

# *What's so Progressive about Progressive Design-Build?*

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**CDM**



WATER DESIGN-BUILD COUNCIL  
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# Progressive design-build: *A better way?*

## Discussion topics:

- What is progressive design-build? How does it work?
- Investment in *projects*, not *procurements*
- Schedule advantages
- Managing project risk as a team
- Owner Questions to Facilitate Choice of alternate delivery
- Top ten success strategies for owners



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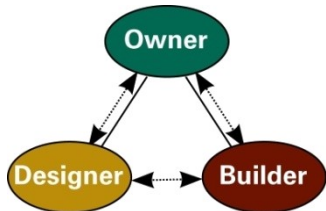
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# Project delivery options

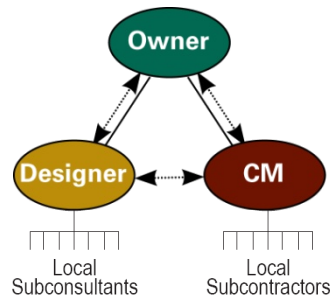
## Traditional Delivery

## Alternative Delivery

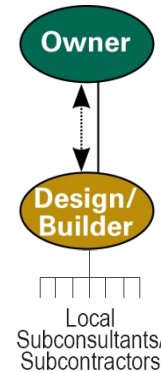
### Design-Bid-Build (DBB)



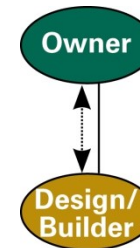
### Construction Management at Risk (CMAR)



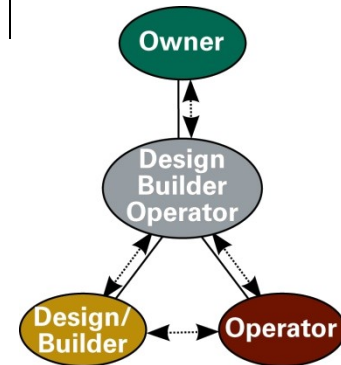
### “Progressive” Design-Build (GMP)



### Lump-Sum Design-Build (LS)



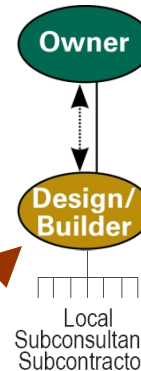
### Design-Build-Operate/Finance, etc.



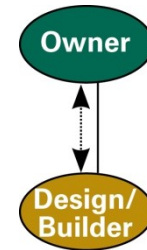
# Distinguishing design-build delivery options

True single contract design-build models offer owners a wide variety of evaluation options, ranging from qualifications-focused to “best value” with a lump-sum price

“Progressive”  
design-build  
(GMP)



Lump-sum  
design-build  
(LS)



Progressive design-build:  
Maximum flexibility for owners

Lump-sum design-build:  
“Performance-based”  
or  
“Prescriptive”

# Design-build nomenclature

## Quasi Design-Build: Multiple Entities

- Design plus CMAR (different engineer and CMAR firm)
- Design plus Early Contractor Action
- Design plus GCCM
- Integrated Delivery

## Design-Build: One Entity

- Progressive DB
- EPCM (Engineer, Procure, Construction)
- Design-CMAR (same firm)
- Lump Sum Design Build



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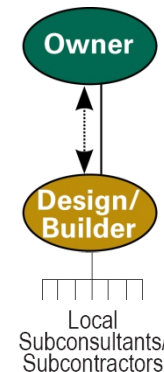
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# Progressive design-build: *A better way?*

## Key Advantages

- Investment in projects, not procurements
- Schedule
- Progressive estimates address owners' challenges
- Better opportunities for local subcontracting
- Capital budget management

## "Progressive" Design-Build (GMP)



# Pros and cons of progressive design-build

## Advantages to Owner

- Simple, inexpensive, quick procurement process
- Potential for increased participation
- Flexibility to complete work based on funding
- Owner can reject lump sum or GMP without significant project delays
- Better chance of designing to budget

## Disadvantages to Owner

- Construction cost is not known at the time of initial contract signing
- Cost determined through negotiated and competitive processes
- May need public education campaign



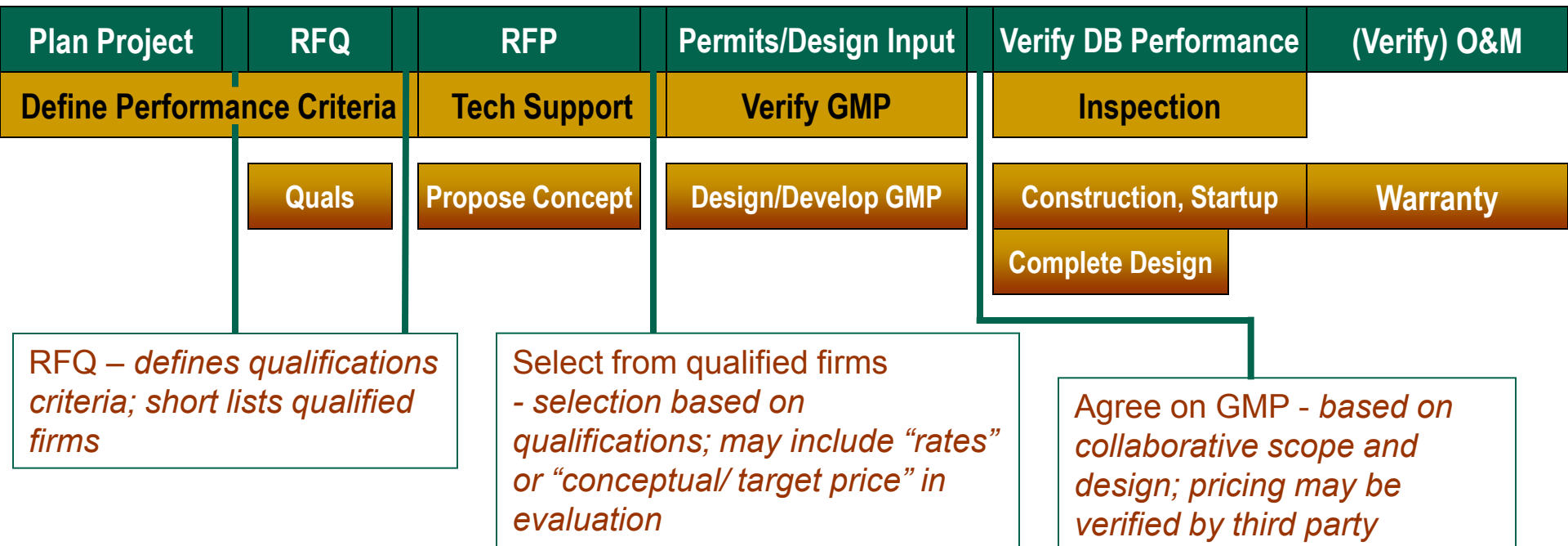
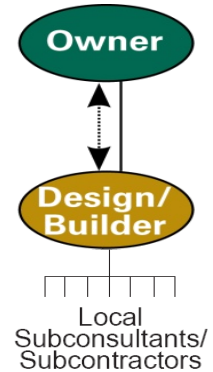
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# “Progressive” design-build procurement model

- “Progressive” model complies with most state design-build statutes as long as some form of “price/cost-related” criteria is included in selection
- Offers owners maximum flexibility/opportunity to collaborate on permitting/ design
- Owners have an “off-ramp” in case of permitting issues or if GMP can’t be negotiated
- Very successful evolving model





# Progressive DB can reduce project complexity and cost . . .

- Owner's staff time and additional technical support for procurement
- Stipends for multiple unsuccessful proposers
- Industry investment in design for proposal
- Additional risk included in ultimate project cost (more unknowns = higher contingency)

## Progressive DB (GMP)

<b>\$</b>	Permits/Design Input	Verify DB Performance	O&M
	Verify GMP	Inspection	
	Design/Develop GMP	Construction, Startup	Warranty
		Complete Design	

## Lump Sum DB (LS)

<b>\$\$\$\$\$\$\$+</b>	Verify DB Performance		O&M
	Verify Design	Inspection	
	Complete Deign, Construction, Startup		Warranty

# . . . And shorten the procurement schedule

- **Timing:** Can procurement process start before all basis of permits are certain?
- **Duration:** Does proposal period need to allow time for design/detailed pricing?
- **Potential for delay:** How many issues/technical questions might arise?

## Progressive DB (GMP)

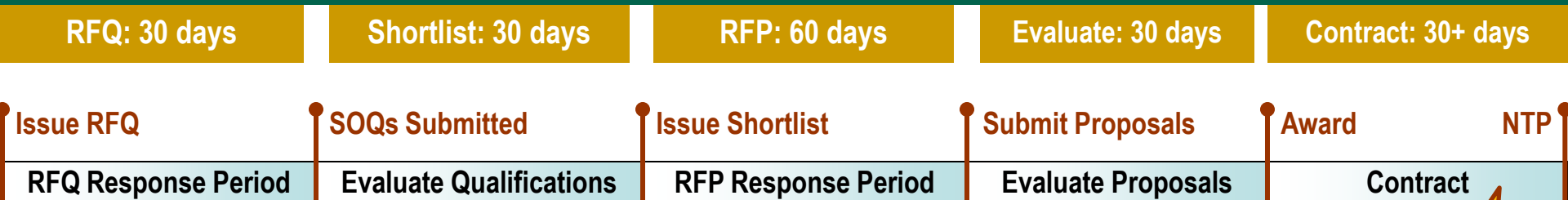
<b>Months</b>	Permits/Design Input	Verify DB Performance	O&M
	Verify GMP	Inspection	
	Design/Develop GMP	Construction, Startup	Warranty
		Complete Design	

## Lump-Sum DB (LS)

<b>Years+</b>	Verify DB Performance		O&M
	Verify Design	Inspection	
	Complete Design, Construction, Startup		Warranty

# Schedule comparison: Typical vs. fast-tracked procurement

## Typical Progressive Design-Build Procurement



6 months

## Fast-Tracked Progressive Design-Build Procurement



3-4 months

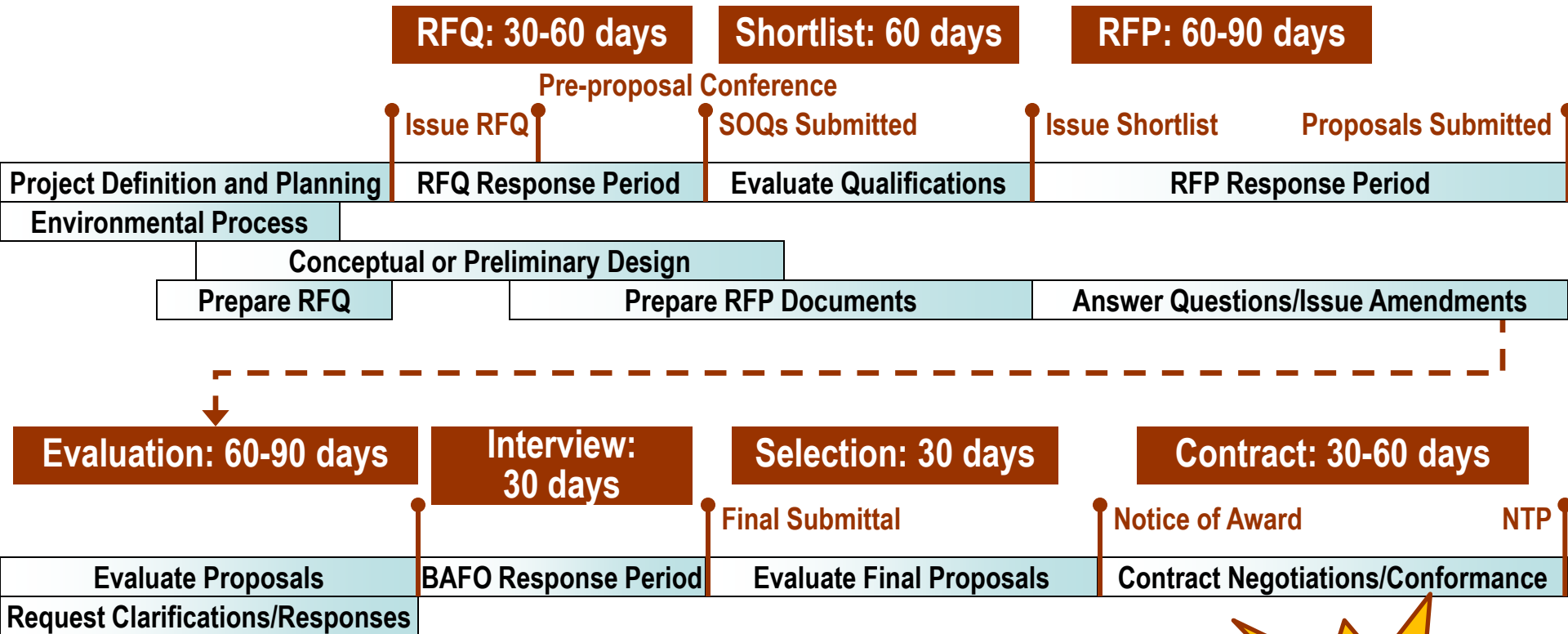


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# Lump-sum procurements can drag out



## Lump Sum Design-Build Procurements

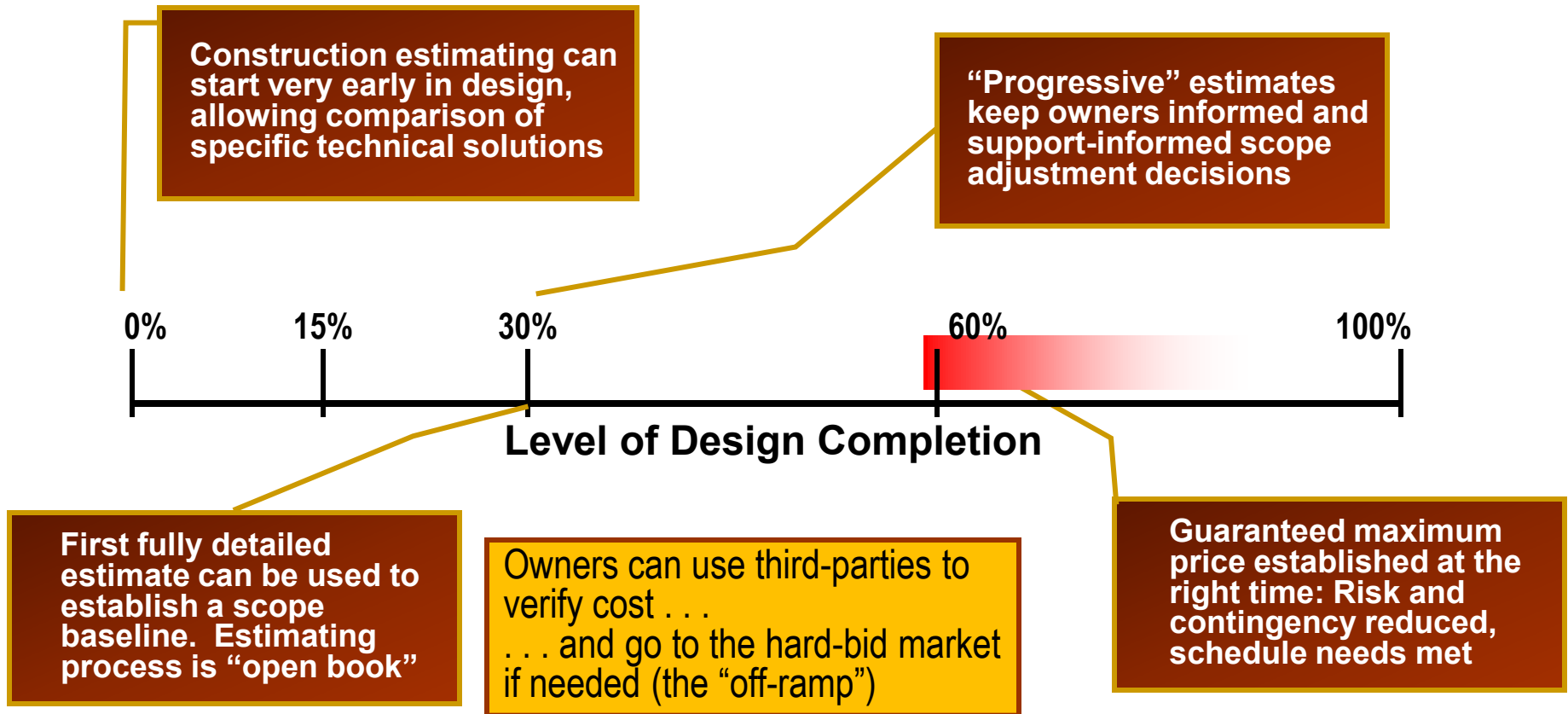


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# Progressive estimates address owners' challenges



# Progressive design-build supports regional firms

- Selection methodology focuses on traditional evaluation criteria
  - **Primarily qualifications based**
  - **Can be tailored to support local expertise/capabilities**
- Proposal preparation significantly less costly
  - **Limited design effort to be performed “on spec”**
  - **Regional firms can support larger teams with minimal proposal investment**
- More flexibility to use regional subs after design-builder selection
  - **Owner can provide input on preferred specialty firms**
  - **Design packages can be developed after the procurement**
- Does not require as much at-risk capability
  - **Subs can participate without taking an at-risk position**



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# Risks managed

- Permitting
- Land Acquisition and Easements
- Geotechnical & Utility risk
- Materials and Equipment escalation
- Capital Cost Availability



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# Owner interaction benefits

- Work with one designer – do it once, right
- Allows direct input from Owner Departments
- Cost analysis of options available as project progresses
- Land acquisition challenges tackled as a team
- Scope adjustments resulting from capital constraints



# Owner questions to facilitate choice of alternate delivery

- Is capital availability uncertain?
- Do staff desire to participate in scope advancement?
- Does project schedule have limited time (less than 9 months) to develop the procurement and enter into contract?
- Will permitting requirements likely impact the scope of the project?



# Owner questions to facilitate choice of alternate delivery (cont'd)

- Will land acquisition likely impact the alignment or orientation of project?
- Does schedule dictate initiation of key project activities before all capital funding available?
- Do state statutes allow use of alternate delivery?

# Top ten success strategies for owners

1. Choose the qualified people you want to work with
2. Consider the approach presented by the potential design-builder
3. Establish a decision-making process for the project to promote rapid decision-making
4. Involve key stakeholders early in design process (e.g.: operations staff)
5. Senior Management (designer-builder and owner)to meet regularly to review project status and issues



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# Top ten success strategies for owners

6. Jointly address permitting issues, track them, and press agencies for action
7. Manage land acquisition as early as possible, including in particular construction easements
8. Communicate capital availability and constraints so they can be integrated into execution plan
9. Incent the project results you wish to accomplish
10. Celebrate interim success milestones

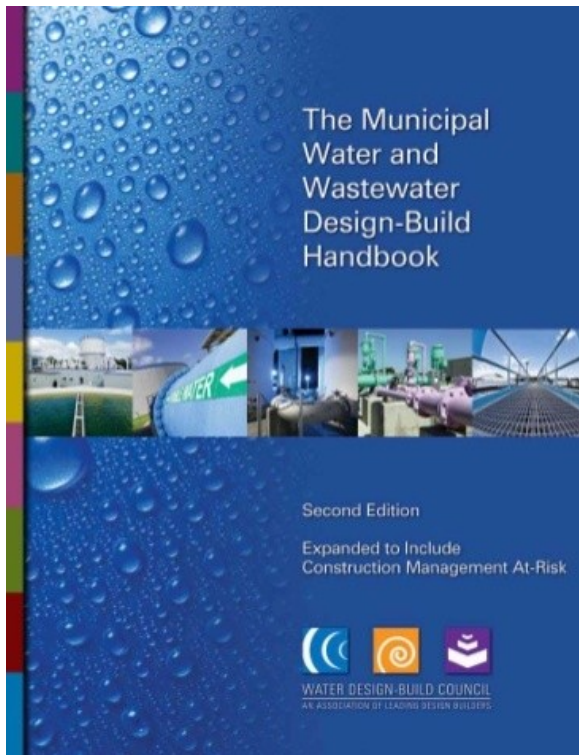


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# Help is available to owners!



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