



**The Corporation of the City of Grand Forks
Committee of the Whole Meeting
AGENDA**

Meeting #: C-2018-3
Date: Monday, March 12, 2018, 9:00 am
Location: 7217 - 4th Street, City Hall Council Chambers

Pages

1. CALL TO ORDER

2. COMMITTEE OF THE WHOLE AGENDA

- a. Adopt agenda
March 12, 2018, COTW

Recommendation

THAT the COTW adopts the agenda as presented.

- b. In-Camera Reminder
Reminder:

A Special to go In-Camera meeting of Council will be held following the Committee of the Whole.

3. MINUTES

- a. Adopt Minutes - Committee of the Whole
February 13, 2018, Committee of the Whole Meeting Minutes

1 - 7

Recommendation

THAT the COTW adopts the February 13, 2018, Committee of the Whole Minutes as presented.

4. REGISTERED PETITIONS AND DELEGATIONS

- a. Fred Marshall, Gene Koch and Others
Saving the Vienna Woods

8 - 9

5. REGIONAL TOPICS FOR DISCUSSION - WITH AREA D

6. PRESENTATIONS FROM STAFF

- a. Sensitive Ecosystem Inventory Draft Report
Engineering and Development

10 - 58

Recommendation

THAT the Committee of the Whole accepts the Sensitive Ecosystem Inventory report for information, and further, THAT the Committee of the Whole recommends to Council to direct staff to implement the Sensitive Ecosystem Inventory in the Official Community Plan, at the March 26, 2018 Regular Meeting of Council.

- b. Monthly Highlight Reports
Department Managers

59 - 62

Recommendation

THAT the COTW receives the monthly highlight reports from department managers.

7. REPORTS AND DISCUSSION

8. PROPOSED BYLAWS FOR DISCUSSION

- a. 2018 Elections Bylaws updates
Corporate Services

63 - 88

Recommendation

THAT the Committee of the Whole recommends to Council to give the first three readings of the "General Local Government Election Bylaw No. 2042, 2018", at the March 26, 2018, Regular Meeting;

AND FURTHER THAT the Committee of the Whole recommends to Council to give the first three readings of the "Automated Voting Machines Authorization Bylaw No. 2043, 2018", at the March 26, 2018, Regular Meeting.

- b. Bylaw No. 2045 Five Year Financial Plan
Chief Financial Officer

89 - 97

Recommendation

THAT the Committee of the Whole discusses a tax revenue increase of either 2% or 3% and recommends that Staff includes the amount in Financial Plan Bylaw No. 2045;

AND FURTHER THAT the Financial Plan Bylaw No. 2045 be presented for first three readings at the March 26, 2018, Regular Meeting of Council.

9. INFORMATION ITEMS

10. CORRESPONDENCE ITEMS

11. LATE ITEMS

12. REPORTS, QUESTIONS AND INQUIRIES FROM MEMBERS OF THE COUNCIL (VERBAL)

13. QUESTION PERIOD FROM THE PUBLIC

14. ADJOURNMENT



The Corporation of the City of Grand Forks
Committee of the Whole
MINUTES

Meeting #: C-2018-02
Date: Tuesday, February 13, 2018, 9:00 am
Location: 7217 - 4th Street, City Hall Council Chambers

Present: Mayor Frank Konrad
Councillor Julia Butler
Councillor Chris Hammett
Councillor Neil Krog (joined at 9:53 am)
Councillor Colleen Ross (joined at 9:04 am)
Councillor Christine Thompson
Councillor Beverley Tripp

Staff: Diane Heinrich - Chief Administrative Officer / Corporate Officer
Daniel Drexler - Deputy Corporate Officer
Juliette Rhodes - Chief Financial Officer
David Reid - Manager of Operations
Dolores Sheets - Manager of Development & Engineering Services
Dale Heriot - Fire Chief
Cavan Gates - Deputy Manager of Operations & Sustainability (joined at 9:50 am)
Graham Watt - Senior Planner
David Bruce - Manager of Inspection & Bylaw Services
Bud Alcock - Bylaw Enforcement Officer

GALLERY

1. CALL TO ORDER

The Committee of the Whole Meeting was called to order at 9:00 am.

2. COMMITTEE OF THE WHOLE AGENDA**a. Adopt agenda**

February 13, 2018, Committee of the Whole

Moved by: Thompson

THAT the COTW adopts the agenda as presented.

Carried

b. In-Camera Meeting Reminder

Reminder:

A Special to go In-Camera meeting of Council will be held directly following the Committee of the Whole.

3. MINUTES**a. Adopt minutes - COTW**

January 15, 2018, Committee of the Whole Meeting minutes

Moved by: Thompson

THAT the COTW adopts the January 15, 2018, Committee of the Whole Meeting minutes as presented.

Carried

4. REGISTERED PETITIONS AND DELEGATIONS**a. Request to submit BikeBC Grant and investigate plowing across Nursery Trestle**

Grand Forks Community Trails Society

Councillor Ross joined the meeting at 9:04 am.

Chris Moslin of the Grand Forks Community Trail Society gave a presentation and discussion ensued regarding:

- 2017 year review

- Trails throughout the City
- Possibility to apply for Bike BC grant
- 2 proposed upgrades to the trail system in Grand Forks
- possibly extension of plowing the Trans Canada Trail into a section of the RDKB area of the trail

Moved by: Tripp

THAT the COTW receives the delegation and presentation from The Grand Forks Community Trails Society for information and the proposed motions for discussion.

Carried

b. 2017 Year-End Summary as per Fee for Service Agreement

The Boundary Museum Society

Shannon Profili and Lee Derhousoff of the Boundary Museum Society gave a presentation and discussion ensued regarding:

- 2017 year in review
- various user groups use the Museum meeting room
- upgrade to meeting room equipment to make the area more user friendly
- various events throughout the year
- restoration of antiques
- Indigenous exhibit and education
- upcoming events for 2018
- trial run of admission fees compared to donations only
- great & important facility to have in community
- possible "passport" in conjunction with other venues in the community

Moved by: Thompson

THAT the COTW receives for information the delegation presentation from The Boundary Museum Society.

Carried

c. Quarterly Update

Grand Forks Art Gallery Society

Tim van Wijk and Gary Babin of the Art Gallery Society gave a presentation and discussion ensued:

- new exhibits at the Gallery facility
- fundraising events
- AGM - retirements, new board members, renaming of a Gallery wing as the "Ted Fogg Gallery"
- planned events for 2018
- other initiatives - strategic plan updates, brand review, asset management and capital budgeting
- year end financials are on track
- importance of arts and culture for the community
- possible admission pricing compared to donations
- comparison to other gallery's in the country
- compensation for artists compared to sales of art work

Moved by: Ross

THAT the COTW receives for information the delegation presentation from the Grand Forks Art Gallery Society.

Carried

5. REGIONAL TOPICS FOR DISCUSSION - WITH AREA D

6. PRESENTATIONS FROM STAFF

- a. Revision of Policy 1603 – Risk Management City Electrical

Outside Works

Councillor Krog joined the meeting at 9:53 am.

Discussion ensued regarding the proposed policy:

- comparison regarding language between new and old policy
- meant as an over-arching governance policy
- electrical review and safety procedures are in a separate document
- guiding principle is focused on health & safety and risk management of the utility to go hand in hand as part of the overall safety procedures

- procedures are in separate document that are operational in nature
- Councils responsibility is to set policy, not procedures

Moved by: Thompson

THAT the Committee of the Whole recommends to Council to adopt the revised “Policy 1603 – Risk Management City Electrical” at the February 26, 2018, Regular Meeting.

Carried

b. Cannabis Legalization Critical Path

Engineering and Development

Discussion ensued regarding:

- timeline for bylaw changes required
- staff resources required to meet timelines
- comparison with other municipalities and potential of working collectively
- legal counsel consultation and input
- goals of the public survey - to determine possible public consumption and possible retail location
- possible mute point regarding public consultation
- provincial and federal regulations will dictate what the municipality can legislate through a local bylaw
- public survey will be used to draft a smoking bylaw to fill the gaps in provincial and federal legislation

Moved by: Hammett

THAT the Committee of the Whole recommends to Council to approve the bylaw introduction and amendment timeline as presented, at the February 26, 2018, Regular Meeting.

Carried

c. Monthly Highlight Reports

Department Managers

Discussion ensued regarding:

- fire at a homeless camp
- LGMA Bootcamp update
- Right of Way under the rail road as part of the WWTP project
- Second hand dealers bylaw is currently under internal review

Moved by: Ross

THAT the COTW receives the monthly highlight reports from department managers.

Carried

7. **REPORTS AND DISCUSSION**8. **PROPOSED BYLAWS FOR DISCUSSION**9. **INFORMATION ITEMS**10. **CORRESPONDENCE ITEMS**11. **LATE ITEMS**12. **REPORTS, QUESTIONS AND INQUIRIES FROM MEMBERS OF THE COUNCIL (VERBAL)**13. **QUESTION PERIOD FROM THE PUBLIC**

Rod Zielinski:

- sewer phasing plan project - grant project has to be completed by March 31, 2018
- expressed concerns regarding the Electrical Safety Plan

Gene Koch:

- Vienna Woods information submitted to Council
- history of the Vienna Woods area and past Council discussions

- possibility for Council to make a firm commitment to the continued support of the Vienna Woods area - previous resolution did not result in a status change of the property
- bylaw or covenant on the property would be required to ensure protection of the area
- importance of bird habitat for the community
- possible protection of forested areas
- process for advertisement of property due to inquiry from a developer
- sensitive systems inventory by an independent biologist is in final stages, review should be available to Council in March 2018
- danger tree removals on airport grounds in 2016
- environmentally sensitive staff is currently employed at the City
- possible cleanup procedures
- types of owls in the area: grey horned owl, boreal owl, screech owl

14. **ADJOURNMENT**

The Committee of the Whole Meeting was adjourned at 11:07 am.

Moved by: Ross

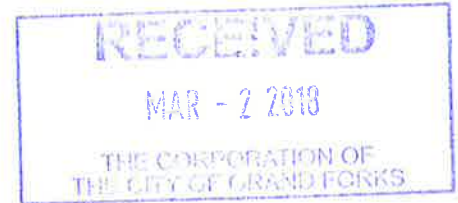
THAT the Committee of the Whole Meeting be adjourned at 11:07 am.

Carried

Mayor Frank Konrad

Deputy Corporate Officer – Daniel
Drexler

Council Delegations



Background

Council for the City of Grand Forks welcomes public input and encourages individuals and groups to make their views known to Council at an open public meeting.

Council needs to know all sides of an issue, and the possible impacts of any action they make take, prior to making a decision that will affect the community. The following outline has been devised to assist you in preparing for your presentation, so that you will understand the kind of information that Council will require, and the expected time frame in which a decision will be forthcoming. Council may not make a decision at this meeting.

Presentation Outline

Presentations may be a maximum of 10 minutes.

Your Worship, Mayor Konrad, and Members of Council, I/We are here on behalf of

Fred Marshall, Gene Koch and others
guest speaker
to request that you consider re-instating the Vienna
woods to be a raptor sanctuary / and urban
forest

The reason(s) that I/We are requesting this action are:

to follow up to lack of time to provide
further information on saving the
Vienna woods from being sold

I/We believe that in approving our request the community will benefit by:

improving air quality, removing noise and
dust pollution, and providing a sanctuary
for endangered species of birds, raptor
and others.

FILE CODE

D2 - Gene Koch & others
re Vienna Woods

Council Delegations (cont.)

I/We believe that by not approving our request the result will be:

a loss from multiple perspectives to the citizens of Grand Forks and the surrounding regional district.

In conclusion, I/we request that Council for the City of Grand Forks adopt a resolution

stating: The commitment made in March of 2004 be honored, and extended to include this area be forever set aside and designated as a raptor and ~~wildlife~~ wildlife sanctuary.

Name:

GENE KOCH & GEORGIA KOCH

Organization:

Mailing Address:

(Including Postal Code)

5955 Kenmore Road G.F.

Telephone Number:

250 442-3957

Email Address:

23216657@gmail.com

The information provided on this form is collected under the authority of the Community Charter and is a matter of public record, which will form a part of the Agenda for a Regular Meeting of Council. The information collected will be used to process your request to be a delegation before Council. If you have questions about the collection, use and disclosure of this information contact the "Coordinator" City of Grand Forks.

N:Forms/Delegation Form

Request for Decision



To: Committee of the Whole
From: **Engineering and Development**
Date: March 12, 2018
Subject: Sensitive Ecosystem Inventory Draft Report
Recommendation: **THAT the Committee of the Whole accepts the Sensitive Ecosystem Inventory report for information, and further, THAT the Committee of the Whole recommends to Council to direct staff to implement the Sensitive Ecosystem Inventory in the Official Community Plan, at the March 26, 2018 Regular Meeting of Council.**

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 of 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, CO₂ 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 policies 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 the Committee of the Whole accepts the Sensitive Ecosystem Inventory report for information, and further,

THAT the Committee of the Whole recommends to Council to direct staff to implement the Sensitive Ecosystem Inventory in the Official Community Plan, at the March 26, 2018 Regular Meeting of Council.

Options

1. RESOLVED THAT Committee of the Whole accepts the report.
2. RESOLVED THAT Committee of the Whole does not accept the report.
3. RESOLVED THAT Committee of the Whole refers the matter back to staff for further information.

Grand Forks Sensitive Ecosystems Inventory - DRAFT -

MARCH 2, 2018

PRESENTED TO:

Development and Engineering Services
City of Grand Forks

PRESENTED BY:

EcoLogic Consultants
4369 Poplar Ridge Crescent
Crescent Valley, BC V0G1H1
Phone: 250-359-7420

PREPARED BY:

A handwritten signature in blue ink, appearing to read "Ryan Durand".

Ryan Durand, RPBio.
Ecologist and Project Manager
EcoLogic Consultants Ltd.

March 2, 2018

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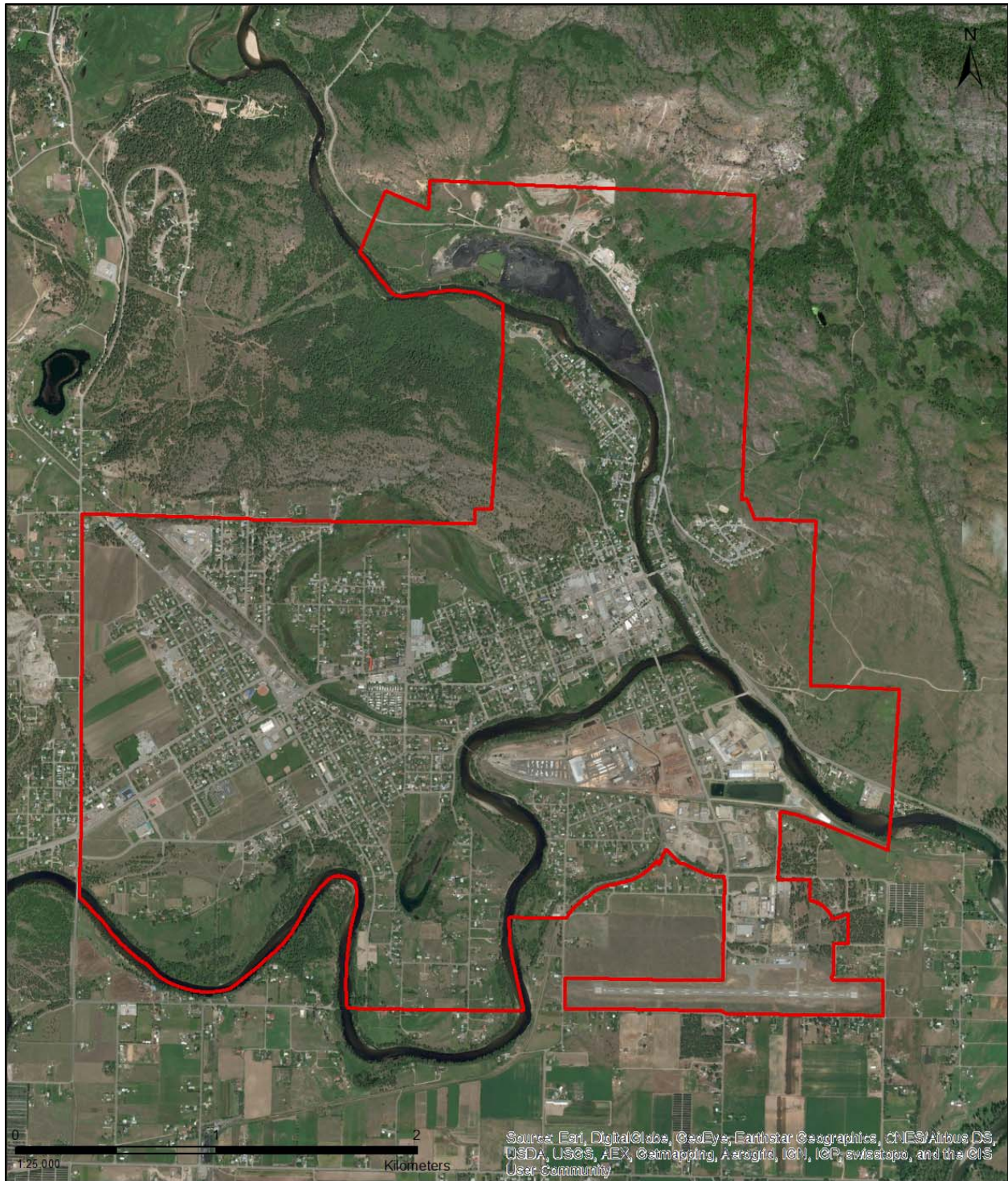
1. INTRODUCTION

The goal of this project was to use Sensitive Ecosystems Inventory (SEI) methodology to map the City of Grand Forks (Fig. 1-1), BC (the City). SEI mapping was created in 1993 by the Canadian Wildlife Service and the BC Conservation Data Centre. It was created in *'response to a need for inventory of at-risk and ecologically fragile ecosystems, and critical wildlife habitat areas on the east side of Vancouver Island.'* Since then, numerous projects have been completed throughout the province. In 2006 a *Standard for Mapping Ecosystems At Risk in British Columbia* was created by the Resource Inventory Standards Committee to promote a standardized process province wide (RISC 2006).

The main purpose of SEI mapping is to describe the ecological diversity of a given area, and determine the type and extent of vulnerable and rare elements (RISC 2006). The SEI standard describes an overview of the assessment process as follows:

'The SEI classification uses two primary groupings of ecosystems: **Sensitive Ecosystems** and **Other Important Ecosystems**. Within each of these groups a series of classes and subclasses is defined that provides a general level of ecosystem description that is appropriate for public education and local planning exercises. Sensitive Ecosystem categories are generalised [sic] groupings of ecosystems that share many characteristics, particularly ecological sensitivities, ecosystem processes, at-risk status, and wildlife habitat values. Criteria for ecological sensitivity include: **environmental specificity**, susceptibility to hydrological changes, soil erosion, especially on shallow soils, spread of invasive alien plants, and sensitivity to human disturbance. Other Important Ecosystems have significant ecological and biological values associated with them that can be identified and mapped, although they are not defined as Sensitive Ecosystems because they have been substantially altered by human use. Consideration of Other Important Ecosystems is critical to capturing key elements of biodiversity of some project areas; they sometimes provide recruitment sites for ecosystems at risk or important wildlife habitat requiring recovery or restoration.'

This report serves as the preliminary findings of the SEI project. It describes the type and extent of ecosystems found in the City. It also provides some example conservation mapping using two locally occurring rare species. Finally, recommendations are provided for future projects to build upon this initiative.



Grand Forks Sensitive Ecosystems Inventory

Figure 1-1. Study Area

Date: 3/5/2018



Coordinate System: NAD 1983 UTM Zone 11N
Projection: Transverse Mercator
Datum: North American 1983

2. METHODOLOGY

Preliminary SEI classes and subclasses were developed for this project from previous SEI projects in the Lower Mainland, Vancouver Island, Gulf Islands, West Kootenay and Okanagan. Some descriptions were changed to reflect location conditions. Table 2-1 presents the full range of SEI classes and subclasses that were available (and appeared to be applicable) for this project.

Table 2-1. Potential SE Classes and Subclasses

SEI Class	SEI Subclass	Brief Description
OF: Old Forest		Forests > 140 yrs.
OF	bd: broadleaf	Broad-leaf dominated (> 75% of stand composition).
OF	co: coniferous	Conifer > 75% of stand.
OF	mx: mixed	Stand composition > 25% conifer and > 25% broadleaf.
MF: Mature Forest		Forests > 80 yrs, < 140 yrs.
MF	co: coniferous	Conifer-dominated (> 75% of stand composition).
MF	mx: mixed	Stand composition > 25% conifer and > 25% broadleaf.
MF	bd: broadleaf	Broad-leaf dominated (> 75% of stand composition).
YF: Young Forest		Patches of forest – stands > 30 yrs, < 80 yrs.
YF	co: coniferous	Conifer-dominated (> 75% of stand composition).
YF	mx: mixed	Stand composition > 25% conifer and > 25% broadleaf.
YF	bd: broadleaf	Broad-leaf dominated (> 75% of stand composition).
PS: Pole Sapling		Trees > 10 m tall, usually 10 - 15 yrs.
PS	co: coniferous	Conifer-dominated (> 75% of stand composition).
PS	mx: mixed	Stand composition > 25% conifer and > 25% broadleaf.
PS	bd: broadleaf	Broad-leaf dominated (> 75% of stand composition).
BW: Broadleaf Woodland		
BW	ac: aspen copse	Aspen copse ecosystems occur in broad, moist depressions in grassland areas. They are typically small ecosystems with trembling aspen overstories and shrubby understories dominated by common snowberry and roses.
BW	as: aspen seepage	Aspen seepage ecosystems occur on slopes with subsurface seepage in a matrix of coniferous forests. These ecosystems are moist and rich as a result of nutrient inputs from seepage and the annual input of leaf litter. They have trembling aspen overstories and diverse, shrubby understories.

SEI Class	SEI Subclass	Brief Description
WD: Woodland		
		Dry site, open stands with between 10 and 25% tree cover including Douglas fir and Ponderosa pine. Patchy shrubs such as Saskatoon and oceanspray are common. Often associated with rock outcrops and cliffs.
WD	3: shrub/herb	Shrub cover 20% or greater, tree cover less than 10%
WD	4: pole sapling	Trees are > 10 m tall and have 10% or greater cover, dense stands, generally 10-40 years old.
WD	5: young forest	Trees are > 10 m tall and have 10% or greater cover, dominated by young trees about 40-80 years old.
WD	6: mature forest	Trees are > 10 m tall and have 10% or greater cover, dominated by mature trees about 80-250 years old.
GR: Grassland		
GR	gr: grassland	Remnant native grasslands with bunchgrasses.
GR	sh: shrub	Dry shrublands – often patchy and interspersed with native and introduced grasses. Common species include snowberry, Saskatoon, rose and sumac.
GR	dr: disturbed	Dry grassland with variety of introduced grass and herbs.
SV: Sparsely Vegetated		
		Areas with 5 – 10% vascular vegetation.
SV	sh: shrub	Shrub ecosystems occur on small rock outcrops with cracks and crevices. They most commonly occur in a grassland matrix.
SV	cl: cliff	Steep slopes of exposed bedrock.
SV	ro: rock outcrop	Rock outcrops – areas of bedrock exposure.
SV	ta: talus	Dominated by rubbly blocks of rock.
SV	es: exposed soil	Any area of exposed soil that is not in other definitions.
RI: Riparian		
		Ecosystems associated with and influenced by freshwater. Structural stages are useful modifiers.
RI	fh: high bench	High bench floodplain terraces.
RI	fm: medium bench	Medium bench floodplain terraces.
RI	fl: low bench	Low bench floodplain terraces.
RI	fd: disturbed floodplain	Floodplain ecosystems that are located on modified river banks. Do not necessarily flood, but contain important cottonwood stands and habitat.
RI	gu: gully	Gully riparian ecosystems occur at the base and lower slopes of moderate to steep-sided linear sites (small valleys or ravines) with significant moisture. These ecosystems have either permanent or intermittent surface water flow, or significant subsurface flow, but are usually not subject to flooding.

SEI Class	SEI Subclass	Brief Description
RI	gb: gravel bar	Non-vegetated gravel bars within the river high water mark.
RI	ri: river	River and creeks.
WN: Wetland		Terrestrial – freshwater transitional areas.
WN	ms: marsh	Graminoid or forb-dominated nutrient-rich wetlands.
WN	sp: swamp	Shrub or tree-dominated wetlands.
WN	ow: shallow water	Permanently flooded, water less than 2m deep at mid-summer.
WN	mo: modified	Modified wetlands (including non-native species such as maple or reed canarygrass) that still retain some wetland functions and processes.
FW: Lakes and Ponds		
FW	pd: pond	Open water > 2 m deep and generally < 50 ha.
FS: Seasonally Flooded Fields		Annually flooded cultivated fields, hay fields, range land, or old fields.
OD: Old Field		Old field ecosystems. May have evidence of old dirt roads and cultivation.
CF: Cultivated Field		Field currently or recently used for various types of agriculture.
NS: Not Sensitive		Disturbed and permanently developed/modified areas.

2.1 ECOSYSTEM MAPPING

Preliminary ecosystem mapping was completed during the summer of 2017 by City staff Rosemary Dykhuizen (Engineering Technologist) and GIS co-op student (Vidula Kalkarni). After field-truthing, the final version was created by Ryan Durand (EcoLogic).

Mapping was completed in ESRI ArcMap 10.5 using heads-up delineation. As the goal of the project was to identify all ecosystem types, a minimum polygon size or mapping scale was not used, rather they were adjusted to fit natural features as needed. Mapping procedures generally followed the protocol for Terrestrial Ecosystem Mapping (RISC 1998) and Standard for Mapping Ecosystems at Risk in British Columbia (RISC 2006), but was limited by the lack of stereo imagery. Base data used for the project was supplied by the City and included:

- ♦ a 2014 15-cm resolution orthomosaic;
- ♦ a 2005 orthomosaic; and
- ♦ LiDAR-derived hillshade, surface model, contours, and canopy height model.

Each ecosystem polygon included attributes describing the type of ecosystem (SEI class and, if applicable, subclass) that occurred (up to three types per polygon) and the approximate area of each ecosystem type. For example, a polygon code may appear as follows:

5MF:co - 3YF:co - 2WN:sp

The above SEI code can be broken down to describe the polygon as containing:

50% mature coniferous forest, 30% young coniferous forest, and 20% swamp.

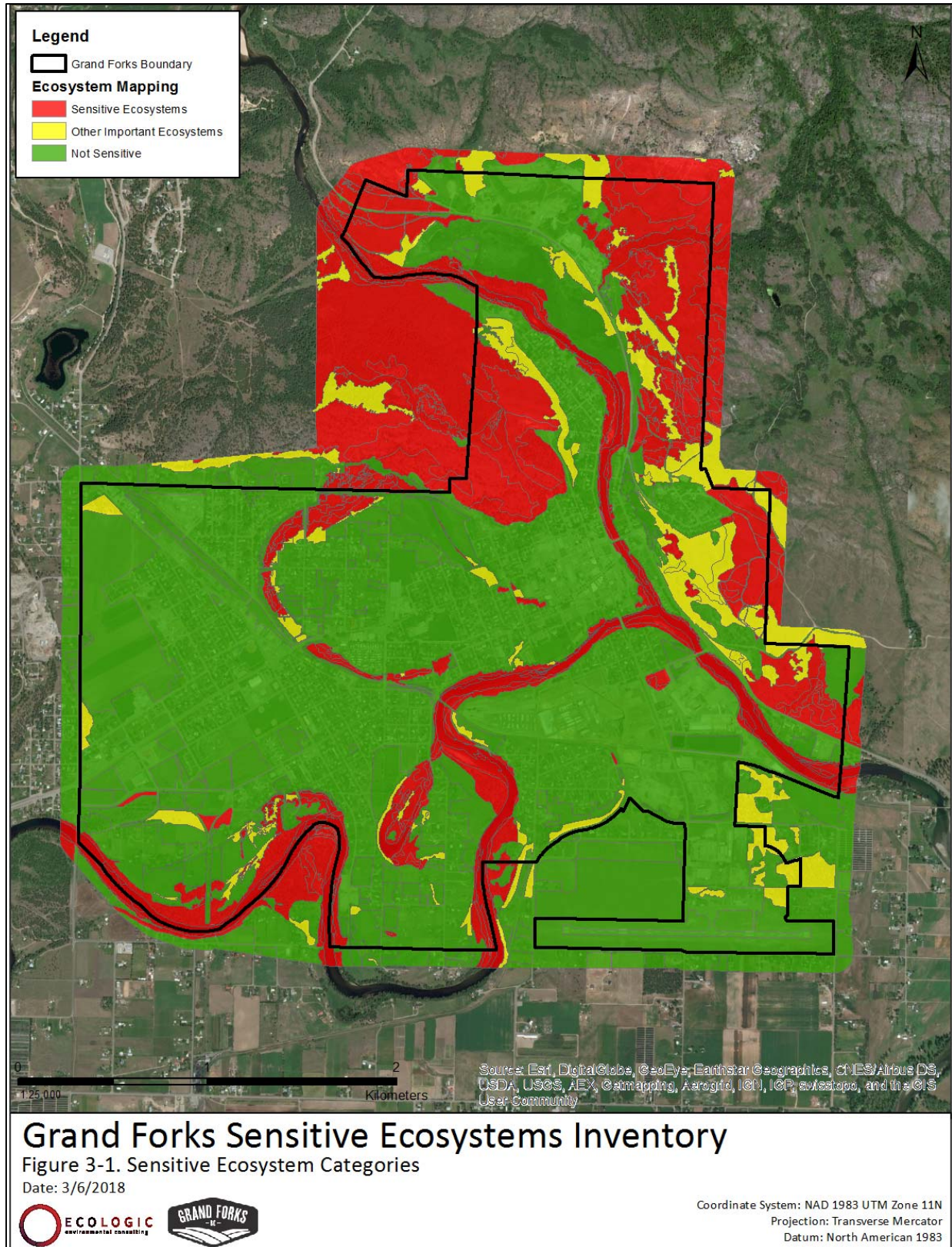
2.2 FIELD SURVEYS

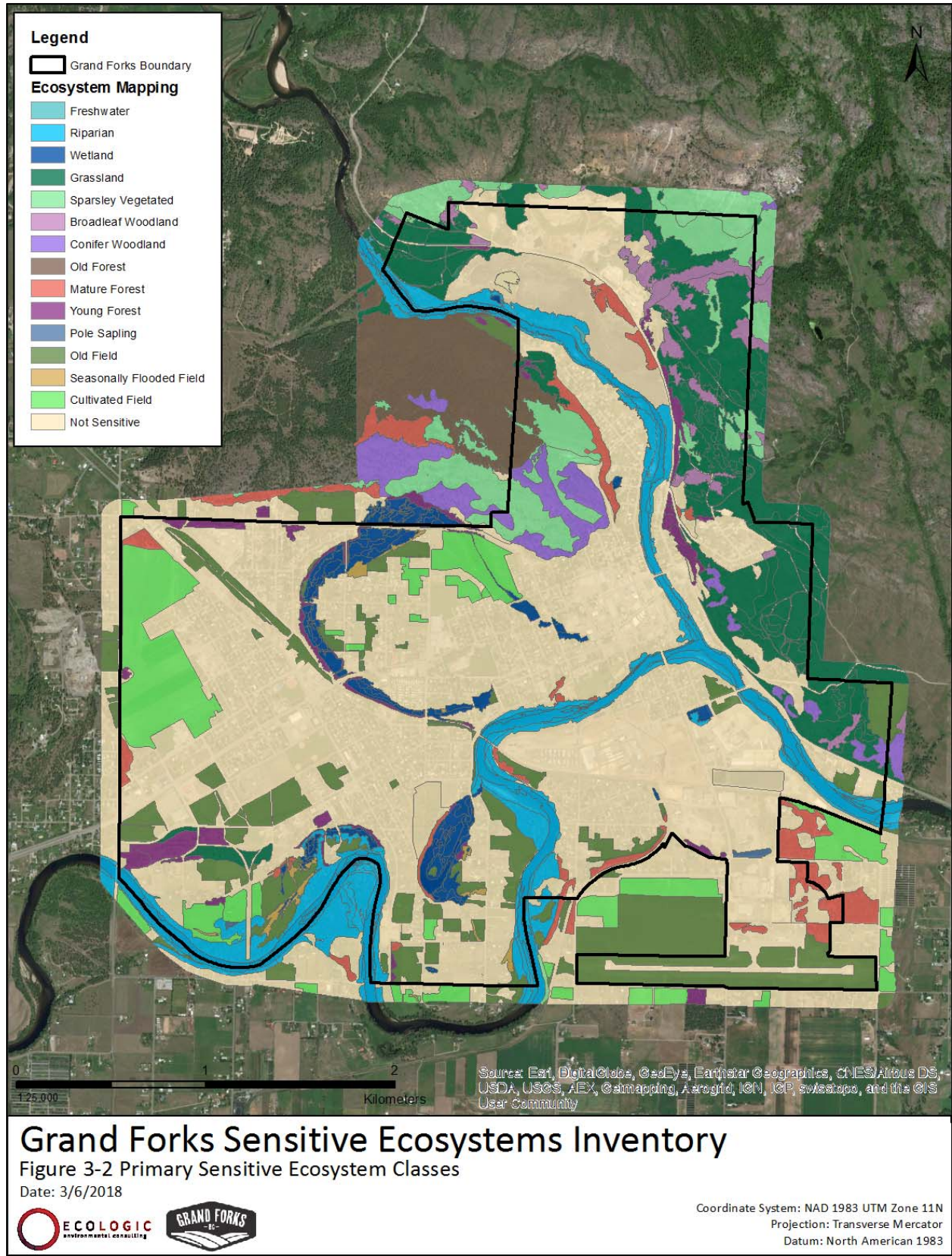
Field surveys were completed on July 20 and September 1, 2017. The surveys included site inspections of both representative ecosystem types and as large of an area possible within the City. Visual plots were completed at a total of 120 locations. The following data were collected in the field:

- ♦ location (UTMs);
- ♦ dominant vegetation type;
- ♦ SEI class and subclass;
- ♦ disturbance and condition notes;
- ♦ representative photos; and
- ♦ additional notes as necessary.

3. SENSITIVE ECOSYSTEMS INVENTORY CLASSIFICATION

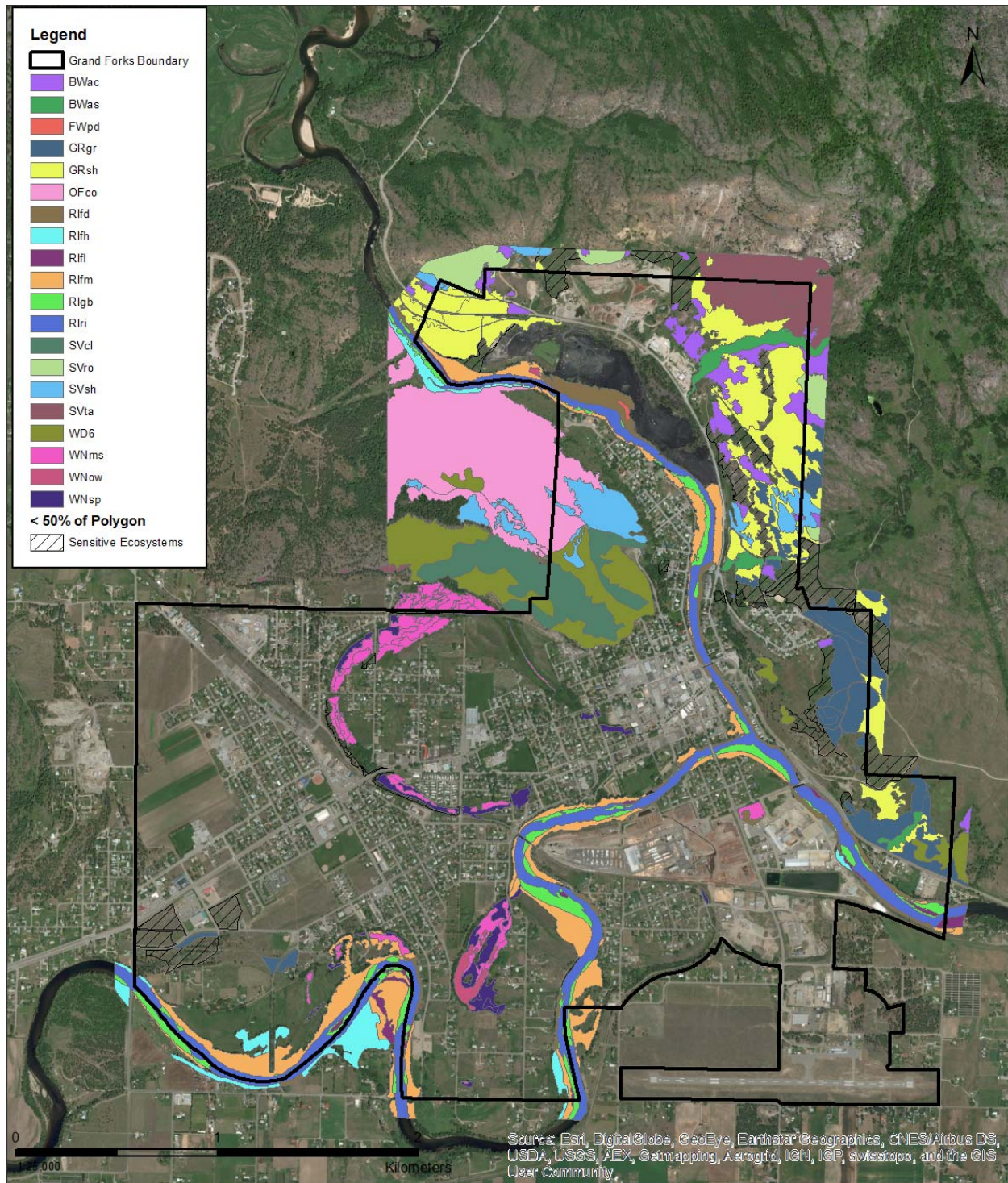
A final determination as to which mapped SEI classes and subclasses should be considered to be Sensitive Ecosystems (SE), Other Important Ecosystems (OIE), and Not Sensitive (NS) was completed based on other SEI projects and expert opinion (Fig. 3-1). The following sections indicate which classes and subclass were used in this project, and which ones fall into the SE, OIE and NS categories (Fig. 3-2).





3.1 SENSITIVE ECOSYSTEMS

Eight SEI classes are recognized as Sensitive Ecosystems in the study area (Table 3.1-1; Fig. 3.1-1). The classification is based on susceptibility to disturbance, high biodiversity and rare species potential, and the ecosystem services they provide.



Grand Forks Sensitive Ecosystems Inventory

Figure 3.1-1. Sensitive Ecosystems

Date: 3/6/2018



Coordinate System: NAD 1983 UTM Zone 11N
Projection: Transverse Mercator
Datum: North American 1983

Table 3.1-1. Sensitive Ecosystems

SEI Class	SEI Subclass	Brief Description
OF: Old Forest		Forests > 140 yrs.
OF	co: coniferous	Conifer > 75% of stand.
BW: Broadleaf Woodland		
BW	ac: aspen copse	Aspen copse ecosystems occur in broad, moist depressions in grassland areas. They are typically small ecosystems with trembling aspen overstories and shrubby understories dominated by common snowberry and roses.
BW	as: aspen seepage	Aspen seepage ecosystems occur on slopes with subsurface seepage in a matrix of coniferous forests. These ecosystems are moist and rich as a result of nutrient inputs from seepage and the annual input of leaf litter. They have trembling aspen overstories and diverse, shrubby understories.
WD: Woodland		Dry site, open stands with between 10 and 25% tree cover including Douglas fir and Ponderosa pine. Patchy shrubs such as Saskatoon and oceanspray are common. Often associated with rock outcrops and cliffs.
WD	6: mature forest	Trees are > 10 m tall and have 10% or greater cover, dominated by mature trees about 80-250 years old.
GR: Grassland		
GR	gr: grassland	Remnant native grasslands with bunchgrasses.
GR	sh: shrub	Dry shrublands – often patchy and interspersed with native and introduced grasses. Common species include snowberry, Saskatoon, rose and sumac.
SV: Sparsely Vegetated		Areas with 5 – 10% vascular vegetation.
SV	sh: shrub	Shrub ecosystems occur on small rock outcrops with cracks and crevices. They most commonly occur in a grassland matrix.
SV	cl: cliff	Steep slopes of exposed bedrock.
SV	ro: rock outcrop	Rock outcrops – areas of bedrock exposure.
SV	ta: talus	Dominated by rubbly blocks of rock.
RI: Riparian		Ecosystems associated with and influenced by freshwater. Structural stages are useful modifiers.
RI	fh: high bench	High bench floodplain terraces.
RI	fm: medium bench	Medium bench floodplain terraces.
RI	fl: low bench	Low bench floodplain terraces.

SEI Class	SEI Subclass	Brief Description
RI	fd: disturbed floodplain	Floodplain ecosystems that are located on modified river banks. Do not necessarily flood, but contain important cottonwood stands and habitat.
RI	gu: gully	Gully riparian ecosystems occur at the base and lower slopes of moderate to steep-sided linear sites (small valleys or ravines) with significant moisture. These ecosystems have either permanent or intermittent surface water flow, or significant subsurface flow, but are usually not subject to flooding.
RI	gb: gravel bar	Non-vegetated gravel bars.
RI	ri: river	River and creeks.
WN: Wetland		Terrestrial – freshwater transitional areas.
WN	ms: marsh	Graminoid or forb-dominated nutrient-rich wetlands.
WN	sp: swamp	Shrub or tree-dominated wetlands.
WN	ow: shallow water	Permanently flooded, water less than 2m deep at mid-summer.
FW: Lakes and Ponds		
FW	pd: pond	Open water > 2 m deep and generally < 50 ha.

3.1.1 Old Forest (OF)

Old Forests are stands that are greater than 140 years old. One sub-class is recognized: coniferous (OF:co). Old forests were only mapped on Observation Mountain and the classification was not confirmed in the field. There is an abundance of literature describing the ecological importance of old forests, including significant biodiversity, rare species, carbon storage, and unique wildlife habitat.

3.1.2 Broadleaf Woodland (BW)

Broadleaf Woodland (BW) are aspen-dominated ecosystems that are widespread on dry south- and western-facing slopes in the region. They typically occur as small patches in water-receiving areas, such as depressions, gullies, toes of slopes, and along watercourses. Trembling aspen forms a nearly continuous cover of typically even-aged trees, while thick understories of various shrubs are common. Two subclasses occur in the City: Aspen Copse (BW:ac) and Aspen Seepage (BW:as). Aspen Copses (Plate 3.1-1) occur in small patches, typically interspersed in larger grassland areas, while Aspen Seepages (Plate 3.1-2) normally occur associated with fluvial features (linear communities along small watercourses and seepage sites). Aspen Seepages have high shrub and herb diversity, due to increased soil moisture and nutrients.



Plate 3.1-1. Broadleaf woodland (BW:ac) aspen copse.



*Plate 3.1-2. Broadleaf woodland (BW:as) aspen seepage in the background, with
Not Sensitive disturbed areas in the foreground.*

3.1.3 Woodland (WD:6)

Woodlands are classified based on an open canopy cover (less than 25%) and their occurrence on dry, water shedding sites with thin soils. They occur on south- and western-facing slopes, interspersed with rock outcrops, cliffs and grasslands. Coniferous trees form the sparse canopy cover, including Douglas fir, Ponderosa pine and lodgepole pine. Understories are varied, with shrub species such as oceanspray common, along with a variety of grasses and herbs. Conifer woodlands are stereotypical fire-maintained ecosystems, with stand-replacing events commonly occurring.

One (of the four mapped WD subclasses) subclass is recognized as sensitive: mature (WD:6). Woodland forests are common in the Grand Forks area, often forming large stands on dry southern slopes (Plate 3.1-3). They have the potential to provide important ecological niches that other forest stands lack, are often inhabited by uncommon or rare species, and are generally sensitive to disturbance.



Plate 3.1-3. Mature woodland ecosystem (WD:6).

3.1.4 Grassland (GR)

Grasslands occur on dry, hot western and south slopes in the Grand Forks area. These sites are typically too dry and hot for trees to become widely established. Most grassland in the area has a significant disturbance history, including grazing, agriculture, fires, and an abundance of roads. Introduced and invasive species are abundant in local grasslands, with true remnant ecosystems uncommon near any developed areas. Two of the three grassland subclasses are considered to be sensitive; Grassland (GR:gr) and Shrubland (GR:sh).

Grasslands are uncommon in the study area, mainly occurring on mid to upper slopes above Valley Heights. They are patchy in occurrence, and additional field surveys will likely reduce the mapped extent (Plate 3.1-4). Bunchgrass is a key indicator of grasslands, along with a wide variety of native grasses and herbs. They are highly susceptible to disturbance and threatened by a variety of invasive species.

Shrubland occurs in areas that are slightly moister than adjacent grasslands, including slight depressions and the toe and lower slopes of water shedding sites (Plate 3.1-5). They are dominated by a high cover of shrubs, including snowberry, rose species, and sumac. Other shrubs occur sporadically, such as elderberry, Saskatoon, mock orange and the occasional conifer.



Plate 3.1-4. Remnant native grassland (GR:gr) with a shrub-filled depression below.



Plate 3.1-5. Dry shrub grassland (GR:sh) with a variety of low and tall shrubs and sporadic Douglas fir.

3.1.5 Sparsely Vegetated (SV)

Sparsely Vegetated ecosystems occur in bedrock and colluvial sites where soil and moisture are limited. Vegetation is sparse and discontinuous, with large extents of exposed bedrocks and talus (Plates 3.1-6 and 3.1-7). Four of the five SV subclasses are considered to be sensitive due to susceptibility to disturbance (and the long period of recovery post-disturbance) and the potential for unique wildlife habitat. Sensitive SV subclasses are shrub (SV:sh), cliff (SV:cl), rock outcrop (SV:ro) and talus (SV:ta).

Iverson and Cadrin (2003) describe the sensitive SV subclasses below:

“Shrub Ecosystems (SV:sh) occur on small rock outcrops with cracks and crevices. They most commonly occur in a grassland matrix. These ecosystems are often steep with soils restricted to small pockets. Scattered shrubs grow in cracks and cliff ferns often grow in small crevices.

Cliff Ecosystems (SV:cl) are steep, vertical cliffs, often found above talus ecosystems. Cliffs have minimal vegetation that is restricted to cracks and crevices, narrow ledges and small soils pockets. Shrubs typically occur in crevices and grasses and forbs occur in small soil pockets on ledges.

Talus Ecosystems (SV:ta) occur on steep slopes covered with angular rock fragments, usually below rock outcrops or cliffs. Soil is restricted to small pockets between rock

fragments. Vegetation usually includes scattered trees, shrubs and cliff ferns. Occasional grasses and forbs grow in soil pockets between rock fragments. Vegetation cover is higher on sites with smaller rock fragments where there is more soil.

Rock Outcrop Ecosystems (SV:ro) occur on areas of exposed rock that have very little soil development and sparse vegetation cover. Vegetation cover typically consists of bunchgrasses and scattered shrubs that are restricted to crevices and pockets of soil. These ecosystems are gently to steeply sloping, but are neither vertical (these are cliff ecosystems), nor dominated by shrubs (these are shrub ecosystems).”



Plate 3.1-6. Mosaic of sparsely vegetated ecosystems, including cliffs (SV:cl), rock outcrops (SV:ro) and talus (SV:ta), with mature conifer woodland (WD:6) above.



Plate 3.1-7. A small talus (SV:ta) slope below cliffs (SV:cl).

3.1.6 Riparian (RI)

Riparian Ecosystems are associated with and influenced by freshwater, generally along rivers, streams, and creeks, but for SEI, also include fringes around lakes. Ecosystems are influenced by factors such as erosion, sedimentation, flooding, or subterranean irrigation due to proximity to the waterbody. Riparian ecosystems form a transition zone between aquatic and terrestrial ecosystems and encompass areas (often linear) along creeks, streams, rivers and lakes that have more soil moisture, and therefore often have noticeably different vegetation, than the adjacent upland. They are subject to fluctuating water tables and flooding and the soils are usually nutrient-rich. Riparian ecosystems are also generally more humid and have greater air circulation than surrounding areas, resulting in a slightly different microclimate. Riparian ecosystems are well known to have significant ecological value, including high biodiversity and a wide variety of wildlife habitat (including the rare Lewis's Woodpecker in the City). They also provide important ecosystem services, such as flood control.

Seven subclasses are recognized in the study area: High Bench (RI:fh), Medium Bench (RI:fm), Low Bench (RI:fl), Disturbed Floodplain (RI:fd), Gully (RI:gu), Gravel Bar (RI:gb), and River (RI:ri).

Medium bench floodplains (RI:fm) are flooded every one to six years for short periods (10 to 25 days). They contain deciduous (mainly cottonwood) or mixed forest dominated by species tolerant of flooding and periodic sedimentation. Typical RI:fm in the study area are extents of young to mature cottonwood floodplains that occur along the majority of the Granby and Kettle Rivers. High bench floodplains (RI:fh) are periodically and briefly inundated by high waters, but contain lengthy subsurface flow in the rooting

zone. They are less common than RI:fm, and often contain a large component of coniferous trees. RI:fl are low bench floodplains that are flooded at least every other year for moderate periods of the growing season. They contain plant species adapted to extended flooding and scouring, typically low covers of shrubs such as willow and cottonwood (Plate 3.1-8; MacKenzie & Moran 2004, Metro Van Parks 2010).

Disturbed Floodplain (RI:fd) is a subclass that was created for this project. The Grand Forks area has a high number of riparian areas along the Granby and Kettle Rivers that have been modified in various ways. These areas include portions of dikes, rip-rap and old fill, and other disturbances. While modified, many of these areas contain ecosystems that are partially functional, and may be prime locations for future restoration.

Gully (RI:gu) ecosystems are typically linear communities that occur at the base of moderate to steep sides valleys and ravines. Permanent or intermittent watercourses that flow through the gullies result in continual soil moisture or seepages. Gullies can be highly productive and diverse relative to the typically dry, open landscape they occur within. In the Grand Forks areas they are limited in extent, occurring in areas otherwise dominated by grasslands and aspen copses.

River (RI:ri) includes large river ecosystems, excluding gravel bars, and smaller creeks and streams that are devoid of vegetation. Gravel Bars (RI:gb) are non-vegetated areas within the river that change on a yearly basis.



Plate 3.1-8. Low bench floodplain (RI:fl) in the foreground, with medium bench floodplain (RI:fm) behind.

3.1.7 Wetland (WN)

Wetland ecosystems are found where soils are saturated by water for enough time that the excess water and resulting low oxygen levels influence the vegetation and soil. The water influence is generally seasonal or year-round and occurs either at or above the soil surface or within the root zone of plants. Wetlands are usually found in areas of flat or undulating terrain. Three sensitive subclasses are recognized in the study area: marshes (WN:ms), swamps (WN:sp), and shallow water (WN:ow). (Metro Van Parks 2010)

Marshes (WN:ms) are characterized by permanent or seasonal flooding by nutrient-rich waters. They are dominated by sedges, cattails and rushes, often with one or two species forming the majority of the thick vegetative cover (Plate 3.1-9; MacKenzie & Moran 2004).

Swamps (WN:sp) are wooded wetlands dominated by 25% or more cover of flood-tolerant trees or shrubs. They are characterized by periodic flooding and nearly permanent sub-surface water flow through mixtures of mineral and organic materials; swamps are high in nutrient, mineral and oxygen content. While swamps occur in a variety of landscape positions, they are most often found in small depressions in level areas, and gently sloping toes along creeks and streams. They are highly variable, but typically contain thick shrub layers and an irregular tree canopy (MacKenzie & Moran 2004).

Shallow Water (WN:ow) wetlands are characterized by still or slow-moving water less than 2 m in depth in mid-summer. They are often transitional between deep water bodies and other wetland ecosystems (Plate 3.1-10). Vegetation is general limited to a few species of floating aquatic species (such as yellow pond lily and duckweed) and/or submerged aquatic species (MacKenzie & Moran 2004; Metro Van Parks 2010).



Plate 3.1-9. Cattail marsh wetland (WN:ms) is blue-listed in the region.



Plate 3.1-10. Typical wetland complex with Shallow Open Water (WN:ow) in the foreground, Marsh (WN:ms) in the middle, and Swamps (WN:sp) in the background.

3.1.8 Freshwater (FW)

Freshwater ecosystems include bodies of water such as lakes and ponds that usually lack floating vegetation. One subclass was found in the study area; Freshwater Ponds (FW:pd). FW:pd are naturally occurring, small bodies of open water (ponds), greater than 2 m deep and generally less than 50 ha, with little to no floating vegetation (Plate 3.1-11).



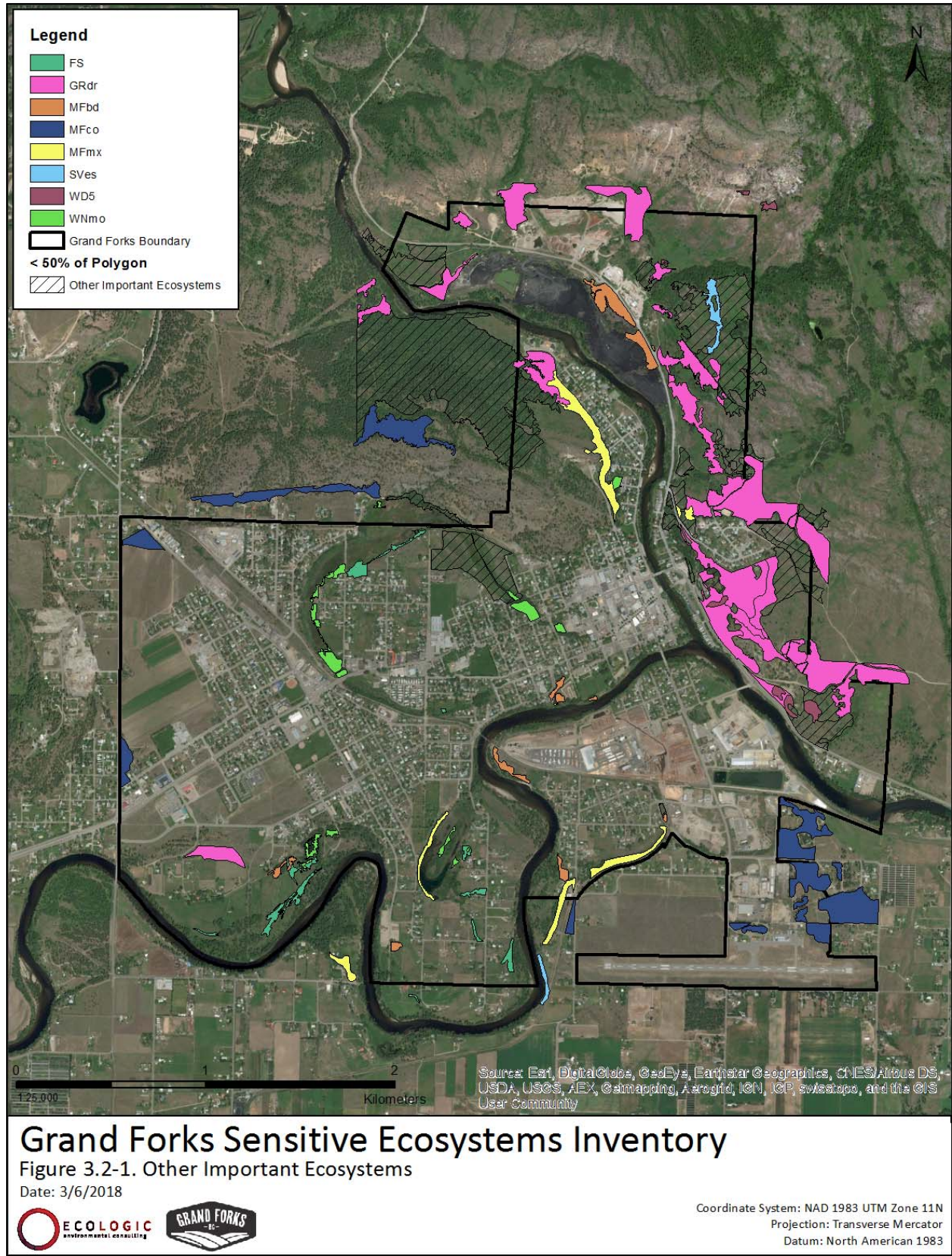
Plate 3.1-11. Freshwater Pond (FW:pd) with Shallow Open Water (WN:ow) and Marsh (WN:ms) in the background.

3.2 OTHER IMPORTANT ECOSYSTEMS

Other Important Ecosystems (OIE) are mapped to identify important elements of biodiversity or recruitment sites for ecosystems at risk or important wildlife habitat requiring recovery or restoration. While these areas are not currently considered to be sensitive, they may evolve (such as mature forests progressing to old forests) in the future to sensitive classes. They also may serve as important landscape level linkages to allow for the flow of genetic material. As the SEI system for the City continues to be developed and improved, some of the OIE classes may be changed to sensitive. Table 3.2-1 lists the SEI classes and subclasses that are considered to be OIE (Figure 3.2-1).

Table 3.2-1. Other Important Ecosystems

SEI Class	SEI Subclass	Brief Description
MF: Mature Forest		Forests > 80 yrs, < 140 yrs.
MF	co: coniferous	Conifer-dominated (> 75% of stand composition).
MF	mx: mixed	Stand composition > 25% conifer and > 25% broadleaf.
MF	bd: broadleaf	Broad-leaf dominated (> 75% of stand composition).
WD: Woodland		Dry site, open stands with between 10 and 25% tree cover including Douglas fir and Ponderosa pine. Patchy shrubs such as Saskatoon and oceanspray are common. Often associated with rock outcrops and cliffs.
WD	5: young forest	Trees are > 10 m tall and have 10% or greater cover, dominated by young trees about 40–80 years old.
GR: Grassland		
GR	dr: disturbed	Dry grassland with variety of introduced grass and herbs.
SV: Sparsely Vegetated		Areas with 5–10% vascular vegetation.
SV	es: exposed soil	Any area of exposed soil that is not in other definitions.
WN: Wetland		Terrestrial – freshwater transitional areas.
WN	mo: modified	Modified wetlands (including non-native species such as maple or reed canarygrass) that still retain some wetland functions and processes.
FS: Seasonally Flooded Fields		Annually flooded cultivated fields, hay fields, range land, or old fields.



3.2.1 Mature Forest (MF)

Mature forests are stands that are 80 to 140 years in age. Subclasses include coniferous (MF:co), mixed (MF:mx), and broadleaf (MF:bd). This forest type covers a small portion of the study area and contains significant wildlife habitat, floral diversity, and buffers to riparian areas. The more sensitive elements of these stands are included in various classes of the Sensitive Ecosystems (such as floodplains). While not considered to be sensitive ecosystems, mature forests are classified as OIE due to the many ecosystem services they provide, and as recruitment stands for eventual old forests.

3.2.2 Woodland (WD:5)

Young conifer woodlands (WD:5) occur in similar conditions as described in the SE Woodland section: generally hot, dry and rocky mountain slopes. Young stands are considered to be OIE as they may not have had time (post-disturbance) to develop important habitat features or rare species. Additional study is required to determine the actual extent of these communities (slow growth on many sites gives the impression of a young stand, but they may be older) and the ecological values they provide.

3.2.3 Grassland (GR:dr)

The Disturbed Grassland (GR:dr) subclass includes a wide variety of grassland communities. These communities are typically close to developed areas and roads, and likely were used as range land. They contain a wide variety of introduced and invasive grasses and herbs (Plate 3.1-12). While modified, these areas often contain a portion of the ecological services that the native grasslands provide (such as wildlife forage and snake habitat) and are susceptible to further disturbance.



Plate 3.1-12. Disturbed grassland (GR:dr) with a high cover of introduced grass and herbs.

3.2.4 Sparsely Vegetated (SV:es)

The Exposed Soil (SV:es) subclass of the Sparsely Vegetated ecosystem class was not field-verified, and is limited in extent. Naturally occurring exposed soils have minimal vegetation development and are highly susceptible to erosion and invasive species. In some landscapes they provide important niche wildlife habitat. This subclass has been placed in the OIE category until additional field studies can provide more information.

3.2.5 Wetland (WN:mo)

Modified wetlands (WN:mo) are common throughout the City. Two main types were observed: swamps that contained a large portion of introduced species, such as Norway maple (Plate 3.1-13), and marshes dominated by introduced or invasive grasses such as reed canarygrass and orchard grass (Plate 3.1-14) that occurred adjacent to developed and agricultural areas or in old riverine side channels. Modified wetlands often continue to provide important ecological services (such as water storage, and limited wildlife habitat), but contain reduced biodiversity. They are prime locations for ecological restoration.



Plate 3.1.13. Modified wetland (WN:mo) dominated by introduced and invasive grasses, with a native marsh (WN:ms) to the right.



Plate 3.1-14. Modified swamp wetland (WN:mo) that is dominated by introduced shrubs.

3.2.6 Seasonally Flooded Fields (FS)

Seasonally flooded fields are typically current or old agricultural or range land located on active floodplains. A portion of the area is expected to flood in any given year, resulting in the potential for abnormal vegetation or wildlife communities to develop or for temporary wildlife habitat to occur (Plate 3.1-15). These areas are not generally considered to be sensitive as they are highly disturbed or modified, but they are useful to separate as distinct ecosystem types for future analysis.



Plate 3.1-15. A Seasonally Flooded Field (FS) located next to a wetland complex.

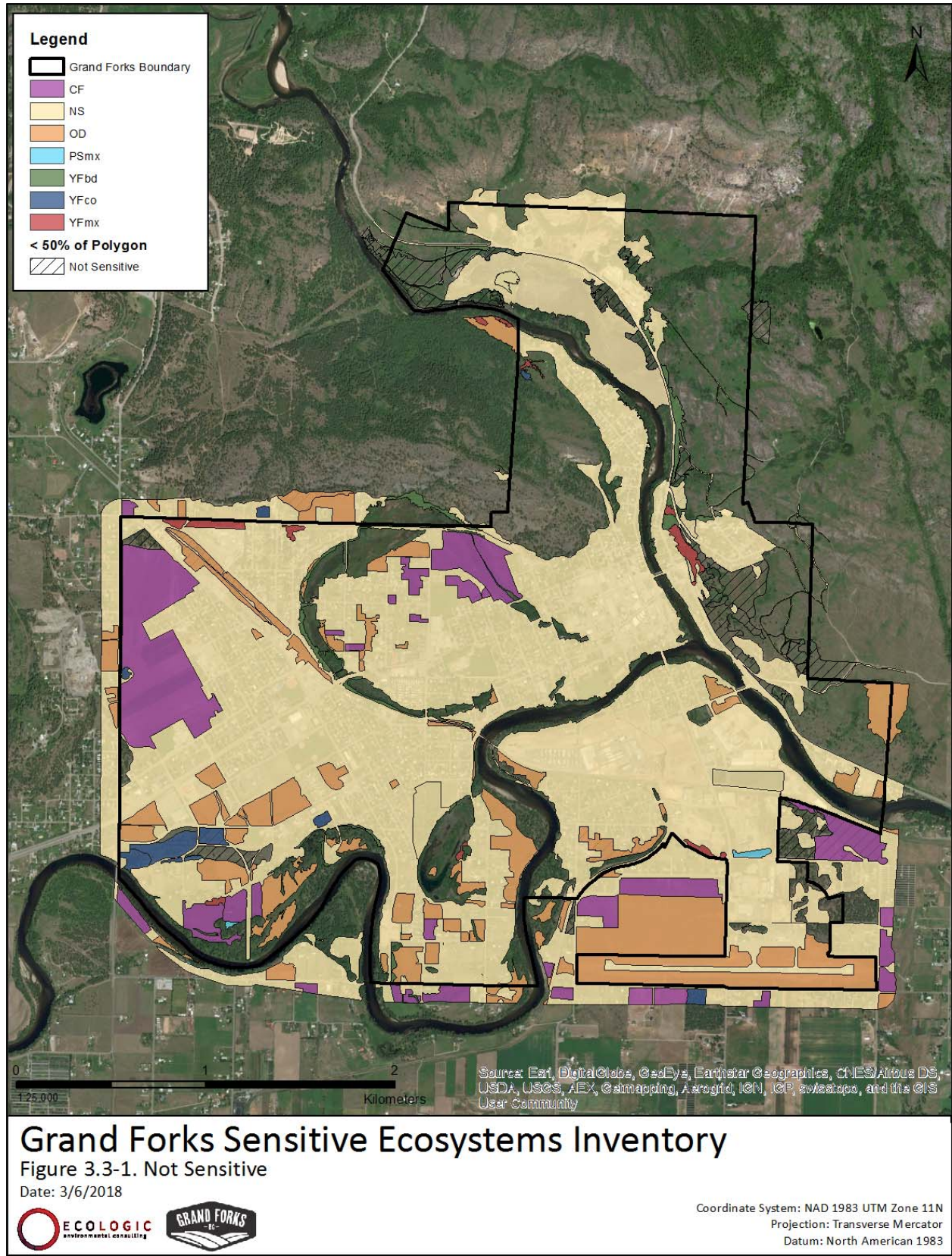
3.3 NOT SENSITIVE

Mapped areas that do not fall in the SE and OIE classes (primarily those with recent or permanent disturbances) are classified as Not Sensitive Ecosystems. The following section provides a brief description of each NS subclass (Table 3.3-1).

Table 3.3-1. Not Sensitive Ecosystems

SEI Class	SEI Subclass	Brief Description
YF: Young Forest		Patches of forest – stands > 30 yrs, < 80 yrs
YF	co: coniferous	Conifer-dominated (> 75% of stand composition)
YF	mx: mixed	Stand composition > 25% conifer and > 25% broadleaf
YF	bd: broadleaf	Broad-leaf dominated (> 75% of stand composition)

SEI Class	SEI Subclass	Brief Description
PS: Pole Sapling		Trees > 10 m tall, usually 10 - 15 yrs
PS	mx: mixed	Stand composition > 25% conifer and > 25% broadleaf
WD: Woodland		Dry site, open stands with between 10 and 25% tree cover including Douglas fir and Ponderosa pine. Patchy shrubs such as Saskatoon and oceanspray are common. Often associated with rock outcrops and cliffs.
WD	3: shrub/herb	Shrub cover 20% or greater, tree cover less than 10%
OD: Old Field		Old field ecosystems. May have evidence of old dirt roads and cultivation.
CF: Cultivated Field		Field currently or recently used for various types of agriculture.
NS: Not Sensitive		Disturbed and permanently developed/modified areas.



3.3.1 Young Forest (YF)

Young forest includes stands that are 30 to 80 years old. Subclasses include coniferous (YF:co), mixed (YF:mx) and broadleaf (YF:bd). In the study area, most young forests are the result of previous logging, clearing, or forest fires. They are not considered to be sensitive ecosystems as young forest generally do not contain attributes that are required for wildlife habitat, have limited vertical structure, and are often comprised of early successional species (with low biodiversity in general). Over time and in the absence of disturbance, these stands will develop into mature forests and develop attributes that may lead to greater importance and therefore sensitivity.

3.3.2 Pole Sapling (PS)

Pole sapling includes stands that are 10 to 15 years old and less than 10 m in height. One subclass was mapped in the study area: Mixed (PS:mx). Pole sapling ecosystems are early successional stages that occur as shrub- and/or herb-dominated areas begin to develop into forests. Biodiversity and wildlife habitat values are limited, and they typically have had recent significant stand level disturbances.

3.3.3 Woodland (WD:3)

Woodlands are classified based on an open canopy cover (less than 25%) and their occurrence on dry, water shedding sites, often with thin soils. The WD:3 (shrub/herb) subclass is assumed to be a post-disturbance site. While they may eventually develop into proper woodlands, the past disturbance limits the current ecological value.

3.3.4 Old Field (OD)

Old fields are generally dominated by a high cover of herbaceous species. These areas have persisted as fields for a significant period of time and may have higher than expected biodiversity and/or the potential for rare species. In the Grand Forks area, most old fields were dominated by a wide variety of introduced and invasive species. As such they are mapped as distinct ecosystem types, even though they are considered to be not sensitive.

3.3.5 Cultivated Field (CF)

Cultivated fields include areas that are currently or recently being used for agriculture. They are distinguished from old fields by obvious signs of plowing and established crops. They were mapped separately as they may turn into Old Fields in the future. Cultivated Fields are assumed to have little to no native species and low overall biodiversity.

3.3.6 Not Sensitive (NS)

Not sensitive includes any area with significant recent (such as logging) or permanent (such as roads, residential areas, etc.) disturbance. These areas are considered to have no significant ecological value in the landscape.

4. CONSERVATION MAPPING

In order to aid conservation planning, the SEI mapping was used to model the habitat suitability for Western Rattlesnake and Lewis's Woodpecker. These species were selected as they utilize different portions of the landscape, are rare species, and are well-documented to occur in the City. This modelling was completed to show the utility of the SEI mapping for future conservation-related projects. Any species or ecological value can be spatially assessed if a rank can be determined for a given ecosystem type.

For the two selected species, each SEI class and subclass was assessed by local biologist Jenny Coleshill (Granby Wilderness Society) using a four rank (Table 4-1) system (nil, low, medium, and high) for its suitability to provide features selected by the species for living (feeding, travel) and breeding (large cottonwood snags) or denning (rock and talus caves and crevasses; Table 4-2).

Table 4-1. Habitat Suitability Ranks

Value	Rank	Description
0	Nil	Habitat not used by species
1	Low	Limited potential use based on habitat present in the ecosystem type.
2	Medium	Moderate attraction to features present in the ecosystem type.
3	High	Species strongly attracted to the habitat for feeding or breeding (large cottonwood snags) or denning (rock and talus caves).

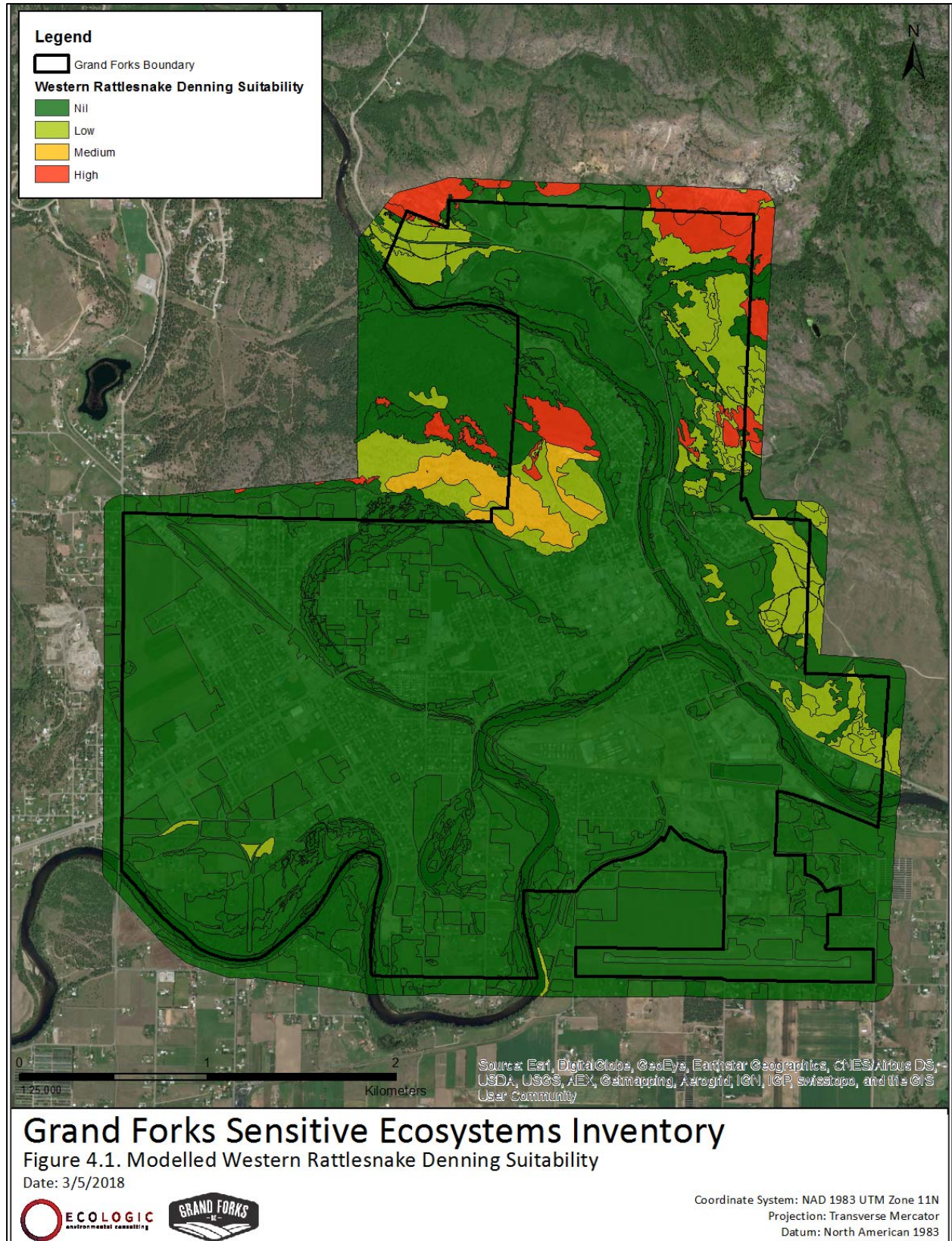
The result of this assessment is a simplistic model that does not take into account actual species occurrence data; rather it uses the ecosystem mapping to give an indication of where suitable habitat occurs. Figure 4-1 depicts Western Rattlesnake denning suitability and Figure 4-2 depicts the Western Rattlesnake living suitability, while Figures 4-3 and 4-4 present the Lewis's Woodpecker breeding and living suitability.

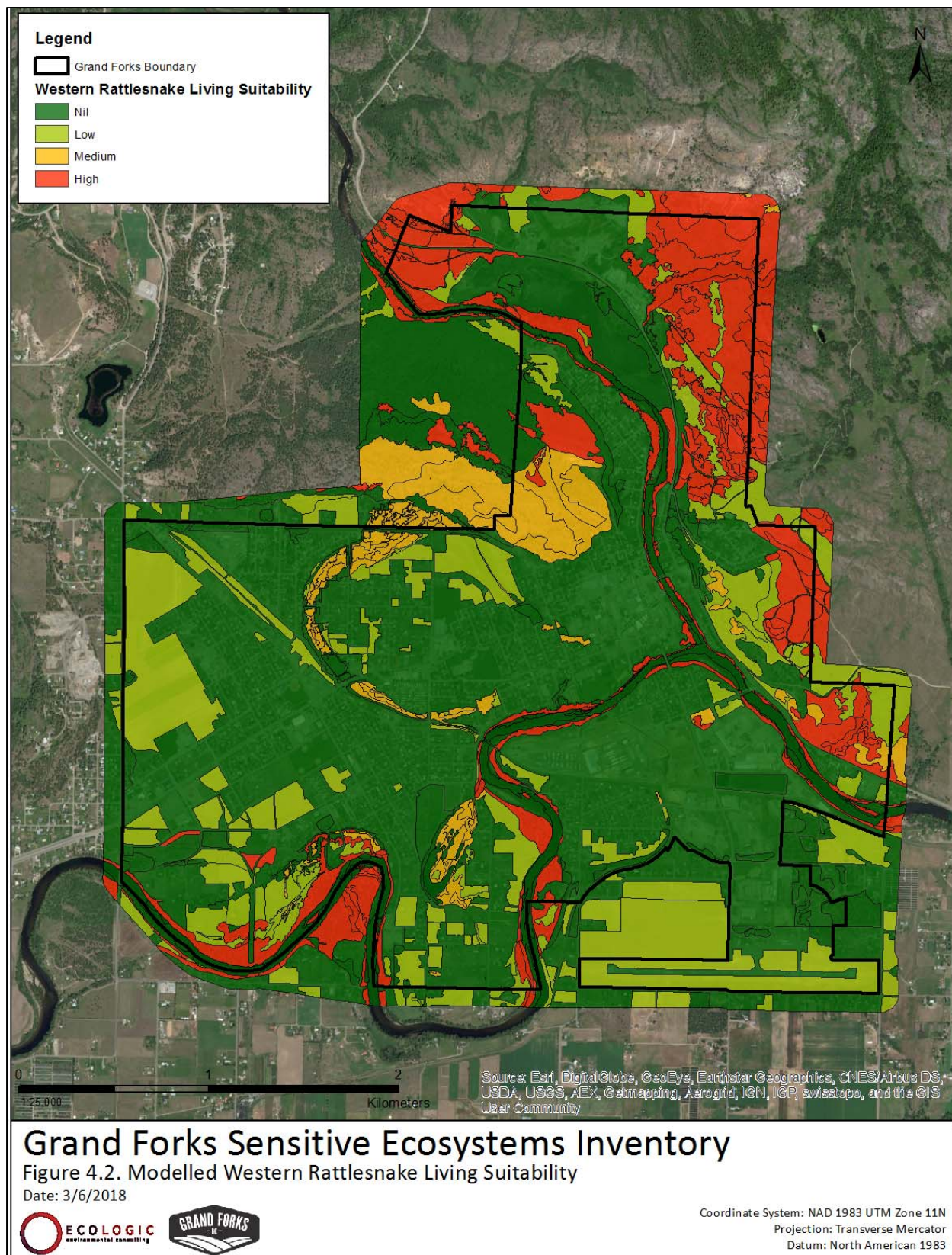
Table 4-2. Habitat Suitability Ranks for Western Rattlesnake and Lewis's Woodpecker

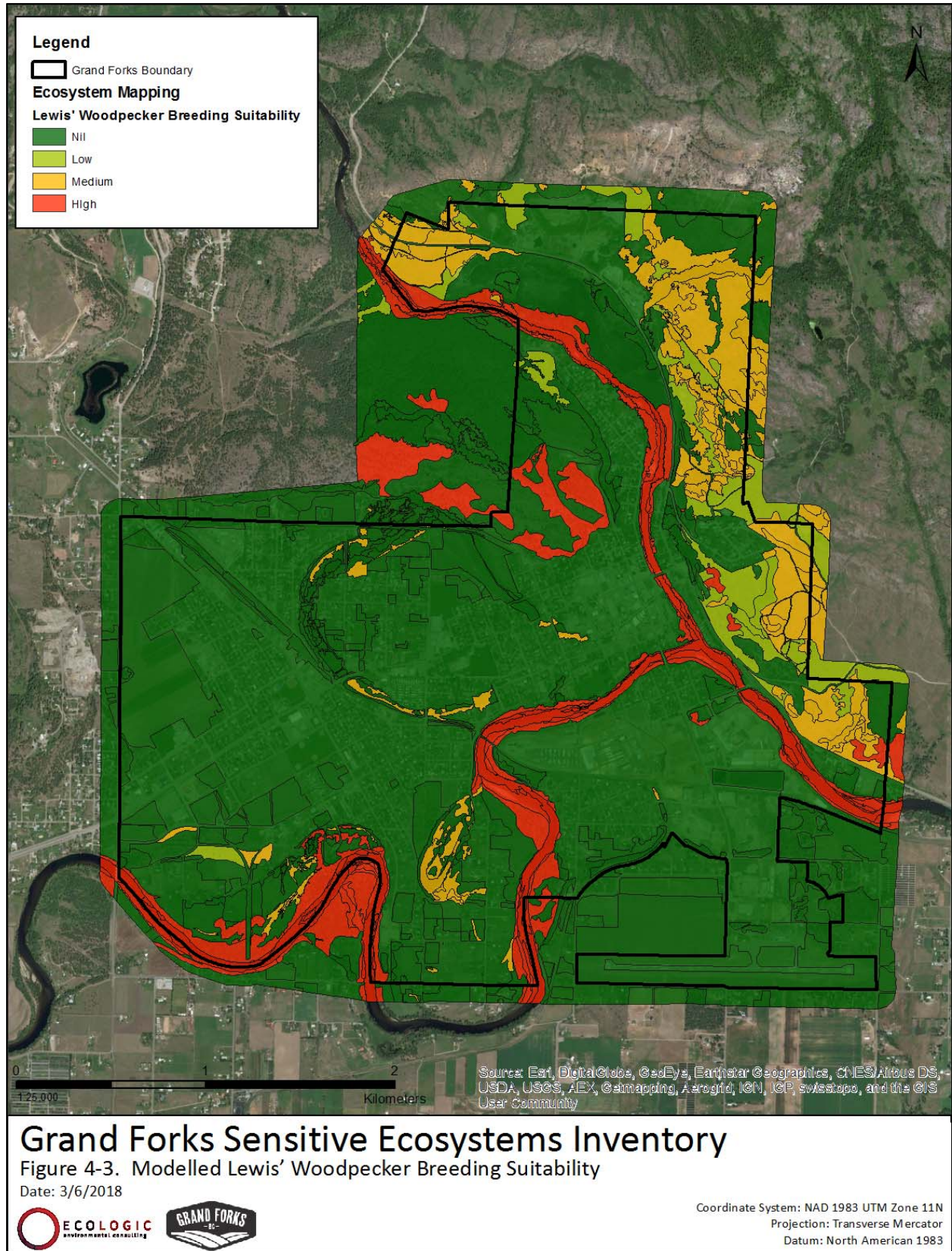
SEI Class	SEI Subclass	Lewis's Woodpecker		Western Rattlesnake	
		Living	Breeding	Living	Denning
OF: Old Forest					
OF	co: coniferous	0	0	0	0
MF: Mature Forest					
MF	co: coniferous	0	0	0	0
MF	mx: mixed	0	0	0	0
MF	bd: broadleaf	0	0	0	0
YF: Young Forest					

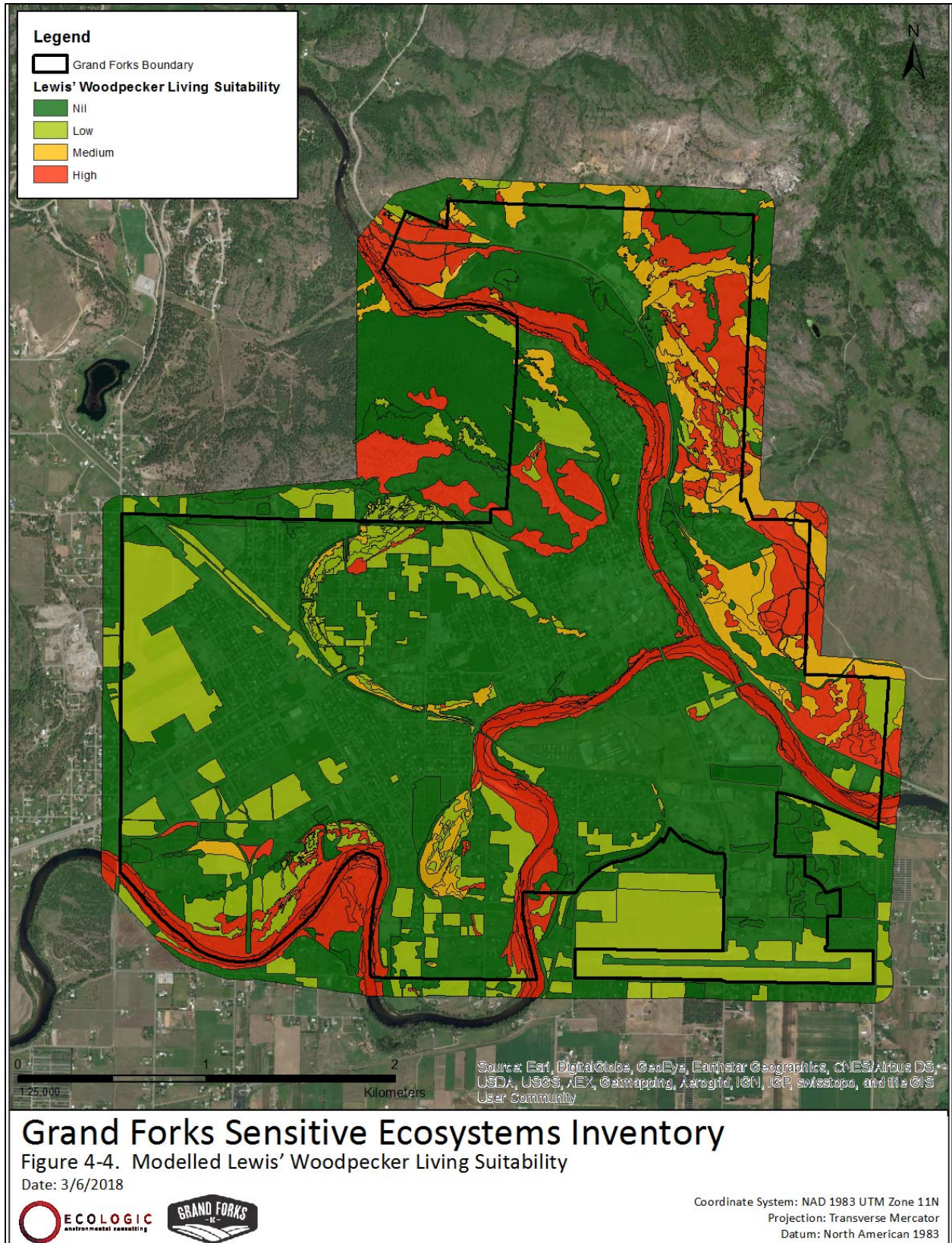
SEI Class	SEI Subclass	Lewis's Woodpecker		Western Rattlesnake	
		Living	Breeding	Living	Denning
YF	co: coniferous	0	0	0	0
YF	mx: mixed	0	0	0	0
YF	bd: broadleaf	0	0	0	0
PS: Pole Sapling					
PS	mx: mixed	0	0	0	0
BW: Broadleaf Woodland					
BW	ac: aspen copse	2	2	3	0
BW	as: aspen seepage	2	2	3	0
WD: Woodland					
WD	4: pole sapling	2	2	2	1
WD	5: young forest	2	2	2	1
WD	6: mature forest	3	3	2	1
GR: Grassland					
GR	gr: bunchgrass	3	2	3	1
GR	sh: shrub	3	2	3	1
GR	dr: disturbed	2	1	1	0
SV: Sparsely Vegetated					
SV	sh: shrub	1	0	3	3
SV	cl: cliff	0	0	2	2
SV	ro: rock outcrop	0	0	3	3
SV	ta: talus	0	0	3	3
SV	es: exposed soil	0	0	1	1
RI: Riparian					
RI	fh: high bench	3	3	3	0
RI	fm: medium bench	3	3	3	0
RI	fl: low bench	3	3	3	0
RI	fd: disturbed floodplain	3	3	3	0
RI	gu: gully	3	3	3	0
RI	gb: gravel bar	3	3	0	0
RI	ri: river	3	3	0	0

SEI ClassSEI Subclass		Lewis's Woodpecker		Western Rattlesnake	
		Living	Breeding	Living	Denning
WN: Wetland					
WN	ms: marsh	1	0	2	0
WN	sp: swamp	2	2	2	0
WN	ow: shallow water	2	2	0	0
WN	mo: modified	1	0	0	0
FW: Lakes and Ponds					
FW	pd: pond	0	0	1	0
FS: Seasonally Flooded Fields		3	2	1	0
OD: Old Field		1	0	1	0
CF: Cultivated Field		1	0	1	0
NS: Not Sensitive		0	0	0	0









5. RECOMMENDATIONS

This report presents an initial assessment of the sensitive ecosystems present in the Grand Forks area. While we believe it is an accurate representation of the study area, several improvements could be made:

- Additional field verification. Particularly in the grasslands and old forest ecosystems which were poorly inventoried. As well, site visits to private land were not included in this assessment, limiting field verification to visual observations from road sides.
- Full ecosystem classification. SEI is by nature a simplistic method of classifying ecosystems. It is designed as a communication tool to allow for relatively easy descriptions and presentation of what is normally much more complex ecosystem mapping (such as Terrestrial Ecosystem Mapping). For many sensitive ecosystem subclasses, a full ecosystem description to the Biogeoclimatic Ecosystem Classification (BEC) site series level would be ideal and enable the status (red and blue listed as per the BC Conservation Data Centre) of the ecosystems to be determined.

The conservation planning section presented in this report was intended to provide an example of what can be done with the SEI base layer. The two simplistic models illustrate how ecosystem data can be ranked and spatially portrayed to provide an idea of habitat suitability for two at risk species. The same approach can be taken with any species or other ecological value as per the interest of the final users.

Another conservation planning tool that could be created from these data is an Environmentally Sensitive Areas (ESA) assessment. An ESA moves beyond just the sensitive ecosystem classifications, to combine it with any other value of your choice. Using a value matrix, multiple disparate values can be combined into a single spatial product to help guide future conservation projects (such as parks, and potential locations for restoration), and provide input into appropriate locations for future development (such as the creation of environmental development permit areas).

REFERENCES

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- Iverson, K. and Cadrin, C. 2003. *Sensitive Ecosystems Inventory: Central Okanagan, 2000 - 2001*. Volume 1: Methodology, Ecological Descriptions, Results and Conservation Tools. Technical Report Series No. 399, Canadian Wildlife Service, Pacific and Yukon Region, British Columbia.
- MacKenzie, W.H. and J.R. Moran. 2004. *Wetlands of British Columbia: A Guide to Identification*. Ministry of Forests, Land Management Handbook 52.
- Resources Inventory Committee. 1998. *Standard for terrestrial ecosystem mapping in British Columbia*. Prepared by Ecosystems Working Group, Terrestrial Ecosystems Task Force, Resources Inventory Committee.
- Resource Inventory Standards Committee (RISC). 2006. *Standard for Mapping Ecosystems at Risk in British Columbia: an Approach to Mapping Ecosystems at Risk and Other Sensitive Ecosystems*. Prepared by BC Ministry of Environment Ecosystems Branch for the Resources Information Standards Committee.

Personal Communications

- Josephine Clark and Janice Jarvis. 2010. Metro Vancouver Regional Parks. Personal communication: Email conversation regarding SEI classification system. Proposed Metro Vancouver Parks Sensitive Ecosystems Inventory Classification.
- Jenny Coleshill. January 2018. Granby Wilderness Society. Personal communication: Email and phone conversation regarding conservation planning.

Monthly Highlight Report



To: Committee of the Whole
From: **Management Team**
Date: March 12, 2018
Subject: Monthly Highlight Report
Recommendation: **THAT the Committee of the Whole receives the monthly highlight report for information.**

Fire Department

General

Calls this month: 23 (7 Fire, 0 Rescue, 16 First Responder)
Year to date calls: 68

- ❖ Posted position for second Deputy Fire Chief, review of applications
- ❖ Volunteers : First Responder training for 6 members (2 weekends)
- ❖ Participated in annual Family Day event
- ❖ Update personnel accountability system
- ❖ Preparation for transition to dispatch from Kelowna
- ❖ Met with area emergency services

Outside Works

Safety Focus

Biohazardous Substance (Bloodborne Pathogens, Airborne Pathogens, Pandemic Influenza) and Cold Stress

General

- ❖ Voltage conversion project
- ❖ HR – Power line technicians position vacancies and 2018 temporary positions
- ❖ WWTP upgrade meetings
- ❖ Storm water management meeting
- ❖ LED project completed at public works
- ❖ Meeting about the condition report for 2nd street and 68th Ave bridges
- ❖ Meeting with Kettle River Watershed Coordinators

Fiscal Economic Growth Community Engagement Community Liveability

- ❖ Meeting with Telus
- ❖ Sewer lift station pump meeting with Electrical Engineer and sales people
- ❖ Servicing meetings

Electrical

- ❖ Arctic Arrow completed 2nd Street, Feeder 1&2 downtown rehabilitation, and the river crossing.
- ❖ 1 service upgrade
- ❖ 2 new service connections
- ❖ Removed two more open-delta non-preferred transformer banks from service

Public Works

- ❖ Winter snow removal, Roads, Sidewalks, Parking lots, Trails, Alleys, City Buildings, throughout town.
- ❖ Winter snow hauling piles throughout
- ❖ Widening everywhere to accommodate new snow including removal of boulevards snow on narrow streets
- ❖ Removal of excess snow in flood prone areas
- ❖ Pot hole patching as needed on roads
- ❖ Public Works Stores clean out / organize for new LED lighting

Events

- ❖ Family Day organizing support with set up and take down.
- ❖ Orientation and training for the new Event Coordinator.

Water and Sewer

- ❖ Lift station maintenance.
- ❖ Sewer main flushing.
- ❖ Support Electrical with voltage conversion.
- ❖ Well and chlorination maintenance.
- ❖ Snow removal.
- ❖ Hydrant maintenance.

Development and Engineering

General

- ❖ GIS and Asset Management integration planning.
- ❖ Received 36 enquiries from the public and developers.
- ❖ Initiated Community Emergency Preparedness Fund grant project.
- ❖ Received the Gas Tax Strategic Priorities Fund grant of \$225,700 and initiated project.
- ❖ Processed 6 business licence applications

Capital Projects

- ❖ Prepared and delivered septic health survey.
- ❖ Discussed SolarNow project with program officer and prepared RFD.
- ❖ West end fire protection project review and planning.
- ❖ Completed tender process for WWTP railway crossing tender
- ❖ Continued implementation of sewer phasing plan project

Planning

- ❖ Drafted Cannabis Critical Path and survey.
- ❖ Facilitated land disposition processes.
- ❖ Facilitated development processes.
- ❖ Completed review and preparation for third reading of zoning bylaw and SCP.
- ❖ Three subdivision applications in review/development.
- ❖ Five development permit applications in process.
- ❖ Facilitated a temporary use permit application process.
- ❖ Completed inventory phase of Sensitive Ecosystem Inventory.

Building Inspection and Bylaw Enforcement

General

- Granby River camping concerns ongoing. Met with local provincial ministries to discuss this issue on Crown Land. The city is unable to prevent this from occurring so the provincial responsibility regarding this matter was emphasized. Any concerns regarding camping along the Granby River are to be referred directly to the Service BC office in Grand Forks for their response.

Bylaw Services

- Ceiling repairs at Whispers arranged and completed
- Block Watch meetings and enquiries. City-wide maps compiled.
- Second Hand Dealers and Pawnbrokers Bylaw – initial draft completed, sent to Corporate Services department for editing & in-house review. The bylaw will also receive a legal counsel review once the in-house review is completed.
- Numerous requests for assistance from the R.C.M.P.
- Parking issues downtown on the rise, Family Day event monitored

Building Inspection

- Building Permit applications this month: 3
- Year to date Building Permit applications: 10
- Year to date construction value: \$709,190.00
- Construction inspections and proposal reviews ongoing

Corporate Services

General

- Prepared and facilitated Council Meetings and eScribe Training
- Human Resources Duties
- Generalized IT support
- Continuation of Event Planning – Family Day, transition to different events delivery model
- Records Management Update and review – ongoing project for up to 3 years – review of current structure with consultant, implementation of structure, new file server configuration
- SharePoint Research
- ESRI GIS software research and team meeting
- Budget Workshops with Council
- Attended the PADM Corporate Administration Training (Deputy Corporate Officer)
- Attended the Successful CAO MATI Training and CAO Forum (Chief Administrative Officer)

Financial Services

General

- Conducted third public budget workshop on February 5th
- Prepared Five Year Financial Plan bylaw for introduction to COTW on March 12th
- Completed year end working papers and additional information requests for annual audit
- Review and approval of grant claims
- Completed first billing cycle for new water & sewer rates, along with mock billing of residential water usage
- Sent out taxpayer notifications regarding arrears and delinquent property taxes
- Completed CivicInfo BC surveys for salary, wages and other remuneration
- Responded to requests for information from the public regarding property and parcel taxes, new utility rates and mock billing

Recommendation

THAT the Committee of the Whole receives the monthly highlight report for information.

Request for Decision



To: Committee of the Whole

From: **Corporate Services**

Date: March 12, 2018

Subject: 2018 Elections Bylaws updates

Recommendations: **THAT the Committee of the Whole recommends to Council to give the first three readings of the “General Local Government Election Bylaw No. 2042, 2018”, at the March 26, 2018, Regular Meeting.**

THAT the Committee of the Whole recommends to Council to give the first three readings of the “Automated Voting Machines Authorization Bylaw No. 2043, 2018”, at the March 26, 2018, Regular Meeting.

Background

The municipality is legislatively required to have an Election Procedure Bylaw in accordance with the Local Government Act. The use of Automated Voting Machines as well requires a bylaw that authorizes the Chief Election Officer to use such devices to ensure for accurate and fast results at the end of the election day.

The General Election Bylaw requires an update in Local Government Act (LGA) section numbers (due to an update in the LGA in December of 2015) as well as some formatting updates, readability enhancements, and updates requested by our contractor in charge of the elections for 2018.

The Automated Voting Machine Bylaw requires a few minor changes as requested by our contractor in charge of the elections in 2018, as well as some housekeeping and formatting updates.

All non-housekeeping related changes are highlighted in **Yellow**.

Please see below for a proposed timeline for the bylaw adoption process.

Date	Meeting Type	Status
March 12	COTW	Introduction and discussion
March 26	Regular	First 3 readings
April 9	Regular	Final reading and adoption

Benefits or Impacts

General

It is a legislated requirement to have an Elections Procedure Bylaw.

Strategic Impact



Community Engagement

- Allow for Special Opportunity Voting places as well as efficient automated vote tabulating machines to reduce risk

Policy/Legislation

Local Government Act

Attachments

Proposed Bylaws No. 2042 & 2043

Current Bylaws No. 1999 & 2000

Recommendation

THAT the Committee of the Whole recommends to Council to give the first three readings of the “General Local Government Election Bylaw No. 2042, 2018”, at the March 26, 2018, Regular Meeting.

THAT the Committee of the Whole recommends to Council to give the first three readings of the “Automated Voting Machines Authorization Bylaw No. 2043, 2018”, at the March 26, 2018, Regular Meeting.

Options

1. RESOLVED THAT Committee of the Whole accepts the report.
2. RESOLVED THAT Committee of the Whole does not accept the report.
3. RESOLVED THAT Committee of the Whole refers the matter back to staff for further information.

THE CORPORATION OF THE CITY OF GRAND FORKS

BYLAW NO. 2042

A Bylaw to provide for the procedures for conduct of General Local Government Elections and other voting.

In accordance with the *Local Government Act*, the Council may, by bylaw, determine various procedures and requirements to be applied in the administration and conduct of local government elections and other voting.

Council for the Corporation of the City of Grand Forks wishes to establish various procedures and requirements under that authority.

The Council for the Corporation of the City of Grand Forks, in an open meeting assembled, enacts as follows:

1. Citation

- 1.1 This bylaw may be cited as the "General Local Government Election Bylaw No. 2042, 2018".

2. Register of Resident Electors

- 2.1 As authorized under **Section 75** of the *Local Government Act*, the most current list of voters prepared under the *Elections Act*, existing at the time an election or other voting is to be held, is deemed to be the register of resident electors for the Municipality.

3. Additional General Election Voting Opportunities

- 3.1 As authorized under **Section 106** of the *Local Government Act*, Council authorizes the Chief Election Officer to establish additional general voting opportunities for general voting day for each election or specified election or other voting and to designate the voting places and voting hours for these voting opportunities.

4. Required Advanced Voting Opportunities

- 4.1 As authorized under section 107 of the Local Government Act, in addition to the required advance voting opportunity on the 10th day before general voting day, an additional advance voting opportunity will be available at a location and on a date established by the Chief Election Officer.
- 4.2 Required advance voting opportunities will be available at the voting place(s) designated by the Chief Election Officer, between the hours of 8:00 a.m. and 8:00 p.m.

5. **Special Voting Opportunities**

- 5.1 In order to give electors who may otherwise be unable to vote, an opportunity to do so, Council will provide Special Voting Opportunity as authorized under Section 109 of the *Local Government Act*, for each election or specified election or other voting at the following locations:

Phoenix Manor Retirement Home	Boundary Lodge Assisted Living	Boundary Hospital & Hardyview Lodge (Includes all Cottages on the property)	Silver Kettle Village
876-72nd Avenue	7130-9 th Street	7649-22 nd Street	2350-72 nd Avenue
Grand Forks BC	Grand Forks BC	Grand Forks BC	Grand Forks BC

- 5.2 The special opportunity voting places shall be open as determined by the Chief Elections Officer.
- 5.3 Provision is made to allow for bedside voting for the Special Voting Opportunity facilities.
- 5.4 The number of candidate's representatives who may be present at the special voting opportunities facilities is limited to one.
- 5.5 Persons who may vote at a special voting opportunity shall be qualified electors who are residents, patients or family members at the facility, or qualified electors who are employed at the facility being used as a special voting opportunity.

6. **Ballots**

- 6.1 Pursuant to **Section 114** of the *Local Government Act*, the Chief Election Officer shall establish the form of ballots to be used in the general local election or other voting. Such determination includes the utilization of the Automated Ballots, for Voting Machines or Printed Ballot as follows:
- (a) Printed Ballots shall be in the form prescribed in **Section 114 and 115** of the Local Government Act;
 - (b) Use of Voting Machines shall be in accordance with **Section 112** of the Local Government Act as outlined **in the current version of the City of Grand Forks' "Automated Voting Machines Authorization Bylaw"**.

7. **Order of Names on Ballot**

- 7.1 The order of names of candidates on the ballot will be determined by alphabetical order in accordance with **Section 116** of the *Local Government Act*.

8. Number of Scrutineers at Voting Places

- 8.1 As authorized under **Section 120 (2) (d)** of the *Local Government Act*, the number of scrutineers for each candidate that may attend at an election is a maximum of one scrutineer for each ballot box in use.

9. Resolution of Tie Votes after Judicial Recount

- 9.1 In the event of a tie vote after judicial recount, the tie vote will be resolved by conducting a lot in accordance with **Section 151** of the *Local Government Act*.

10. General

- 10.1 Any enactment referred to herein is a reference to an enactment of British Columbia and regulations thereto, as amended, revised, consolidated or replaced from time to time.
- 10.2 If any part, section, sentence, clause, phrase or word of this Bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder which shall continue in full force and effect and be construed as if the Bylaw had been adopted without the invalid portion.

11. Repeal

- 11.1 The following bylaws are hereby repealed:
- **“Procedures for the Conduct of Local Government Election and Other Voting Bylaw No. 1999, 2014”**

Read a first, second, and third time by the Municipal Council this ____ day of _____, 2018.

Finally Adopted this ____ day of _____, 2018.

Mayor, Frank Konrad

Corporate Officer, Diane Heinrich

C E R T I F I C A T E

I hereby certify the foregoing to be a true copy of the "General Local Government Election Bylaw No. 2042, 2018", as adopted by the Municipal Council of the City of Grand Forks on the _____ day of _____, 2018.

Corporate Officer of the Corporation of the
City of Grand Forks

THE CORPORATION OF THE CITY OF GRAND FORKS

BYLAW NO. 2043

A Bylaw to provide for the procedures for the use of Automated Voting Machines General Local Elections and other voting

In accordance with the Local Government Act, the Council may, by bylaw, provide for the use of automated voting machines, voting recorders or other devices for voting in an election;

Council for the Corporation of the City of Grand Forks wishes to establish various procedures and requirements under that authority;

The Council for the Corporation of the City of Grand Forks, in an open meeting of Council, **ENACTS** as follows:

1. Citation

- 1.1 This bylaw may be cited as the “**Automated Voting Machines Authorization Bylaw No. 2043.**”

2. Definitions

- 2.1 In this bylaw, all definitions shall be in accordance with the *Local Government Act*, except for the following:

“**Acceptable mark**” means a completed oval that the vote tabulating unit is able to identify and that has been made by an elector in the space provided on the ballot opposite the name of any candidate or opposite either ‘yes’ or ‘no’ on any other voting question.

“**Automated vote counting system**” means a system that counts and records votes and processes and stores election **or any voting** results and is comprised of the following:

- (a) a number of ballot scan vote tabulating units, each of which rests on a two compartment ballot box, one compartment of which is for:
 - (i) voted ballots, and
 - (ii) returned ballots that have been reinserted using the ballot override procedure; and the other for the temporary storing of voted ballots during such time as the vote tabulating unit is not functioning; and
- (b) a number of portable ballot boxes into which voted ballots are deposited where a vote tabulating unit is not being used, for counting after the close of voting on general voting day.

“**Ballot**” means a single automated ballot card designed for use in an automated vote counting system, which shows:

- (a) the names of all of the candidates for each of the offices of Mayor, Council and/or **School Trustee**; and
- (b) all of the choices on all of the bylaws or other matters on which the opinion or assent of the electors is sought.

“Ballot return override procedure” means the use, by an election official, of a device on a vote tabulating unit that causes the unit to accept a returned ballot.

“Election headquarters” means the voting place on general voting day at which the chief election officer has an office and the count procedure will be made.

“Emergency ballot compartment” means one of two separate compartments in the ballot box under each vote tabulating unit into which voted ballots are temporarily deposited in the event that the unit ceases to function.

“Memory device” means a removable storage device which stores all the permanent results for the vote tabulating unit.

“Portable ballot box” means a ballot box that is used at a voting place where a vote tabulating unit is not being used.

“Results tape” means the printed record generated from a vote tabulating unit at the close of voting on general voting day which shows the number of votes for each candidate for each of the office of Mayor, Council and/or **School Trustee** and the number of votes for and against each bylaw or other matter on which the assent or opinion of the electors is sought.

“Returned ballot” means a voted ballot that was inserted into the vote tabulating unit by the elector but was not accepted and was returned to the elector with an explanation of the ballot marking error which caused the ballot not to be accepted.

“Secrecy sleeve” means an open-ended folder or envelope used to cover ballots to conceal the choices made by each elector.

“Vote tabulating unit” means the device into which voted ballots are inserted and that scans each ballot and records the number of votes for each candidate and for and against each bylaw or other matter on which the assent or opinion of the electors is sought.

3. Use of Voting Machines

- 3.1 Council hereby authorizes the conducting of general local elections and other voting in the City of Grand Forks using an automated vote counting system.

4. Automated Voting Procedures

- 4.1 The presiding election official for each voting place and at each advance voting opportunity shall, as soon as the elector enters the voting place and before a ballot is

- issued, offer and if requested, direct an election official to provide a demonstration to an elector of how to vote using an automated vote counting system.
- 4.2 Upon completion of the voting demonstration, if any, the elector shall proceed as instructed, to the election official responsible for issuing ballots, who:
- (a) shall ensure that the elector:
 - (i) is qualified to vote in the election; and
 - (ii) is voting in the correct voting division [if applicable]; and
 - (iii) completes the voting book as required by the *Local Government Act*; and
 - (b) upon fulfilment of the requirements of subsection (a), shall then provide a ballot to the elector, a secrecy sleeve if requested by the elector, and any further instructions the elector requests.
- 4.3 Upon receiving a ballot and secrecy sleeve if so requested, the elector shall immediately proceed to a voting compartment to vote.
- 4.4 The elector may vote only by making an acceptable mark on the ballot:
- (a) beside the name of each candidate of choice up to the maximum number of candidates to be elected for each of the offices of Mayor, Council and/or **School Trustee**; and
 - (b) beside either 'yes' or 'no' in the case of each bylaw or other matter on which the assent or opinion of the electors is sought.
- 4.5 Once the elector has finished marking the ballot, the elector must place the ballot into the secrecy sleeve, if applicable, proceed to the vote tabulating unit and under the supervision of the election official in attendance, insert the ballot directly from the secrecy sleeve, if applicable, into the vote tabulating unit without the acceptable marks on the ballot being exposed.
- 4.6 If, before inserting the ballot into the vote tabulating unit, an elector determines that he has made a mistake when marking a ballot or if the ballot is returned by the vote tabulating unit, the elector may request a replacement ballot by advising the election official in attendance.
- 4.7 Upon being advised of the replacement ballot request, the presiding election official [or alternate presiding election official] shall issue a replacement ballot to the elector and mark the returned ballot "spoiled" and shall retain all such spoiled ballots separately from all other ballots and they shall not be counted in the election.
- 4.8 If the elector declines the opportunity to obtain a replacement ballot and has not damaged the ballot to the extent that it cannot be reinserted into the vote tabulating unit, the election official shall, using the ballot return override procedure, reinsert the returned ballot into the vote tabulating unit to count any acceptable marks that have been made correctly.

- 4.9 Any ballot counted by the vote tabulating unit is valid and any acceptable marks contained on such ballots will be counted in the election subject to any determination made under a judicial recount.
- 4.10 Once the ballot has been inserted into the vote tabulating unit and the unit indicates that the ballot has been accepted, the elector must immediately leave the voting place.
- 4.11 During any period that a vote tabulating unit is not functioning, the election official supervising the unit shall insert all ballots delivered by the electors during this time, into the emergency ballot compartment, provided that if the vote tabulating unit:
- (a) becomes operational, or
 - (b) is replaced with another vote tabulating unit,
- the ballots in the emergency ballot compartment shall, as soon as reasonably possible, be removed by an election official and under the supervision of the presiding election official be inserted into the vote tabulating unit to be counted.
- 4.12 Any ballots that were temporarily stored in the emergency ballot compartment and are returned by the vote tabulating unit when being counted shall, through the use of the ballot return override procedure and under the supervision of the presiding election official, be reinserted into the vote tabulating unit to ensure that any acceptable marks are counted.

5. Advance Voting Opportunity Procedures

- 5.1 Vote tabulating units shall be used to conduct the vote at all advance voting opportunities and voting procedures at the advance voting opportunities shall follow as closely as possible those described in Section 4 of this bylaw.
- 5.2 At the close of voting at each advance voting opportunity the presiding election official in each case shall ensure that:
- (a) no additional ballots are inserted in the vote tabulating unit;
 - (b) the emergency ballot compartment is sealed to prevent insertion of any ballots;
 - (c) the register tapes in the vote tabulating unit are not generated; and
 - (d) the memory device of the vote tabulating unit is secured.
- 5.3 At the close of voting at the final advance voting opportunity, the presiding election official shall:
- (a) ensure that any remaining ballots in the emergency ballot compartment are inserted into the vote tabulating unit;
 - (b) secure the vote tabulating unit so that no more ballots can be inserted; and
 - (c) deliver the vote tabulating unit together with the memory card and all other materials used in the election to the chief election officer at election headquarters.

6. Special Voting Opportunity Procedures

- 6.1 A portable ballot box shall be used for all special voting opportunities and the presiding election official appointed to attend at each special voting opportunity shall proceed in accordance with Sections 4.2, 4.3, 4.4 and 4.5 of this Bylaw so far as applicable, except that the voted ballots shall be deposited into the portable ballot box supplied by the presiding election official.
- 6.2 The presiding election official at a special voting opportunity shall ensure that the portable ballot box is secured when not in use and at the close of voting at the final special voting opportunity, the presiding election official shall seal the portable ballot box and return it together with all other election materials to the custody of the chief election officer.

7. Procedures after the Close of Voting on General Voting Day

- 7.1 After the close of voting on general voting day at voting opportunities where a vote tabulating unit was used in the election, but excluding advance and special voting opportunities,
- (a) each presiding election official shall:
 - (i) ensure that any remaining ballots in the emergency ballot compartment are inserted into the vote tabulating unit;
 - (ii) secure the vote tabulating unit so that no more ballots can be inserted;
 - (iii) generate three copies of the register tape from the vote tabulating unit; and
 - (iv) deliver one copy of the register tape along with the memory device from the vote tabulating unit to the chief election officer at election headquarters; and
 - (b) and each alternate presiding election official shall:
 - (i) account for the unused, spoiled and voted ballots and place them, packaged and sealed separately, into the election materials transfer box along with one copy of the results tape;
 - (ii) complete the ballot account and place the duplicate copy in the election materials transfer box;
 - (iii) seal the election materials transfer box;
 - (iv) place the voting books, the original copy of the ballot account, one copy of the results tape, completed registration cards (if applicable), keys and all completed administrative forms into the chief election officer portfolio; and
 - (v) transport all equipment and materials to election headquarters.
- 7.2 At the close of voting on general voting day the chief election officer shall direct the presiding election official for the advance voting opportunity and any special voting opportunities where vote tabulating units were used, to proceed in accordance with Section 7.1 of this bylaw.

- 7.3 At the close of voting on general voting day all portable ballot boxes used in the election will be opened under the direction of the Chief Election Officer and all ballots shall be removed and inserted into a vote tabulating unit to be counted, after which the provisions of Sections 7.1, so far as applicable, shall apply.

8. Recount Procedure

- 8.1 If a recount is required it shall be conducted under the direction of the Chief Election Officer using the automated vote counting system and generally in accordance with the following procedure:

- (a) the memory cards of all vote tabulating units will be cleared;
- (b) vote tabulating units will be designated for each voting place;
- (c) all ballots will be removed from the sealed ballot boxes; and
- (d) all ballots, except spoiled ballots, will be reinserted in the appropriate vote tabulating units under the supervision of the Chief Election Officer.

9. General

- 9.1 Any enactment referred to herein is a reference to an enactment of British Columbia and regulations thereto, as amended, revised, consolidated or replaced from time to time.
- 9.2 If any part, section, sentence, clause, phrase or word of this Bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder which shall continue in full force and effect and be construed as if the Bylaw had been adopted without the invalid portion.

10. Repeal

- 10.1 The following bylaws are hereby repealed:

- **“Automated Voting Machines Authorization Bylaw No. 2000”**

Read a first, second, and third time by the Municipal Council this ____ day of _____, 2018.

Finally Adopted this ____ day of _____, 2018.

Mayor, Frank Konrad

Corporate Officer, Diane Heinrich

CERTIFICATE

I hereby certify the foregoing to be a true copy of the Automated Voting Machines Authorization Bylaw No. 2043, 2018", as adopted by the Municipal Council of the City of Grand Forks on the _____ day of _____, 2018.

Corporate Officer of the Corporation of the
City of Grand Forks

THE CORPORATION OF THE CITY OF GRAND FORKS

BYLAW NO. 1999

A BYLAW TO PROVIDE FOR THE DETERMINATION OF VARIOUS PROCEDURES FOR THE CONDUCT OF LOCAL GOVERNMENT ELECTIONS AND OTHER VOTING.

In accordance with the Local Government Act, the Council may, by bylaw, determine various procedures and requirements to be applied in the conduct of local government elections and other voting.

Council for the Corporation of the City of Grand Forks wishes to establish various procedures and requirements under that authority.

The Council for the Corporation of the City of Grand Forks, in an open meeting of Council, **ENACTS** as follows:

1. **Definitions**

In this bylaw:

"Elector" means a resident elector or property elector of the jurisdiction as defined under the Local Government Act.

"Election" means an election for the number of persons required to fill a local government office.

"General Local Election" means the elections held for the Mayor and all Councillors of the Municipality, which must be held in the year 2014 and in every 4th year after that.

"General Voting Day" means:

- (a) for a general local election, set under Section 36(2) of the Local Government Act;
- (b) for other elections, the date set under Sections 37(5), 38(1) or (3) or 142(5) of the Local Government Act, and
- (c) for other voting, the date set under Section 162 of the Local Government Act.

"Jurisdiction" means, in relation to an election, the Municipality for which it is held.

"Local Government" means:

- (a) in relation to a Municipality, the Council.

"Other Voting" means voting on a matter referred to in Section 158 of the Local Government Act.

2. **Register of Resident Electors**

As authorized under Section 62 of the Local Government Act, the most current list of voters prepared under the Elections Act, existing at the time an election or other voting is to be held, is deemed to be the register of resident electors for the Municipality.

3. **Additional General Voting Opportunities**

The Council authorizes the Chief Election Officer to establish additional general voting opportunities for general voting day for each election or specified election or other voting and to designate the voting places and voting hours with the limits set out in Section 96(2) of the Local Government Act for such voting opportunities.

4. **Additional Advance Voting Opportunities**

As authorized under Section 98 of the Local Government Act, the Council authorizes the Chief Election Officer to establish additional advance voting opportunities for each election or specified election or other voting to be held in advance of general voting day and to designate the voting places, establish the date and the voting hours for these voting opportunities.

5. **Special Voting Opportunities**

- (a) In order to give electors who may otherwise be unable to vote, an opportunity to do so, the Council will provide Special Voting Opportunity as authorized under Section 99 of the Local Government Act, for each election or specified election or other voting at the following places and shall be open during the hours hereinafter specified:

- 1. Phoenix Manor Retirement Home
876-72nd Avenue, Grand Forks BC

- the voting place shall be open as determined by the Chief Elections Officer

2. Boundary Lodge Assisted Living
7130–9th Street, Grand Forks, BC
 - the voting place shall be open as determined by the Chief Elections Officer
 3. Boundary Hospital & Hardyview Lodge
(Includes all Cottages on the property)
7649-22nd Street, Grand Forks, B.C.
 - the voting place shall be open as determined by the Chief Elections Officer
 4. Silver Kettle Village, 2350-72nd Avenue, Grand Forks, B.C.
 - the voting place shall be open as determined by the Chief Elections Officer
- (b) The following procedures for voting and for conducting the voting proceeding apply to the special voting opportunity:
- (i) Provision is made to allow for bedside voting.
- (c) The number of candidate's representatives who may be present at the special voting opportunity is limited to one.
- (d) The following restriction applies to persons who may vote at a Special Voting Opportunity:
- (i) The only electors who may vote at the Special Voting Opportunity on the date when the Special Voting Opportunity is held are those voters who are residents of the facilities or those who have been admitted as patients to the Hospital and facilities Staff.

6. **Ballots**

Pursuant to Section 104 of the Local Government Act, the Chief Election Officer shall establish the form of ballots to be used in the general local election or other voting. Such determination includes the utilization of the Automated Ballots, for Voting Machines or Printed Ballot as follows:

- (a) Printed Ballots shall be in the form prescribed in Section 104 and 105 of the Local Government Act;

(b) Use of Voting Machines shall be in accordance with Section 101 of the Local Government Act as outlined in the City of Grand Forks' "Automated Voting Machines for General Local Elections and Other Voting Bylaw No. 2000".

7. **Order of Names on Ballot**

The order of names of candidates on the ballot will be determined by alphabetical order in accordance with Section 106 of the Local Government Act.

8. **Number of Scrutineers at Voting Places**

As authorized under Section 110(2) (d) of the Local Government Act, the number of scrutineers for each candidate that may attend at an election is a maximum of one scrutineer for each ballot box in use.

9. **Resolution of Tie Votes after Judicial Recount**

In the event of a tie vote after judicial recount, the tie vote will be resolved by conducting a lot in accordance with Section 141 of the Local Government Act.

11. This bylaw may be cited as the **"Procedures for the Conduct of Local Government Election and Other Voting Bylaw No. 1999, 2014"**.

INTRODUCED this 26th day of May, 2014.

Read a **FIRST** time this 9th day of June, 2014.

Read a **SECOND** time this 9th day of June, 2014.

Read a **THIRD** time this 9th day of June, 2014.

FINALLY RECONSIDERED AND ADOPTED this 23rd day of June, 2014.

Mayor Brian Taylor

Corporate Officer, Diane Heinrich

C E R T I F I C A T E

I hereby certify the foregoing to be a true copy of bylaw No. 1999, as adopted by the
Municipal Council of the City of Grand Forks on the 23rd day of June, 2014.

Corporate Officer of the Municipal Council of the
City of Grand Forks

THE CORPORATION OF THE CITY OF GRAND FORKS

BYLAW NO. 2000

A BYLAW TO PROVIDE FOR THE USE OF AUTOMATED VOTING MACHINES FOR GENERAL LOCAL ELECTIONS AND OTHER VOTING

In accordance with the Local Government Act, the Council may, by bylaw, provide for the use of automated voting machines, voting recorders or other devices for voting in an election;

Council for the Corporation of the City of Grand Forks wishes to establish various procedures and requirements under that authority;

The Council for the Corporation of the City of Grand Forks, in an open meeting of Council, **ENACTS** as follows:

1. CITATION

- 1.1 This bylaw may be cited as the “**Automated Voting Machines Authorization Bylaw No. 2000.**”

2. DEFINITIONS

- 2.1 In this bylaw, all definitions shall be in accordance with the Local Government Act, except for the following:

Acceptable mark means a completed oval that the **vote tabulating unit** is able to identify and that has been made by an elector in the space provided on the **ballot** opposite the name of any candidate or opposite either ‘yes’ or ‘no’ on any other voting question.

Automated vote counting system means a system that counts and records votes and processes and stores election results and is comprised of the following:

- (a) a number of **ballot scan vote tabulating units**, each of which rests on a two compartment **ballot** box, one compartment of which is for:
- (i) voted ballots, and
 - (ii) returned ballots that have been reinserted using the **ballot override procedure**; and the other for the temporary storing of voted ballots during such time as the **vote tabulating unit** is not functioning; and

- (b) a number of **portable ballot boxes** into which voted **ballots** are deposited where a **vote tabulating unit** is not being used, for counting after the close of voting on general voting day.

Ballot means a single automated ballot card designed for use in an **automated vote counting system**, which shows:

- (a) the names of all of the candidates for each of the offices of Mayor, Council and/or School Districts; and
- (b) all of the choices on all of the bylaws or other matters on which the opinion or assent of the electors is sought.

Ballot return override procedure means the use, by an election official, of a device on a **vote tabulating unit** that causes the unit to accept a **returned ballot**.

Election headquarters means temporary City Hall at 6641 Industrial Parkway, Grand Forks, BC. until such time that Administrative Staff moves back to permanent City Hall location at 7217 – 4th Street.

Emergency ballot compartment means one of two separate compartments in the ballot box under each **vote tabulating unit** into which voted **ballots** are temporarily deposited in the event that the unit ceases to function.

Memory device means a removable storage device used in the ballot processing unit to record ballot results and to store polling location information such as:

- (a) the names of all of the candidates for each of the offices of Mayor, Council and/or School Districts; and
- (b) the alternatives of 'yes' or 'no' for each bylaw or other matter on which the assent or opinion of the electors is being sought;

and a mechanism to record and retain information on the number of **acceptable marks** made for each.

Portable ballot box means a ballot box that is used at a voting place where a **vote tabulating unit** is not being used.

Results tape means the printed record generated from a **vote tabulating unit** at the close of voting on general voting day which shows the number of votes for each candidate for each of the office of Mayor, Council and/or School Districts and the number of votes for and against each bylaw or other matter on which the assent or opinion of the electors is sought.

Returned ballot means a voted **ballot** that was inserted into the **vote tabulating unit** by the elector but was not accepted and was returned to the elector with an explanation of the **ballot** marking error which caused the **ballot** not to be accepted.

Secrecy sleeve means an open-ended folder or envelope used to cover **ballots** to conceal the choices made by each elector.

Vote tabulating unit means the device into which voted **ballots** are inserted and that scans each **ballot** and records the number of votes for each candidate and for and against each bylaw or other matter on which the assent or opinion of the electors is sought.

3. **USE OF VOTING MACHINES**

- 3.1 Council hereby authorizes the conducting of general local elections and other voting in the City of Grand Forks using an **automated vote counting system**.

4. **AUTOMATED VOTING PROCEDURES**

- 4.1 The presiding election official for each voting place and at each advance voting opportunity shall, as soon as the elector enters the voting place and before a **ballot** is issued, offer and if requested, direct an election official to provide a demonstration to an elector of how to vote using an **automated vote counting system**.
- 4.2 Upon completion of the voting demonstration, if any, the elector shall proceed as instructed, to the election official responsible for issuing **ballots**, who:
- (a) shall ensure that the elector:
 - (i) is qualified to vote in the election; and
 - (ii) is voting in the correct voting division [if applicable]; and
 - (iii) completes the voting book as required by the Local Government Act; and
 - (b) upon fulfilment of the requirements of subsection (a), shall then provide a **ballot** to the elector, a **secrecy sleeve** if requested by the elector, and any further instructions the elector requests.
- 4.3 Upon receiving a **ballot** and **secrecy sleeve** if so requested, the elector shall immediately proceed to a voting compartment to vote.

- 4.4 The elector may vote only by making an **acceptable mark** on the **ballot**:
- (a) beside the name of each candidate of choice up to the maximum number of candidates to be elected for each of the offices of Mayor, Council and/or School Districts; and
 - (b) beside either 'yes' or 'no' in the case of each bylaw or other matter on which the assent or opinion of the electors is sought.
- 4.5 Once the elector has finished marking the **ballot**, the elector must place the **ballot** into the **secrecy sleeve**, if applicable, proceed to the **vote tabulating unit** and under the supervision of the election official in attendance, insert the **ballot** directly from the **secrecy sleeve**, if applicable, into the **vote tabulating unit** without the **acceptable marks** on the **ballot** being exposed.
- 4.6 If, before inserting the **ballot** into the **vote tabulating unit**, an elector determines that he has made a mistake when marking a **ballot** or if the **ballot** is returned by the **vote tabulating unit**, the elector may request a replacement **ballot** by advising the election official in attendance.
- 4.7 Upon being advised of the replacement **ballot** request, the presiding election official [or alternate presiding election official] shall issue a replacement **ballot** to the elector and mark the **returned ballot** "spoiled" and shall retain all such spoiled **ballots** separately from all other **ballots** and they shall not be counted in the election.
- 4.8 If the elector declines the opportunity to obtain a replacement **ballot** and has not damaged the **ballot** to the extent that it cannot be reinserted into the **vote tabulating unit**, the election official shall, using the **ballot return override procedure**, reinsert the **returned ballot** into the **vote tabulating unit** to count any **acceptable marks** that have been made correctly.
- 4.9 Any **ballot** counted by the **vote tabulating unit** is valid and any acceptable marks contained on such **ballots** will be counted in the election subject to any determination made under a judicial recount.
- 4.10 Once the **ballot** has been inserted into the **vote tabulating unit** and the unit indicates that the **ballot** has been accepted, the elector must immediately leave the voting place.
- 4.11 During any period that a **vote tabulating unit** is not functioning, the election official supervising the unit shall insert all **ballots** delivered by the electors during this time, into the **emergency ballot compartment**, provided that if the **vote tabulating unit**:
- (a) becomes operational, or

(b) is replaced with another **vote tabulating unit**,

the **ballots** in the **emergency ballot compartment** shall, as soon as reasonably possible, be removed by an election official and under the supervision of the presiding election official be inserted into the **vote tabulating unit** to be counted.

4.12 Any **ballots** that were temporarily stored in the **emergency ballot compartment** and are returned by the **vote tabulating unit** when being counted shall, through the use of the **ballot return override procedure** and under the supervision of the presiding election official, be reinserted into the **vote tabulating unit** to ensure that any **acceptable marks** are counted.

5. ADVANCE VOTING OPPORTUNITY PROCEDURES

5.1 **Vote tabulating units** shall be used to conduct the vote at all advance voting opportunities and voting procedures at the advance voting opportunities shall follow as closely as possible those described in Section 4 of this bylaw.

5.2 At the close of voting at each advance voting opportunity the presiding election official in each case shall ensure that:

- (a) no additional **ballots** are inserted in the **vote tabulating unit**;
- (b) the **emergency ballot compartment** is sealed to prevent insertion of any **ballots**;
- (c) the **register tapes** in the **vote tabulating unit** are not generated; and
- (d) the **memory device** of the **vote tabulating unit** is secured.

5.3 At the close of voting at the final advance voting opportunity, the presiding election official shall:

- (a) ensure that any remaining **ballots** in the **emergency ballot compartment** are inserted into the **vote tabulating unit**;
- (b) secure the **vote tabulating unit** so that no more **ballots** can be inserted; and
- (c) deliver the **vote tabulating unit** together with the **memory card** and all other materials used in the election to the chief election officer at **election headquarters**.

6. SPECIAL VOTING OPPORTUNITY PROCEDURES

6.1 A **portable ballot box** shall be used for all special voting opportunities and the presiding election official appointed to attend at each special voting opportunity shall proceed in accordance with Sections 4.2, 4.3, 4.4 and 4.5 of this Bylaw so far as applicable, except that the voted **ballots** shall be deposited into the **portable ballot box** supplied by the presiding election official.

- 6.2 The presiding election official at a special voting opportunity shall ensure that the **portable ballot box** is secured when not in use and at the close of voting at the final special voting opportunity, the presiding election official shall seal the **portable ballot box** and return it together with all other election materials to the custody of the chief election officer.

7. PROCEDURES AFTER THE CLOSE OF VOTING ON GENERAL VOTING DAY

- 7.1 After the close of voting on general voting day at voting opportunities where a **vote tabulating unit** was used in the election, but excluding advance and special voting opportunities,

(a) each presiding election official shall:

- (i) ensure that any remaining **ballots** in the **emergency ballot compartment** are inserted into the **vote tabulating unit**;
- (ii) secure the **vote tabulating unit** so that no more **ballots** can be inserted;
- (iii) generate three copies of the **register tape** from the **vote tabulating unit**; and
- (iv) deliver one copy of the **register tape** along with the **memory device** from the **vote tabulating unit** to the chief election officer at **election headquarters**; and

(b) and each alternate presiding election official shall:

- (i) account for the unused, spoiled and voted **ballots** and place them, packaged and sealed separately, into the election materials transfer box along with one copy of the **results tape**;
- (ii) complete the ballot account and place the duplicate copy in the election materials transfer box;
- (iii) seal the election materials transfer box;
- (iv) place the voting books, the original copy of the ballot account, one copy of the **results tape**, completed registration cards (if applicable), keys and all completed administrative forms into the chief election officer portfolio; and
- (v) transport all equipment and materials to **election headquarters**.

- 7.2 At the close of voting on general voting day the chief election officer shall direct the presiding election official for the advance voting opportunity and any special voting opportunities where **vote tabulating units** were used, to proceed in accordance with Section 7.1 of this bylaw.

- 7.3 At the close of voting on general voting day all **portable ballot boxes** used in the election will be opened under the direction of the Chief Election Officer and all

ballots shall be removed and inserted into a **vote tabulating unit** to be counted, after which the provisions of Sections 7.1, so far as applicable, shall apply.

8. RECOUNT PROCEDURE

8.1 If a recount is required it shall be conducted under the direction of the Chief Election Officer using the **automated vote counting system** and generally in accordance with the following procedure:

- (a) the memory cards of all vote tabulating units will be cleared;
- (b) **vote tabulating units** will be designated for each voting place;
- (c) all **ballots** will be removed from the sealed ballot boxes; and
- (d) all **ballots**, except spoiled **ballots**, will be reinserted in the appropriate **vote tabulating units** under the supervision of the Chief Election Officer.

9. GENERAL

9.1 Any enactment referred to herein is a reference to an enactment of British Columbia and regulations thereto, as amended, revised, consolidated or replaced from time to time.

9.2 If any part, section, sentence, clause, phrase or word of this bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder which shall continue in full force and effect and be construed as if the Bylaw had been adopted without the invalid portion.

INTRODUCED this 26th day of May, 2014.

Read a **FIRST** time this 9th day of June, 2014.

Read a **SECOND** time this 9th day of June, 2014.

Read a **THIRD** time this 9th day of June, 2014.

FINALLY ADOPTED this 23rd day of June, 2014.

Mayor Brian Taylor

Corporate Officer, Diane Heinrich

CERTIFICATE

I hereby certify the foregoing to be a true copy of Bylaw No. 2000, as adopted by the Municipal Council of the City of Grand Forks on the 23rd day of June, 2014.

Corporate Officer of the Municipal Council of the
City of Grand Forks

Request for Decision



To: Committee of the Whole
From: **Chief Financial Officer**
Date: March 12, 2018
Subject: Five Year Financial Plan Bylaw No. 2045
Recommendation: **THAT the Committee of the Whole discusses a tax revenue increase of either 2% or 3%, AND recommends that Staff includes that amount in Financial Plan Bylaw No. 2045, AND FURTHER to present Financial Plan Bylaw No. 2045 for first three readings at the March 26, 2018 Regular Meeting of Council.**

Background

Sections 165 and 166 of the Community Charter require a municipality to adopt a five-year financial plan annually, before the annual property tax bylaw is adopted, and to include public consultation as part of the financial planning process. The Financial Plan Bylaw introduced here will need to be adopted on April 9, 2018 in order to meet the regulatory deadline of May 15, 2018 for the adoption of the annual tax rates bylaw.

Three public budget workshops were conducted on January 15th and 29th, with presentations by staff on the capital and operating budgets for 2018. A draft 2018-2022 financial plan was presented at the third workshop on February 5th, 2018 for review and discussion.

The financial plan bylaw presented here includes the following changes from the draft financial plan presented at the February 5th workshop:

- a revenue increase of \$8,958 for the Fortis franchise fee. Notification of the actual amount was received since the budget workshop.
- an increase of \$20,000 in general government expenses to cover the cost of a Freedom of Information request which will be discussed at the Regular Meeting.
- a \$52,546 decrease in capital expenditures and transfers from reserves for the voltage conversion project. This reflects 2017 expenditures recorded since February 5th, which have reduced the carryforward amount for 2018.

In accordance with Asset Management Financial Policy 808, which states that property taxes increases will be within 2% of inflation, the draft financial plan bylaw introduced here incorporates a 3% increase in property tax revenues from the 2017 amount of \$3,693,713. This represents an increase of \$110,811 for total property tax revenues of \$3,804,524 in 2018.

At the last budget workshop, Staff was requested to also present information here regarding the impact of a 2% revenue increase as an alternative to a 3% increase.

The difference between a 2% and 3% increase in property tax revenues represents a decrease of approximately \$37,100 in revenue and cash from operations, and thus also in funds available to transfer to reserves or surplus.

The following is a summary of key figures illustrating the difference between increases of 2% and 3%:

	2% Increase	3% Increase
Total Revenues	\$ 18,426,221	\$ 18,463,324
Total Expenses	13,325,231	13,325,231
Surplus (Deficit) for the year	5,100,990	5,138,093
Total Cash from Operations	6,968,601	7,005,704
Transfer to Reserves	(1,400,000)	(1,400,000)
Transfer to Surplus	(19,551)	(56,654)
Residential Tax Rate (per \$1,000)	\$4.8591	\$4.9074
Average Municipal Tax (based on BCAA average of \$234,000)	\$1,137	\$1,148

Once Staff receives a decision from the Committee of the Whole on the amount of tax revenue increase to include, the proposed bylaw will be amended accordingly and made presented for first three readings at the March 26th Regular Meeting.

Benefits or Impacts

General

Adoption of a five-year financial plan is an annual requirement of the Community Charter. The 2018-2022 Financial Plan sets out the proposed funding sources, expenditures, and transfers to and from reserve funds for the current and additional four fiscal years.

The Financial Plan has been developed by applying the objectives and policies of Asset Management Financial Policy 808 towards achieving a goal of financial sustainability.

Strategic Impact



Fiscal Responsibility

Preparation of an annual budget and financial plan allows the City to ensure that adequate provision is made to meet its short and long-term operational and capital financial needs.

Policy/Legislation

Community Charter Section 165
Asset Management Financial Policy No. 808

Attachments

Draft Five Year Financial Plan Bylaw No. 2045

Recommendation

THAT the Committee of the Whole discusses a tax revenue increase of either 2% or 3%, AND recommends that Staff includes that amount in Financial Plan Bylaw No. 2045, AND FURTHER to present Financial Plan Bylaw No. 2045 for first three readings at the March 26, 2018 Regular Meeting of Council.

Options

1. THAT the Committee of the Whole accepts the report.
2. THAT the Committee of the Whole does not accept the report.
3. THAT the the Committee of the Whole refers the matter back to staff for further information.

THE CORPORATION OF THE CITY OF GRAND FORKS

BYLAW NO. 2045

A Bylaw to Establish the Five Year Financial Plan For the Years 2018 - 2022

The Council for the Corporation of the City of Grand Forks, in open meeting assembled, enacts as follows:

1. This bylaw may be cited, for all purposes, as the “Five Year Financial Plan Bylaw, 2018-2022, No. 2045”.
2. Schedule “A” attached hereto and forming part of this bylaw is hereby adopted as the Statement of Objectives and Policies for the Five Year Financial Plan for the years 2018 to 2022.
3. Schedules “B” and “C” attached hereto and forming part of this bylaw are hereby adopted as the Financial Plan schedules of proposed funding sources, expenditures, and transfers between funds for the years 2018 to 2022.

Read a first, second and third time by the Municipal Council this 26th day of March, 2018.

Finally Adopted on this 9th day of April, 2018.

Mayor Frank Konrad

Corporate Officer Diane Heinrich

C E R T I F I C A T E

I hereby certify the foregoing to be a true and correct copy of the “Five Year Financial Plan Bylaw, 2018-2022, No. 2045”, as adopted by the Municipal Council of the City of Grand Forks on this 9th day of April, 2018.

Corporate Officer of the Municipal Council of the
City of Grand Forks

**CORPORATION OF THE CITY OF GRAND FORKS
5 Year Financial Plan Bylaw 2045
Schedule “A” Statement of Objectives and Policies**

In accordance with Section 165 (3.1) of the Community Charter, The City of Grand Forks is required to include in the Five Year Financial Plan, objectives and policies regarding each of the following:

1. The proportion of total revenue that comes from each of the funding sources described in Section 165(7) of the Community Charter;
2. The distribution of property taxes among the property classes, and
3. The use of permissive tax exemptions.

Funding Sources

Objective:

- For operations, to maintain annual increases to a level that approximates the annual increase in inflation unless a specific program or project is identified that requires tax revenue funding.
- For capital and fiscal, to review and address annually the long term needs for capital infrastructure.

Policies

- After an initial correction period, ensure that property tax increases remain as stable as possible over time and within 2 percent above inflation.
- Increase utility rates consistently over time, between 3 and 4 percent, to fund the asset management capital reserves.
- Evaluate and set user fees and charges fairly for the services received.
- Set taxes, fees and charges to achieve full cost recovery, where appropriate, for operating costs.
- Periodically review fees and charges to ensure that they account for inflation and changes in the level of service provided.
- Encourage the use of alternate revenue resources instead of property taxes.

Revenue Source	Amount	% of Total Revenue
Property Value Taxes	\$ 3,921,566	16.1%
Parcel Taxes	161,226	0.7%
Fees and Charges	7,786,866	32.0%
Other Sources	6,593,666	27.0%
Proceeds from Borrowing	1,484,854	6.1%
Reserve Funding	4,422,583	18.1%
TOTAL	\$ 24,370,761	100.0%

Distribution of Property Taxes

Objective:

- To ensure property taxes and rates are sufficient to meet the City’s short and long-term needs.
- To ensure equity among the property classes by reviewing the ratios of property class allocations annually.

Policies:

- Conduct periodic reviews of taxes paid by individual classes.
- Consider tax shifts or redistributions only where a full comprehensive analysis and impact is undertaken.
- Where a tax shift is required, consider a gradual phase-in to allow the properties in the class to adjust their budgets accordingly.
- In establishing property tax rates, take into consideration:
 - The amount of property taxes levied as compared to other municipalities.
 - The property class conversion ratio as compared to other municipalities.
 - The tax share borne by each property class
 - The tax ratios of each property classification

The 2018 distribution of property taxes rates among the different classes has not yet been determined. The following distribution is based on rate multiples consistent with prior years:

Property Class	Rate Multiple	% of Property Value Tax
01 Residential	1.00	55.31%
02 Utilities	7.92	1.39%
04 Major Industry	8.64	21.11%
05 Light Industry	2.93	1.45%
06 Business	2.39	20.70%
08 Recreation/Non Profit	0.80	0.03%
09 Farm	1.08	0.01%
TOTAL		100.00%

Permissive Tax Exemptions**Objective**

- Optimize the provision of charitable and not for profit services for the benefit of Grand Forks residents.
- Provide property tax exemptions as permitted under the Community Charter in a consistent and fair manner.
- Restrict the provision of exemption to those providing an extension to City services and minimize the impact on City revenues.

Policies

- Grand Forks residents must be primary beneficiaries of the organization's services and the services provided must be accessible to all members of the public.
- In guiding and approving permissive tax exemptions, Council will take into consideration:
 - Not-for-profit occupiers of City property for the duration of their occupancy.
 - Land and improvements surrounding a statutorily exempt building for public worship.

CORPORATION OF THE CITY OF GRAND FORKS
5 Year Financial Plan Bylaw No. 2045
Schedule "B" Five Year Financial Plan 2018-2022

	2018	2019	2020	2021	2022
	Budget	Budget	Budget	Budget	Budget
Revenues					
Property Taxes	\$ 3,804,524	\$ 3,918,660	\$ 4,036,220	\$ 4,157,307	\$ 4,282,026
Parcel and Frontage Taxes	161,226	161,226	161,226	5,826	5,826
Grants in Lieu of Taxes	17,147	17,661	18,191	18,737	19,299
Percentage of Revenue Tax	99,895	104,000	104,000	104,000	104,000
Sales of Services and User Fees	7,786,866	8,006,106	8,234,649	8,470,049	8,712,511
Grants	6,266,366	1,022,879	1,037,667	1,052,591	1,067,653
Other Revenues	327,300	327,300	327,300	327,300	327,300
Total Revenues	18,463,324	13,557,832	13,919,253	14,135,810	14,518,615
Expenses					
Purchases for resale	3,490,408	3,560,216	3,631,420	3,704,049	3,778,130
General Government	1,296,871	1,266,728	1,291,063	1,315,884	1,341,202
Protective Services	926,782	899,218	917,003	935,143	953,646
Transportation Services	1,256,315	1,225,341	1,249,848	1,274,845	1,300,341
Environmental & Health Services	236,145	240,868	245,685	250,599	255,611
Public Health Services	84,823	86,519	88,249	90,014	91,814
Planning and Development	445,400	406,768	404,173	411,726	419,430
Parks, Recreation and Cultural Services	1,390,940	1,298,771	1,317,520	1,309,645	1,329,152
Water Services	822,067	787,508	803,258	819,323	835,709
Electrical Services	674,674	688,167	701,930	715,969	730,288
Wastewater Services	700,468	714,477	728,767	743,342	758,209
Amortization	1,867,611	2,177,100	2,290,687	2,314,792	2,341,932
Debt Interest	132,727	188,987	163,262	161,015	160,926
Total Expenses	13,325,231	13,540,668	13,832,865	14,046,346	14,296,390
Surplus (Deficit) for the year	\$ 5,138,093	\$ 17,164	\$ 86,388	\$ 89,464	\$ 222,225
Adjusted for non-cash items					
Amortization	1,867,611	2,177,100	2,290,687	2,314,792	2,341,932
Total Cash from Operations	\$ 7,005,704	\$ 2,194,264	\$ 2,377,075	\$ 2,404,256	\$ 2,564,157
Adjusted for Cash Items					
Proceeds from Borrowing	1,484,854	-	-	-	-
Capital Expenditures	(11,132,382)	(2,344,000)	(2,259,000)	(2,364,000)	(2,429,000)
Debt Principal Repayments	(324,105)	(373,961)	(328,837)	(213,837)	(181,656)
Transfer from Reserves	4,422,583	2,344,000	2,259,000	2,364,000	2,429,000
Transfer to Reserves	(1,400,000)	(1,800,000)	(2,000,000)	(2,100,000)	(2,300,000)
Transfer to Surplus	(56,654)	(20,303)	(48,238)	(90,419)	(82,501)
	\$ (7,005,704)	\$ (2,194,264)	\$ (2,377,075)	\$ (2,404,256)	\$ (2,564,157)
Financial Plan Balance	\$ -	\$ -	\$ -	\$ -	\$ -

CORPORATION OF THE CITY OF GRAND FORKS
5 Year Financial Plan Bylaw No. 2045
Schedule "C" - Five Year Financial Plan 2018-2022

CAPITAL EXPENDITURES - 2018			FUNDED FROM										
Description	Fund	Amount	General Capital	Electrical Capital	Water Capital	RESERVES Equipment	Land Sales	Gas Tax	Climate Action	Slag	DEBT	GRANTS	OTHER
2017 Carry Forward Projects													
Silver Kettle Sidewalk	General	181,141	181,141										
Public Works Fuel Tanks	General	53,826	53,826										
Public Works Upgrades	General	20,000	20,000										
Public Works - 22nd Street	General	556,070									556,070		
Wayfaring Signs	General	65,000								65,000			
Airport AWOS Upgrade	General	42,298	10,574									31,724	
Expo Sign changes	General	35,000								35,000			
Library HRV	General	12,000											
Emergency Repair Fund	General	10,914	10,914										
Flood Plain Mapping & Dike Restoration	General	117,500	50,000									67,500	
5 tonne Dump Truck	Fleet	250,000				250,000							
T-Tech trailer	Fleet	11,325				11,325							
Service Truck Replacement	Fleet	15,305	15,305										
Holder Replacement	Fleet	40,541				40,541							
Electrical Engineering	Electrical	30,367	30,367										
Electrical Voltage Conversion	Electrical	535,767	535,767										
Wastewater Treatment Plant UV	Sewer	437,932					145,977					291,955	
Headworks Grinder	Sewer	38,679					38,679						
Water/Sewer Scada	Sewer	2,854					2,854						
3rd Street Sewer Main Repair	Sewer	35,309	35,309										
Wastewater Treatment Plant Upgrades	Sewer	2,748,751	467,288									2,281,463	
Bio-Solids Land Application Plan	Sewer	25,000	25,000										
Sewer Phasing Plan	Sewer	78,500	13,345									65,155	
Water/Sewer Scada	Water	3,219					3,219						
5th Street Watermain Replacement	Water	41,152						41,152					
West Side Fire Protection	Water	923,932									928,784		(4,852)
Water Supply & Conservation	Water	10,000			10,000								
Subtotal 2017 Carry Forward Projects		6,322,382	1,448,836	-	10,000	301,866	190,729	41,152	-	100,000	1,484,854	2,737,797	7,148

CORPORATION OF THE CITY OF GRAND FORKS
5 Year Financial Plan Bylaw No. 2045
Schedule "C" - Five Year Financial Plan 2018-2022

CAPITAL EXPENDITURES - 2018			FUNDED FROM									
Description	Fund	Amount	RESERVES					OTHER				
			General Capital	Electrical Capital	Water Capital	Equipment	Land Sales	Gas Tax	Climate Action	Slag	DEBT	GRANTS
2018 New Projects												
City Park Campground Upgrade	General	20,000										
Data Collection Equipment	General	30,000										
Ball Diamond Rebuild to baseball specs	General	10,000										
LED Street Lighting	General	400,000										
Public Works Upgrades	General	45,000								400,000		
Facilities Review	General	10,000										
Annual Facility upgrades and replacement plan	General	15,000										
Annual Emergency Facility Fund	General	30,000										
Renewable energy program	General	25,000										
Replace Crosswalks in City Core	General	50,000								50,000		
Central Ave Sidewalk Replacement	General	40,000								40,000		
Bridge Approach Paving	General	20,000								20,000		
Annual Water and Sewer Emergency Repair Fund	General	50,000										
7th Street Storm Sewer	General	10,000										
Fleet replacement	Fleet	300,000										
Electric Mower	Fleet	20,000						20,000				
Annual Low Impact Storm water Program	General	25,000										
Annual Electrical System Upgrade Programs	Electrical	100,000										
Fuse Coordination Study and implementation	Electrical	15,000										
Electrical Master Plan	Electrical	35,000		35,000								
Granby Water Crossing / Yale Bridge water main	Water	10,000			10,000							
Interior Property Isolation	Water	150,000										
Well 5 VFD	Water	50,000										
Shared Property (strata, trailers) Water Meters	Water	50,000										
Water service upgrade - City Park, 7th St., etc...	Water	125,000								50,000		
136 Sagamore/Airport Water Line Extension	Water	25,000										
Airport Water Main Looping	Water	75,000								25,000		
Water Main Airport	Water	2,480,000										
Sewer Main Relining	Sewer	60,000										2,480,000
Lift Station Pumps	Sewer	25,000										
Granby River Force Main Crossing	Sewer	10,000										
MWR Discharge Requirements	Sewer	500,000										
Subtotal 2018 New Projects		4,810,000	1,680,000	35,000	35,000	20,000	-	560,000	-	-	-	-
TOTAL CAPITAL EXPENDITURES		11,132,382	3,128,836	35,000	45,000	321,866	190,729	601,152	-	100,000	1,484,854	5,217,797
												7,148