

From Planning to Implementation

Building Support for the CRD's Multi-Generational Water Infrastructure Program

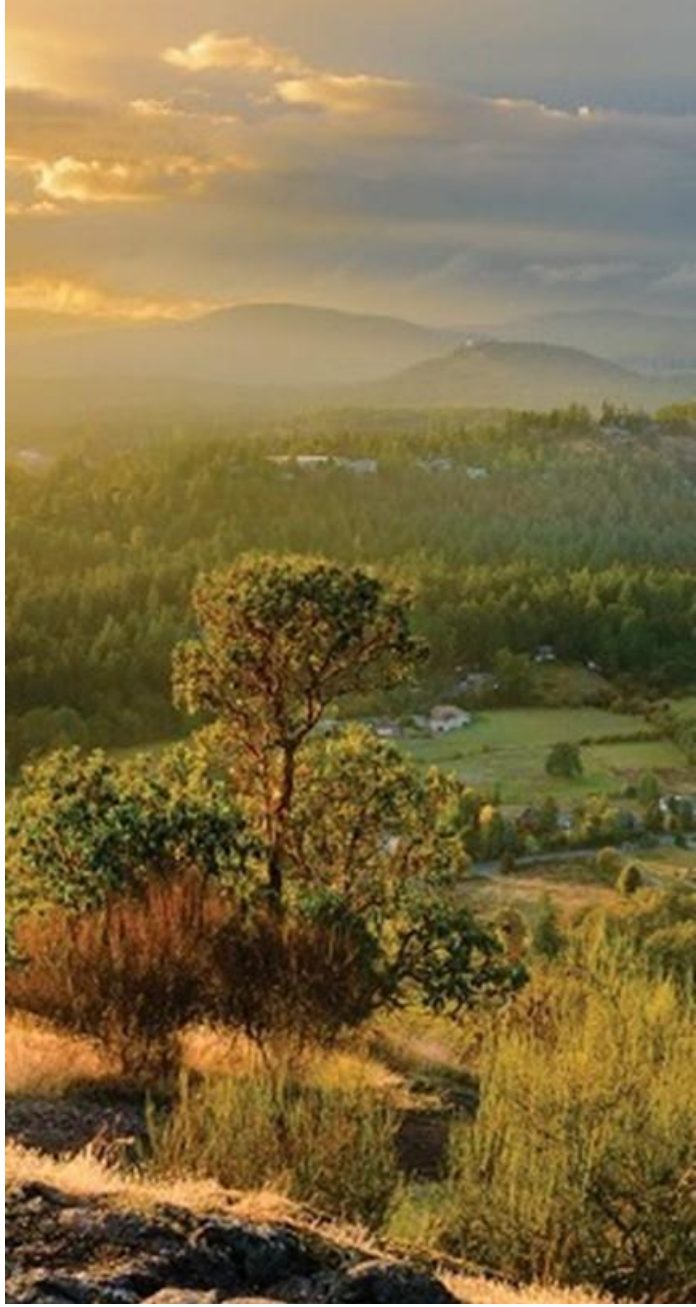
Libby Barg Bakke | Consor
Jude D Grounds | Carollo

carollo

Associated Environmental

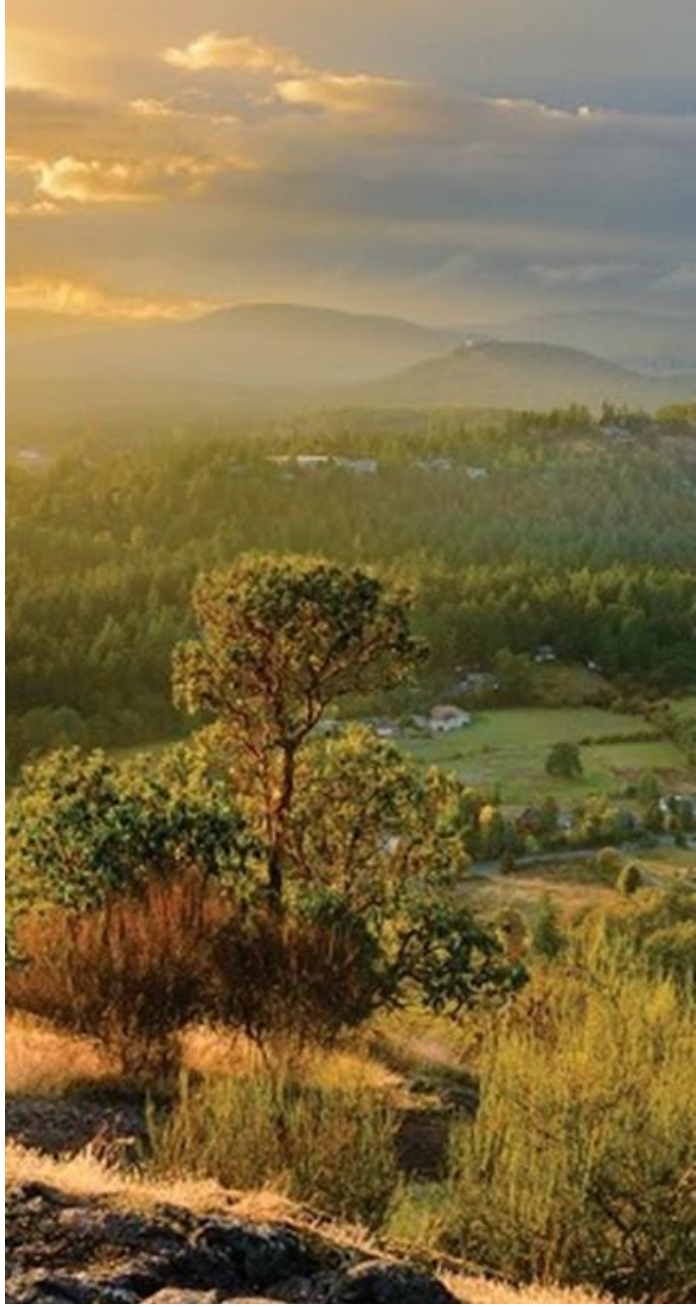
Acknowledgements

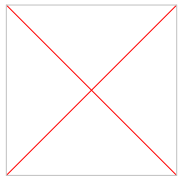
- Capital Regional District Staff and Board
- Regional Water Supply Commission
- Water Advisory Committee
- Associated Engineering
- Stantec
- Carollo Engineers



Agenda

- Purpose and Background
- Vision and Principles
- Program Implementation
- Recommendations and Next Steps



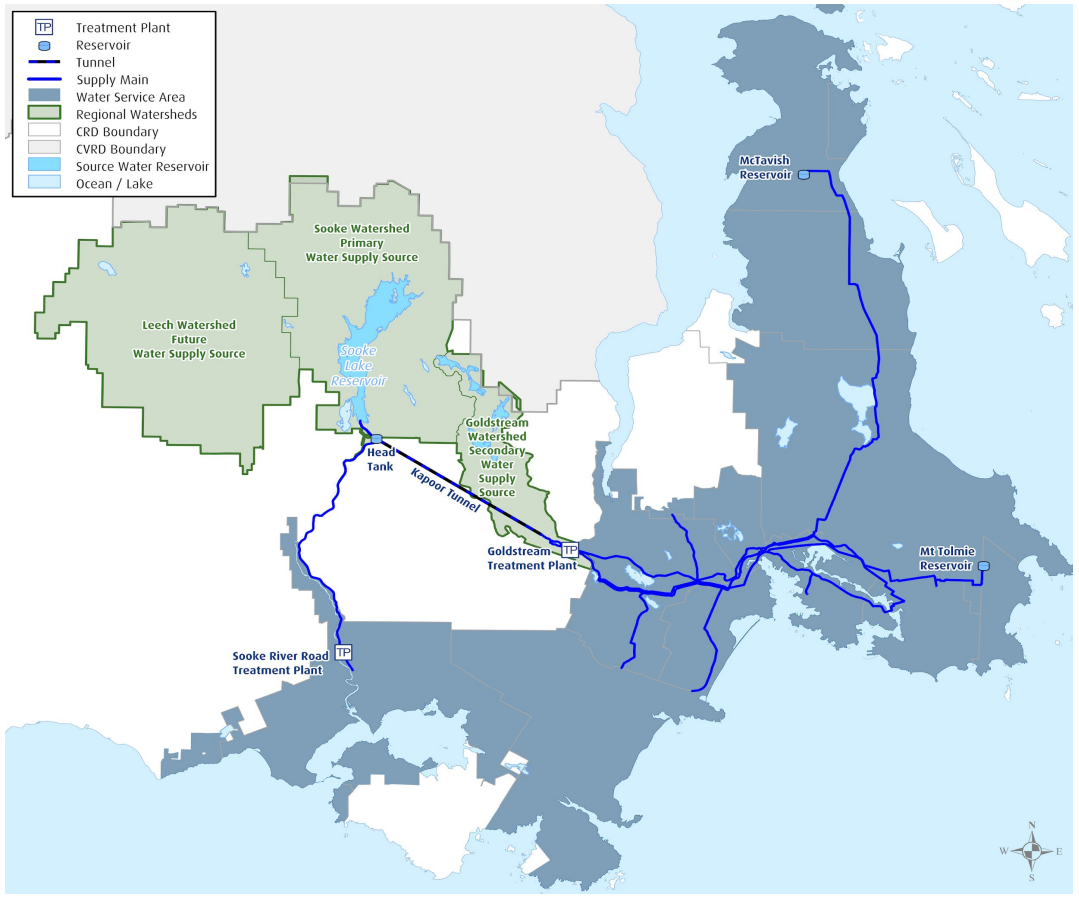


Purpose and Background



Regional Water Supply Service serves municipalities and First Nations in Greater Victoria

- The primary source is the Sooke Lake Reservoir
- Customers include residential, industrial, commercial, institutional, and agricultural totaling ~430,000 people



3 WATERSHEDS

2 TUNNELS

1 DAMS

5 DISINFECTION FACILITIES

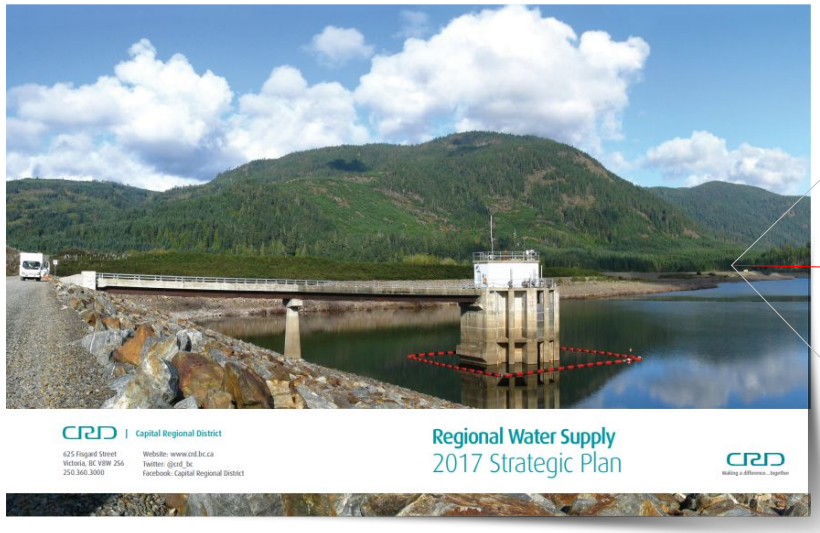
120k TRANSMISSION MAINS

To deliver a multi-generational program, we need to:

- Build on past work
- Bring together the right people for collaboration and buy-in
- **Mitigate risk with every decision**

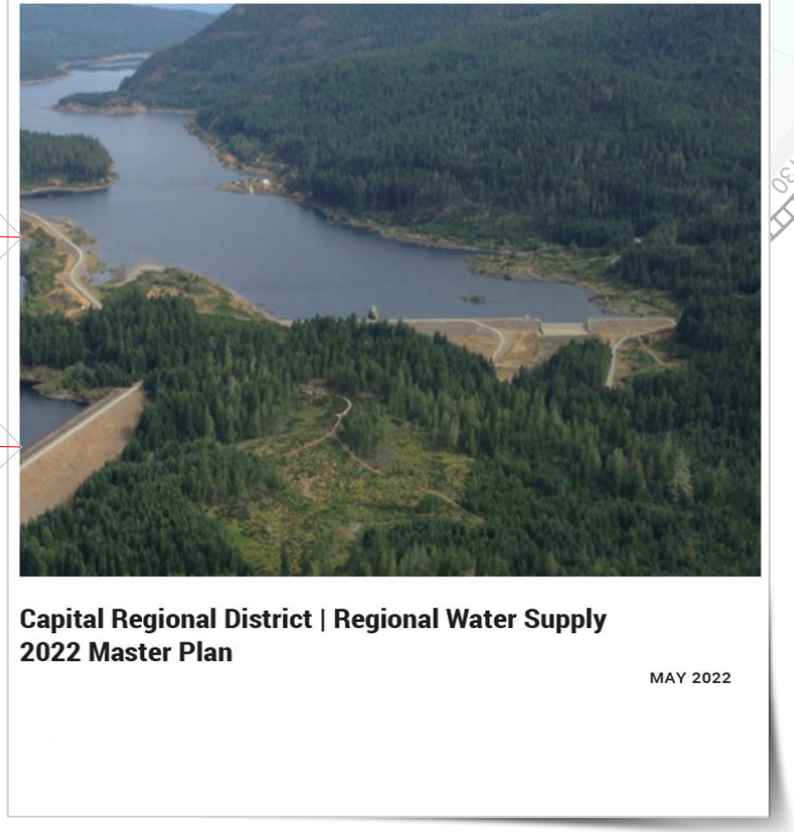


Using strategic documents as a compass



POPULATION AND DEMAND PROJECTIONS
- Growth
- Demand Management

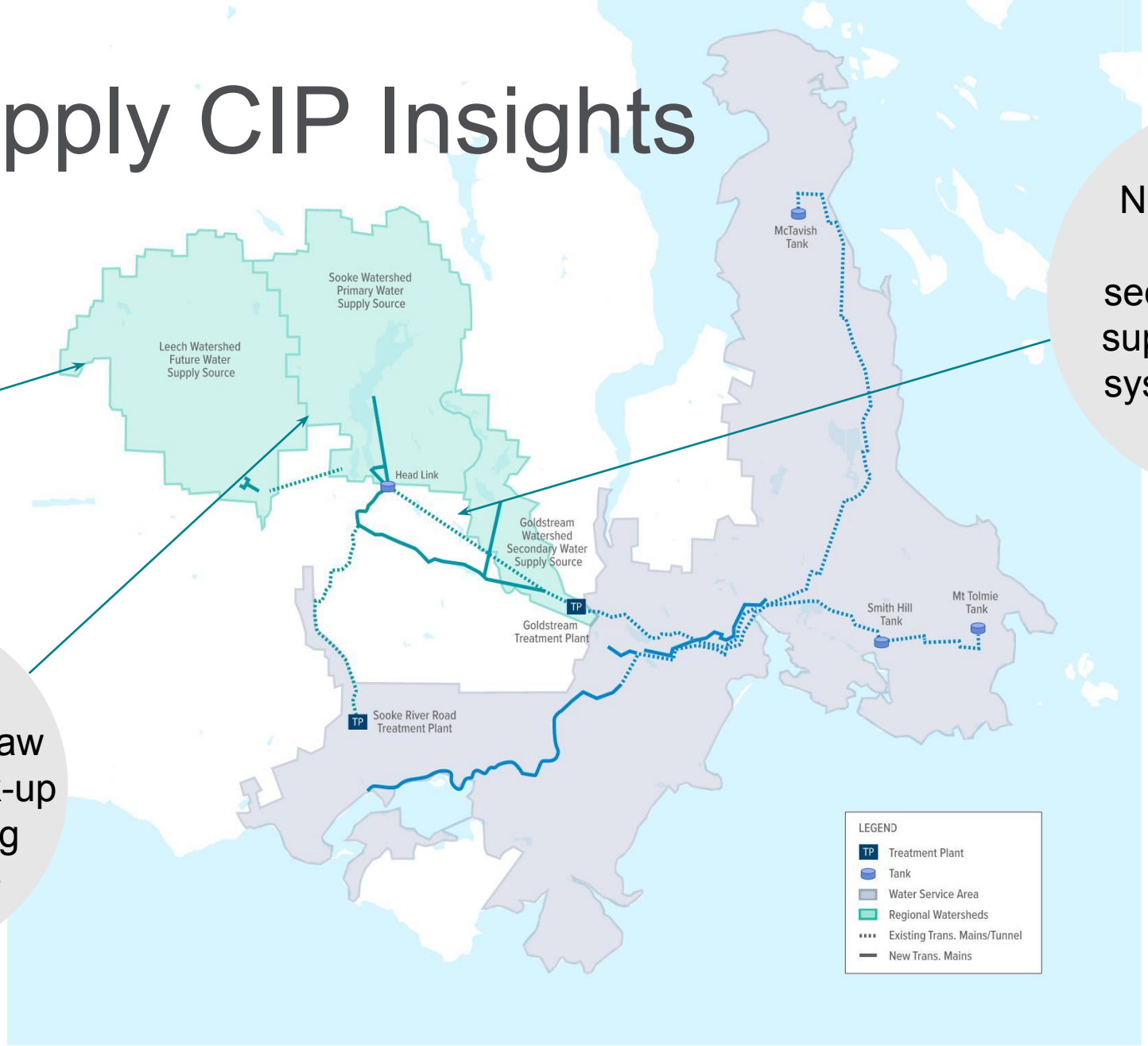
RISK ASSESSMENTS
- Climate Change
- Seismic Resiliency



Water Supply CIP Insights

Water from the Leech Watershed will help meet the region's growing demand and withstand summer droughts

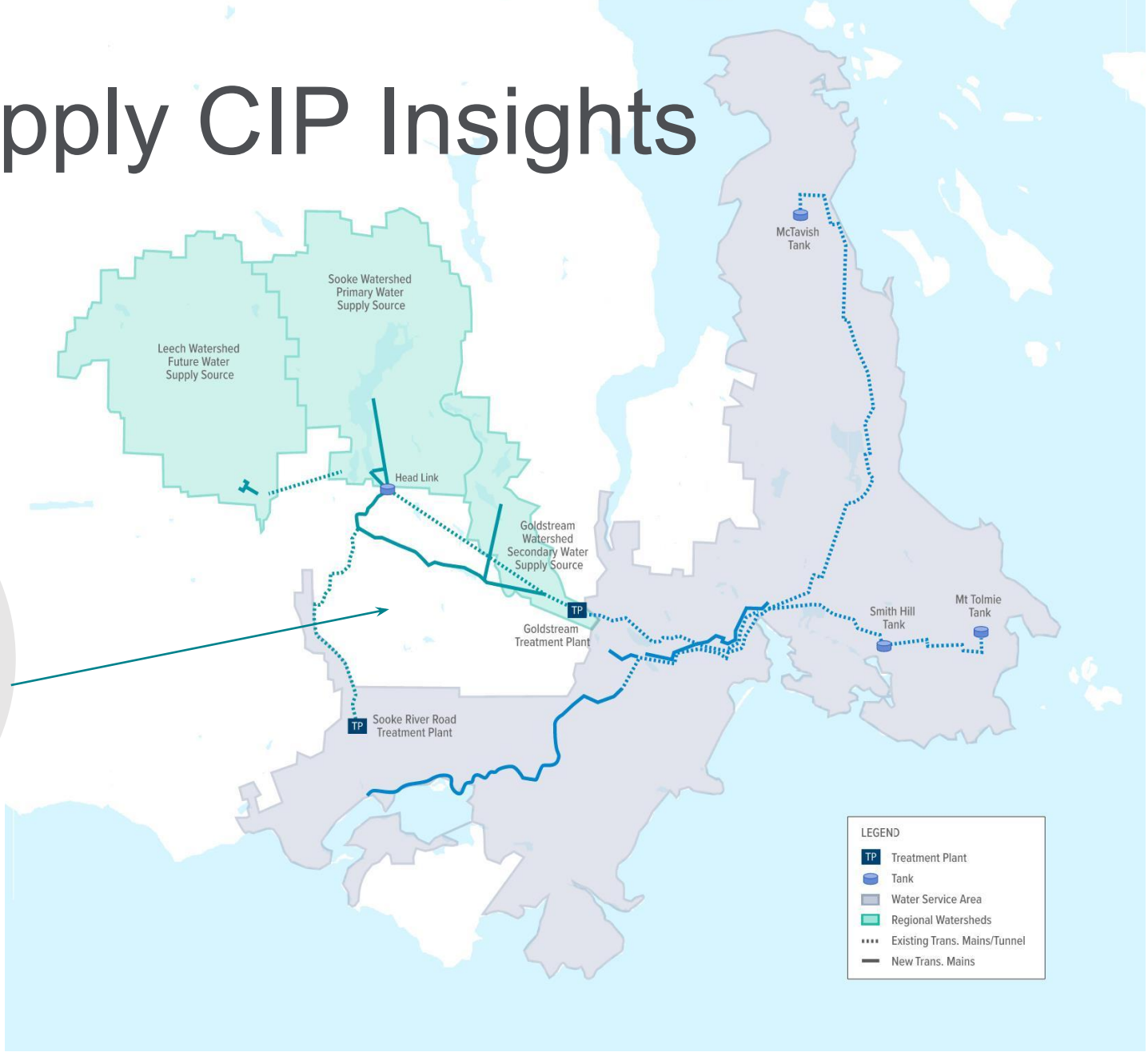
New intake provides cool raw water, and back-up for the existing single intake



New hardened access to secondary water supply increases system reliability

Water Supply CIP Insights

New state-of-the-art water treatment plant ensures safe water, even during challenging conditions

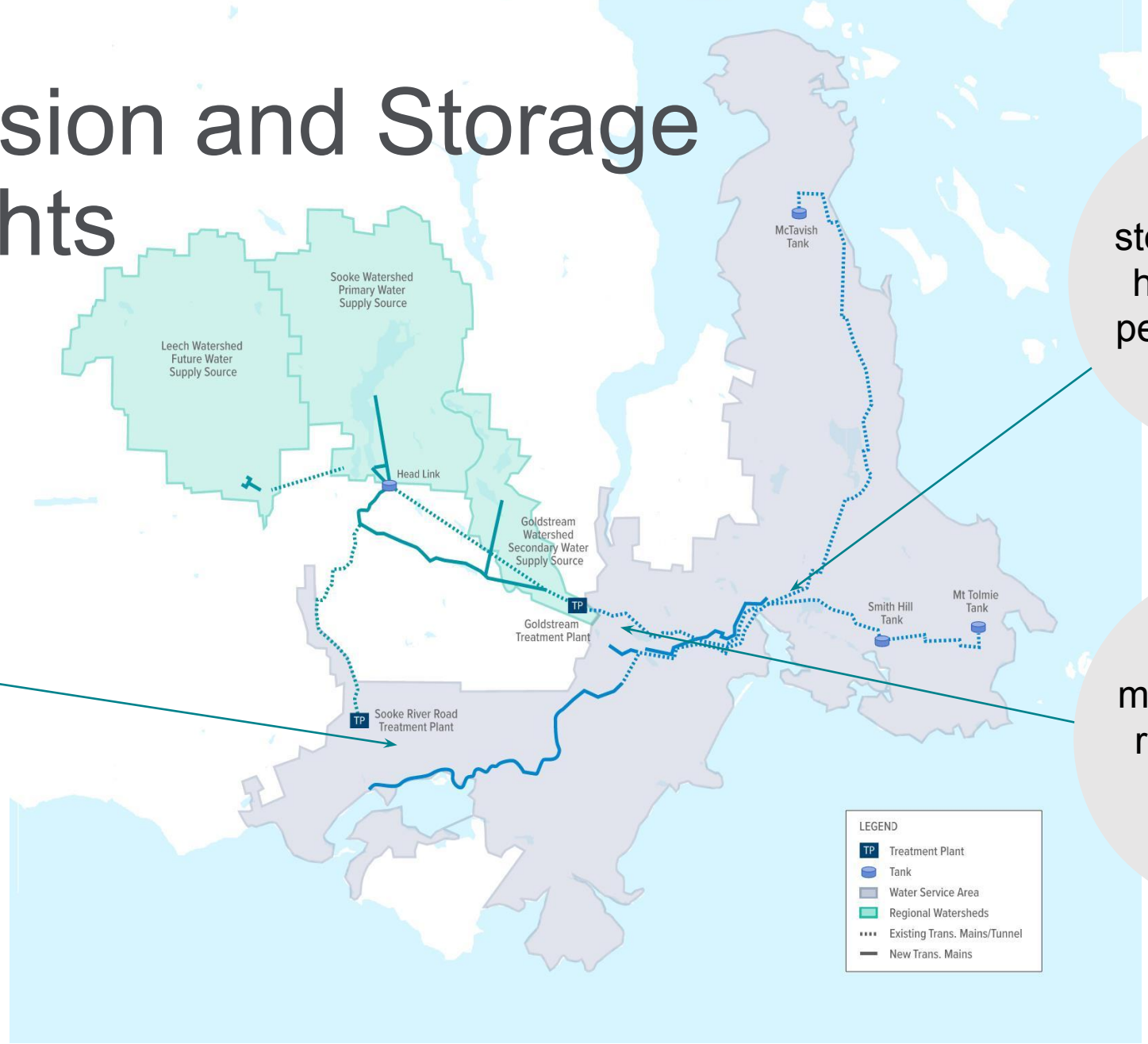


Transmission and Storage CIP Insights

New water storage tank to help balance peak demands in the City

New supply main to Sooke to deliver treated water

New supply mains increase reliability and delivery efficiency

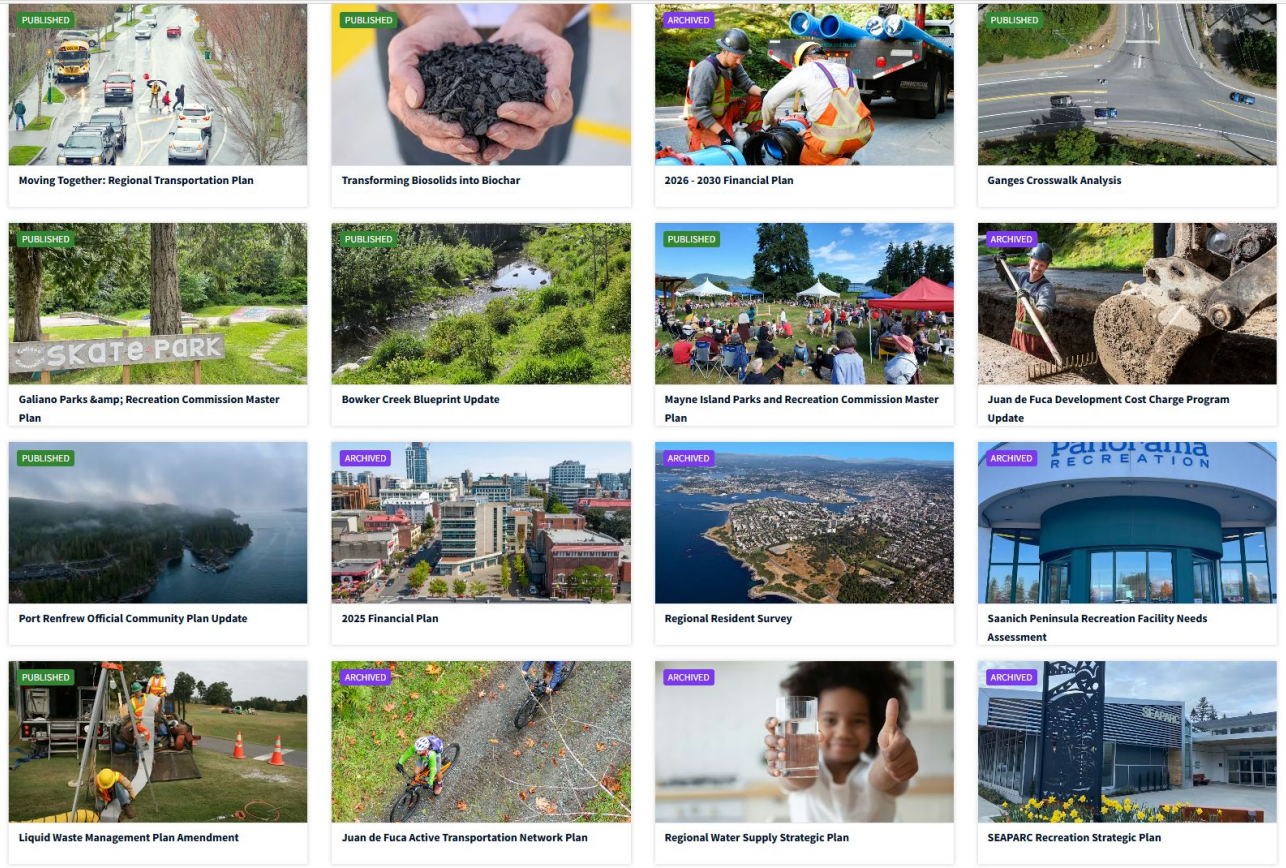


What will the program consist of?

MORE THAN **21** MAJOR PROJECTS

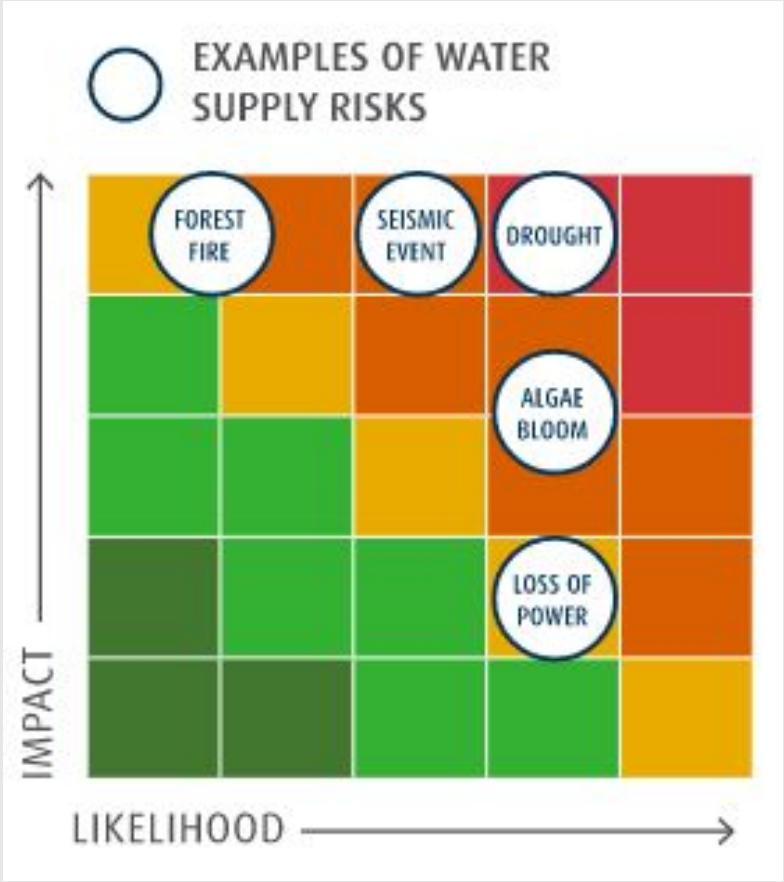
APPROXIMATE CONSTRUCTION VALUE EXPECTED TO COST OVER **$2B**

STEADILY INCREASE SYSTEM RELIABILITY THROUGH **2055**



Water Supply Insights Leads to Risk Driven Infrastructure

- Water Supply Risks
  - Drought
  - Algae bloom
  - Loss of power
  - Seismic event
  - Forest fire
- Outcome: Risk-Driven Infrastructure
  - Protected access to source water
  - Modernized treatment facility
  - Increased system resilience
  - Reduced single points of failure



Implementation Insights Leads to Applicable Tools and Strate

- Implementation Risks
  - Accountability
  - Resources
  - Affordability
  - Permitting
- Outcome: Mitigation Tools and Strategie
  - Communications Plan and Governance Framework
  - Organization Structure and Resourcing Plan
  - Financial Controls and Sequencing/Packaging
  - Holistic Permitting Matrix



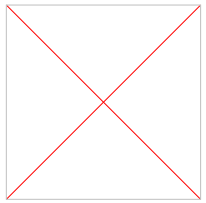
FINANCIAL MODELS TO INFORM TIMING



PROJECT DELIVERY SELECTION SYSTEM



LEVEL-OF-SERVICE TARGETS



Vision and Principles








Legislative/Legal
Environmental

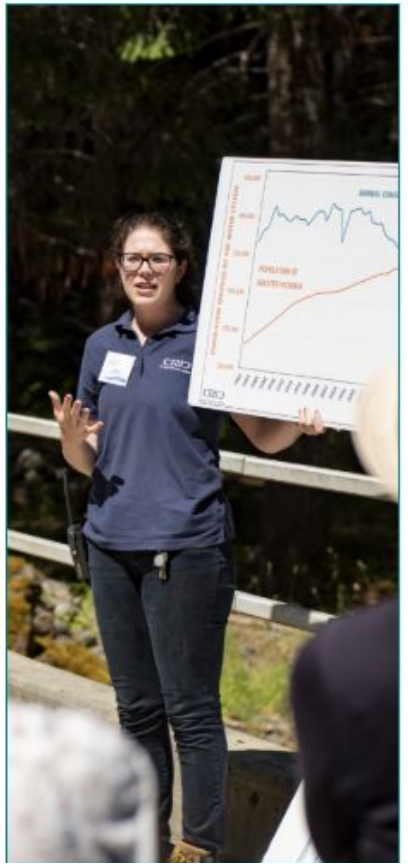


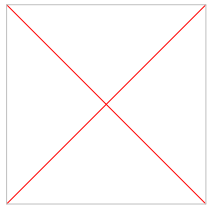
Our Program Vision

Investing today to ensure reliable drinking water for generations to come



Guiding Principles to Achieve the Vision

STRONG AND INCLUSIVE PARTNERSHIPS	PURPOSEFUL DESIGN FOR RESILIENCE & OPERATIONS	ORGANIZATIONAL READINESS & EXECUTION EXCELLENCE	PROACTIVE, RISK-INFORMED PROGRAM DELIVERY	FINANCIAL RESPONSIBILITY AND AFFORDABILITY
				



Program Implementation



Methodology: Developing tools for risk mitigation



ACCOUNTABILITY

RESOURCES

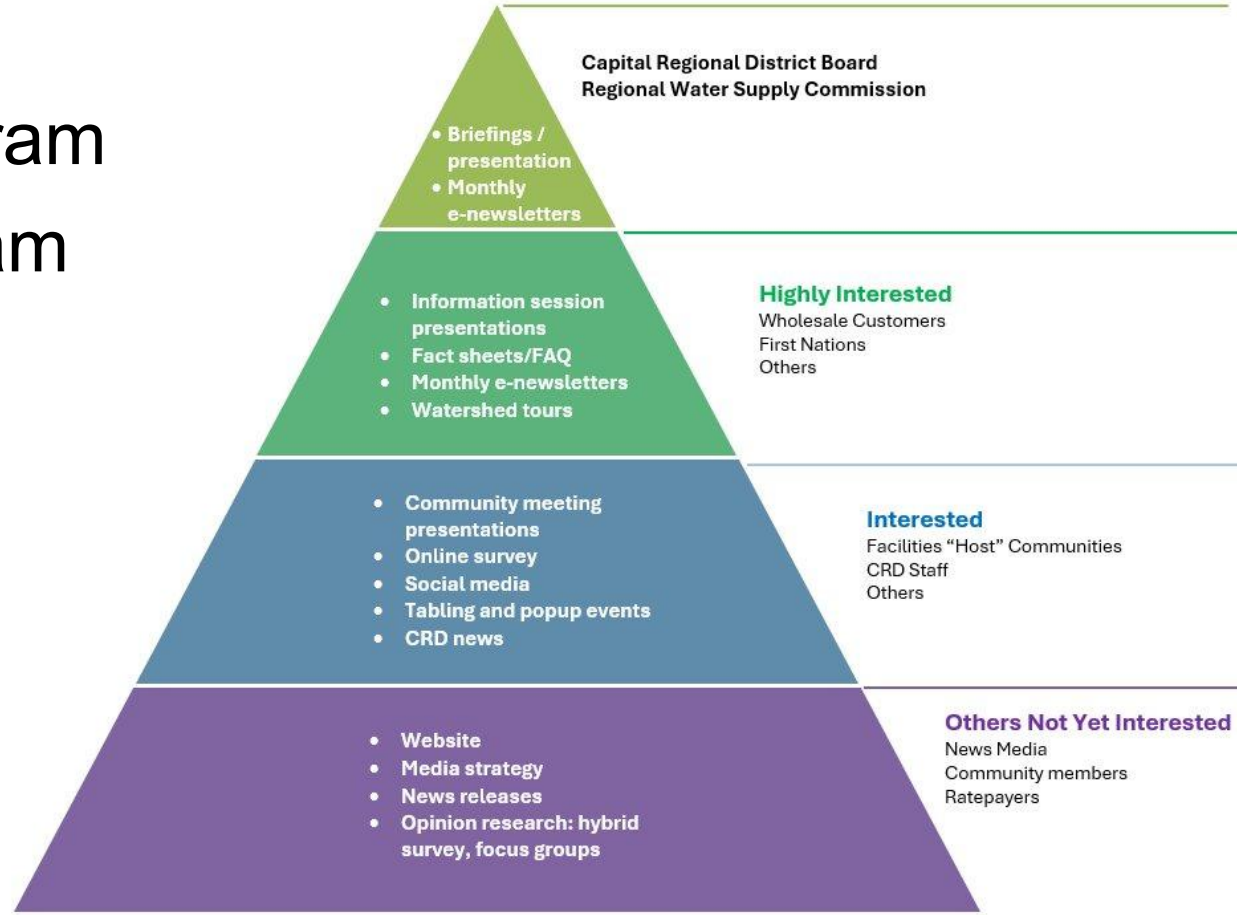
AFFORDABILITY

PERMITTING

Communications Plan informs, maintains awareness, and builds trust

ACCOUNTABILITY

- Ongoing throughout Program
- Overall package of Program projects and benefits
- Target audiences to focus communication effort



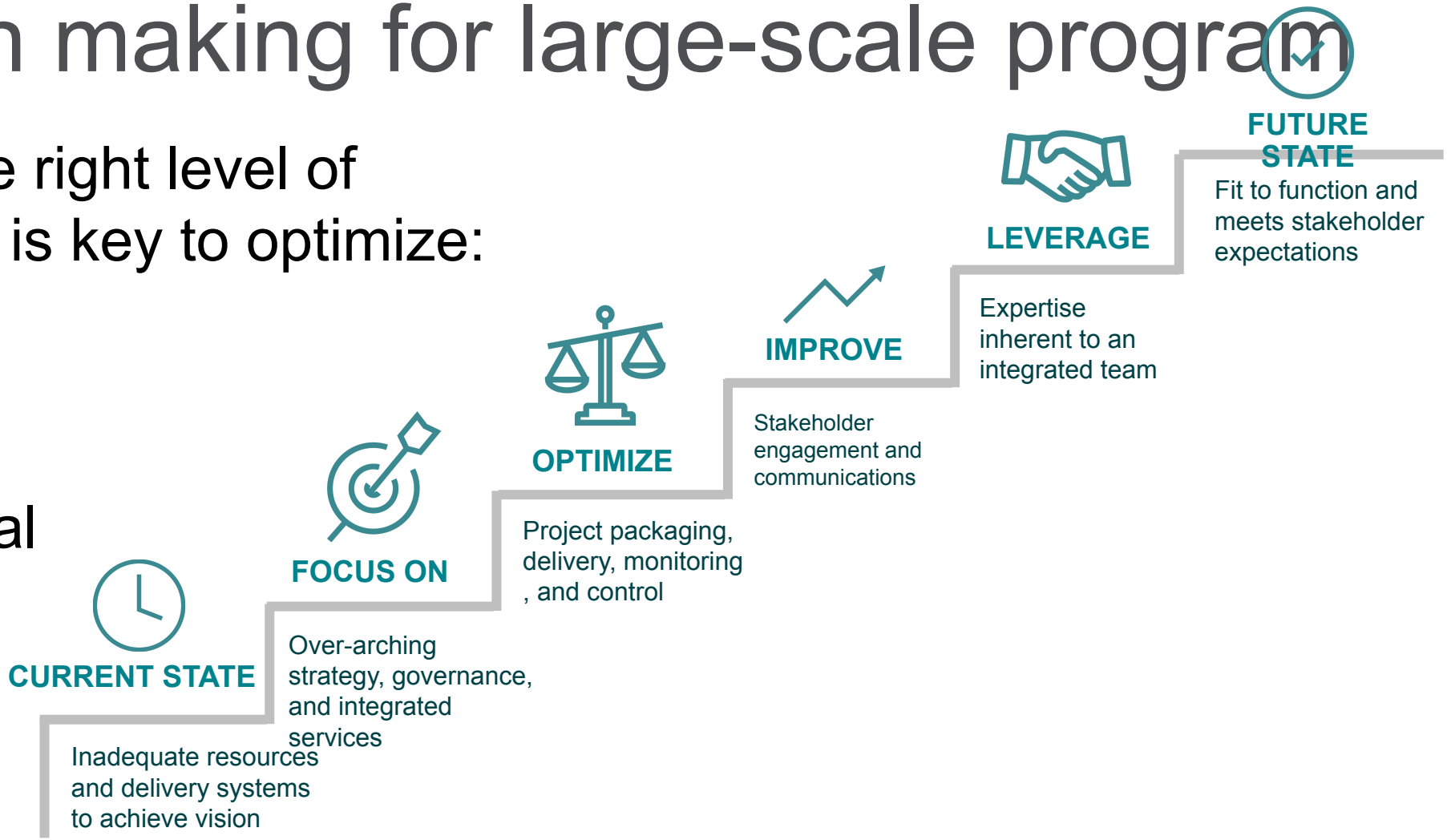
COMMUNICATIONS PYRAMID

ACCOUNTABILITY

Governance framework optimizes decision making for large-scale program

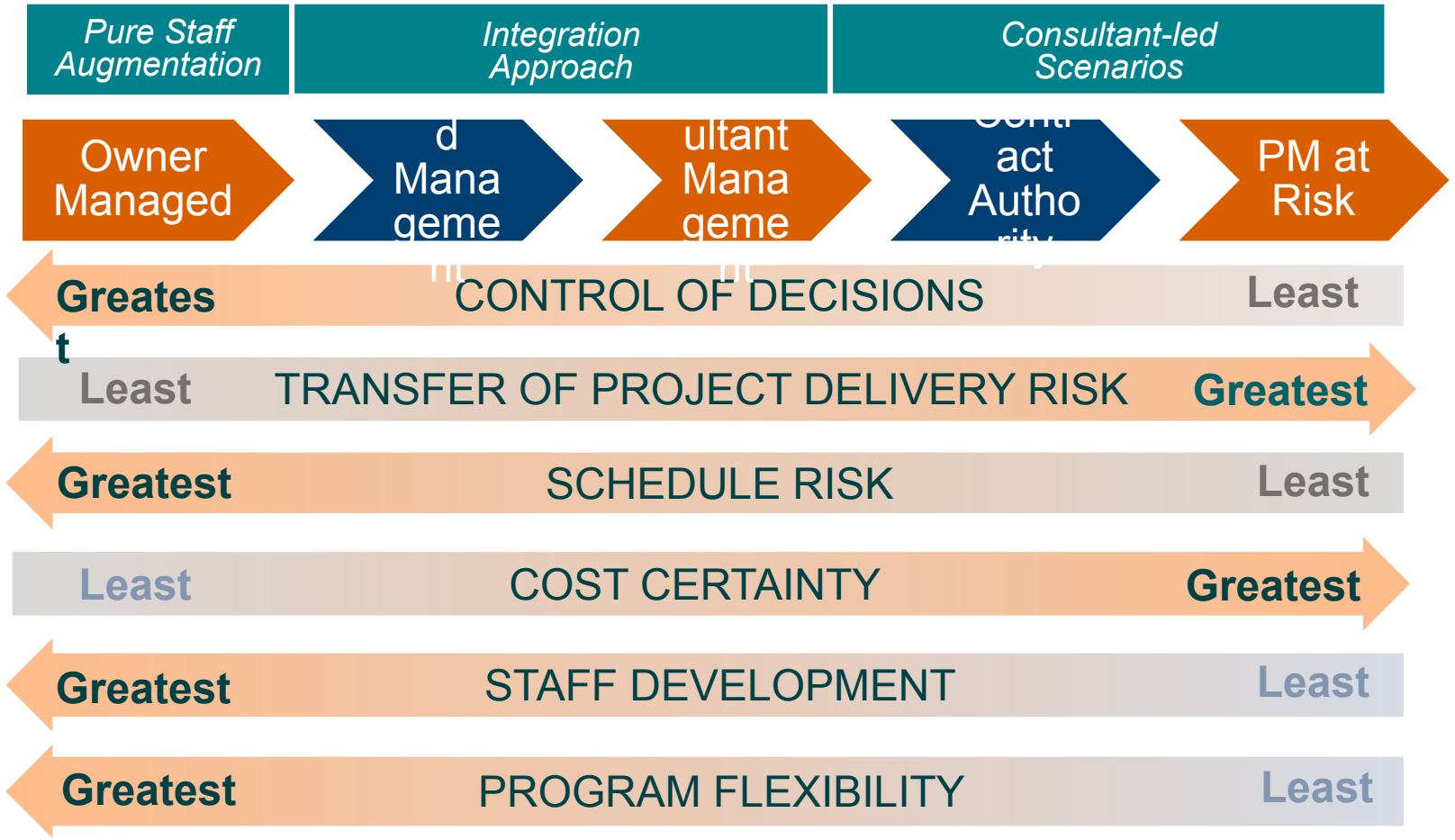
Choosing the right level of governance is key to optimize:

- Financial
- Technical
- Logistical
- Managerial

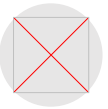


ACCOUNTABILITY

Gaining decision and resource clarity through integrated people, systems, and tools



Using leadership teams to provide clear hierarchy



ACCOUNTABILITY



RESOURCES

RESPONSIBLE



Using leadership teams to provide clear hierarchy

RESPONSIBLE

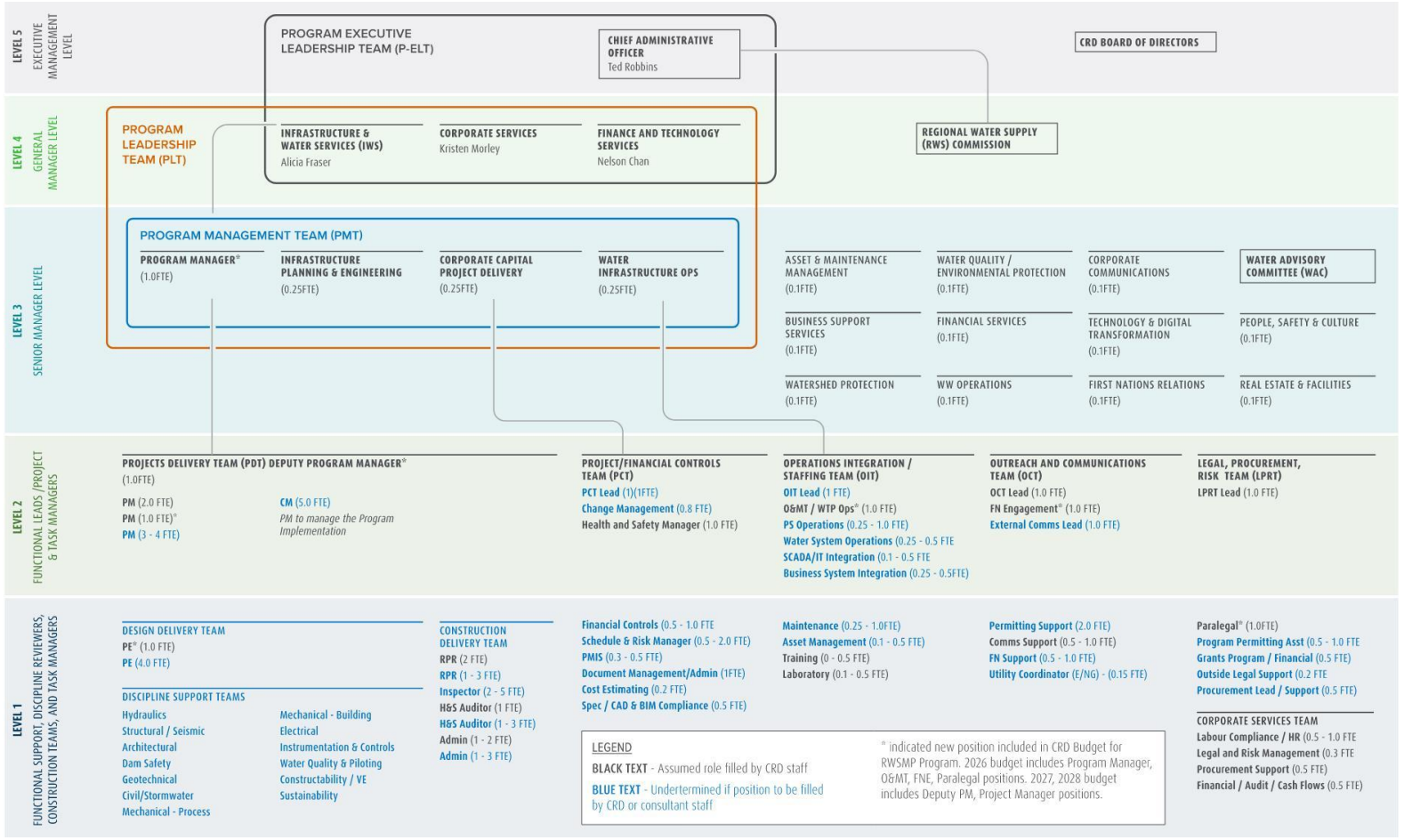
ACCOUNTABLE

CONSULTED

INFORM

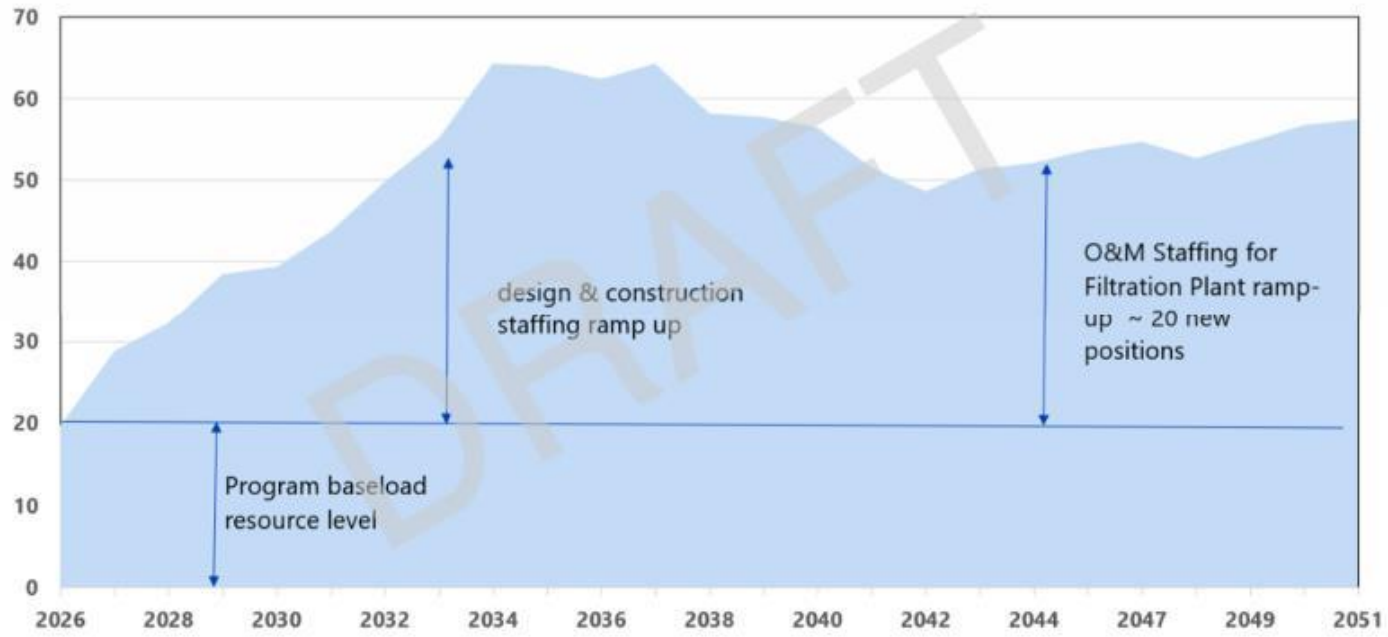
ACCOUNTABILITY

RESOURCES



Resourcing plan transparently shows staff allocation throughout program phases

- Evaluate Existing Structure
- Develop Program Org Chart
- Assign FTE's
- Allocate FTE's based off schedule



Creating a framework for project drivers, goals, and risks allows for early delivery method selection



Using intentional procurement and delivery method selection to gain economies of scale and consistent delivery

Packaging Drivers

- Schedule alignment
- Project proximity and likeness
- Project interdependencies
- Project complexity

Market Engagement Outcomes

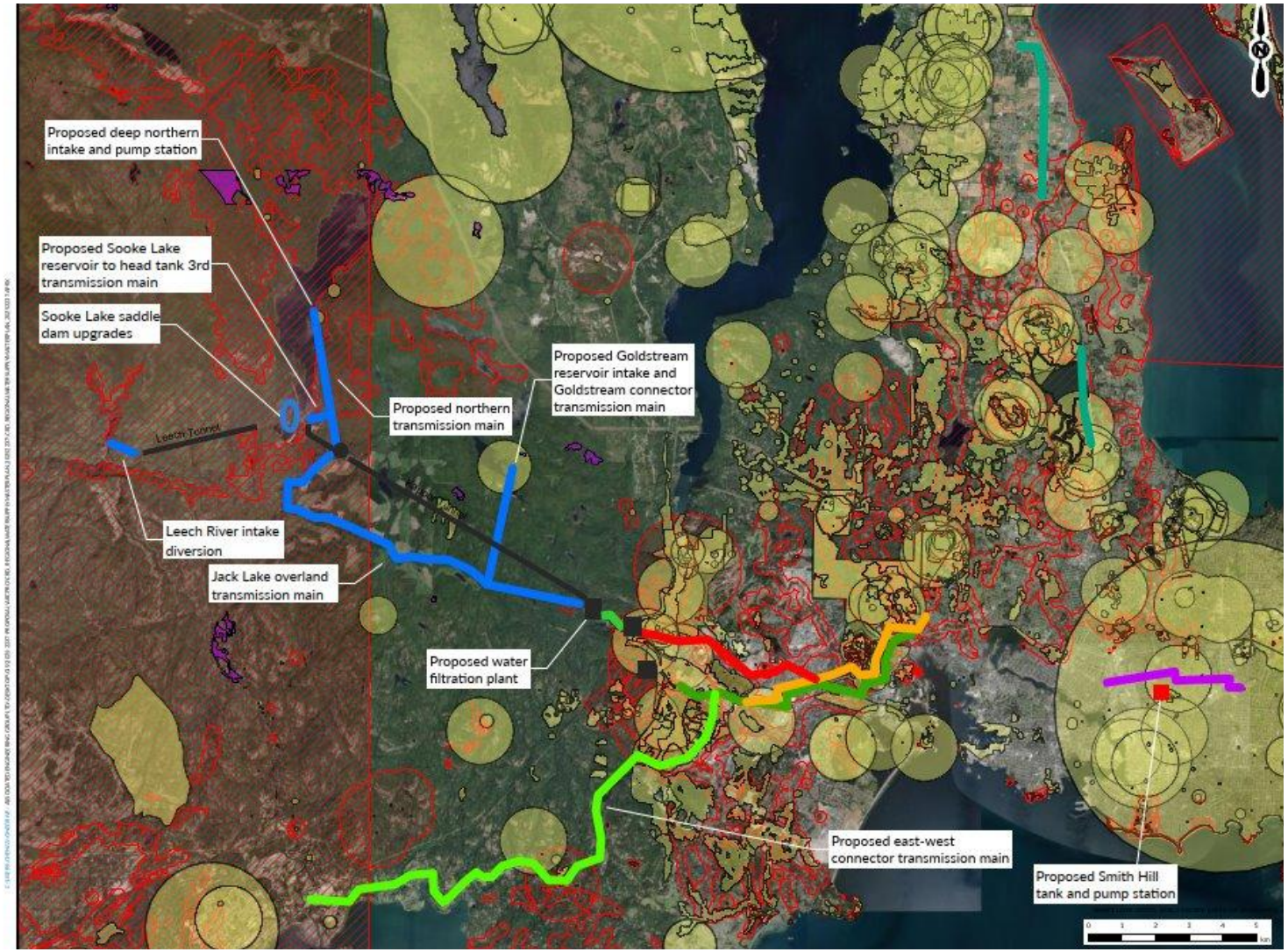
- Align project with market capacity
- Higher value, collaborative projects are prioritized



Creating a financial model to provide project timing clarity

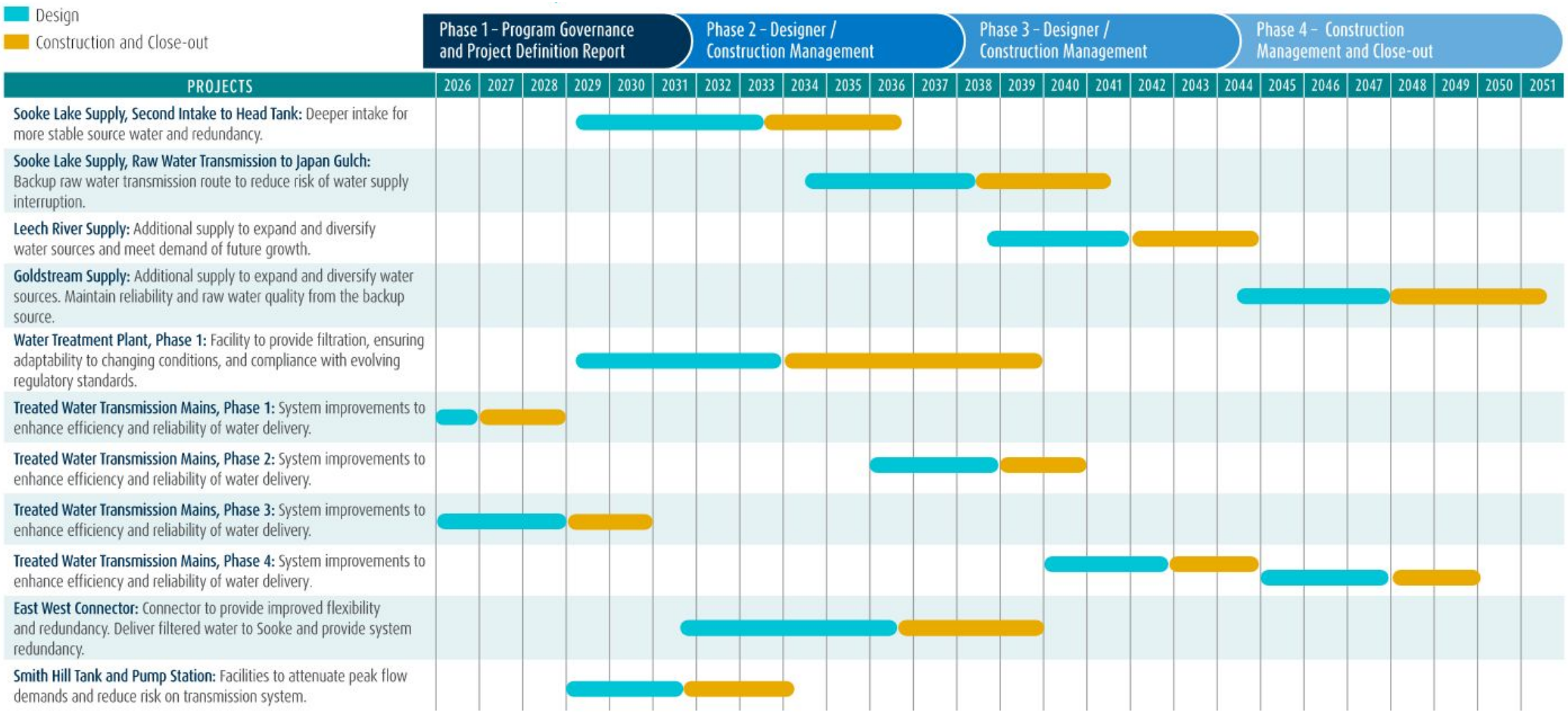


Holistic permitting framework allows for using efficiencies between projects

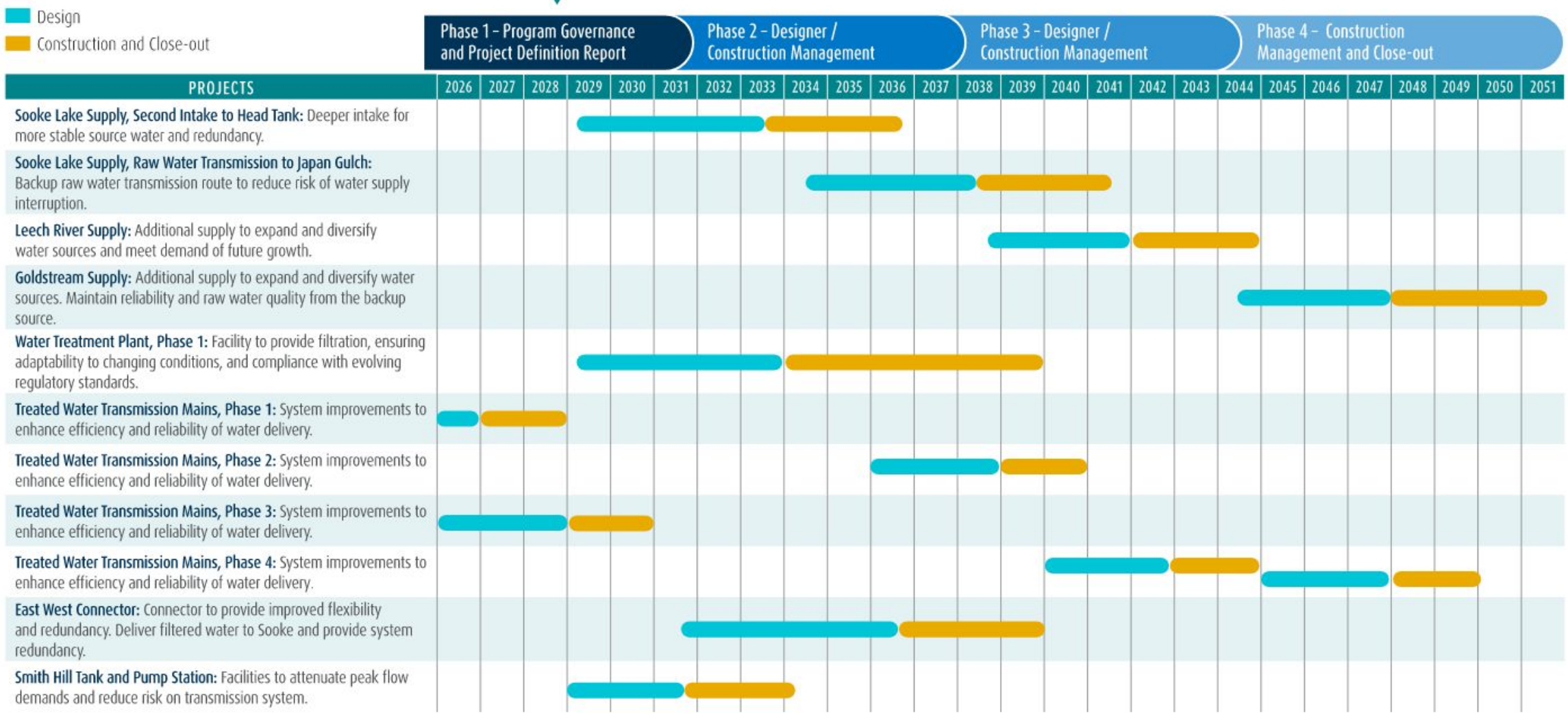


Recommendations and Next Steps

Program Schedule



Two key steps in Phase 1



1 ESTABLISH PROGRAM STRUCTURE AND GOVERNANCE.

Approach

Put the right people and systems in place within CRD

Benefit

Build CRD capacity and strength and balance use of industry expertise

2 DELIVER PROJECT DEFINITION REPORT.

Approach

Perform holistic assessment of all projects and begin water treatment pilot testing

Benefit

Helps CRD solicit feedback from interested parties and understand effects of individual projects on one another



Next Steps

- Finalize the program implementation plan “Road Map” Q2 2026
- Start hiring for new positions in 2026 and beyond

- RFP(s) in 2026/2027:
  - Advance Project Definition Report, likely including pilot testing
  - Program startup support
- Continue progressing current program projects with existing staff
  - Large diameter water main projects
  - Resiliency Plan



Next Steps

- Reporting to Commission and Board
- Public-facing communication
- Budgeting
- Recruiting



QUESTIONS?

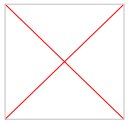
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