Risk Based Capital Management Update

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**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
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Process, In General

Assess
Asset Condition & Criticality

Build
Relative Risk by Asset
BRA Asset Risk Profile

Prioritize
Asset Renewal to Lower Risk Profile

Manage
Long-Term Capital Forecasting
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Identifying relative asset risk...

\[
\text{Likelihood of Failure} \times \text{Consequence of Failure} \times \text{Redundancy} = \text{Risk Score}
\]

Condition
- Mortality
- Capacity
- Availability
- Obsolescence
- Level of Service

Criticality
- Economic Factors
- Regulatory Factors
- Organizational Factors

Risk Control
- No. of Units Required vs. No. of Units Provided

Meeting Date: April 29, 2019
Risk Based Capital Management

Prioritize Assets to Reduce Risk Profile...

<table>
<thead>
<tr>
<th>CIP Group</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>Repair/Replace 1 – 5 Years</td>
</tr>
<tr>
<td>Short-Term</td>
<td>Repair/Replace 6 – 10 Years</td>
</tr>
<tr>
<td>Mid-Term</td>
<td>Repair/Replace 11 – 20 years</td>
</tr>
<tr>
<td>Long-Term</td>
<td>Repair/Replace &gt;20 Years</td>
</tr>
</tbody>
</table>

Business Rule #1: Risk Score
Business Rule #2: Condition Score
Business Rule #3: Remaining Useful Life (RUL)
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Updates from January

• Selected David Jones to serve as Capital Improvements Planning Administrator

• Reviewed Asset Hierarchies for:
  • Dams
  • Temple-Belton WWTP
  • East Williamson County WTP

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Next Steps

• FY19 Efforts
  • Map hierarchy to Infor financial database
  • Initial assignment of criticality information to groups of assets
  • Perform gap analysis on asset database
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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