Joint Water Master Plan

Stage 4 – Final Plan

Executive Committee
June 11, 2018
Agenda

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

- Abbotsford
- Mission
Progress

• Define the planning scenarios
• Set levels of service
• Identify issues and opportunities
• Analyze, discuss, decide and report

Stage 1: Background Review and Data Assessment
- April 2017

Stage 2: Analysis and Evaluation
- Fall / Winter 2017

Stage 3: Draft Plan
- Spring 2018

Stage 4: Final Plan
- May / June 2018
Engagement

Council
Joint Shared Service Committee (JSSC)
Stage 1 – Nov. 9, 2017
Stage 2/3 – Mar. 22, 2018
Stage 4 – May 17, 2018

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, RESILENT, SUSTAINABLE, INCREMENTAL, FLEXIBLE AND GRANTABLE
Key Issues and Opportunities

1. New Source for Supply Resiliency
2. Enhance Security at Major Assets
3. Prepare for Evolving Regulations (ie: WSA)
4. Optimize Water Supply, Demands and Water Quality
5. Prepare for Major Vulnerabilities
6. Enhance Maintenance for Better Life Cycle Results
Abbotsford/Mission
Joint Water Master Plan

- ✔ BUILDING CAPACITY
  - New Source for Supply Resiliency

- ✔ ASSET RENEWAL
  - Enhance Maintenance for Better Life Cycle Results

- ✔ OPERATIONAL COMPLIANCE
  - Prepare for Evolving Regulations (ie: WSA)

- ✔ OPTIMIZE SERVICE DELIVERY
  - Enhance Security at Major Assets
  - Prepare for Major Vulnerabilities

- ✔ RESILIENT SYSTEM
  - Optimize Water Supply, Demands and Water Quality
• 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

ANNUAL EXPENDITURE (MILLIONS)

New Source Expansion $59M
Optimization Projects $17M
Water Quality PH $15M
Dickson Lake Optimization $10M
New Source Expansion $17M

MILLIONS

2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041

Potential grant (2/3 proj. costs)
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
Recommendation

• THAT the Joint Water Master Plan, be adopted; and

• THAT it be used to develop a long term financial plan
QUESTIONS / COMMENTS ?