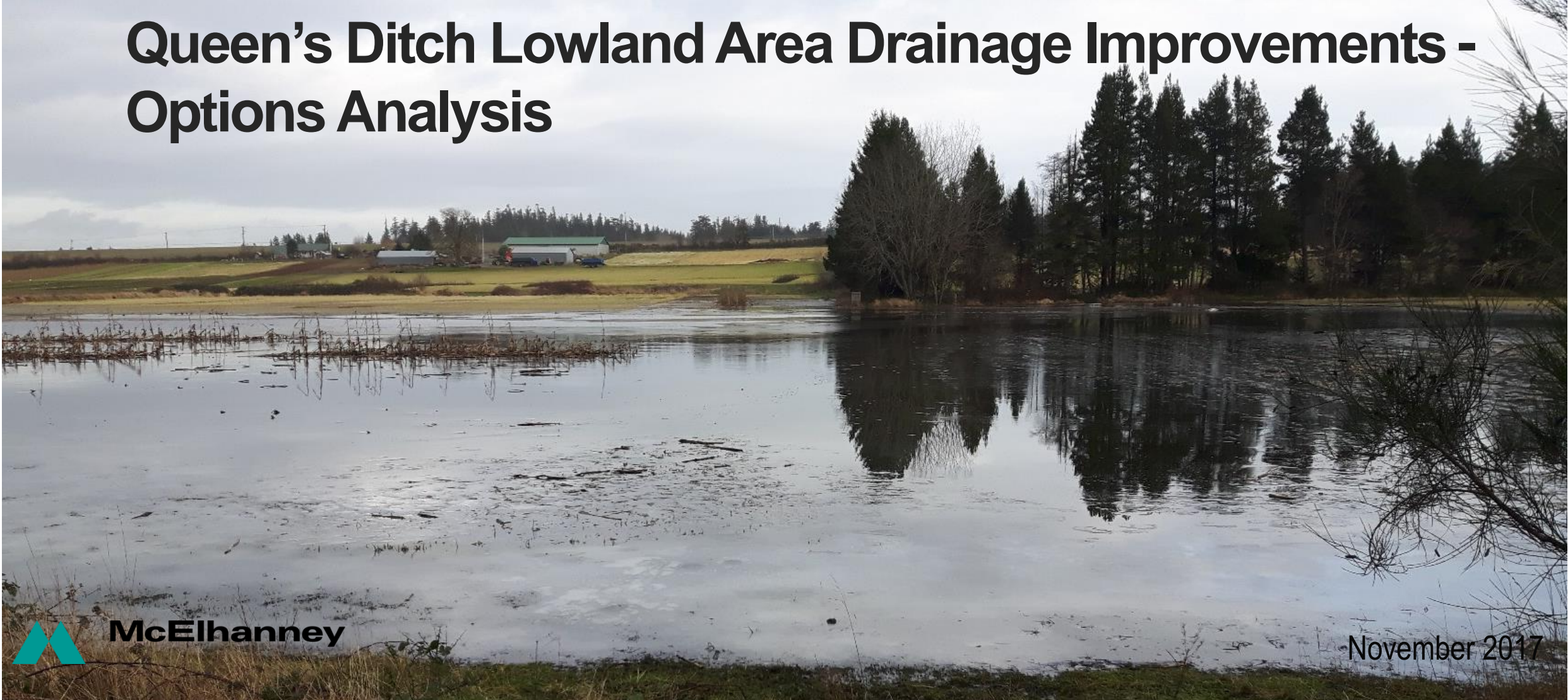


Comox Valley Regional District

Queen's Ditch Lowland Area Drainage Improvements - Options Analysis





Overview

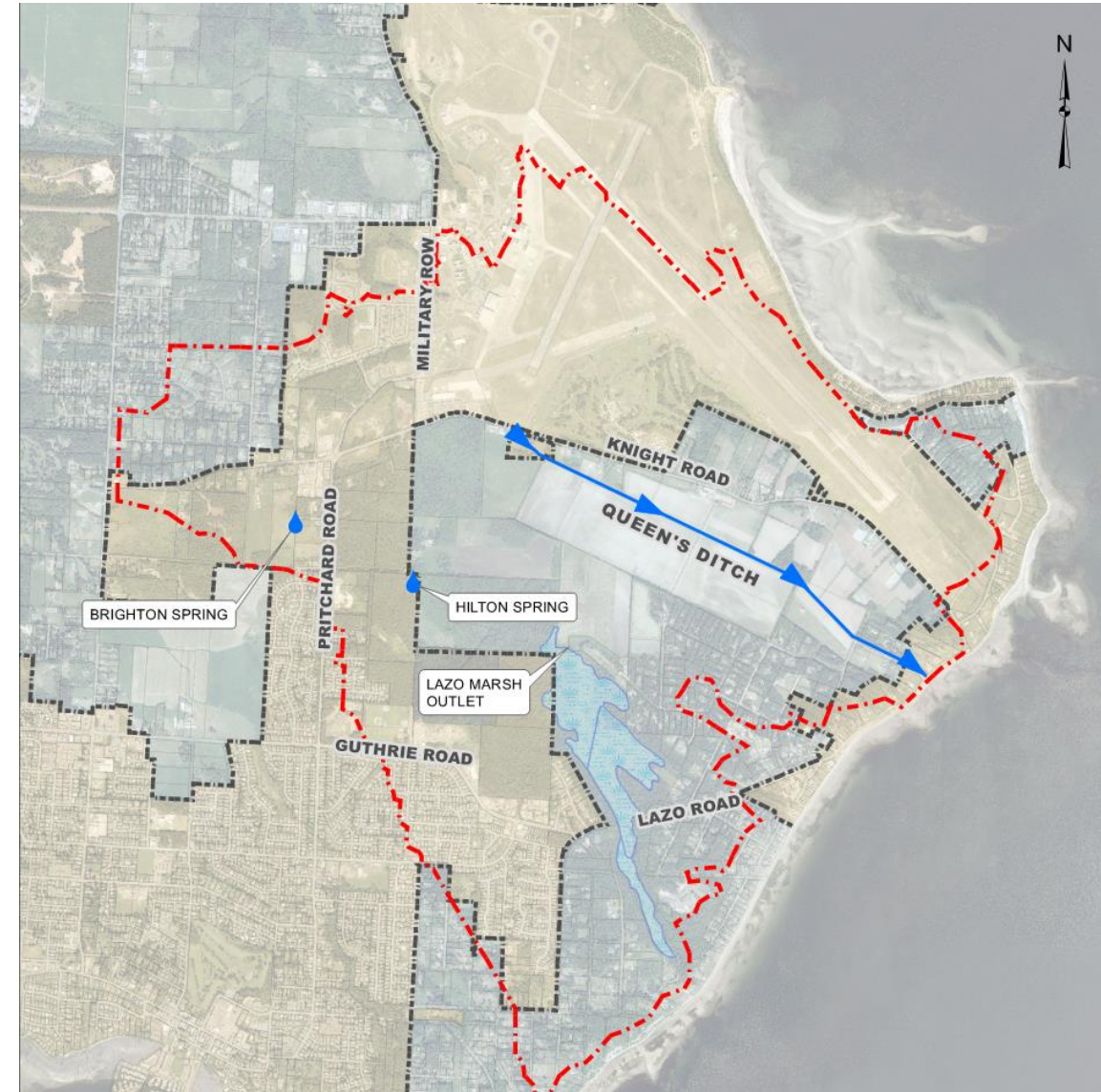
- Background - History of flooding in the area
- Overview of current study
 - Phase 1 - Drainage catchment mapping
 - Phase 2 – Land use assessment
 - Phase 3 – Verification of surface flows
 - Phase 4 – Conveyance improvement options analysis
 - Phase 5 – implementation of preferred option and development of a Management Plan
- Focus today on Phases 1, 2, and 4



Background - History of Flooding

A quick history...

- The Queen's Ditch was initially constructed as a sewage outfall
- Formalized Lazo Creek into a drainage channel
- Over time, the Lazo wetland was slowly filled to allow it to be farmed.
- Land owners have manipulated drainage to suit agricultural needs

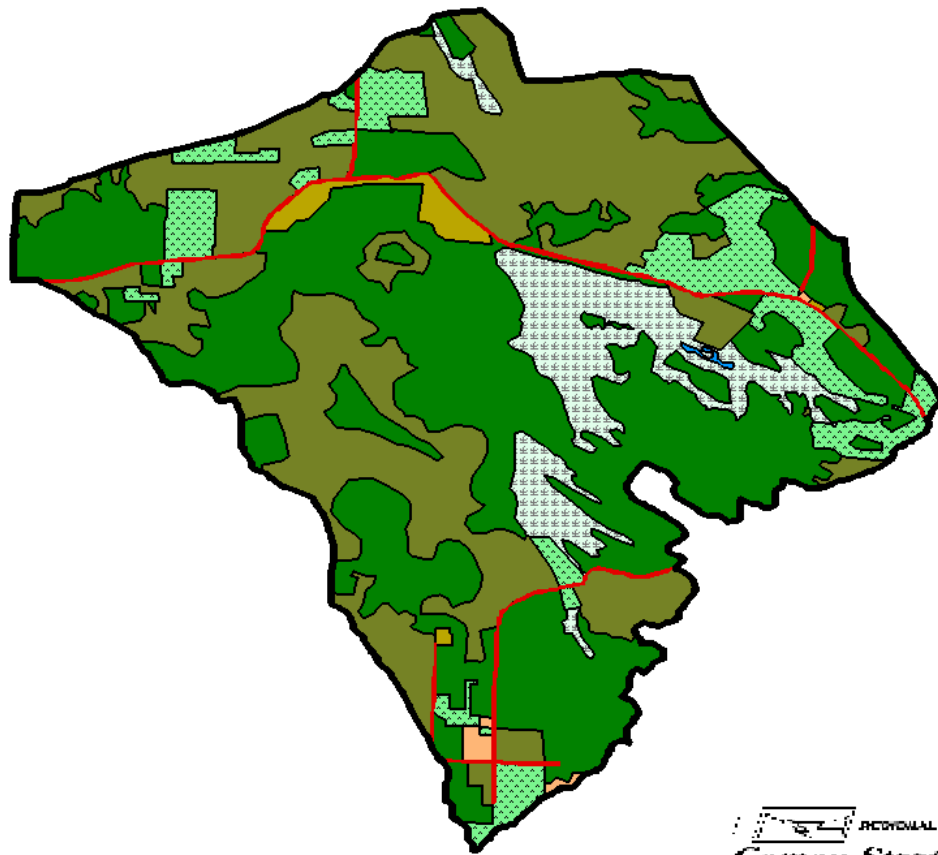




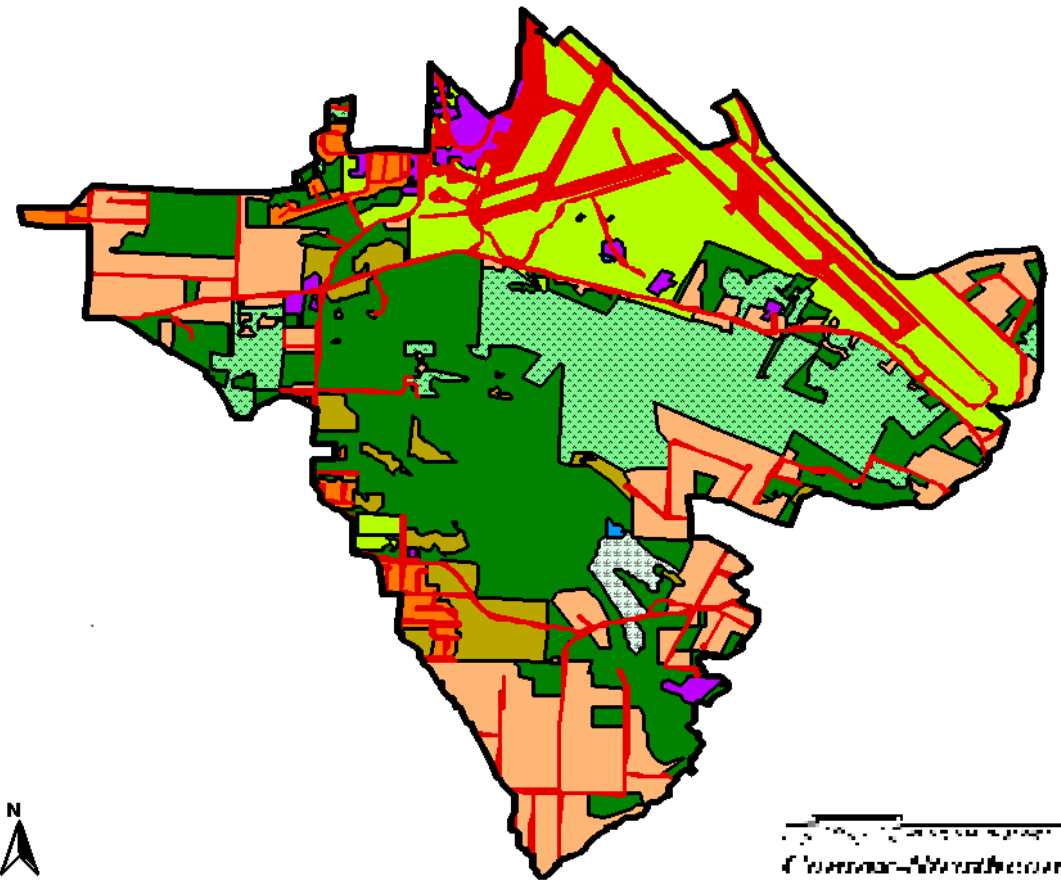
Background - History of Flooding Cont.

A quick history...

- Development of lands up-gradient of the Queen's Ditch continues to this day – CFB Comox, Town of Comox, CVRD
- Lack of regular maintenance of the Queen's Ditch has decreased available hydraulic capacity of the ditch
- Net result:
 - Reduced capacity of the Lazo Wetland (Queen's Ditch) system
 - More runoff entering the system, sooner after rain falls

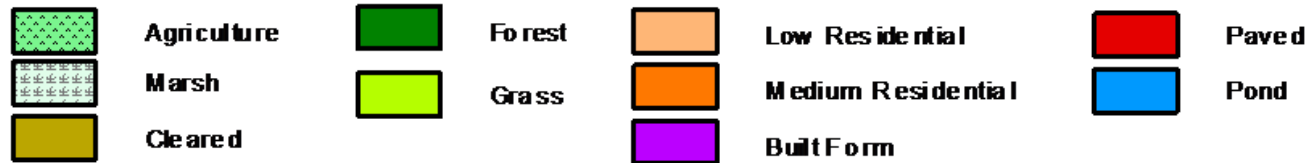


REGIONAL DISTRICT N
Comox-Strathcona



REGIONAL DISTRICT N
Comox-Strathcona

1996 LAND USE AND LAND COVER

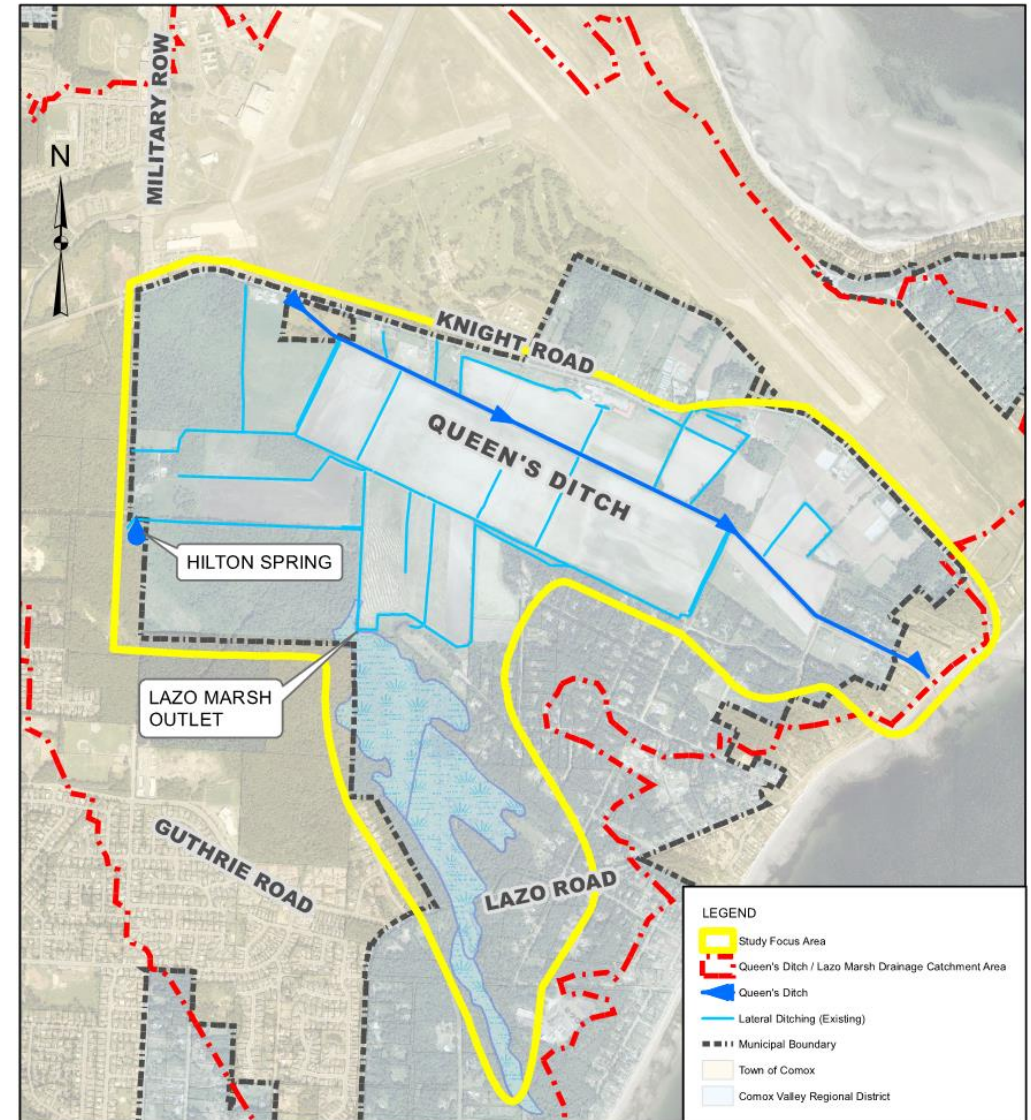
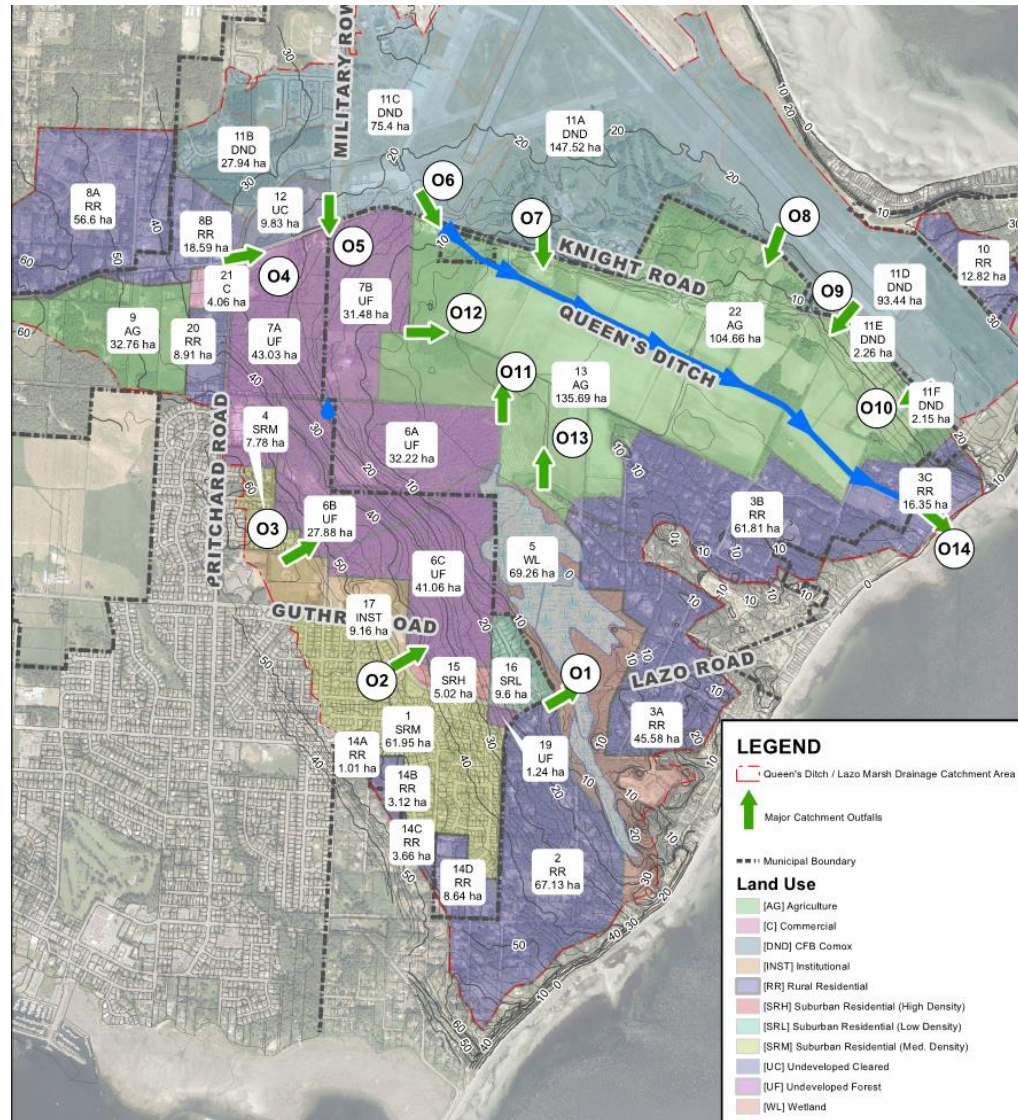


Land Use – 1931 vs 1996

“Towards a Management Plan for the Lazo Watershed and Queen’s Ditch”, prepared by William Marsh



Drainage Catchment and Land Use Mapping





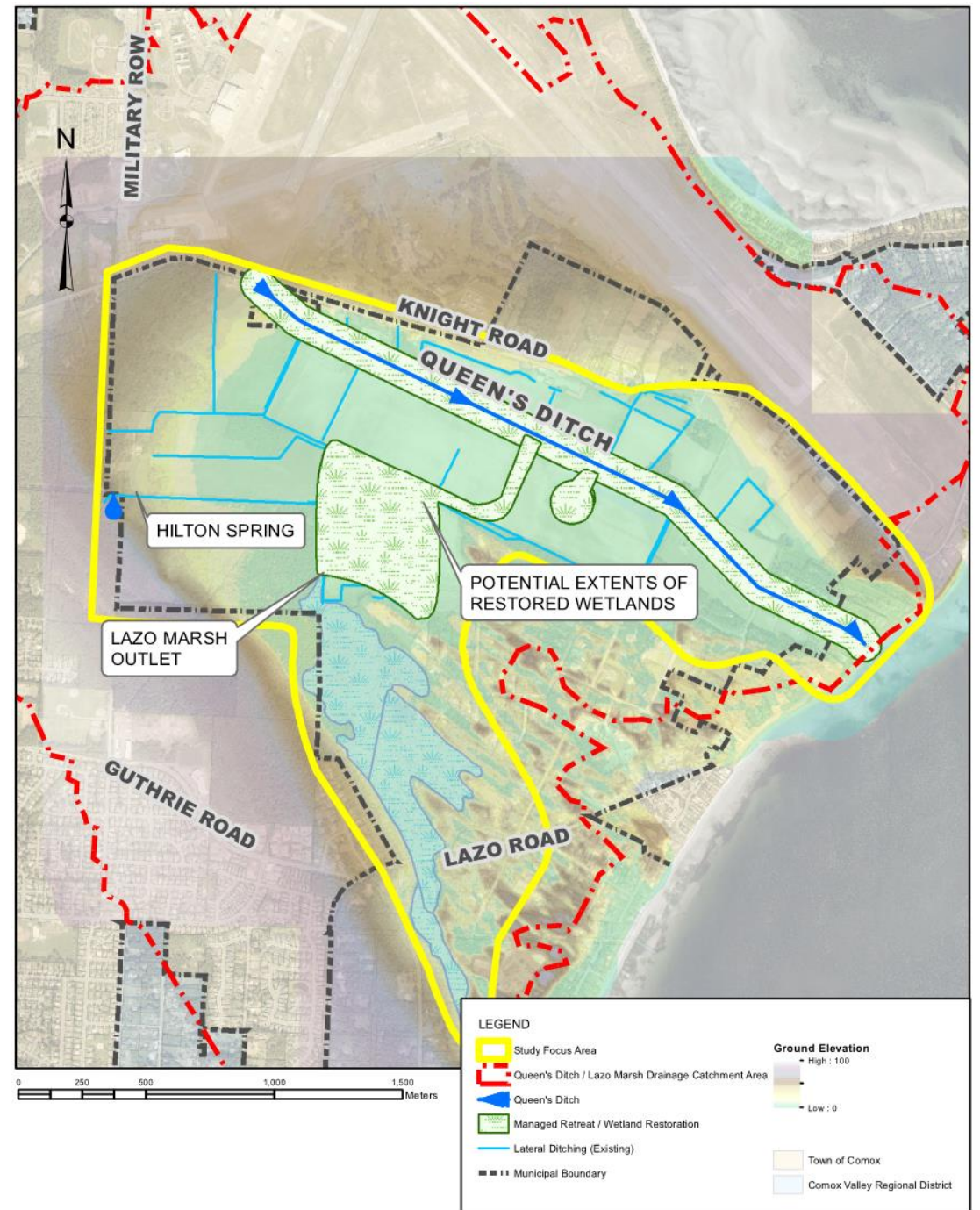
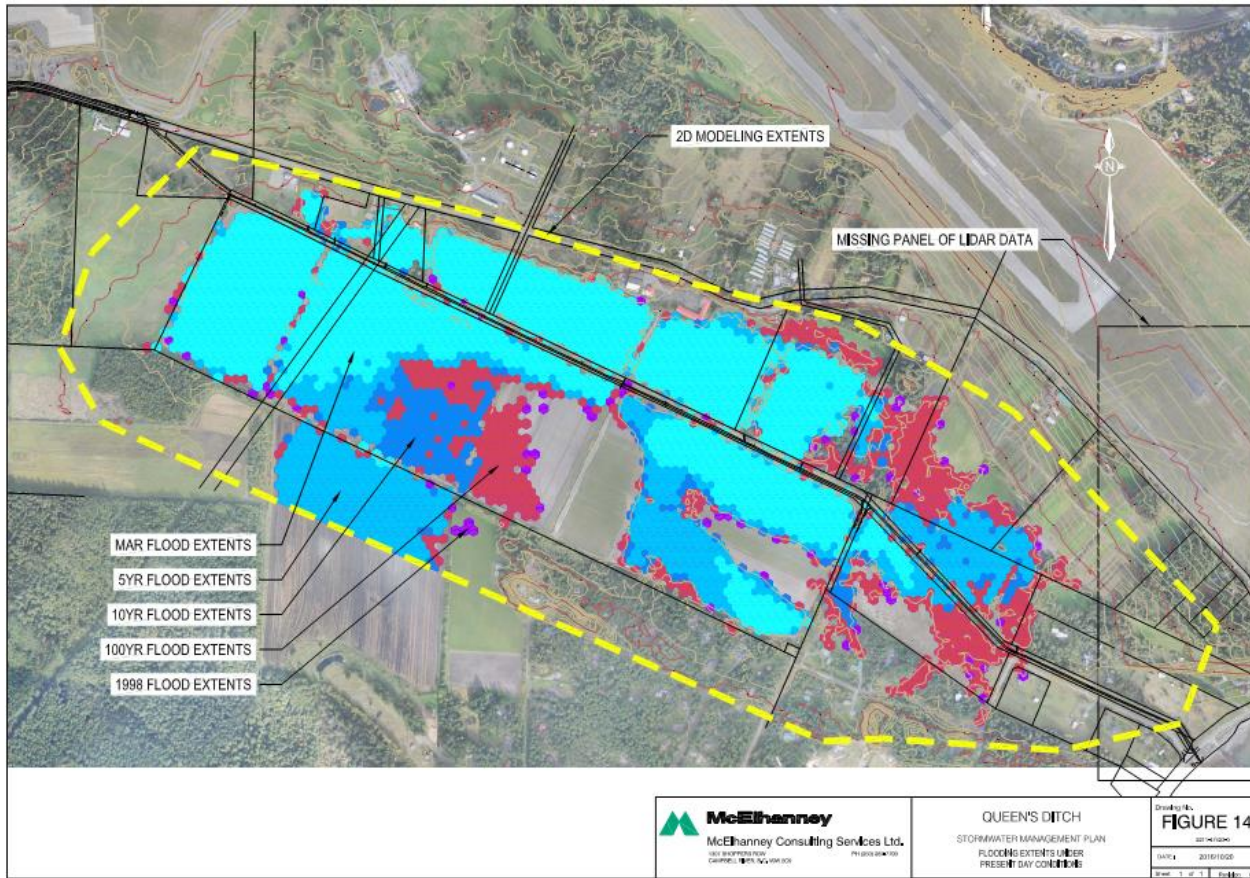
Options Analysis – Improvement Options Considered

Phase 4 Effort

1. Cleaning and deepening of existing ditching, replacing culverts as required (lined and unlined)
2. Addition of overflow channeling (2 options, Lazo Marsh and DND bypasses)
3. Diking and pumping of low areas
4. Managed retreat, or wetland restoration
5. Construction of detention ponds, or off-channel storage



Managed Retreat - Wetland Restoration Option



Questions

