



Risk Based Capital Planning and Management Approach

***Presented by
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Technical Services Manager***



Risk Based Capital Management

Objectives

- **Improve decision making on asset renewal through improved prioritization of assets across BRA**
- **Improve long-term capital forecasting through improved assessment of renewal needs**

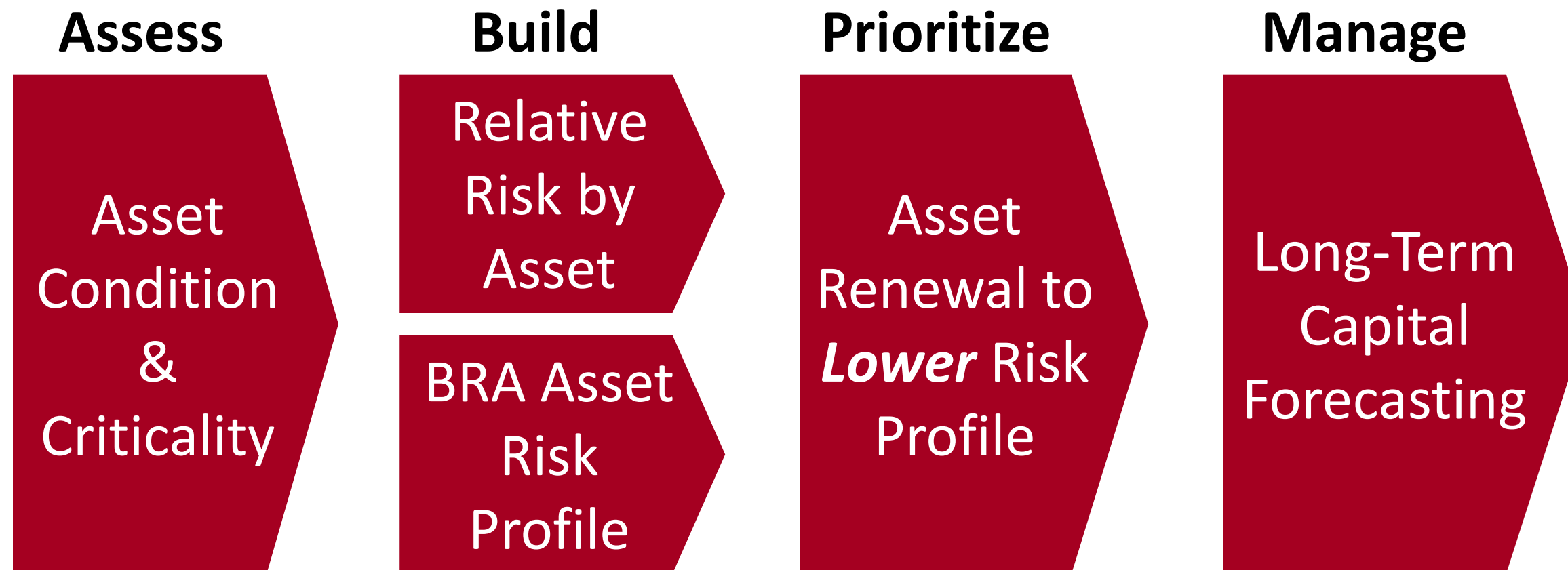
Steering Team

- **Blake Kettler, Don Malovets, Jay Middleton, Davy Moore, Brett Thomas, and Connie Tucker**
- **Brad Brunett, David Collinsworth, Jim Forte, Michael McClendon, David Thompson, and Lauralee Vallon**



Risk Based Capital Management

Process, In General





Risk Based Capital Management

Assessing Assets...

2011 Condition Assessment Standards

		1 Excellent	2 Good	3 Adequate	4 Poor	5 Very Poor
CONDITION	Physical Condition	New or practically new	>75% of effective useful life remaining	75% to 25% of effective useful life remaining	<25% of effective useful life remaining	Failed or failure imminent
	Performance Condition	Meets current & future capacity needs OR Meets current and anticipated future regulations OR Minimal maintenance required to function	NOT USED	Meets current capacity needs but not future OR Meets current regulations but not future OR Routine maintenance required to function	NOT USED	Does not meet current capacity needs OR Does not meet current or future regulations OR Frequent, costly maintenance required to function

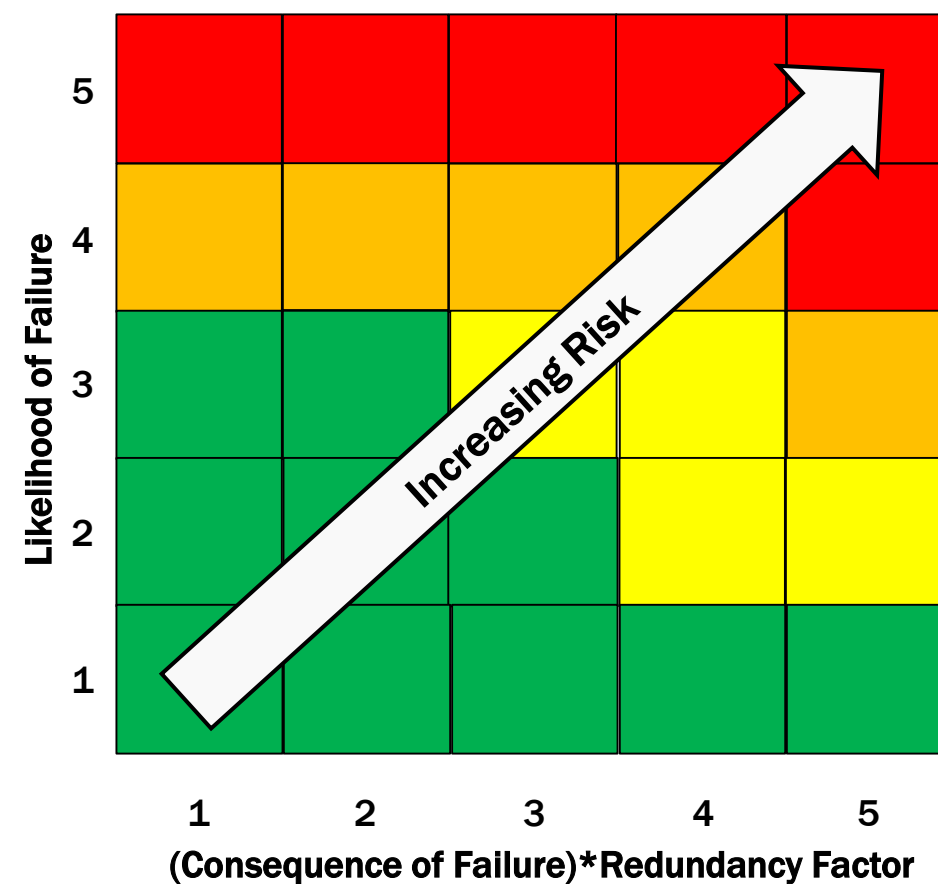
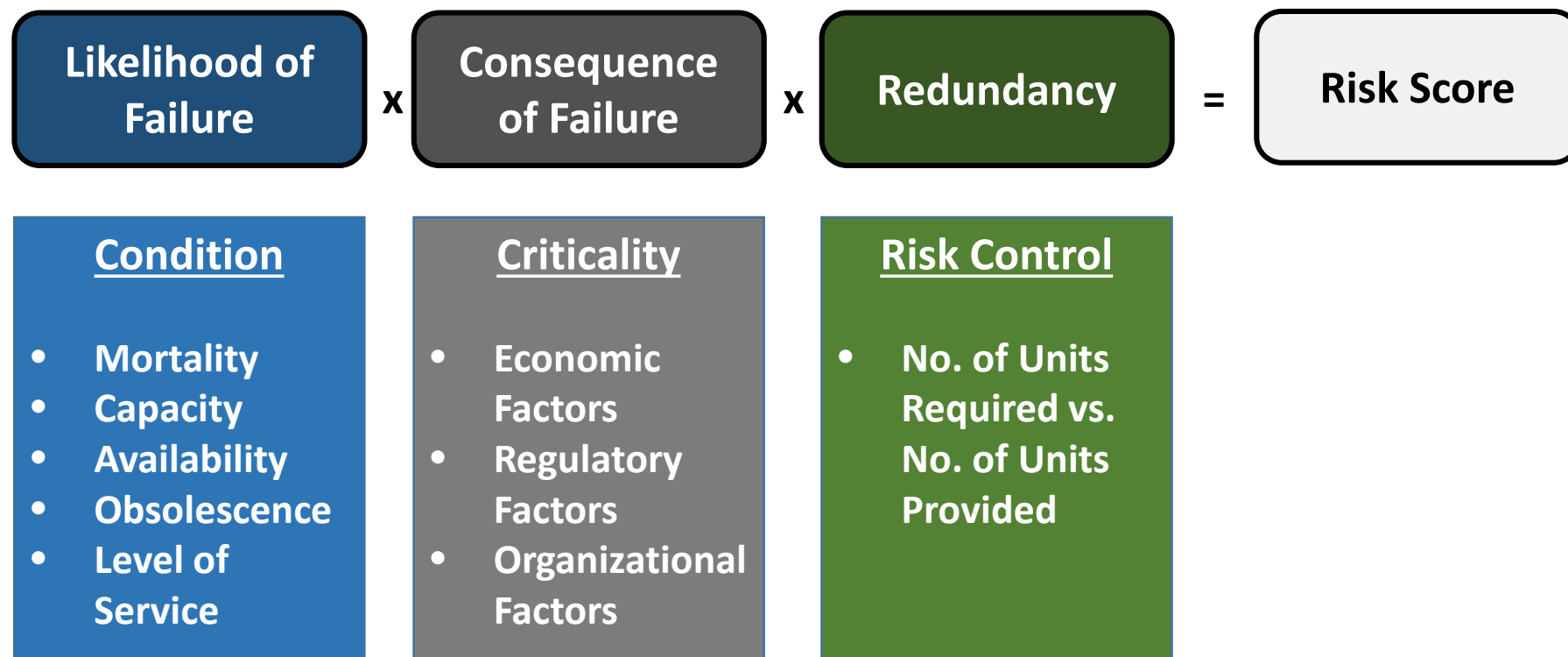
2011 Criticality Assessment Standards

		1 Low Consequence	2 Medium Consequence	3 High Consequence
CRITICALITY	Safety (30%)	No Impact	Minor safety issue resulting in less than 1 day lost time	Serious injury or death to personnel or public
	Customer Service (30%)	No Impact OR Full Redundancy	Short duration localized service outages impacts OR Partial Redundancy	Long duration or Widespread service outages or impacts
	Regulatory Compliance (30%)	No Impact OR Full Redundancy	Minor non-compliance event OR Partial Redundancy	Major State or Federal non-compliance event
	O&M Issues (10%)	No Extraordinary Cost Impact	Significant cost to repair, performed with existing contracts or forces	Large cost to repair, requiring emergency contracts



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Identifying relative asset risk...

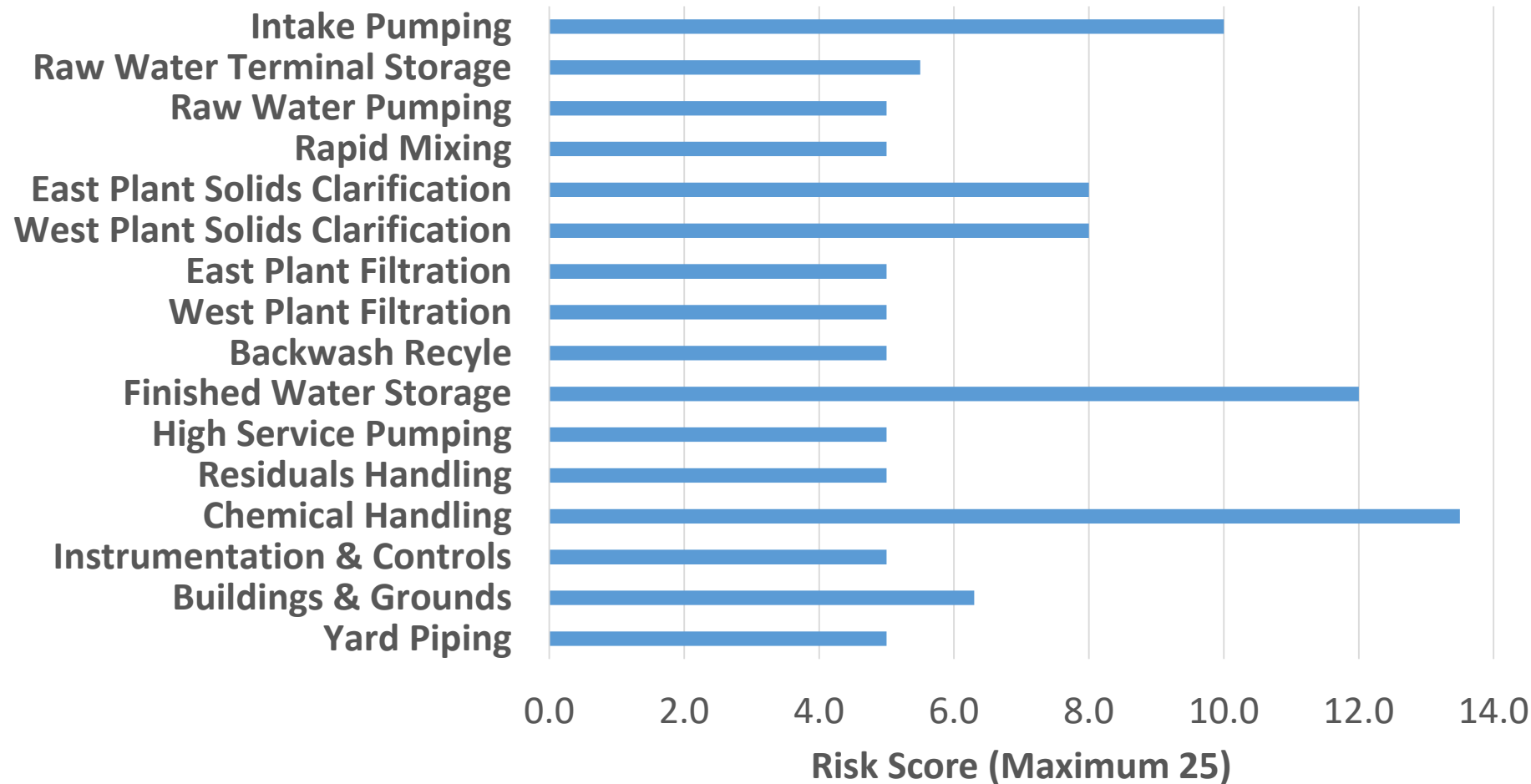
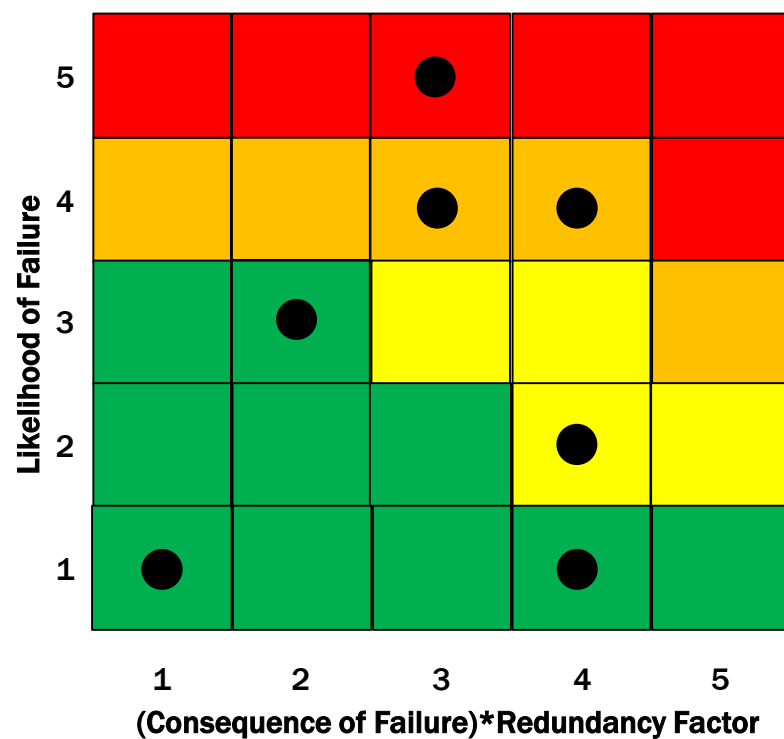




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Reviewing Risk Profile...

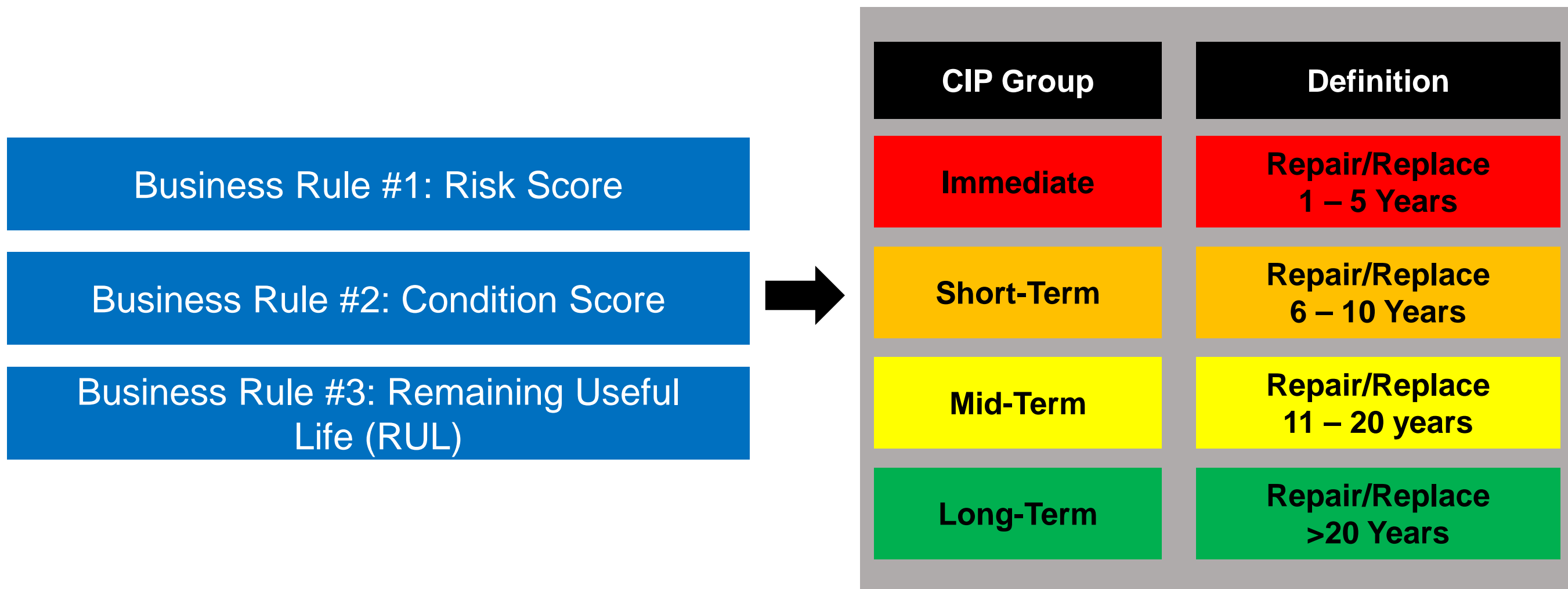
E. Williamson County WTP





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Prioritize Assets to Reduce Risk Profile...

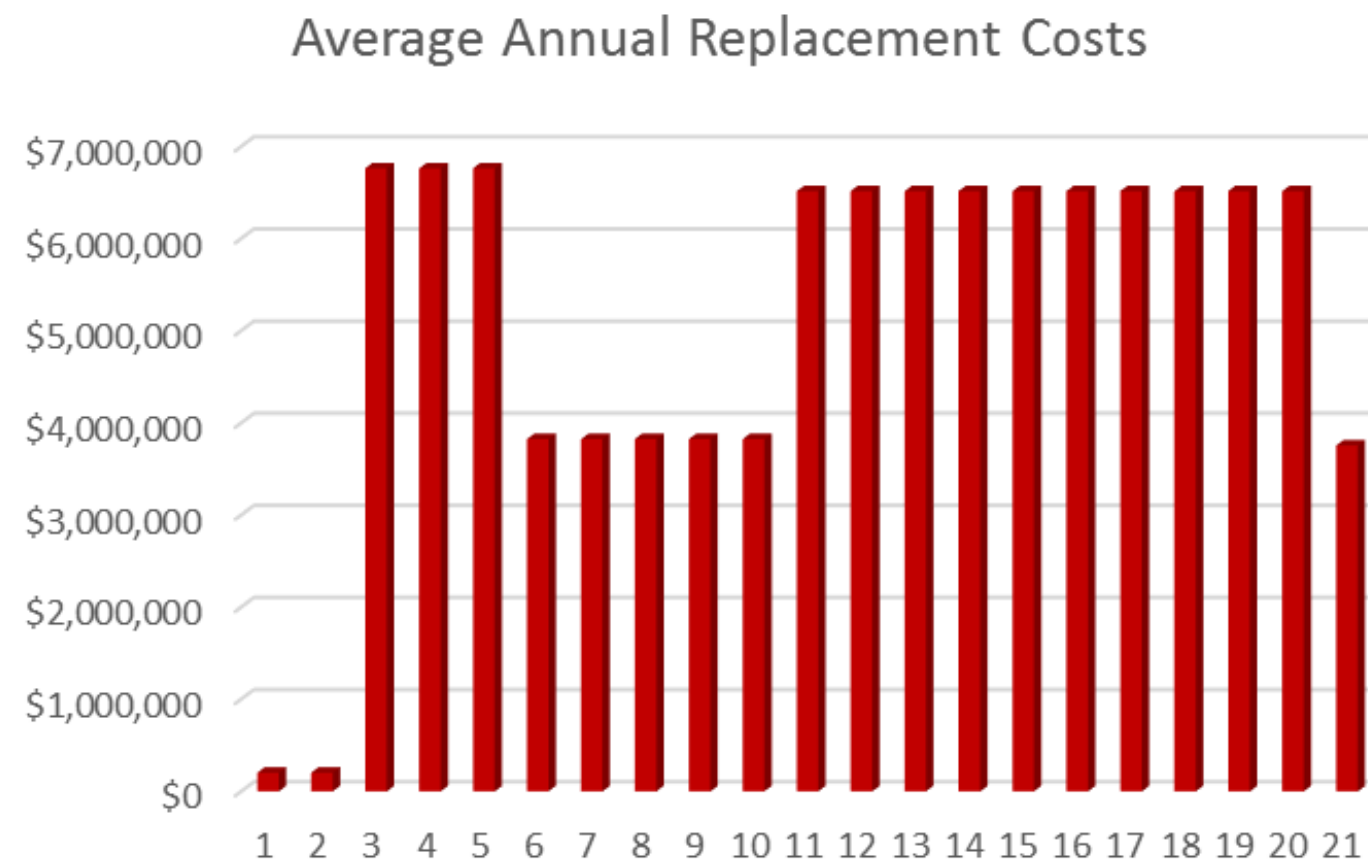




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Use Asset Groups to Improve Long-Term Capital Forecasting...

CIP Group	Definition	Number of Assets	Replacement Cost (000s)
Immediate	1 – 5 Years	371	\$20,695
Short-Term	6 – 10 Years	466	\$19,122
Mid-Term	11 – 20 years	620	\$65,156
Long-Term	>20 Years	25	\$3,754





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Next Steps

- **FY19 Efforts**
 - **Establish asset hierarchy to assign criticality information to groups of assets**
 - **Map hierarchy to Infor financial database**
 - **Perform gap analysis on asset database**
 - **Initial assignment of criticality data to asset list**



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Next Steps

- **FY20 Efforts**
 - **Develop condition assessment data for all assets**
 - **Finalize criticality data for all assets**
 - **Use prioritization to frame FY21 CIP planning decisions**
 - **Develop initial estimates of replacement cost and timing for all assets**



Brazos River Authority



Brazos

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RIVER AUTHORITY