



Joint Water Master Plan

Stage 4 – Final Plan

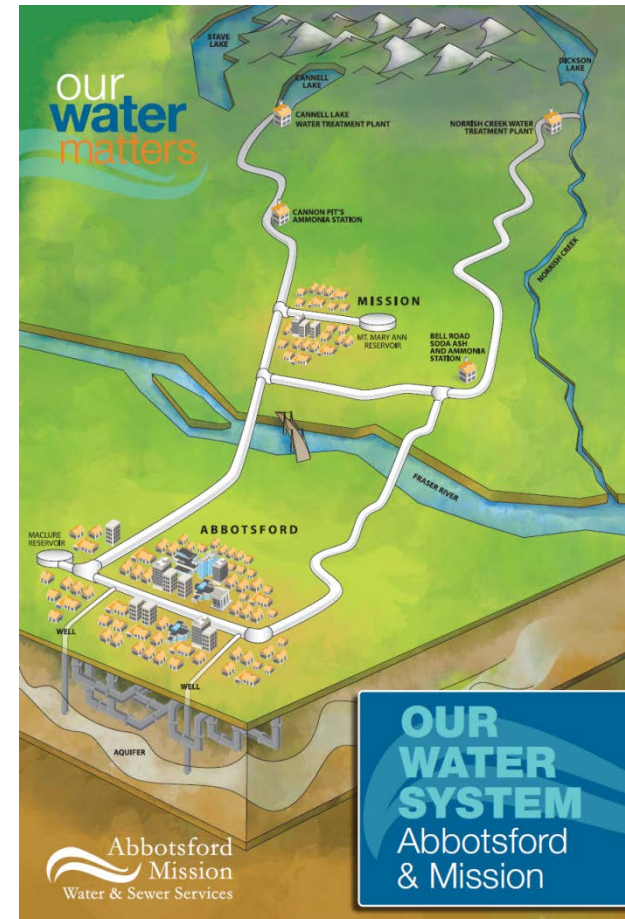
Executive Committee
June 11, 2018



Abbotsford/Mission Joint Water Master Plan

Agenda

- Overview
- Progress
- Purpose
- Engagement
- Issues and Opportunities – Themes
- Proposed Annual Expenditures
- Recommendations





Alignment



- Abbotsford
- Mission

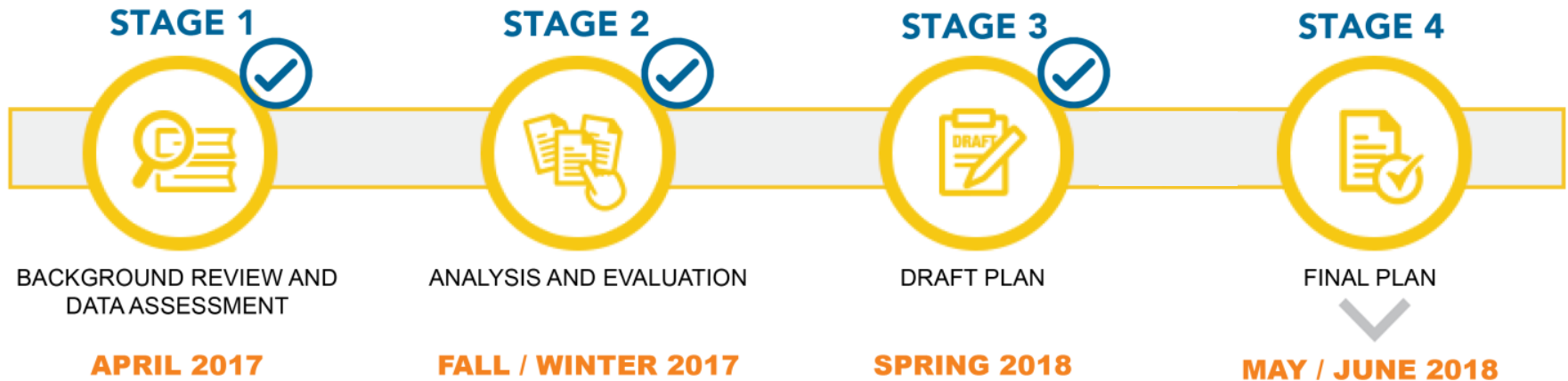


MAKE IT YOUR MISSION





Progress





Engagement

Council

**Joint Shared Service
Committee (JSSC)**

Stage 1 – Nov.9, 2017

Stage 2/3 – Mar. 22, 2018

Stage 4 – May 17, 2018

PUBLIC EVENTS

STAGE 1

Farmers Market
(Abbotsford and
Mission)
Canada Day

STAGE 2/3

Abbotsford Seven Oaks Mall
Abbotsford Clearbrook Library
Mission Leisure Centre (2
events)





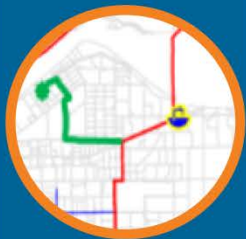
Purpose

- Set levels of service
- Identifies projects to address issues and opportunities
- Schedule projects and investments
- Recommendations to support implementation

**PHASEABLE, AFFORDABLE, RESILIENT, SUSTAINABLE,
INCREMENTAL, FLEXIBLE AND GRANTABLE**



Key Issues and Opportunities



New Source
for Supply
Resiliency

1



Enhance
Security at
Major Assets

2



Prepare for
Evolving
Regulations
(ie: WSA)

3



Optimize
Water
Supply,
Demands
and Water
Quality

4



Prepare for
Major
Vulnerabilities

5



Enhance
Maintenance
for Better
Life Cycle
Results

6



Abbotsford/Mission Joint Water Master Plan



BUILDING CAPACITY



New Source
for Supply
Resiliency

1



ASSET RENEWAL



Enhance
Maintenance
for Better
Life Cycle
Results

2



OPERATIONAL COMPLIANCE



Prepare for
Evolving
Regulations
(ie: WSA)

3



OPTIMIZE SERVICE DELIVERY



Enhance
Security at
Major Assets

2



Prepare for
Major
Vulnerabilities

5



Optimize
Water
Supply,
Demands
and Water
Quality

4

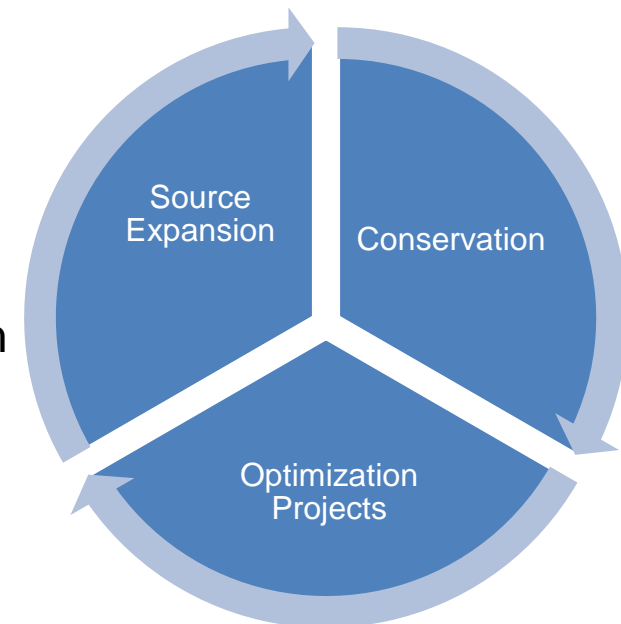
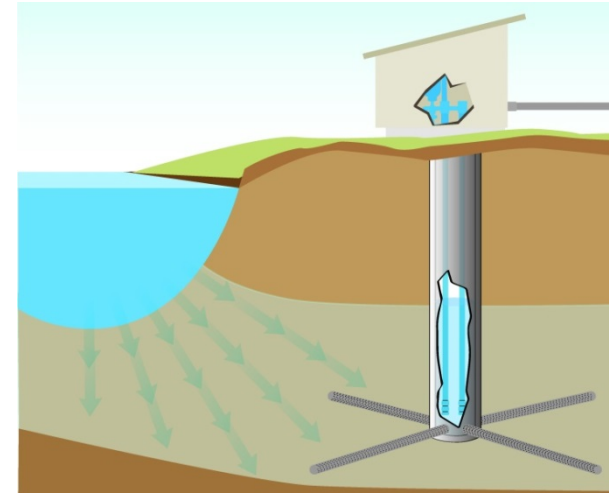


RESILIENT SYSTEM



Building Capacity

- Support residential, industrial commercial and institutional growth for the next 25 years
- Identify system upgrades and timing
- Water Source / Supply Study looked at:
 - Water Conservation
 - Optimization and
 - Source Expansion
- Proceed with investigation of Collector Well on South side of Fraser River.
 - Phase 1 provide 25ML/day by 2025
 - Phase 2 provide additional 25ML/day by 2040





Asset Renewal

- Adopt new evaluation policy for inspecting and responding to asset deterioration
 - including repairs, renewal and funding





Operational Compliance

Continue to Comply with Regulations and best practices for BC Water Systems and adapt to changing regulations

- Maintain Filtration “avoidance” of Cannell Lake
- Groundwater Licensing
- Undertake Groundwater at Risk of Containing Pathogens screening
- Prepare for Manganese guidelines update
- pH: continue to monitor for water quality and corrosion risks;





Optimize Service Delivery

- Proceed with:
 - Mission Zone 4 Reservoir
 - Upgrade Best Ave Booster Station
 - Dickson Lake Expansion
- Build upon and enhance current water conservation program



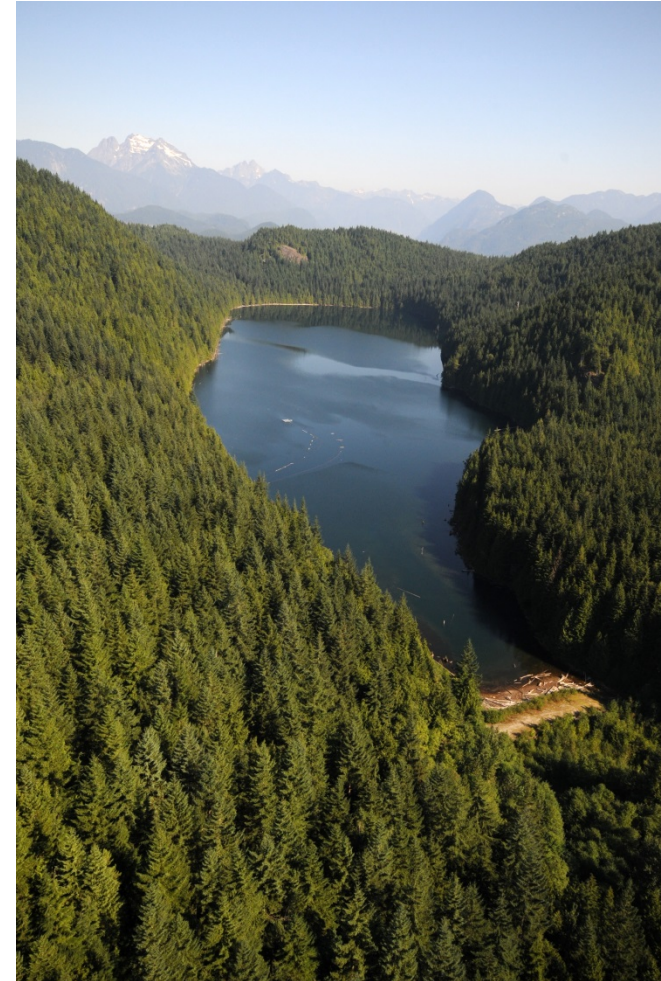


Resilient System

Safe Guard Source quality, Supply consistency and prevent unplanned shutdowns

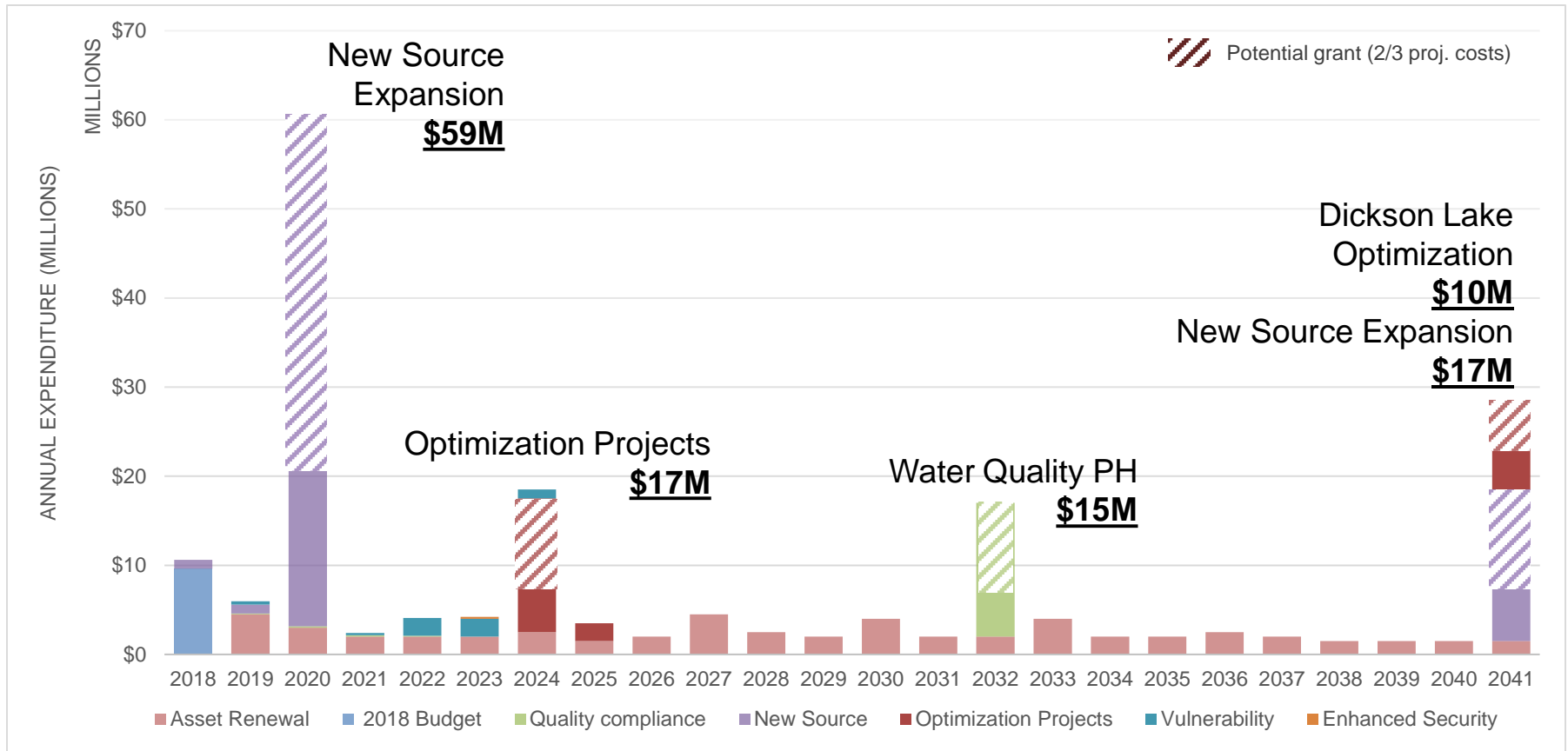
Key investments:

- Update the Following plans
 - Seismic Vulnerability Assessment and design guidelines
 - Emergency Response Plans
 - Water Shed Protection Plans
- Improve Security Systems
- Improve SCADA communications in remote areas





Proposed Annual Capital Expenditures





Highlights

- Early investment in a New Source (\$59M)
- Approximately \$180M Capital plan between 2019 and 2041
- Expenditure levels reduced compared to previous plan
- Grants will be sought for major projects.
- Future master plans (every 5 years) to review and update

WATER

GRANTS



COMMUNITY
WORKS FUND



DCC



RESERVES



OTHER FUNDING
SOURCES



DEBT

* Only if required





Recommendation

- THAT the Joint Water Master Plan, be adopted; and
- THAT it be used to develop a long term financial plan



QUESTIONS / COMMENTS ?