

Presentation to CRD Board

CAWT Project Board

September 14, 2016

Presentation Objective

Support the following:

For information

- Project Board Report – Sept 7
- Due Diligence Report – Sept 6

For approval

- Business Case – Sept 7

Project Board - Terms of Reference

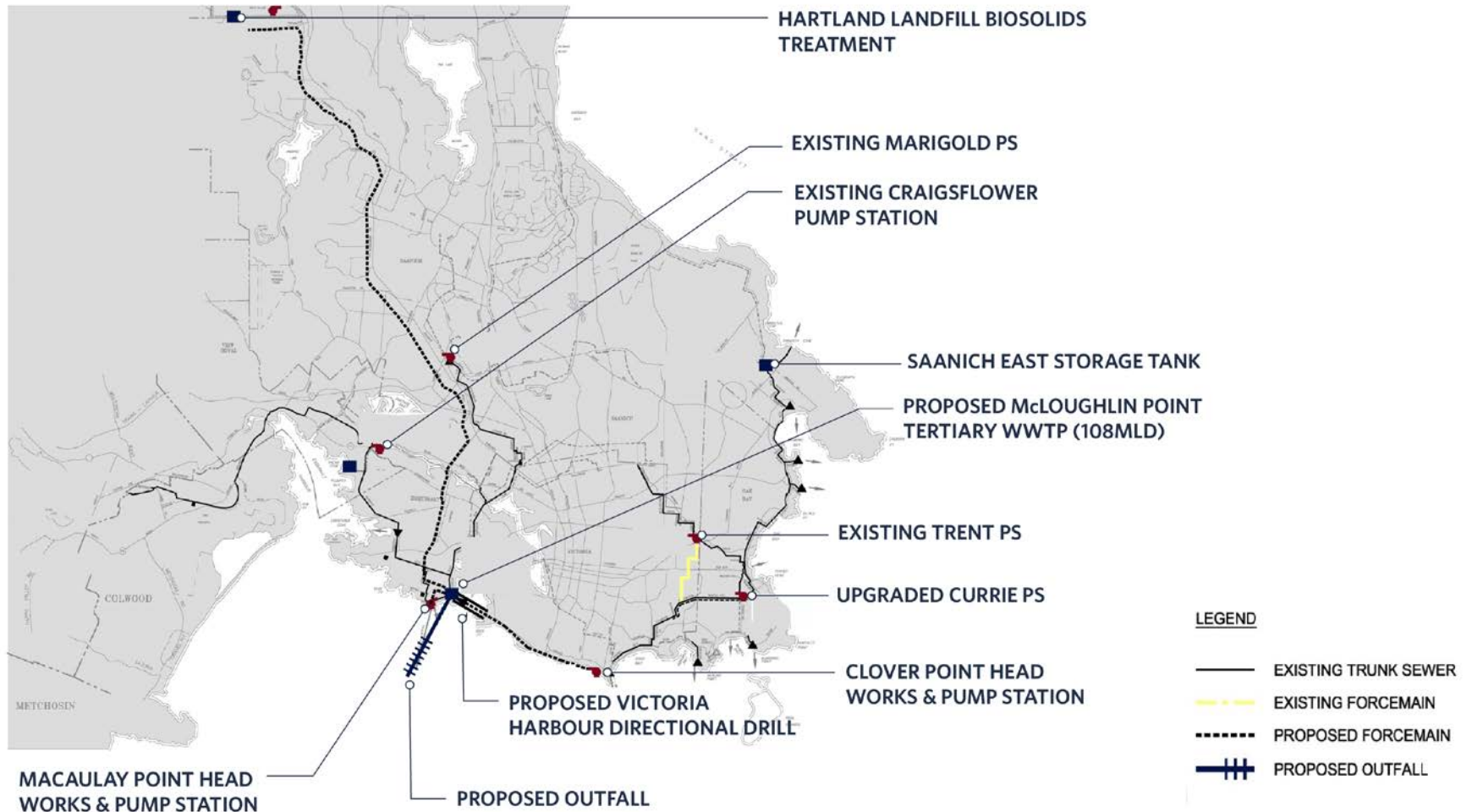
Goals:

- Meet federal requirements for secondary treatment by 2020
- Minimize costs to residents
- Optimize opportunities for resource recovery
- Minimize greenhouse gas emissions
- Add value to communities and enhance livability of neighbourhoods

Plan Summary

- Wastewater treatment (tertiary)
- Conveyancing
- Residual solids treatment
- Integrated waste management planning process
- Macaulay pump station upgrade
- Colwood proposal development funding
- CRD regional sewage facilities review

System Map



Project Board Objectives

Goal:

- Meet federal requirements for secondary treatment

Measure:

- ✓ Wastewater will receive tertiary treatment

Project Board Objectives

Goal:

- Minimize costs to residents

Measure:

- ✓ \$765 million capital cost is less than previous plans
- ✓ \$155-\$245 million less than other short-listed options

Project Board Objectives

Goal:

- Optimize opportunities for IRM

Measure:

- ✓ Smaller investment in treatment of residual solids and investment in process to create an Integrated Resource Management strategy for liquid and solid wastes

Project Board Objectives

Goal:

- Reduce greenhouse gases

Measure:

- ✓ 5-10% reduction of GHG emissions from previous plans

Project Board Objectives

Goal:

- Add value to surrounding communities & enhance livability of neighbourhoods

Measure:

- ✓ Separation of waste water plant from residuals treatment plant
- ✓ Conveyance of residual solids by pipeline
- ✓ Significant revision of wastewater plant design
- ✓ Commit to improve CRD sewage facilities

Costs

Program costs include:

- Prior Seaterra and CRD management costs and costs of construction of collection facilities to-date
- Project Board costs to-date and forecast owner's costs to completion
- All direct and indirect construction costs
- All allowances for risk and contingencies
- All other costs for program recommendations

Program Budget

Cost Centre	Capital Cost (\$ 2016)
Tertiary Wastewater Treatment Plant (McLoughlin Point)	\$381 million
Collection and Conveyancing System	\$192 million
Residual Solids Treatment Plant (Hartland)	\$188 million
Macaulay Improvements and Colwood Studies	\$4 million
Total	\$765 million

CRD Contribution by Household

Municipality/Township	Annual Estimated Cost Per Household
Oak Bay	\$344
Saanich	\$208
Victoria	\$296
Esquimalt	\$258
View Royal	\$248
Colwood	\$146
Langford	\$239
Average Annual Cost Per Household	\$245

Sources of Funding

Agreement	Eligible Amount
Building Canada Fund - Major Infrastructure Component	\$120 million
Canada - Green Infrastructure Fund Conveyance System Project	\$50 million
Federal - PPP Canada Biosolids	\$36 million
Provincial - Contribution Agreement	\$248 million
CRD	\$311 million
Total	\$765 million

Wastewater Treatment Plant



Proposed revised design at McLoughlin Point

Treatment of Residual Solids

- Plant at Hartland to produce Class A biosolids using anaerobic digesters (new Request for Proposals)
- Class A biosolids to be stored on an interim basis at Hartland
- All biogas and leachate recovered
- Class A biosolids will qualified as beneficial use (as defined by MOE)
- Planning process to develop IRM strategy for recovery of resources from both liquid and solid waste

Colwood Concept Proposal

- Currently a concept and cost estimate
- Outstanding issues include:
 - study of hydro-geological conditions
 - study of impact of re-use and recharge
 - environmental impact assessment
 - comprehensive cost estimates
- Recommend funding of up to \$2m to further these studies

Conclusion

- The Project Board believes that the recommendations meet the goals for a project as outlined in the Board's Terms of Reference
- 13 recommendations are submitted for your consideration as a package
- Not designed to be approved or rejected individually; together they form the basis for the Business Case under consideration