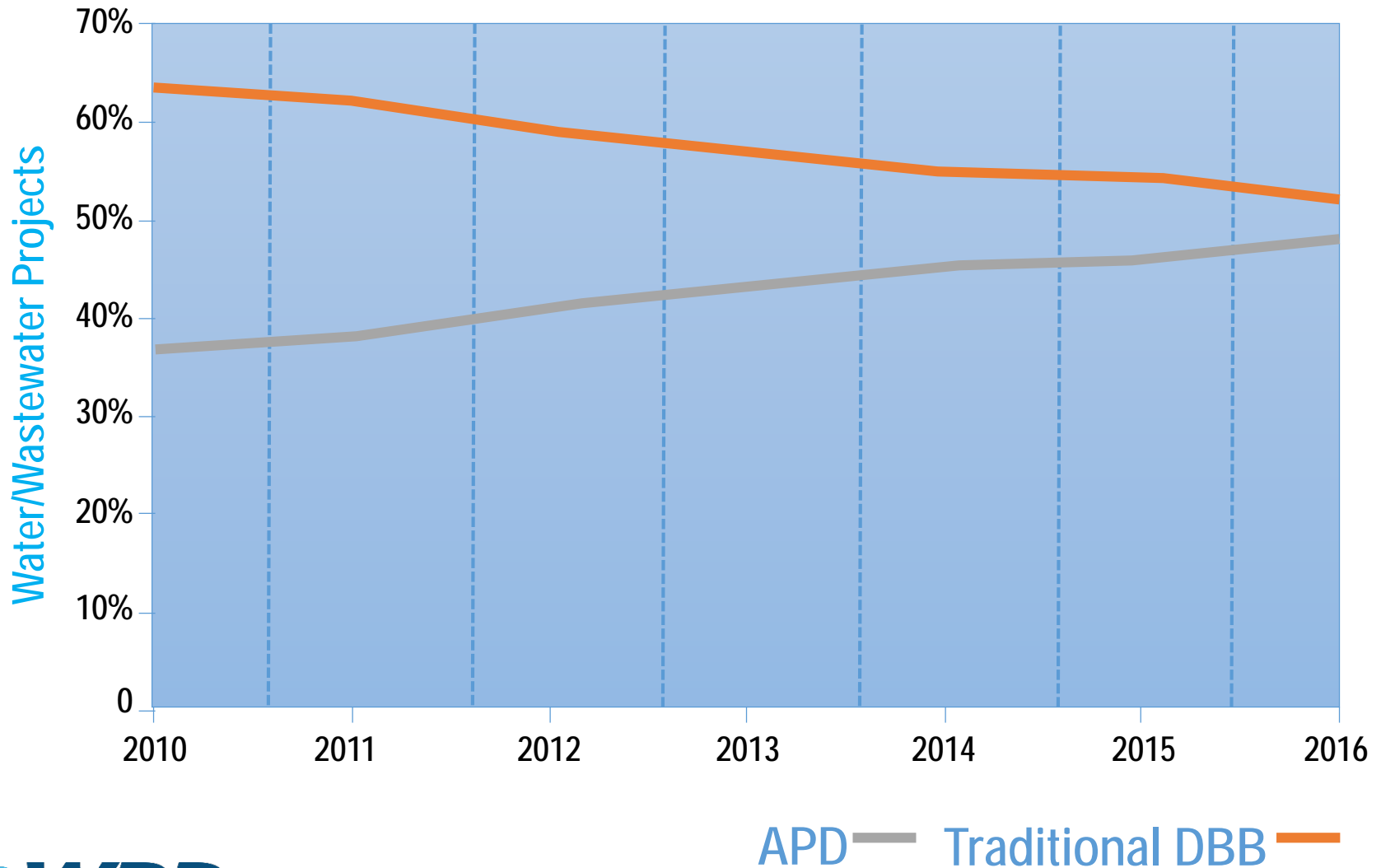
- **Create opportunity for innovation**
- Participate in development of team rules
- Comply with team rules
- Sets tone
- Determines “best value”
- Enables completion
  - Staff trained
  - Receive docs
  - Punch out
  - Assume ownership

# Key Points: Managed Risk

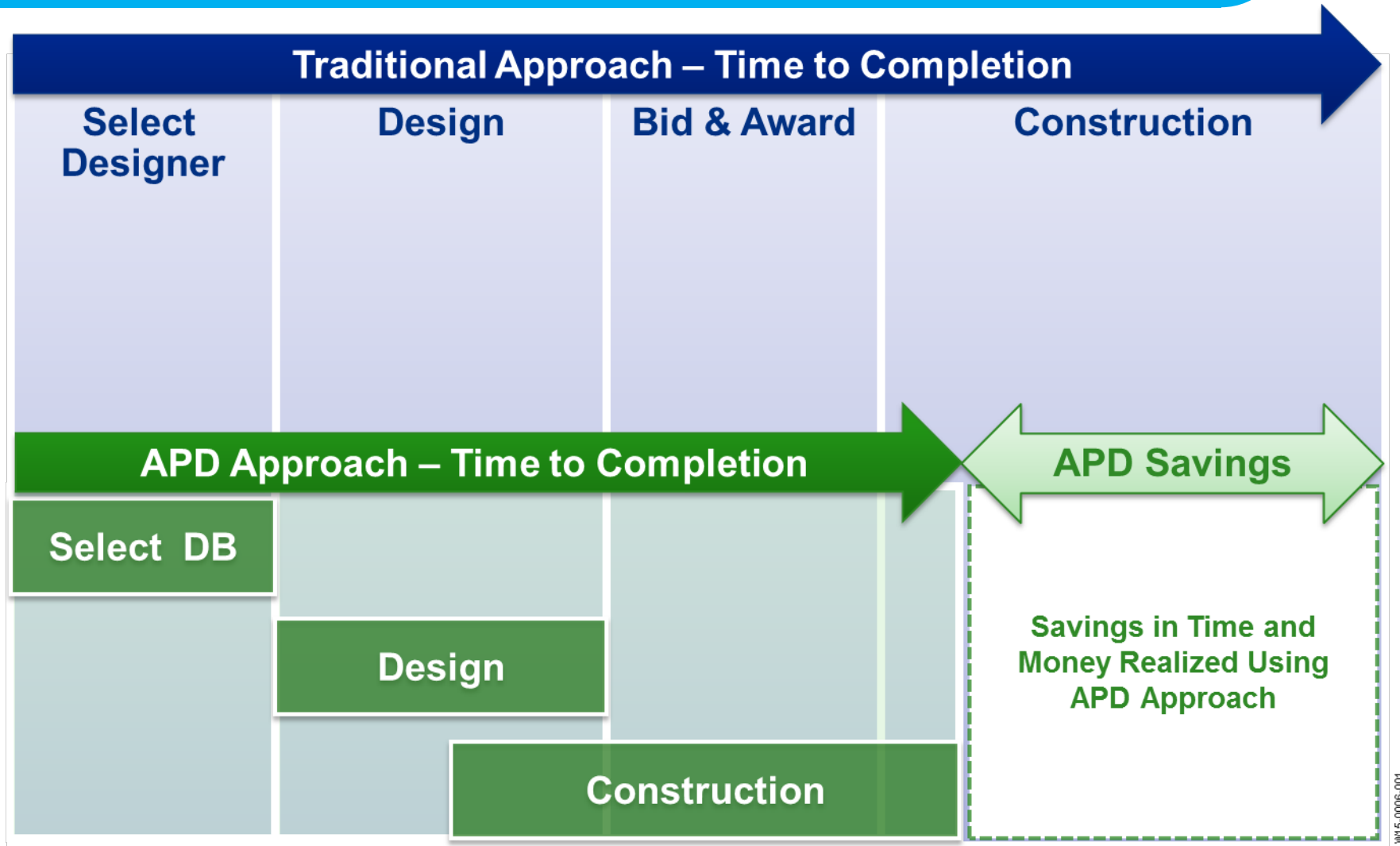
- Accurate risk assignment
- Establishing rules of engagement
- Create environment for collaboration and innovation



# Key Points: Owner's Choosing APD

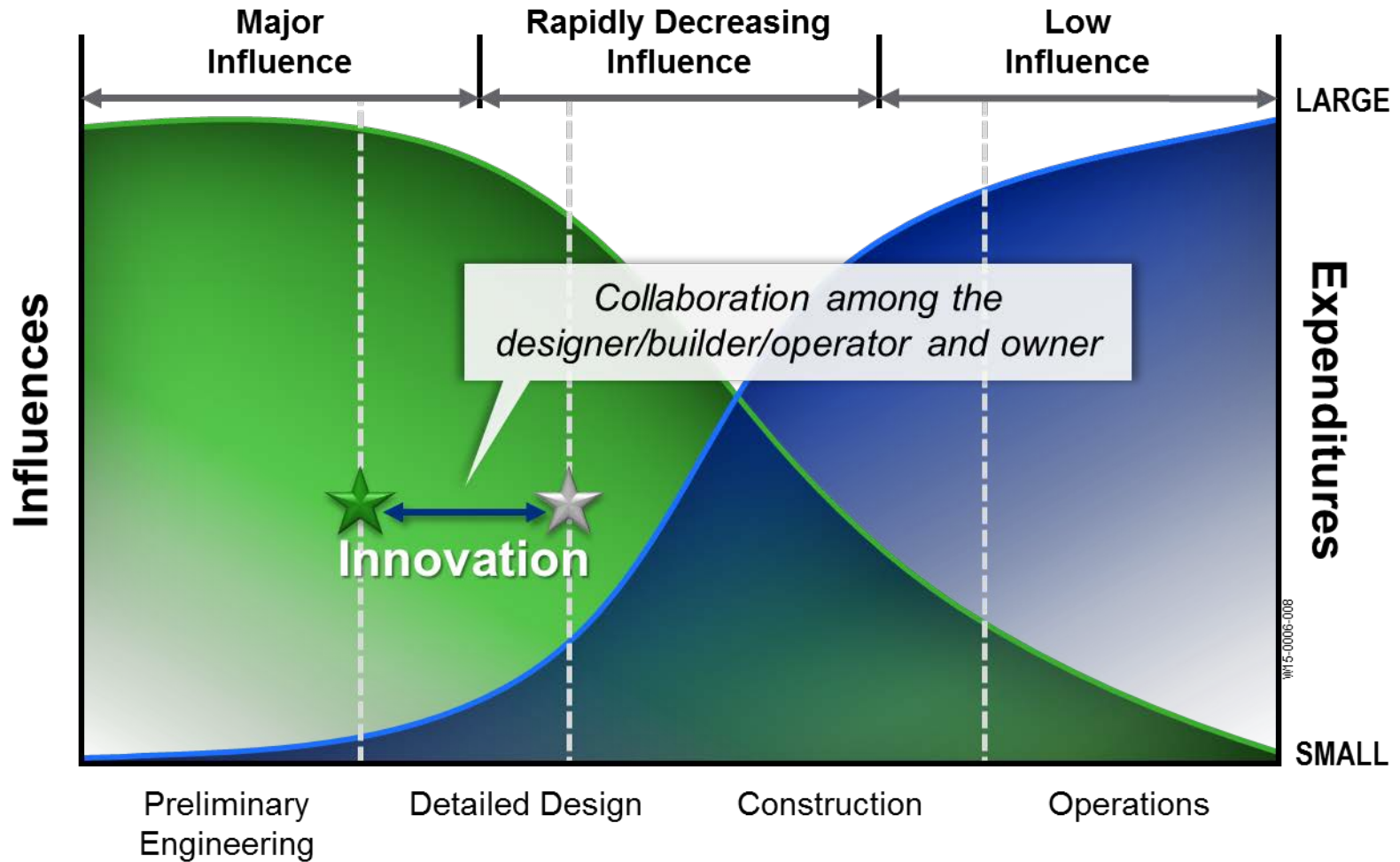


# Key Points: APD Saves Money





# Key Points: Collaboration Encourages Innovation



# Progressive D-B-O: A Better Way?

## Key Advantages

- Invest in Projects not Procurements
- Schedule
- Progressive costs estimates address Owners' financing challenges
- Better opportunities for local subconsultant and subcontractor support
- Owner is completely engaged and part of collaborative project delivery team

**“Progressive”**  
Design-Build-Operate  
(GMP)



Owner



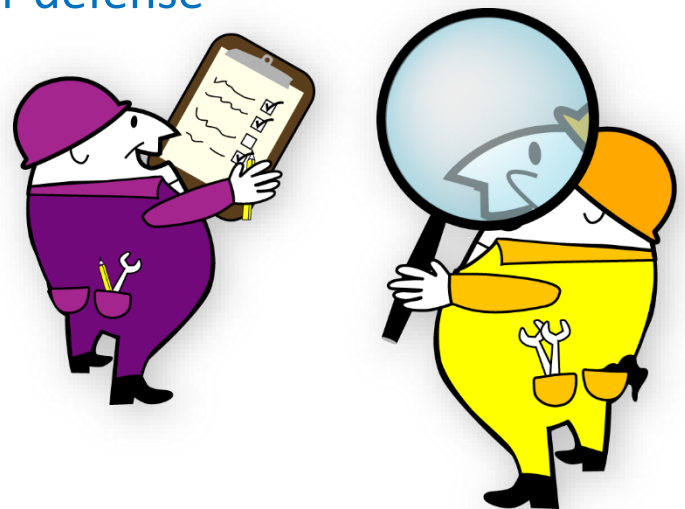
Design  
Builder  
Operator



Local Subconsultants/  
Subcontractors

# Keys to Achieving Success

- Need a project champion/advocate
- Stakeholder buy-in an absolute must
- Must be willing to share risk and work harder/differently
- OE/OA is part of the overall team
  - Extension of staff and not a “first” line-of-defense
  - Provide programmatic management and technical advisory services
  - Collocation is critical to facilitating the collaborative process
  - Must be a facilitator and team leader



# Benefits of APD (D-B-O)



- **Selection methodology focuses on traditional evaluation criteria**
  - Primarily qualifications based allowing owner to select team that offers best innovations, approach, and value
  - Excellent approach when considering cost, schedule, and operational impacts associated with various process and design configurations
  - Selection criteria can be tailored to support owner's project-specific needs
- **More flexibility after design-builder-operator selection**
  - Supports a “best value” approach where design-builder-operator works hand-in-hand with owner to make critical design and process decisions
  - Owner can provide input on preferred specialty firms/manufacturers/equipment providers
    - Design-builder-operator can still secure bids to ensure competitive pricing
    - Easier to integrate PLA and monitor labor compliance





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