Request for Decision

To:	Regular Meeting
From:	**Development and Engineering Services**
Date:	March 26, 2018
Subject:	Sensitive Ecosystem Inventory implementation in Official Community Plan
Recommendation:	**THAT Council direct staff to develop the implementation of the Sensitive Ecosystem Inventory by drafting amendments to the Official Community Plan and associated bylaws.**

Background

In 2016, Council directed staff to begin the process to update the Sustainable Community Plan according to five major themes. The first identified theme was 'environmental sustainability', with policies relating to protected natural areas and environmental development permit areas, greenhouse gas reduction, and other related issues.

Significant new data and information was required to initiate planning on natural area protection, as no ecosystem mapping or classification had been performed in recent decades. In 2016, staff obtained air photo and LiDAR elevation data to provide updated source data for classifying ecosystems.

In 2017, staff and consulting biologists EcoLogic Consultants undertook the classification different ecosystem types within City limits using the Sensitive Ecosystem Inventory (SEI) methodology, as described in the attached draft final report. The SEI was originally developed for use on Vancouver Island to identify significant habitat areas to protect. It has since been used across BC and is a standard methodology.

While useful for identifying potential areas to prioritize for conservation, it also acts as a science-based decision support tool for land use and development decisions because it identifies which areas are more suitable for disturbance. Development can be directed to non-sensitive lands and varying degrees of protection could be brought into place for sensitive lands.

The ecosystem mapping can also be used to identify areas associated with ecosystem services such as flood protection, erosion control, carbon sequestration and aquifer protection. These ecosystem services contribute greatly to community livability, while providing municipal services such as stormwater reduction at no cost. An upcoming report on applying the SEI in conservation planning will identify how the biodiversity, conservation and ecosystem services values apply to planning and development or operational decisions. The following are ecosystem values and services of relevance to ecosystems identified in the SEI:

- Socio-economic
    - Brings nature into communities
    - Offers scenic values
    - Intrinsic value of nature
    - Cultural values
    - Provides green spaces and place for outdoor recreation
    - Provides educational opportunities in/on nature
    - Provides opportunities for eco-tourism
    - Increased property value
    - Reduction of invasive species
    - Mitigates impacts of climate change
    - Legacy for future generations
    - Health – get outside and active
- Ecological
    - Offers representation of ecosystem types
    - Contributes to biodiversity
    - Habitat for rare or endangered ecosystems/species
    - Provides connectivity and linkages
    - Contributes to resilient ecosystems to mitigate impacts of climate change
    - Conservation framework i.e. Important in larger context provincial and federal interest Contributes to other conservation initiatives
- Species
    - Contains habitat features necessary for reproduction
    - Food for reproduction
    - Security habitat
    - Contains habitat features necessary for general living during growing season
    - Contains habitat features necessary for general living during winter season
- Municipal ecosystem service
    - Flood Protection
    - Water Quality
    - Provides erosion control
    - Storm water management Rainfall interception i.e. reduce impermeable surfaces
    - Provides dust control
    - Reduction of invasive species
    - Aquifer Protection
- Other ecosystem service
    - Air quality i.e. oxygen production, CO_2 sequestration
    - Temperature control
    - Soil quality
    - Water quality
    - Sediment & nutrient retention and export
    - Local climate amelioration (i.e. natural cooling in the summer and warming in the winter)
    - Carbon Storage

Staff recommends implementing the Sensitive Ecosystem Inventory through objectives, policies and development permit area regulations in the Official Community Plan as part of this theme update. Other implementing bylaws and polices will include:

- Zoning Bylaw – refinements to zone locations, boundaries and setbacks;
- Tree Bylaw – protection for sensitive ecosystems on private lands;
- Tree Policy – management of City trees in or near sensitive ecosystems; and
- Nature Park dedication bylaws.

Benefits or Impacts

Strategic Impact

 Economic Growth

- Ensure that all development is in line with visions and guiding principles of the SCP and current best practices.
- We will develop a sustainability charter.

 Fiscal Responsibility

- We will continue to retain our natural assets as a public trust.

Attachments
Final Draft Sensitive Ecosystem Inventory report.

Recommendation

THAT Council direct staff to develop the implementation of the Sensitive Ecosystem Inventory by drafting amendments to the Official Community Plan and associated bylaws.

Options

1. RESOLVED THAT Council accepts the recommendation.
2. RESOLVED THAT Council does not accept the recommendation.
3. RESOLVED THAT Council refers the matter back to staff for further information.

Report Approval Details

Document Title:	RFD SEI to OCP March 2018.docx
Attachments:	- Grand_Forks_SEI_FinalDraft_Mar2018.pdf
Final Approval Date:	Mar 15, 2018

This report and all of its attachments were approved and signed as outlined below:

Dolores Sheets - Mar 15, 2018 - 3:14 PM

Diane Heinrich - Mar 15, 2018 - 3:17 PM