



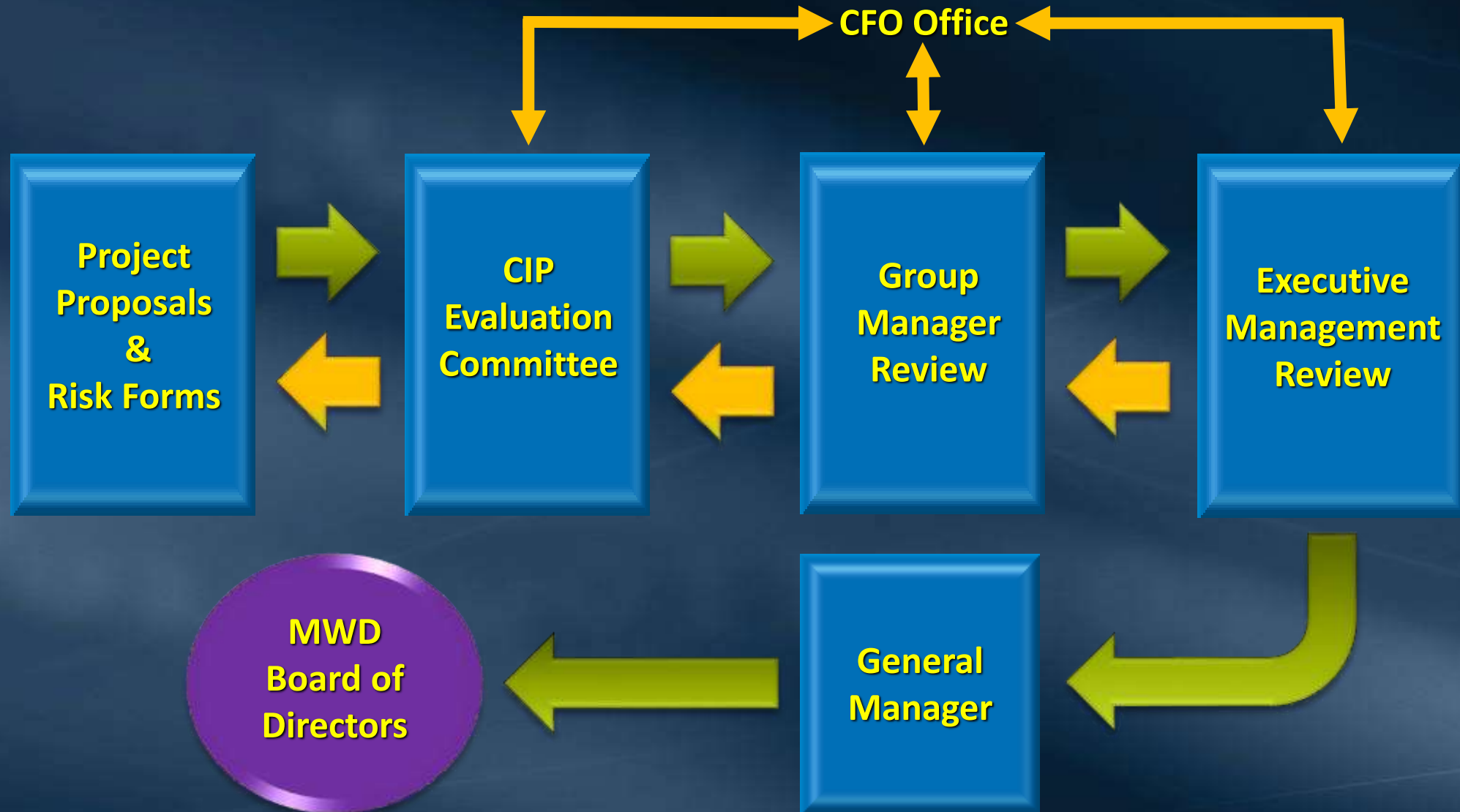
Proposed Capital Investment Plan Biennial Budget for FYs 2022/23 and 2023/24

Engineering and Operations Committee
Item 6b
March 7, 2022

Capital Investment Plan Presentation Overview

- CIP budget development process
- Enhanced CIP Risk Framework
- Overview of proposed CIP

CIP Development Process



Development of Enhanced CIP Risk Framework and Inclusion in the CIP Development Process

Asset Management (AM) Program

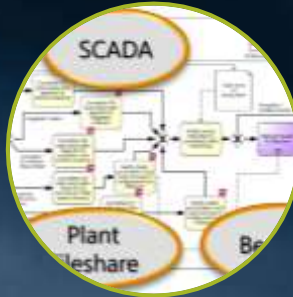


Achieve success
through our people

AM strategy & planning

Sustainable
AM governance

Cultural transformation



Make our processes
more effective

AM decision making tools

Comprehensive
lifecycle approach

AM reporting &
quality assurance



Maximize value
from assets

Asset knowledge
management

Condition &
performance monitoring

Tactical AM Plans
(TAMPs)

Risk Framework

Objectives



Uniform
definition
of risk



Be aligned with
best-in-class

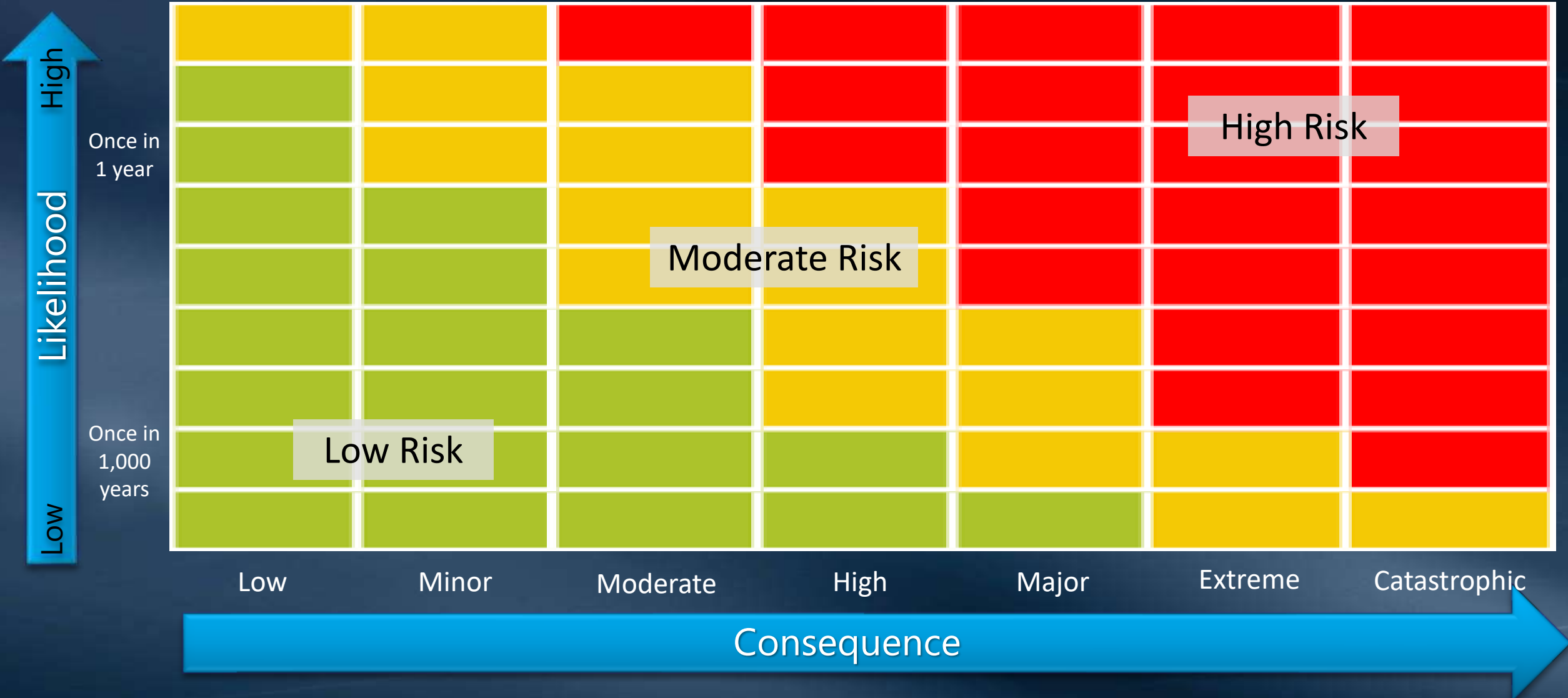


Capture expert
knowledge



Repeatable
& sustainable
process

Risk Heatmap



Likelihood of Hazard

Example hazards



Earthquake



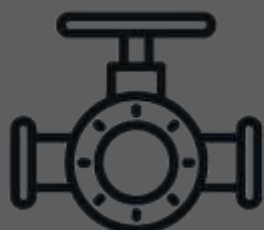
Pipe Leak



Fire



Broken Pump



Failed Valve



Pressure Surge

Frequency ranges



10 times a year

Within a year

Within 10 years

Within 50 years

Within 100 years

Within 500 years

Consequence of Hazard



	Low	Minor	Moderate	High	Major	Extreme	Catastrophic
Safety	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
Compliance & Legal	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
Reputation	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
Financial Impact	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>
Reliable Service	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div></div>

 Safety

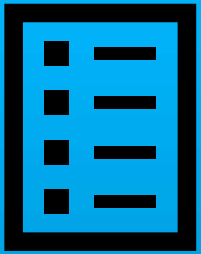
 Compliance & Legal

 Reputation

 Financial Impact

 Reliable Service

How was risk considered in this CIP budget?



Define top 3 risks



Perform
quality assurance

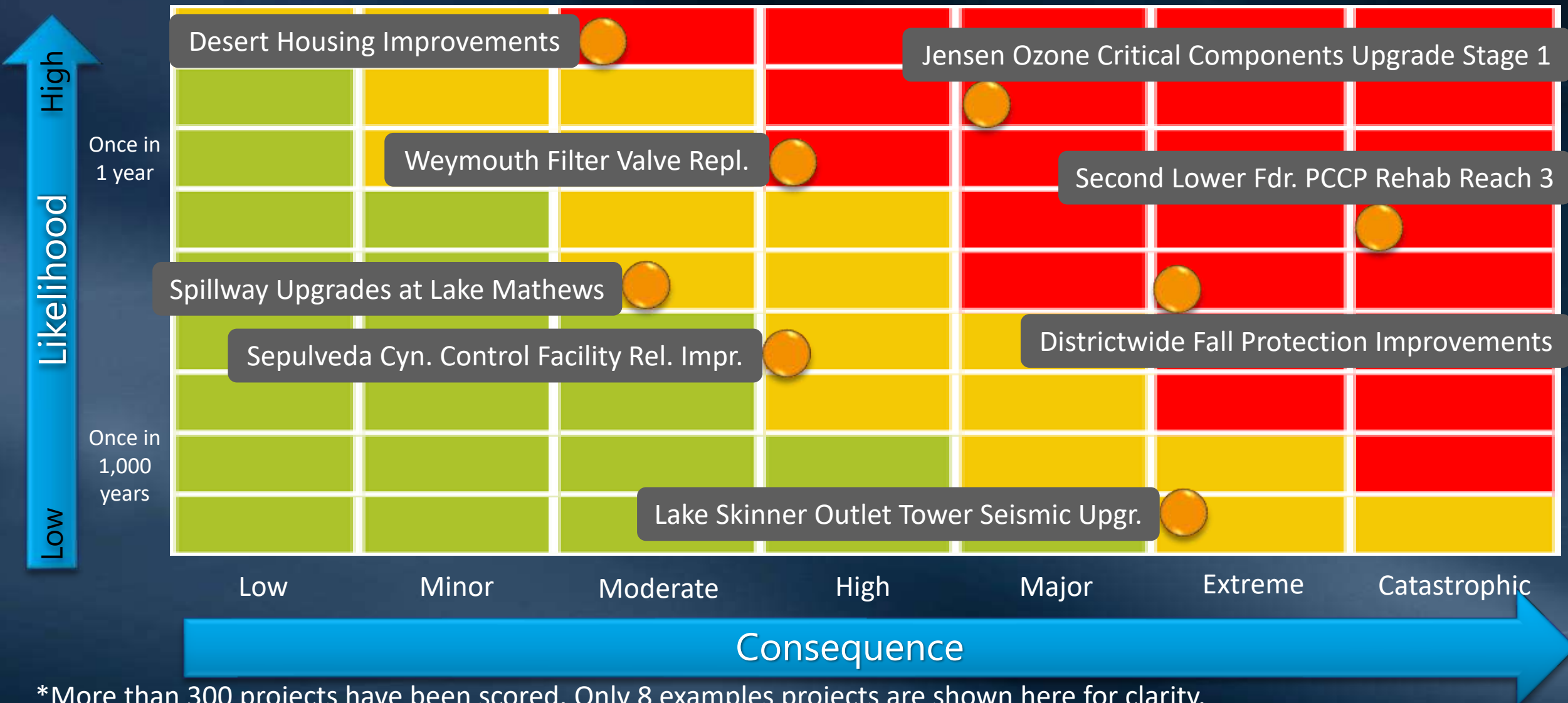


Consider risk in
CIP scoring &
prioritization



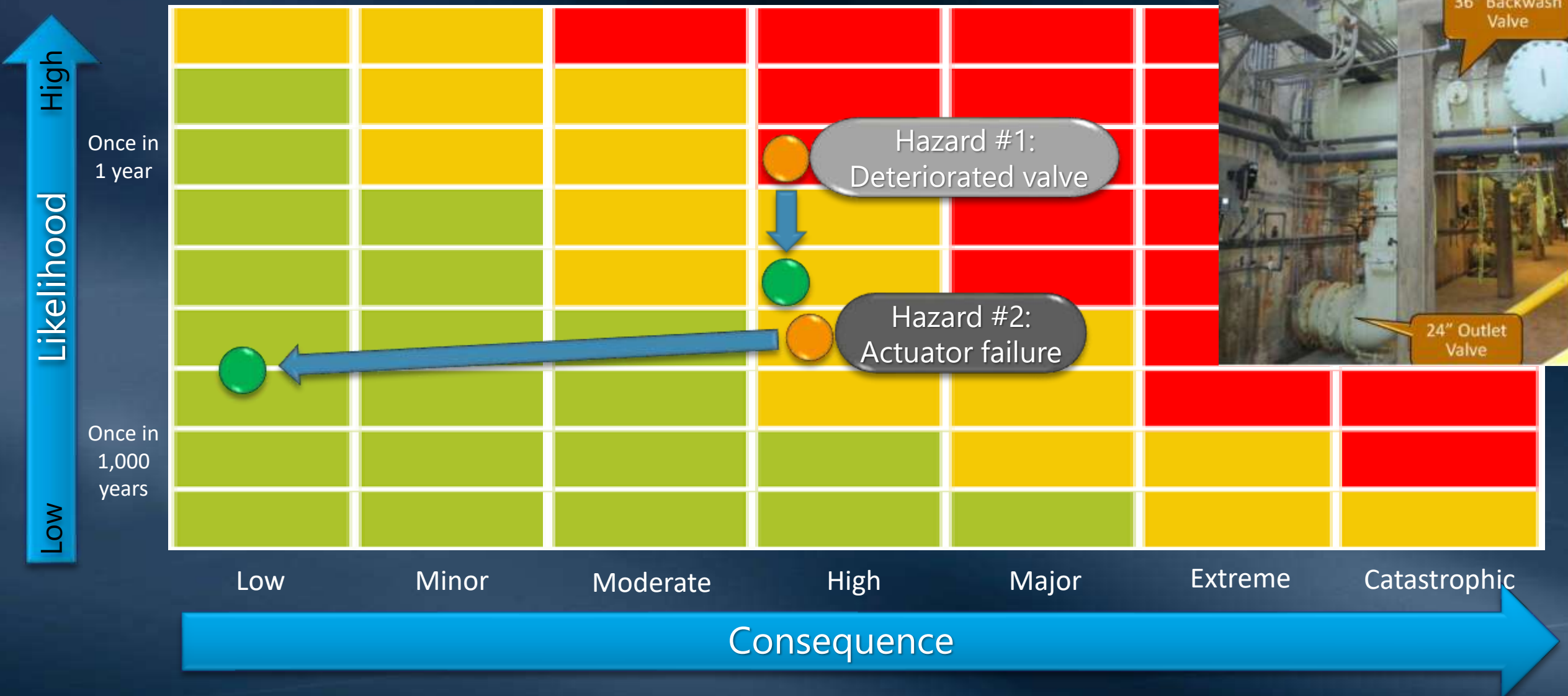
Review risk prior to
contract bid

Sample* of Projects w/ Pre-Mitigation Risk



*More than 300 projects have been scored. Only 8 examples projects are shown here for clarity.

Example: Weymouth Filter Valve Replacement



Successful Pilot

Valuable risk info on +300 capital projects

Automated & sustainable workflow

Data-informed approach to tap into expert insight

Alignment with best-in-class



**Enhanced
CIP Approach**

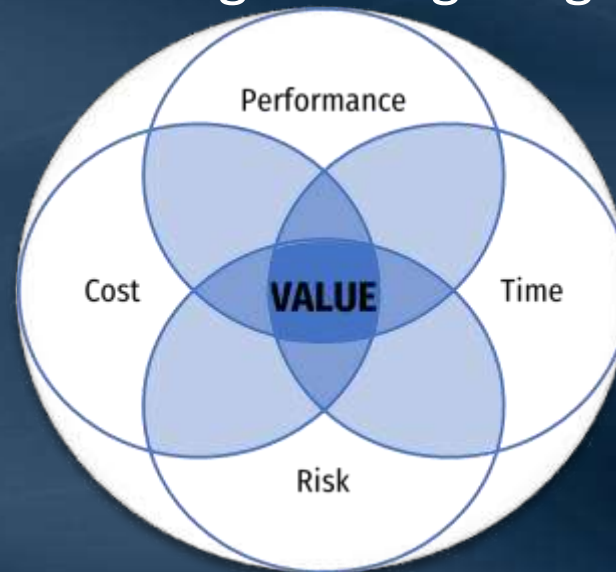
Value Engineering Program

Improving overall value of CIP projects



CIP Project Delivery Process

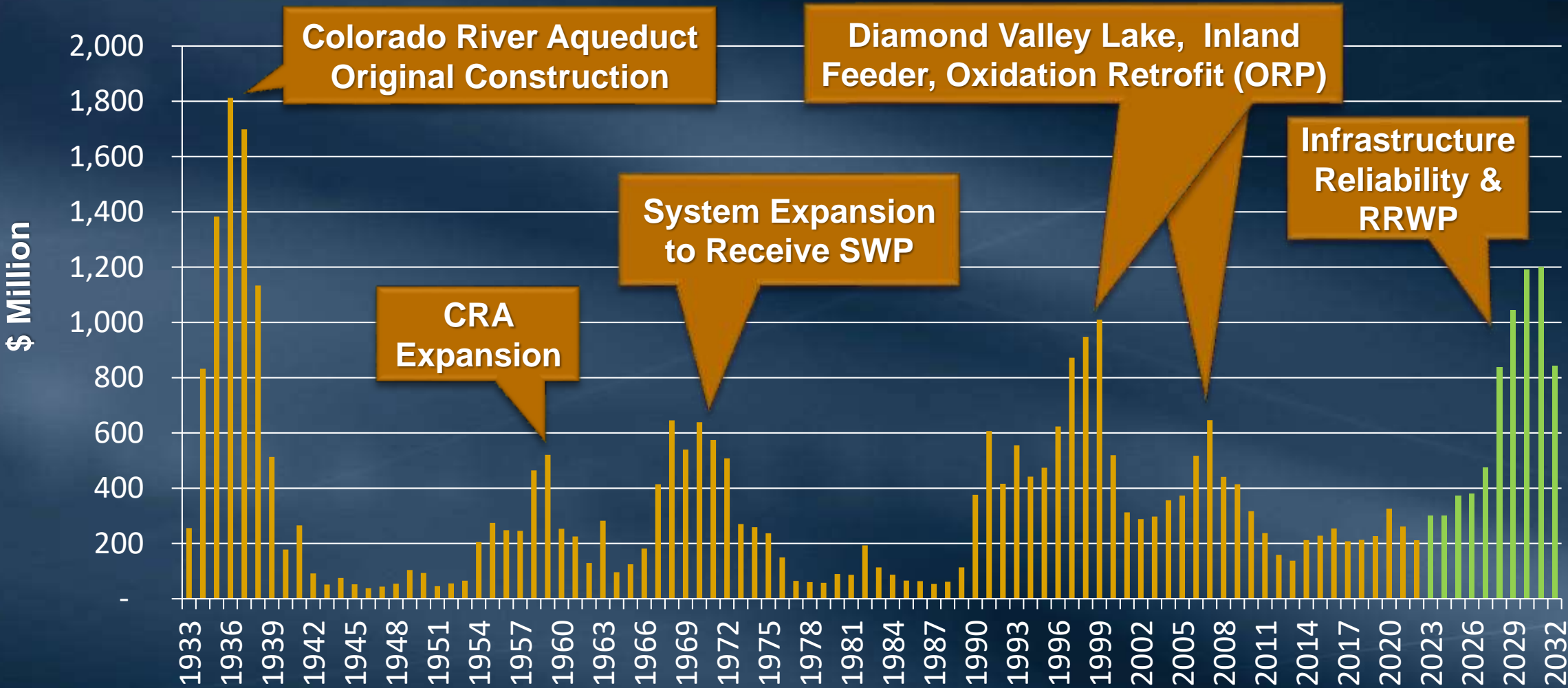
Value Engineering Program



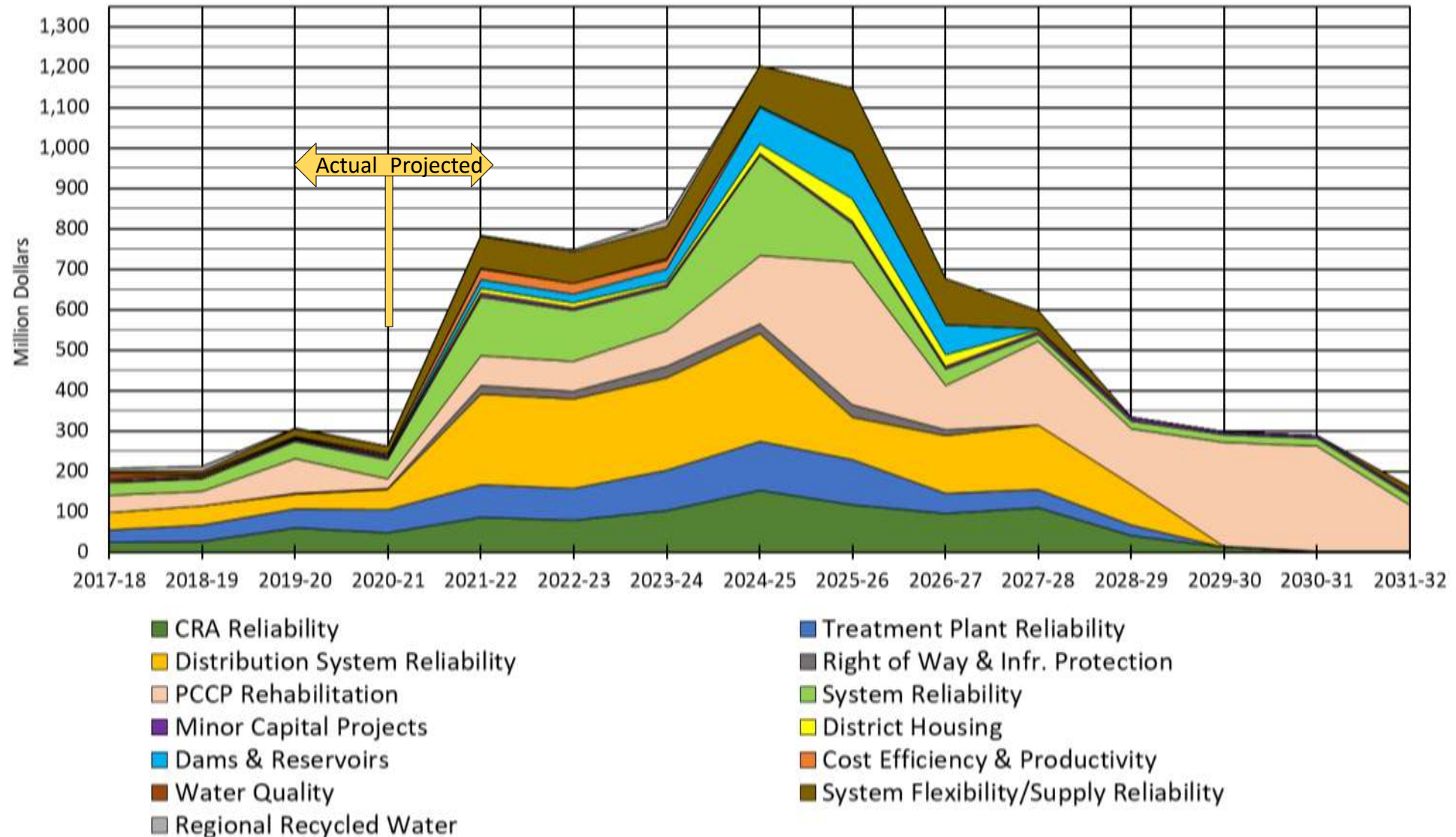
Capital Investment Plan Recommendation

Historical Capital Expenditures

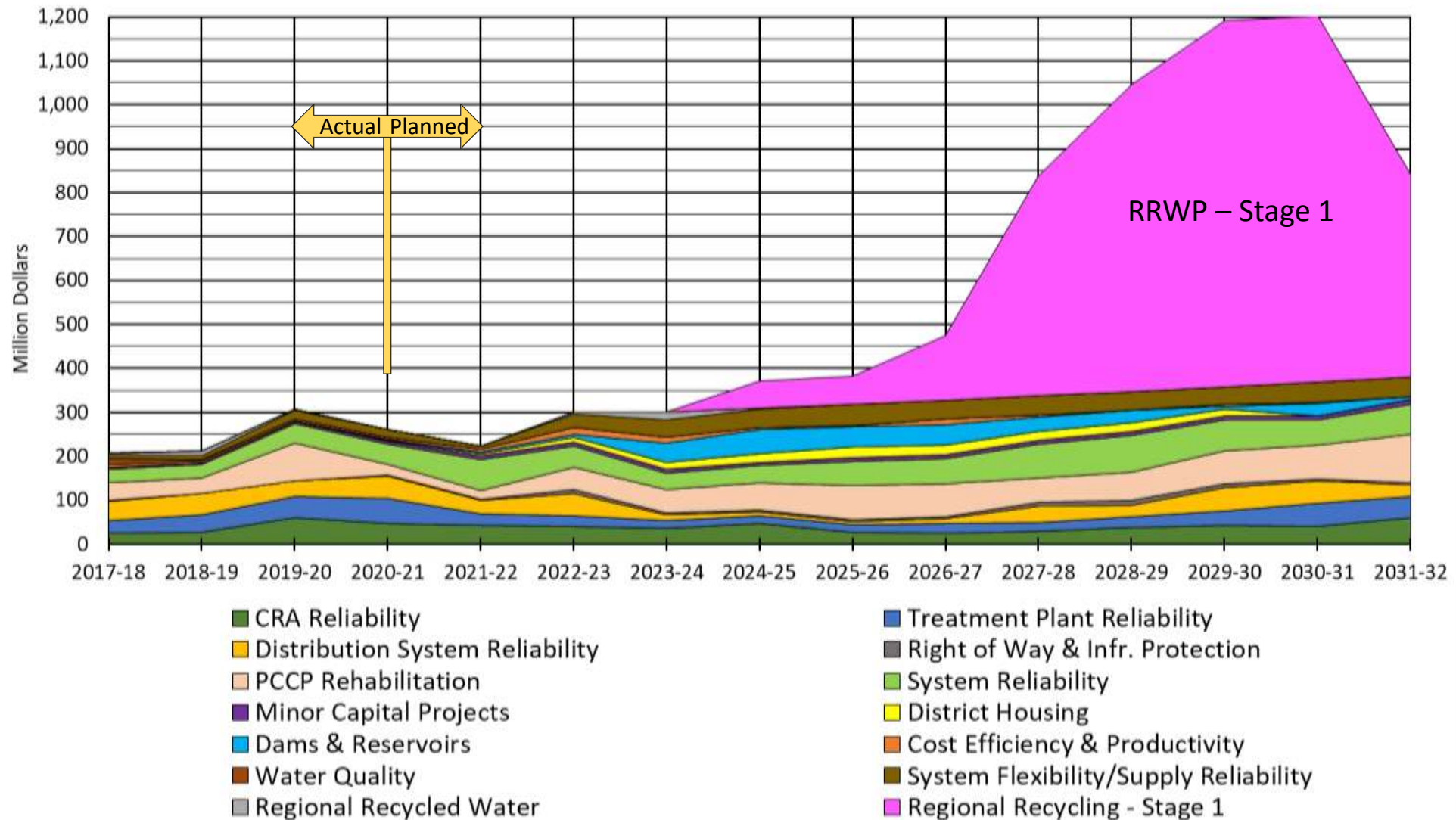
(Adjusted to Current \$)



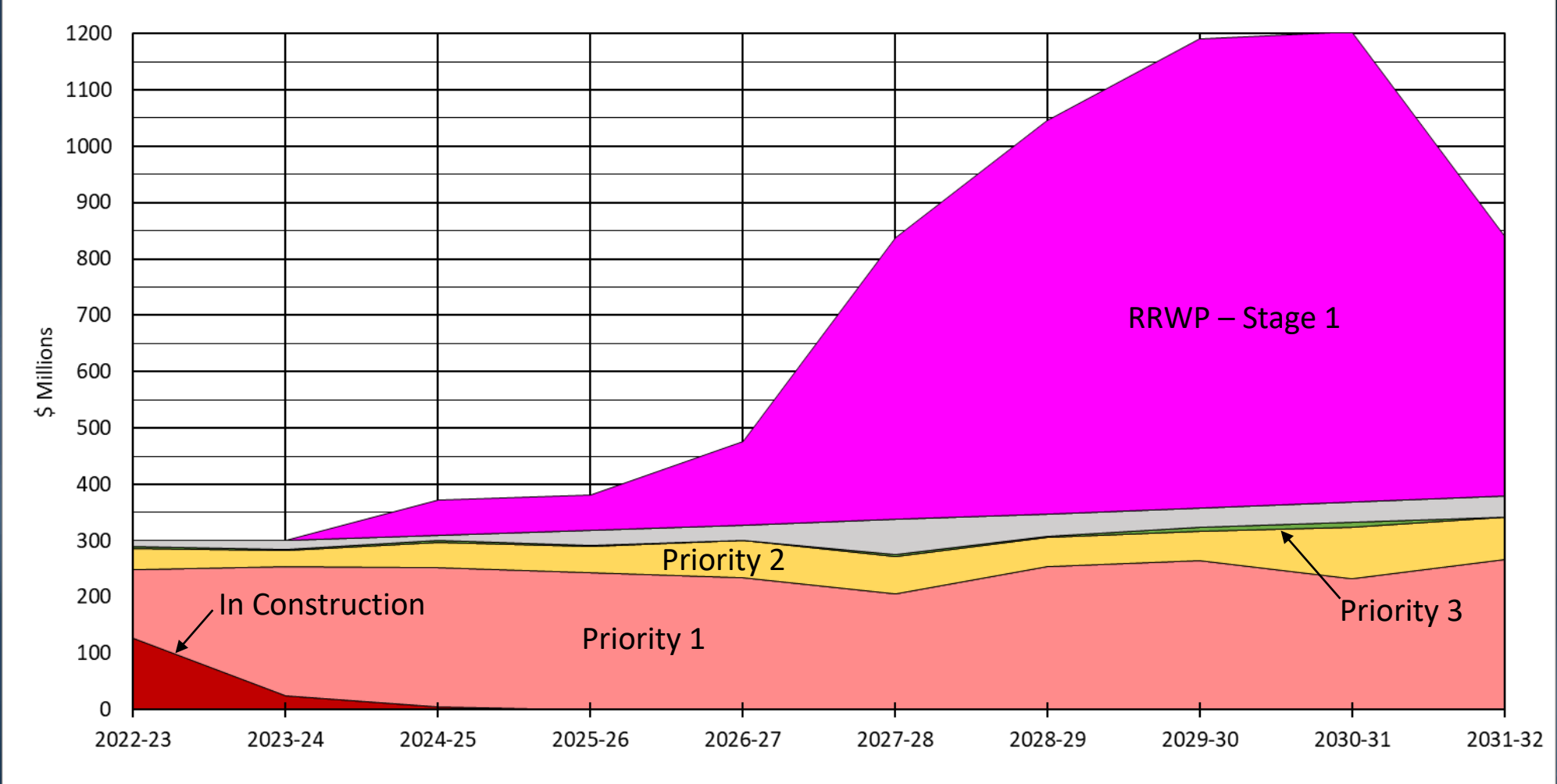
Projected & Unleveled CIP Expenditures by Program



Recent & Planned CIP Expenditures by Program



Planned CIP Expenditures by Sponsor Priorities



Proposed CIP for FY 2022/23 - 2023/24 by Program

Programs

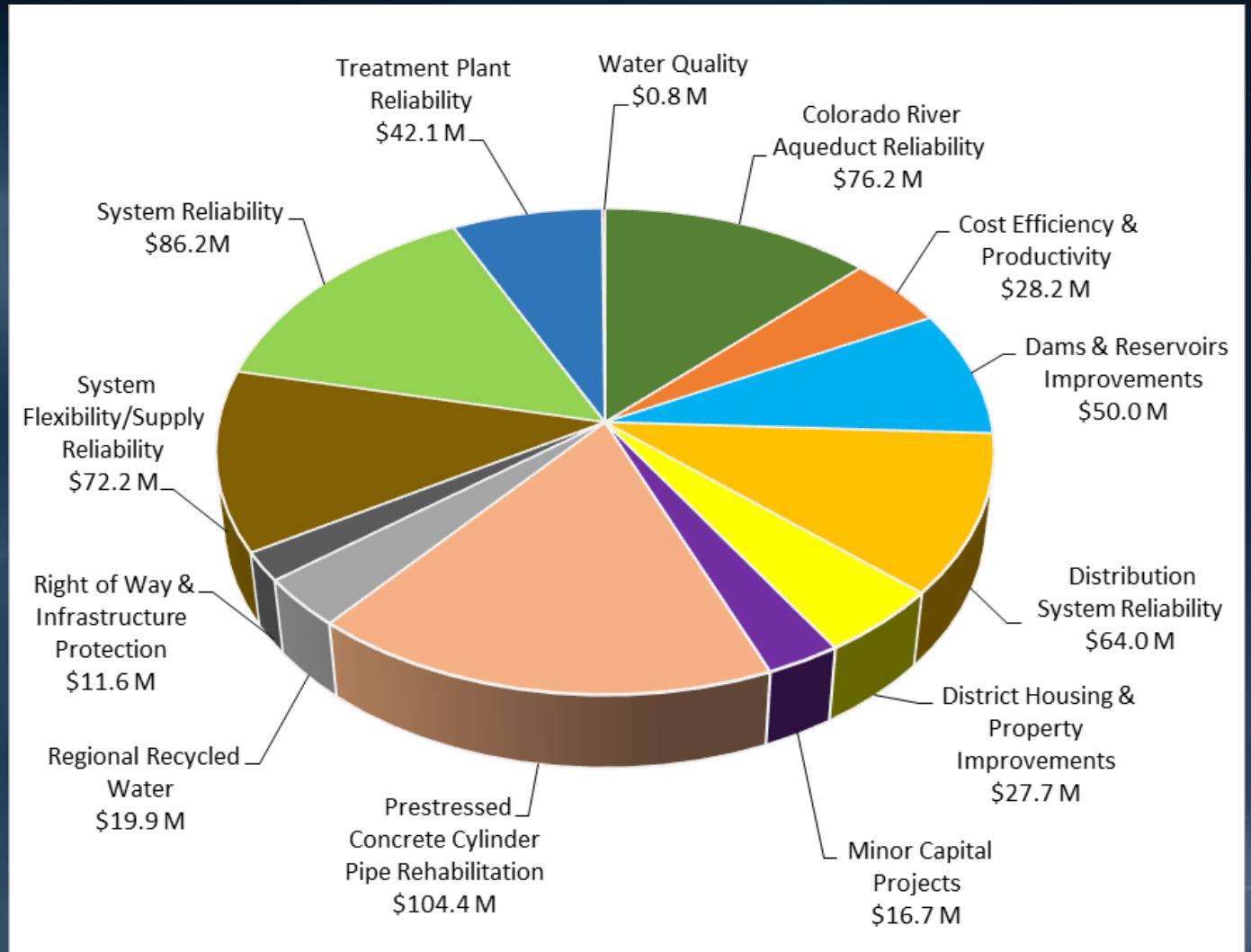
13



Projects

450*

* Excluding Minor Capital Projects



Ten-Year CIP Projection: FY 2022/23 - 2031/32

by Program

- Planned Expenditures: **\$7 billion**

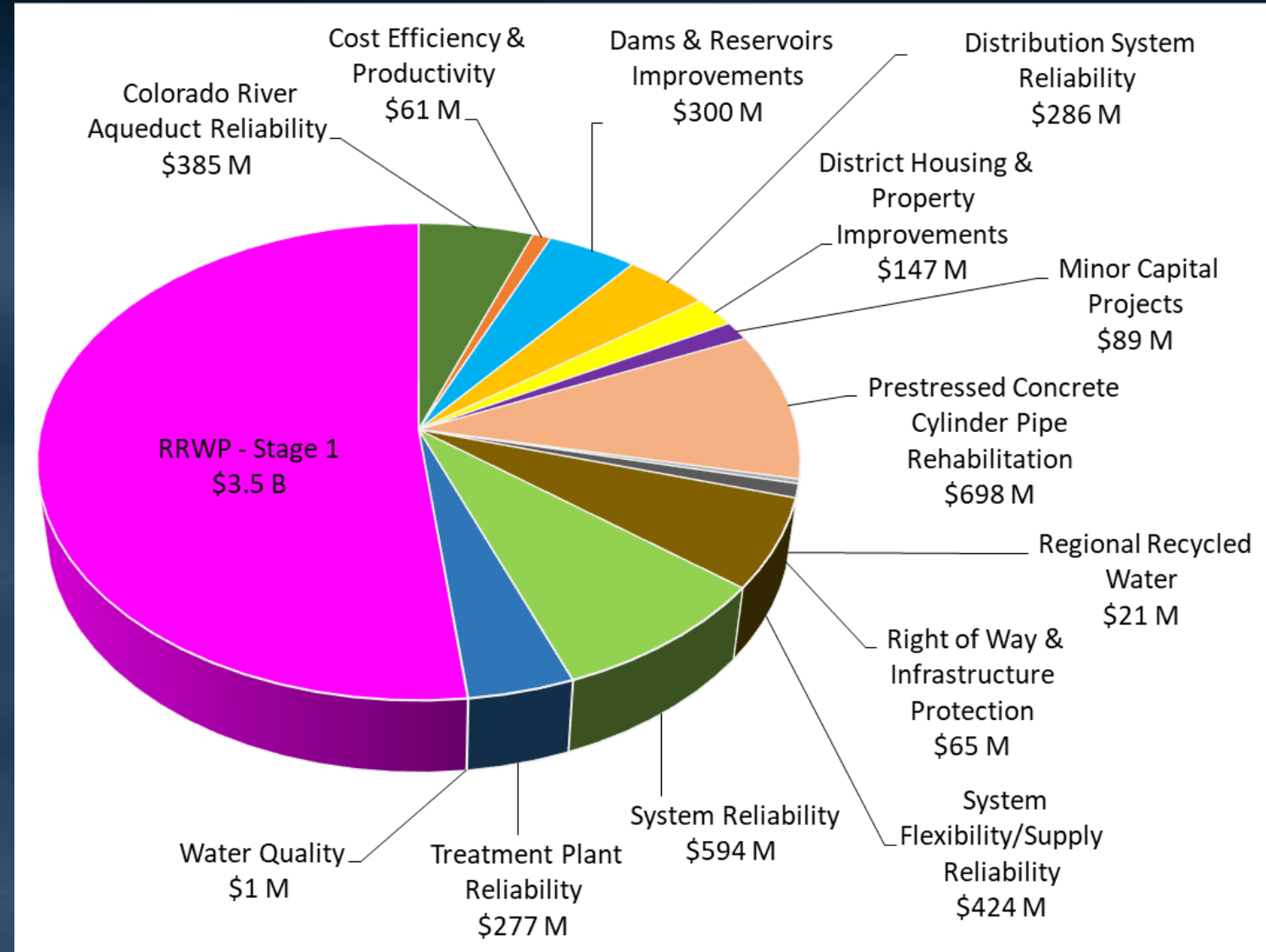
- RRWP: **\$3.5 B**

- PCCP: **\$698 M**

- CRA: **\$385 M**

- Drought: **\$283 M**

- SCADA: **\$173 M**



Proposed CIP for FYs 2022/23 - 2023/24

- 2-Year planned spending of \$600 million
 - \$300 million each year
 - Projects identified in the CIP Appendix
- April Board actions
 - Appropriate \$600 M
 - Authorize GM authority
 - Initiate or proceed with work on planned capital projects identified in CIP Appendix

CIP for FY 2022/23 & FY 2023/24

- Included in the planned expenditures
 - Approx. 450 projects, not including Minor Capital Projects
 - DVL recreation: new and R&R
 - Direct Potable Reuse Demonstration Facility
 - Drought-related projects
- Not included in the planned expenditures
 - Full-scale regional recycled water projects – environmental documentation being prepared using O&M funds
 - New regional reservoir
 - Unplanned projects – projects not identified in CIP Appendix

Potential Early Addition of RRWP to the CIP

- State and Federal funding potentially available for RRWP in the upcoming biennium
- Potential action: move RRWP into CIP
- Impacts of Board moving RRWP into the CIP
 - Facilitates staff pursuit of outside funding
 - Staff can commence preliminary design and detailed program planning
 - Would result in approximately \$25M to \$30M of additional capital expenditures in upcoming biennium, in addition to currently planned expenditures for environmental planning efforts

