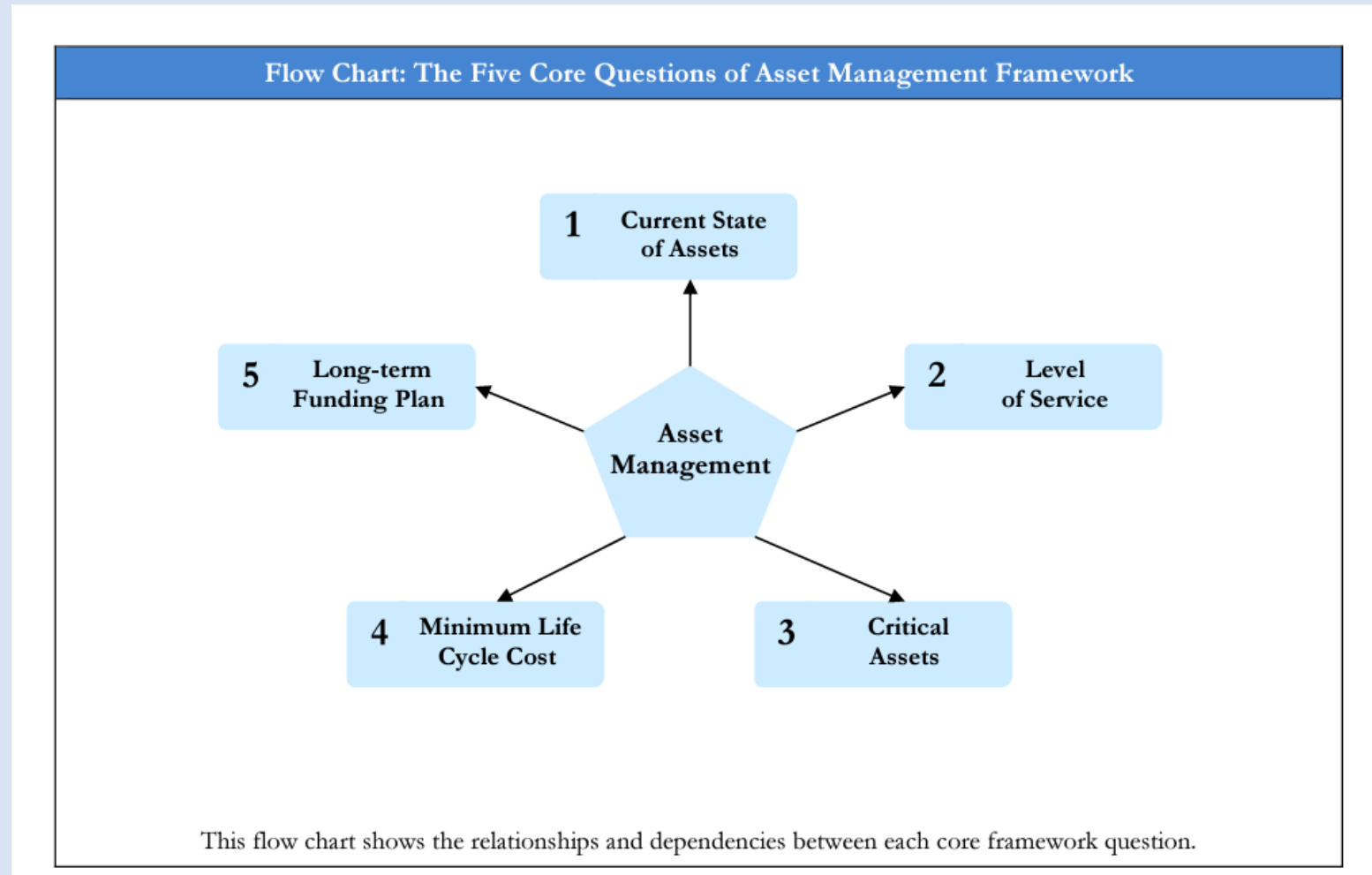


Green Asset Management: Long-term Funding Plan

David Reazin
EPA Region 6

Green Asset Management Framework

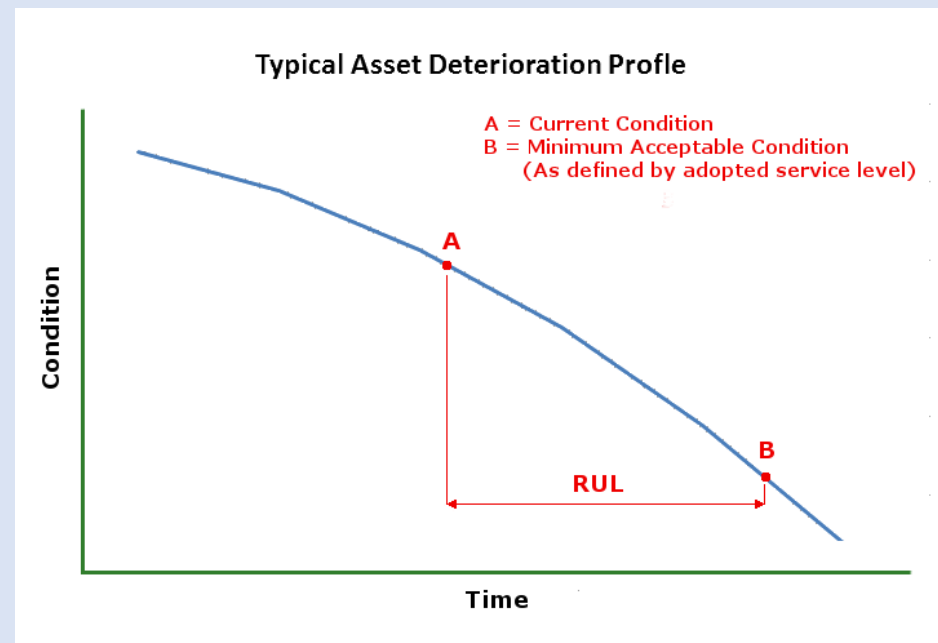


Useful Life

An estimate of how long you can reasonably expect to use an asset for the benefit of your organization.

Useful Life

An estimate of how long you can reasonably expect to use an asset for the benefit of your organization.



Gray Infrastructure Useful Life

<u>Components</u>	<u>Years</u>
Wells and Springs	25
Intake Structures	35
Pumping Equipment	10
Disinfection Equipment	5
Hydropneumatic Tanks	10
Concrete and metal storage tanks	30
Transmission structures (pipes)	35
Valves	35

Green Infrastructure Useful Life

(Disclaimer: Estimates for discussion purposes only to show variables for this presentation)

<u>Best Management Practice</u>	<u>Years</u>	<u>Best Management Practice</u>	<u>Years</u>
Rain Gardens	25 – 50	Green Streets	25 – 30
Vegetated Swales	25 – 30	Green Corridors / Greenbelts	50 – 100
Detention / Retention Basins	40 – 50	Stormwater Parks	100 +
Green Roofs	30 – 50	Wetland Restoration and Protection	40 - 50
Rainwater Harvesting	20 – 30	Floodplain Restoration	40 – 50
Permeable Pavement	20 – 40	Riparian Buffer Strips	25 – 40
Tree Canopy	50 +		

Impacts on Useful Life

- Environmental:



Google Images site.

Impacts on Useful Life

- Environmental:
 - hydrology
 - erosion and sedimentation
 - intensity of storm events
 - vegetation coverage
 - gray infrastructure upstream/downstream
 - urban development and stormwater runoff
 - irrigation
 - invasive species
 - drought

Impacts on Useful Life

- Administrative:



Google Images site.

Impacts on Useful Life

- Administrative:
 - Education / training
 - frequency and thoroughness of inspections
 - funding for corrective actions

Capital Improvement Plan



Google Images site.

Capital Improvement Plan

A community planning and fiscal management tool:

- to coordinate the location, timing and financing of capital improvements over a multi-year period — usually 4-6 years.
- anticipate expenses of large capital costs for replacement projects

Capital Improvement Plan for GI Projects

(Disclaimer: Estimates for discussion purposes only to show variables for this presentation)

Year	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6	Annual Cost
2023		\$1,000			\$1,000		\$2,000
2024	\$4,000		\$5,000			\$2,000	\$11,000
2025				\$2,000			\$2,000
2026	\$1,200	\$6,000			\$500		\$7,700
2027						\$7,000	\$7,000
2028	\$6,000		\$6,000				\$12,000
2029		\$8,000		\$120,000			\$128,000
2030					\$4,500		\$4,500
2031	\$1,500					\$1,000	\$2,500
2032		\$2,000		\$1,000			\$3,000
2033			\$9,000				\$9,000
2034	\$75,000				\$80,000		\$155,000
2035		\$7,000		\$2,000		\$3,000	\$12,000
2036					\$4,000		\$4,000
2037	\$2,500			\$1,000		\$60,000	\$63,500
2038		3000			\$2,000		\$5,000
2039			\$6,000				\$6,000
2040	\$4,000	\$3,000		\$3,000		\$1,000	\$11,000

Red – Replacement Cost

Funding Considerations

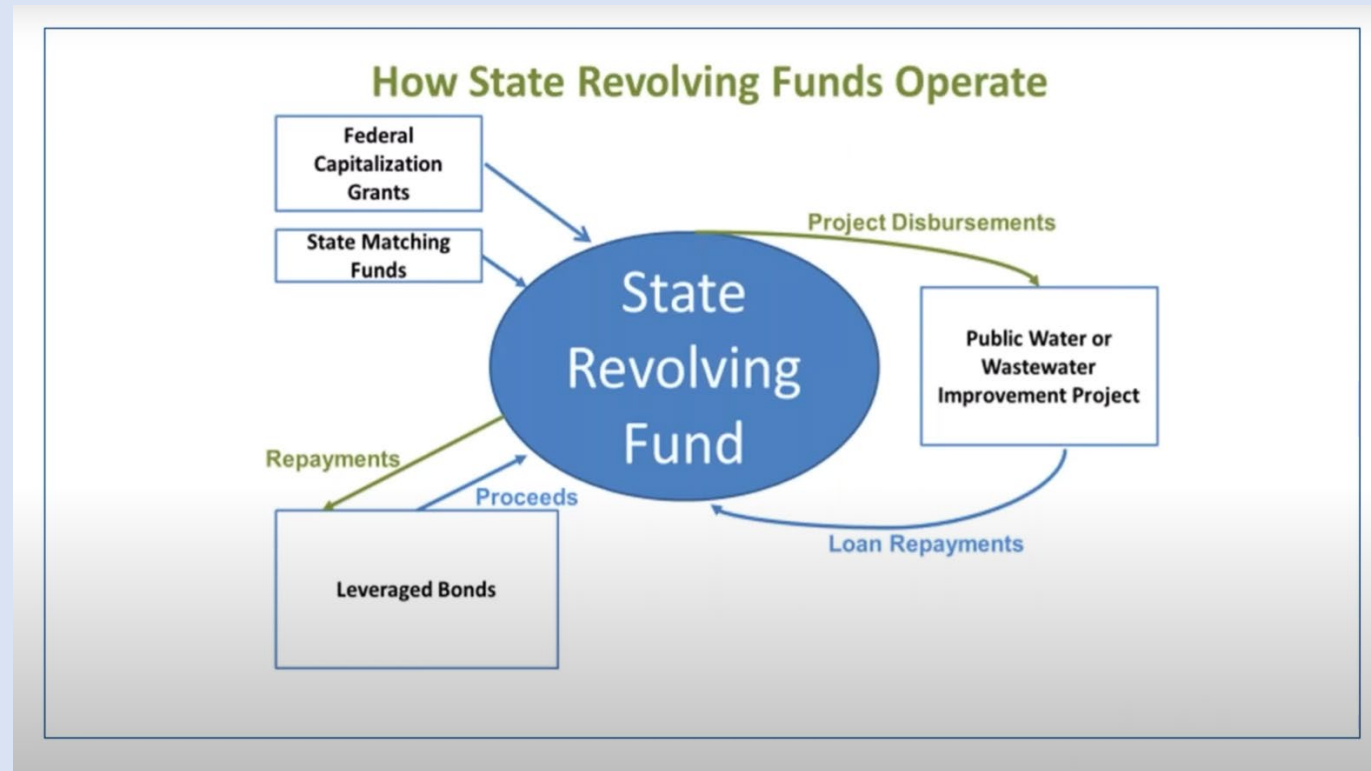


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Primary Sources of Funding

- Stormwater utility fees
- Departmental Budgets
- Capital Improvement Bonds
- Clean Water State Revolving Fund (SRF)
- Other

State Revolving Fund (SRF)



Google Images site.

SRF - Green Project Reserve

10% Clean Water State Revolving Fund Requirement:

- Green Infrastructure
- Water Efficiency
- Energy Efficiency
- Environmentally Innovative

Eligible Projects for Funding

- green streets
- permeable pavement
- Bioretention
- trees
- green roofs
- constructed wetlands
- capital equipment to maintain green infrastructure projects
- street tree or urban forestry programs

Eligible Projects for Funding

- stormwater harvesting and reuse projects
- downspout disconnection
- Wet weather discharges
- permanent riparian buffers or soft bioengineered stream banks.
- management of wetlands, flood attenuation).
- preserve or restore site hydrologic processes through sustainable landscaping and site design.
- purchase of land or easements on land that has a direct benefit to water quality, such as riparian and wetland protection or restoration.




Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58 - Bipartisan Infrastructure Law

- \$8.3 billion nationwide for reclamation water infrastructure projects over five years to advance drought resilience and expand access to clean water for families, farmers and wildlife.
- 49% loan forgiveness to projects assisting underserved / disadvantaged communities.

Texas Water Development Board

3. What types of projects can I use the loan funding for?

Financial assistance from the CWSRF can be utilized for:

- wastewater treatment facilities
- collection systems
- wastewater recycling and reuse improvements
-  [stormwater mitigation](#)
-  [nonpoint source pollution control](#)
- estuary management project
- eligible green project reserve components
-  [disaster recovery](#)

Texas Water Development Board

- Low interest loans and principal forgiveness from the Texas Water Development Board
- Grant Award funding:
 - SFY 23 Capitalization Base Program - \$52,885,000
 - SFY 23 Bipartisan Infrastructure Law Program – \$81,347,000
- Use these grants and other funds to provide project funding – goal of \$408 Million, including \$53 Million in principal forgiveness and \$355 Million in low interest rate loans.

Texas Water Development Board – Asset Management Tools

- Strongly supports Asset Management.
- TWDB will provide \$100,000 in 0% loan funds to prepare asset management tools
- A small system may receive up to \$500,000 at 0% for a portion of the total TWDB funding for a project if it has already implemented substantially all of the tools listed in TWDB's Asset Management Program for Small Systems (AMPSS) initiative
- TWDB provides additional ranking points to projects if the entity has an asset management plan
- TWDB continues with its Asset Management Program for Small Systems (AMPSS) initiative. Recently awarded 20 contracts of \$100,000 each to provide 20 systems with asset management plans & associated tools

Texas Water Development Board

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Texas Water Development Board

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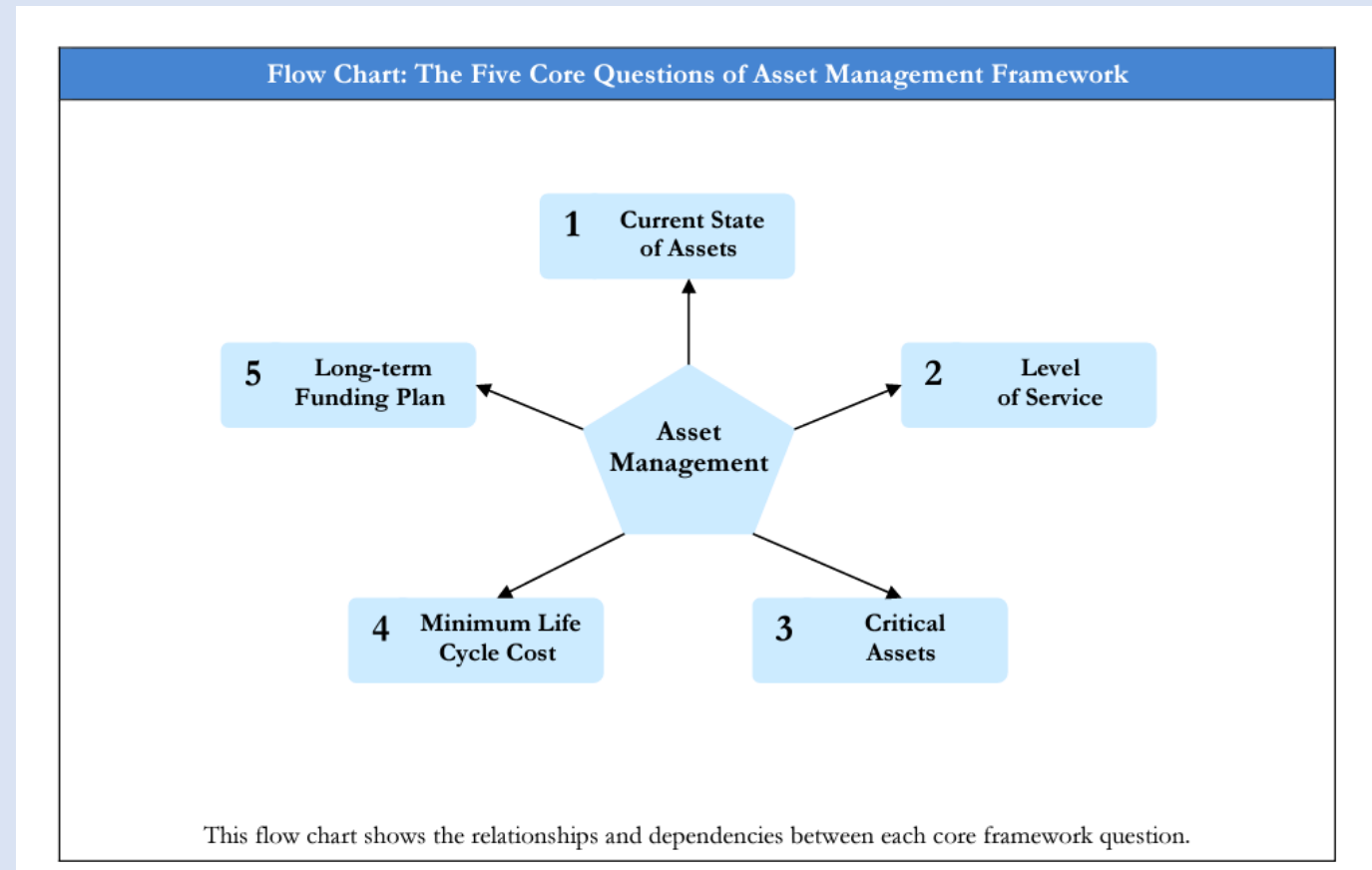
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Summary

Useful Life Considerations

Capital Improvement Planning

Sources of Funding





Google Images site.

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