

Ausable Bayfield CA

Lake Huron Shoreline Hazards

DRAFT

SUBCELL 2

Cohesive bluffs

Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

Other features

- - - Top of slope

~ ~ ~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

Lakeshore Area 1

Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

Erosion Hazard
That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.

Dynamic Beach Hazard
That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
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Mapping Notes:

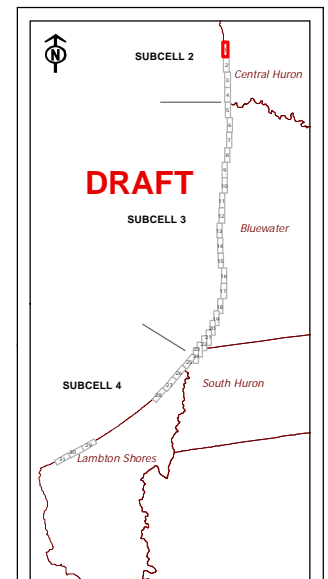
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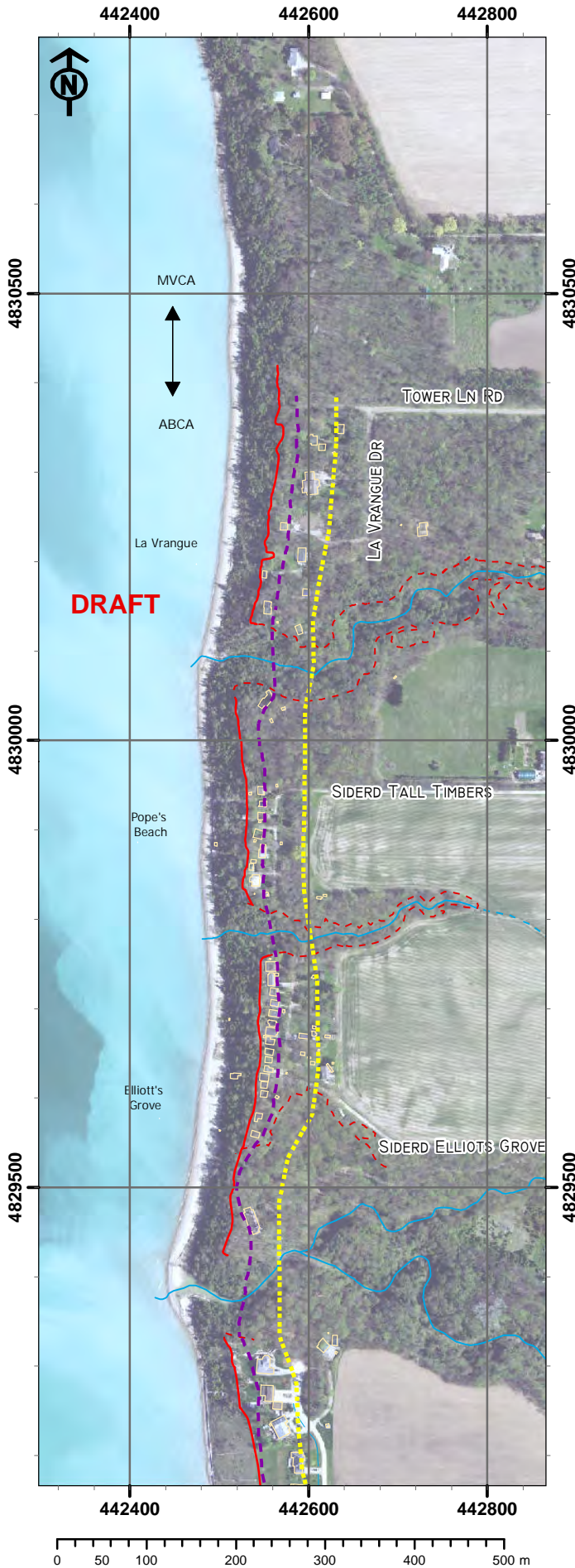
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MAP 1 of 31



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Ausable Bayfield CA

Lake Huron Shoreline Hazards

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SUBCELL 2

Cohesive bluffs

Lakeshore features

— Top of bluff - May 2015

--- Lakeshore Area 1

..... Lakeshore Area 2

Other features

- - - Top of slope

~ ~ ~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

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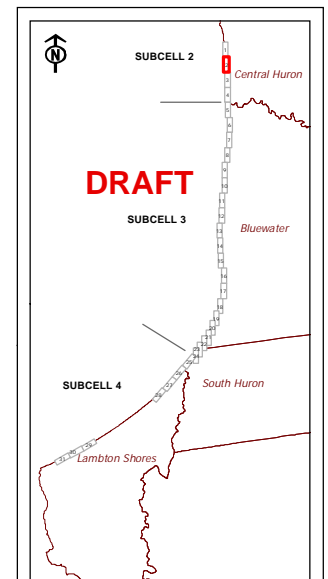
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Lake Huron Shoreline Hazards

DRAFT

SUBCELL 2

Cohesive bluffs

Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

Other features

- - - Top of slope

~ ~ ~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

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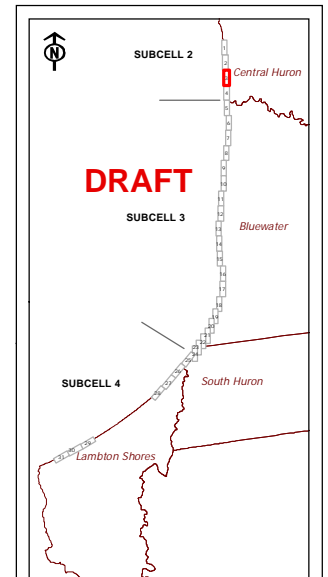
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MAP 3 of 31



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Ausable Bayfield CA

Lake Huron Shoreline Hazards

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SUBCELL 2

Cohesive bluffs / Filet beach

Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

Other features

- - - Top of slope

~~~~~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

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##### Lakeshore Area 2

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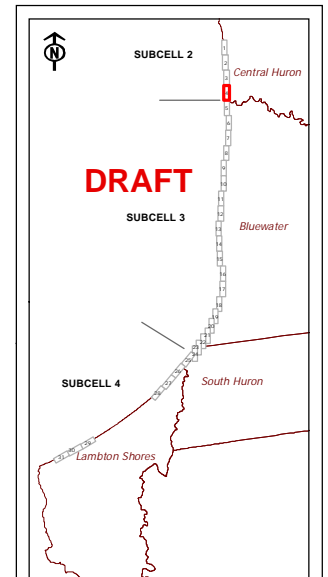
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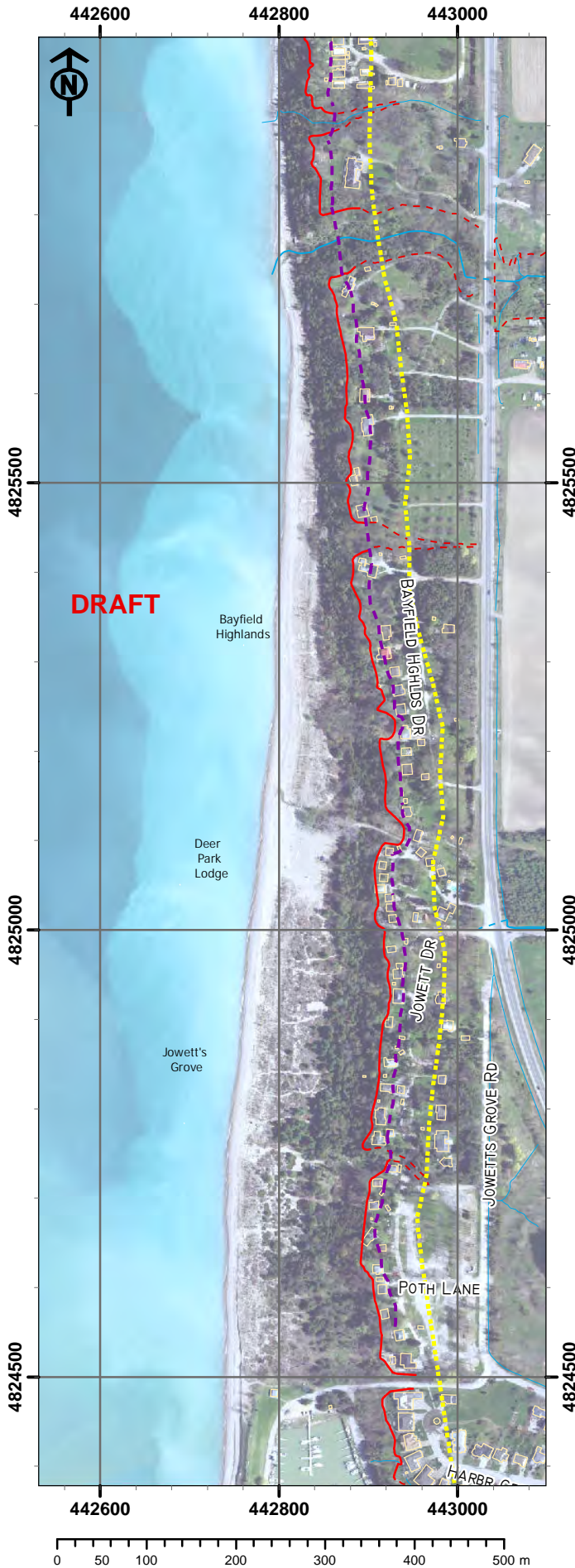
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**MAP 4 of 31**



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# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT** **DRAFT**

### SUBCELL 3

#### Cohesive bluffs

#### Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- ..... Lakeshore Area 2

#### Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building

| Lakeshore Area 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Lakeshore Area 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flood Hazard</b><br>That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.                                                                                                                                                                                                             | <b>Flood Hazard</b> – not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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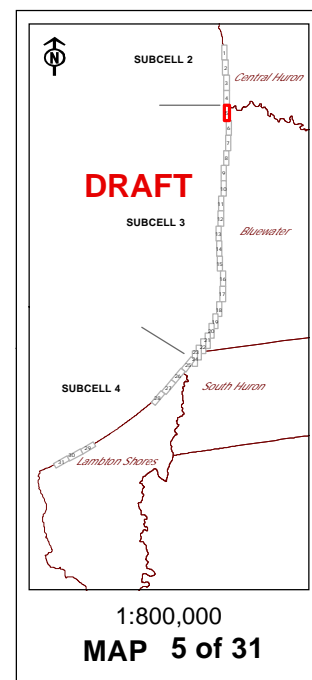
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# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT** **SUBCELL 3** **DRAFT**

### Cohesive bluffs

#### Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- ..... Lakeshore Area 2

#### Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building

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#### Lakeshore Area 2

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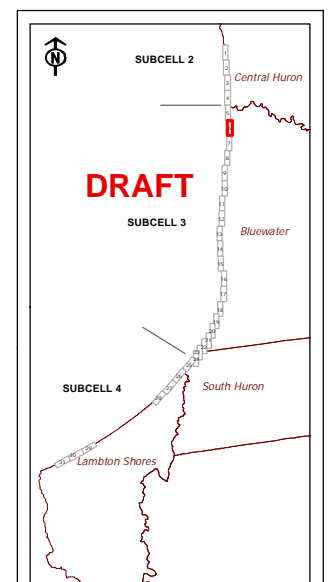
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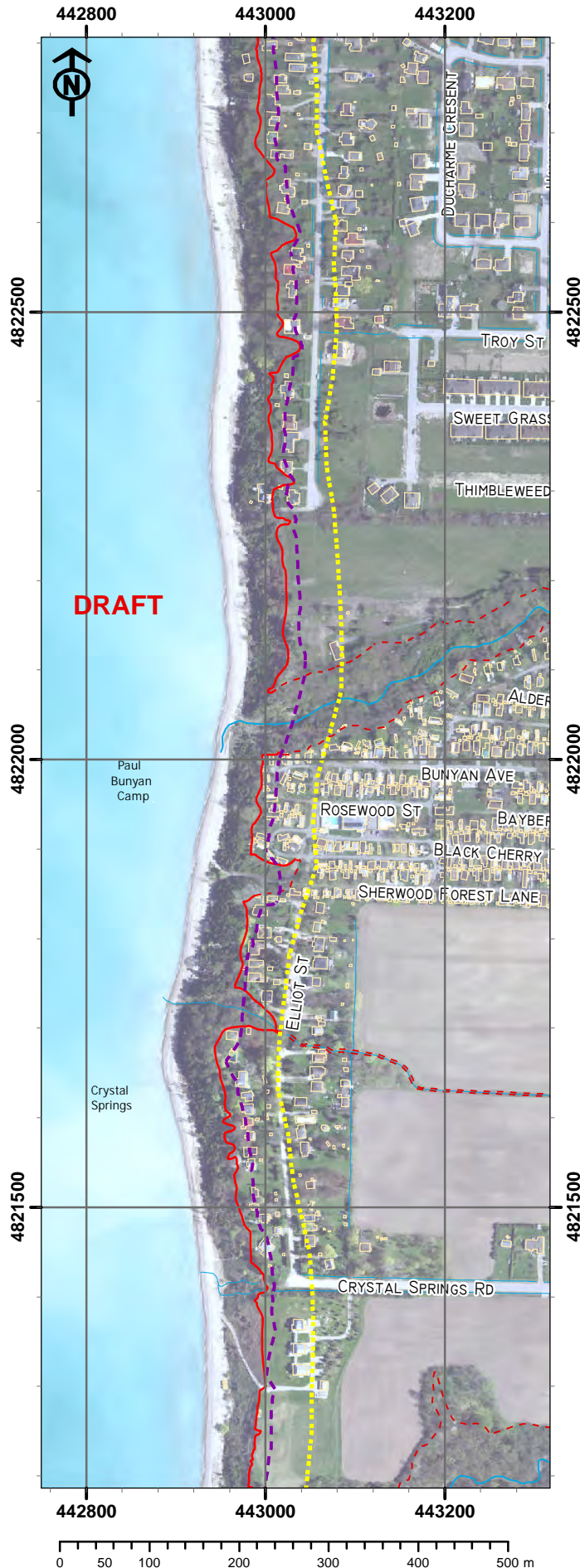
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**MAP 6 of 31**



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# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT** **SUBCELL 3** **DRAFT**

### Cohesive bluffs

#### Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

#### Other features

- - - Top of slope

~ ~ ~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

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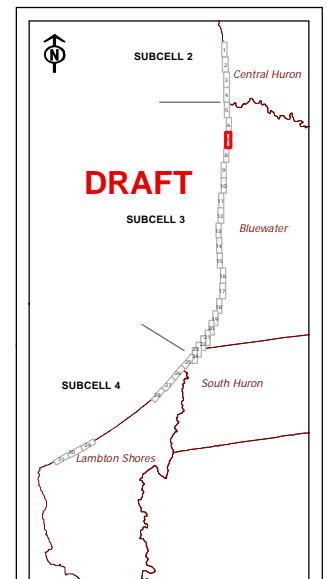
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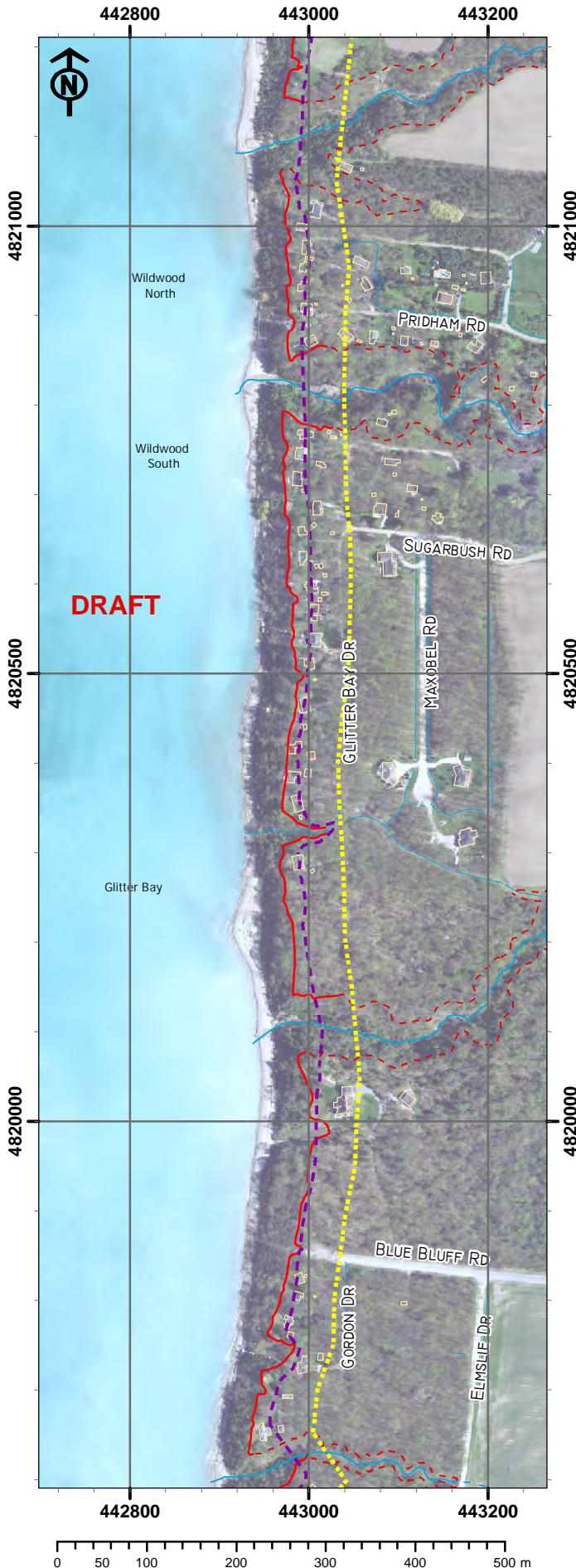
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**MAP 7 of 31**



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## Lake Huron Shoreline Hazards

**DRAFT** **DRAFT**

### SUBCELL 3

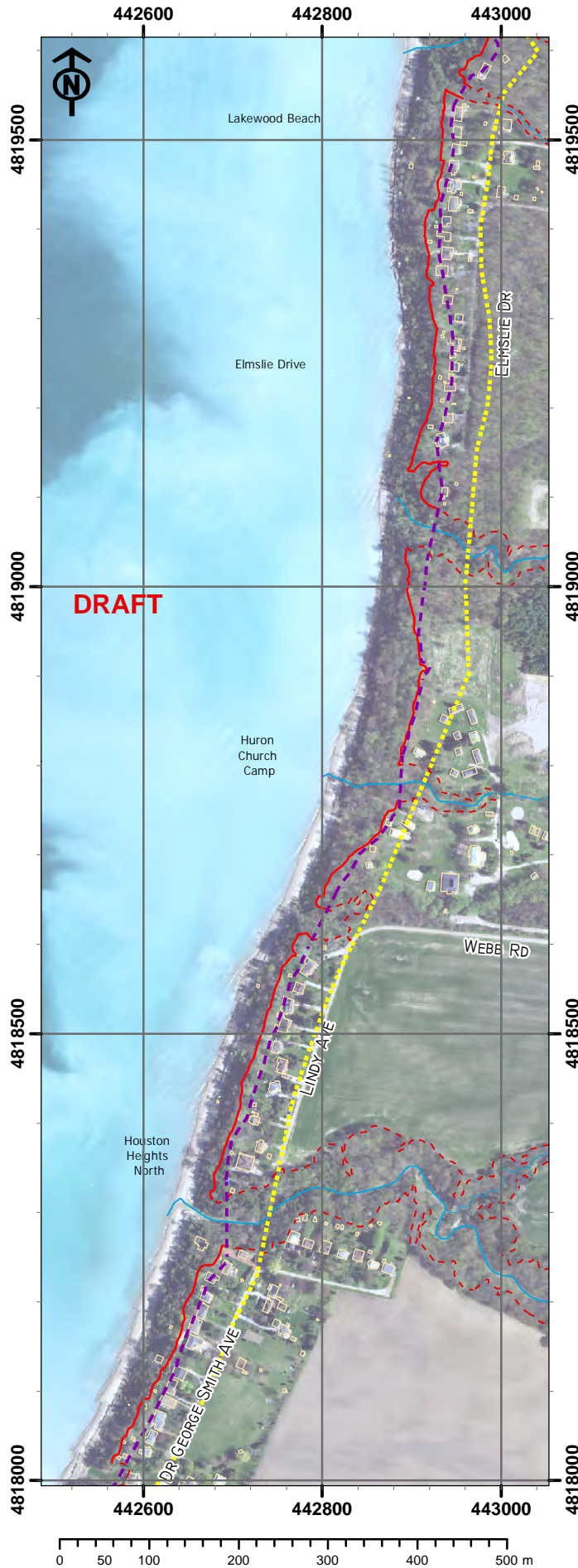
#### Cohesive bluffs

#### Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- ..... Lakeshore Area 2

#### Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
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**DRAFT**

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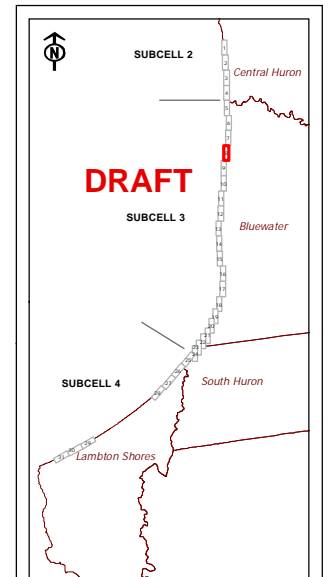
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**MAP 8 of 31**



# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT** **SUBCELL 3** **DRAFT**

### Cohesive bluffs

#### Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- ..... Lakeshore Area 2

#### Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



**DRAFT**

| Lakeshore Area 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Lakeshore Area 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flood Hazard</b><br>That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.                                                                                                                                                                                                             | <b>Flood Hazard</b> – not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Erosion Hazard</b><br>That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.                                                                                                                                                                                                                                                                                                                                                    | <b>Erosion Hazard</b><br>That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance** OR a measured distance of 45 metres from the top of the unaltered lake bluff. **The additional 15m allowance, consists of an Access Allowance of 6m plus provision for any recent erosion changes. |
| <b>Dynamic Beach Hazard</b><br>That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion). | <b>Dynamic Beach Hazard</b><br>That area landward (or inland) from Lakeshore Area 1 plus the Defined Portion of the Dynamic Beach which is a distance of 30 metres. This 30 m is called the "Defined Portion of the Dynamic Beach" and is also part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).                      |

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#### Mapping Notes:

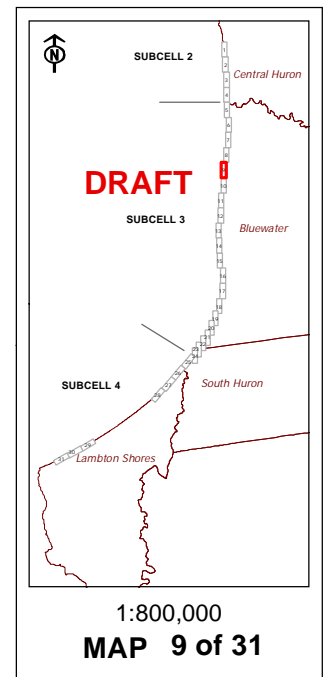
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**MAP 9 of 31**







# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT**

### SUBCELL 3

#### Cohesive bluffs

#### Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- ..... Lakeshore Area 2

#### Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building

#### Lakeshore Area 1

**Flood Hazard**  
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

**Erosion Hazard**  
That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.

**Dynamic Beach Hazard**  
That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance\*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

#### Lakeshore Area 2

**Flood Hazard** – not applicable

**Erosion Hazard**  
That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance\*\* OR a measured distance of 45 metres from the top of the unaltered lake bluff. \*\*The additional 15m allowance, consists of an Access Allowance of 6m plus provision for any recent erosion changes.

**Dynamic Beach Hazard**  
That area landward (or inland) from Lakeshore Area 1 plus the Defined Portion of the Dynamic Beach which is a distance of 30 metres. This 30 m is called the "Defined Portion of the Dynamic Beach" and is also part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

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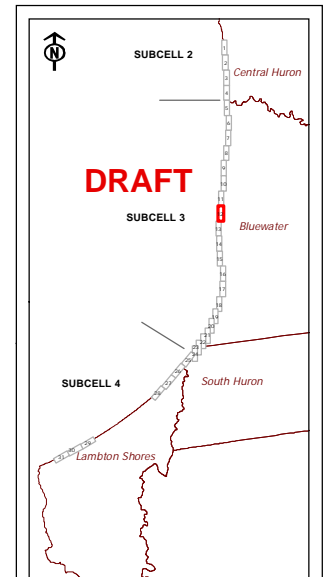
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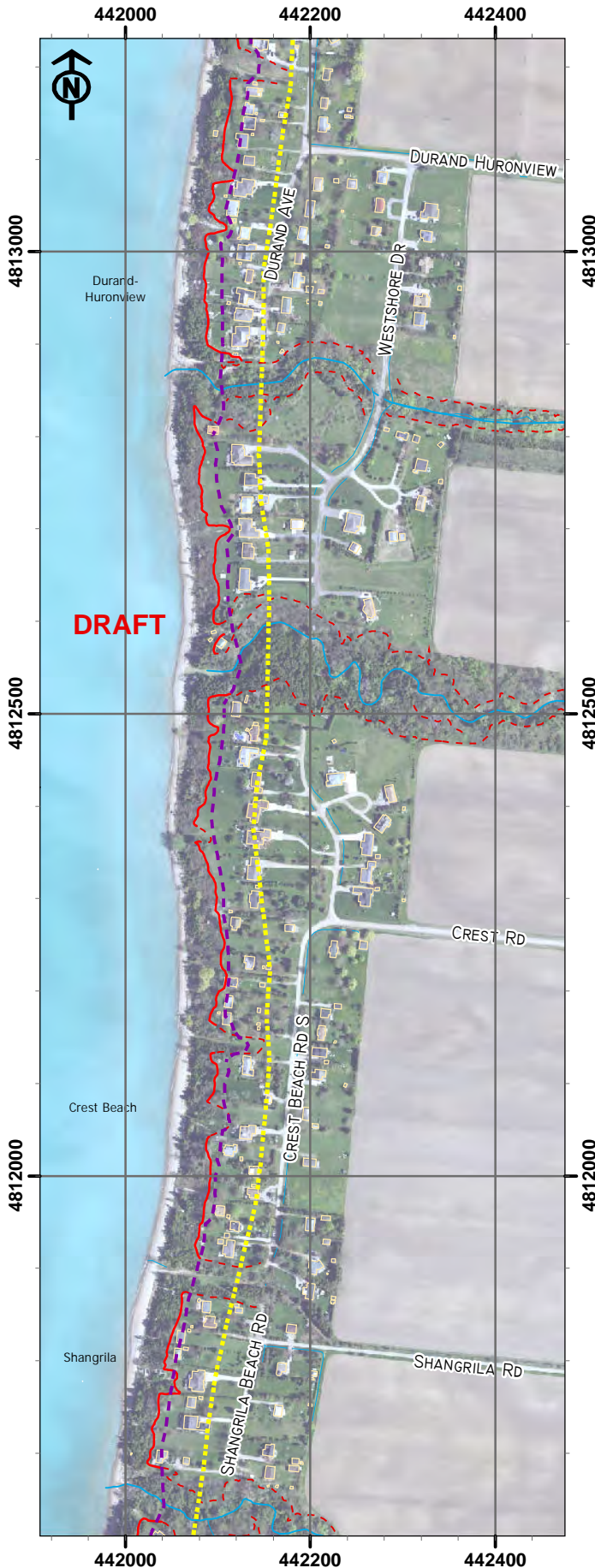
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**MAP 12 of 31**



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# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT** **DRAFT**

### SUBCELL 3

#### Cohesive bluffs

#### Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- ..... Lakeshore Area 2

#### Other features

- - - Top of slope
- ~ ~ ~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building

#### Lakeshore Area 1

**Flood Hazard**  
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

**Erosion Hazard**  
That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.

**Dynamic Beach Hazard**  
That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance\*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

#### Lakeshore Area 2

**Flood Hazard** – not applicable

**Erosion Hazard**  
That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance\*\* OR a measured distance of 45 metres from the top of the unaltered lake bluff. \*\*The additional 15m allowance, consists of an Access Allowance of 6m plus provision for any recent erosion changes.

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#### Mapping Notes:

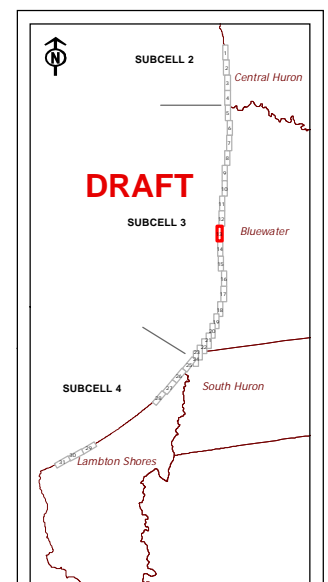
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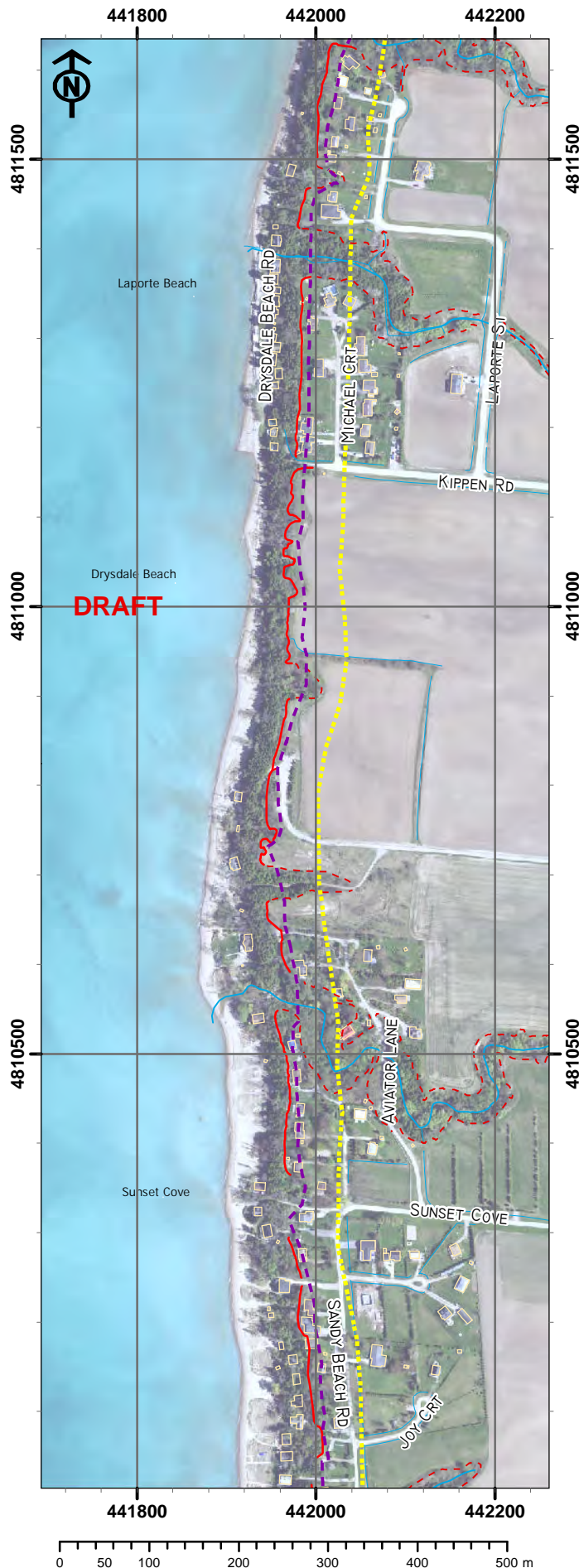
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**MAP 13 of 31**



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# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT** **SUBCELL 3** **DRAFT**

### Cohesive bluffs

#### Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- ..... Lakeshore Area 2

#### Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



**DRAFT**

**DRAFT**

| Lakeshore Area 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Lakeshore Area 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flood Hazard</b><br>That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.                                                                                                                                                                                                             | <b>Flood Hazard</b> – not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Erosion Hazard</b><br>That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.                                                                                                                                                                                                                                                                                                                                                    | <b>Erosion Hazard</b><br>That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance** OR a measured distance of 45 metres from the top of the unaltered lake bluff. **The additional 15m allowance, consists of an Access Allowance of 6m plus provision for any recent erosion changes. |
| <b>Dynamic Beach Hazard</b><br>That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion). | <b>Dynamic Beach Hazard</b><br>That area landward (or inland) from Lakeshore Area 1 plus the Defined Portion of the Dynamic Beach which is a distance of 30 metres. This 30 m is called the "Defined Portion of the Dynamic Beach" and is also part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).                      |

#### Mapping Notes:

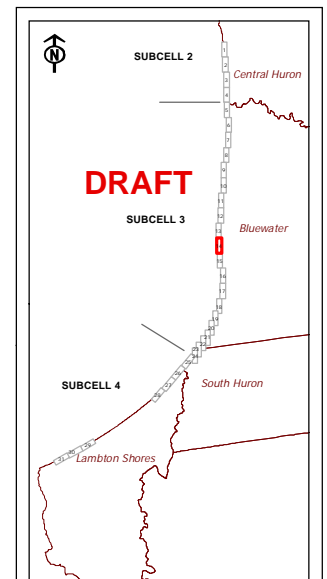
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**MAP 14 of 31**



# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT**

### SUBCELL 3

### Cohesive bluffs

#### Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- ..... Lakeshore Area 2

#### Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



**DRAFT**

| Lakeshore Area 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Lakeshore Area 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Flood Hazard</b><br>That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.                                                                                                                                                                                                             | <b>Flood Hazard</b> – not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Erosion Hazard</b><br>That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.                                                                                                                                                                                                                                                                                                                                                    | <b>Erosion Hazard</b><br>That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance** OR a measured distance of 45 metres from the top of the unaltered lake bluff. **The additional 15m allowance, consists of an Access Allowance of 6 m plus provision for any recent erosion changes. |
| <b>Dynamic Beach Hazard</b><br>That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion). | <b>Dynamic Beach Hazard</b><br>That area landward (or inland) from Lakeshore Area 1 plus the Defined Portion of the Dynamic Beach which is a distance of 30 metres. This 30 m is called the "Defined Portion of the Dynamic Beach" and is also part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).                       |

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#### Mapping Notes:

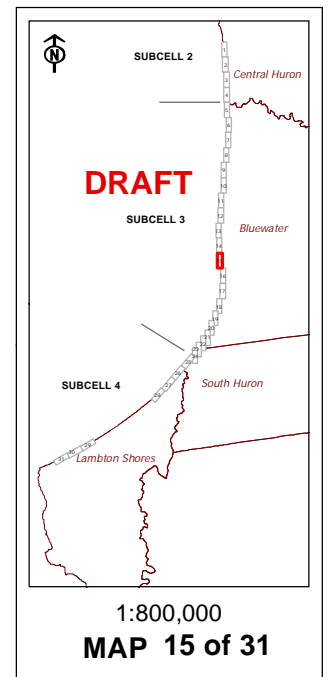
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**MAP 15 of 31**

# Ausable Bayfield CA

## Lake Huron Shoreline Hazards

**DRAFT** **SUBCELL 3** **DRAFT**

### Cohesive bluffs

#### Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

#### Other features

- - - Top of slope

~~~~~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

Lakeshore Area 1

Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

Erosion Hazard
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Dynamic Beach Hazard
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Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance** OR a measured distance of 45 metres from the top of the unaltered lake bluff. **The additional 15m allowance, consists of an Access Allowance of 6m plus provision for any recent erosion changes.

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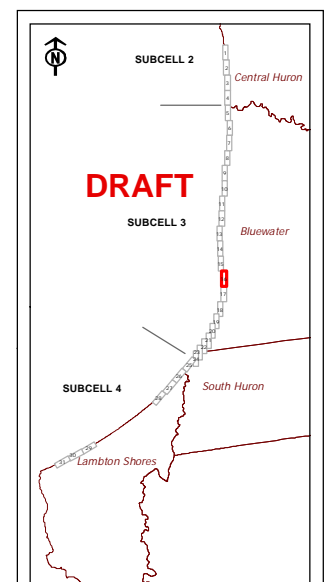
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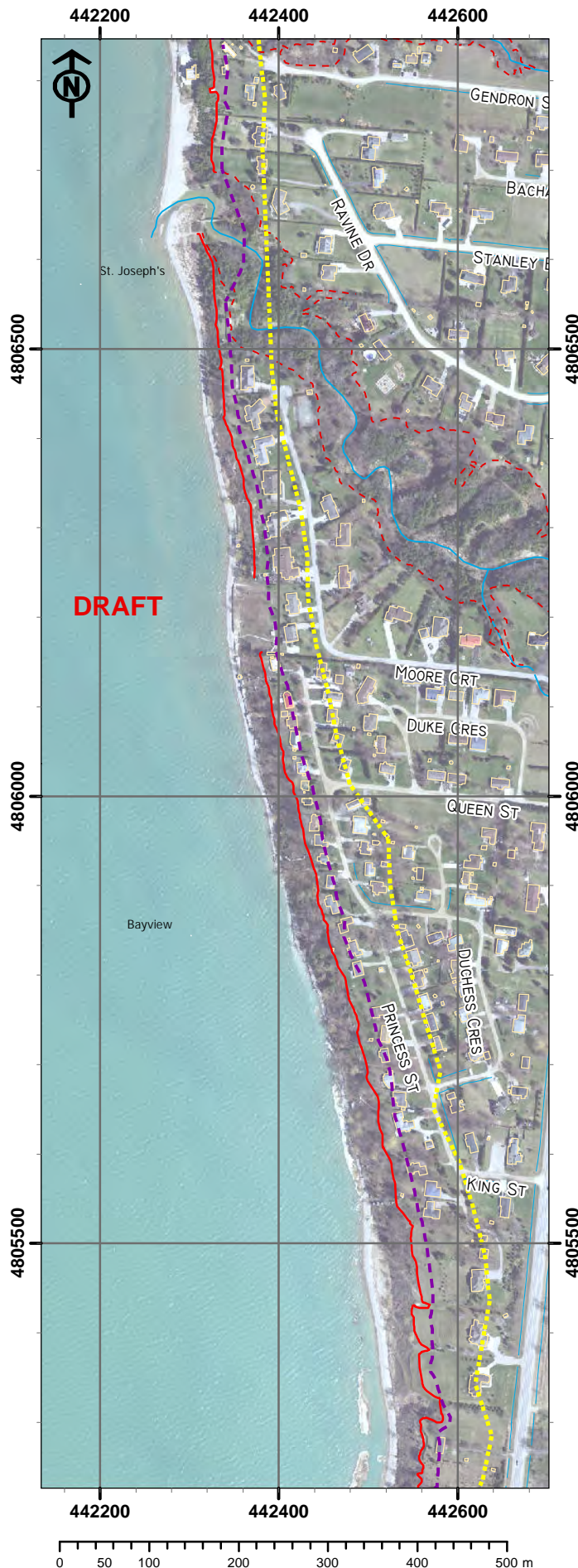
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MAP 16 of 31



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Lake Huron Shoreline Hazards

DRAFT

SUBCELL 3

Cohesive bluffs

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building

Lakeshore Area 1

Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

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Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
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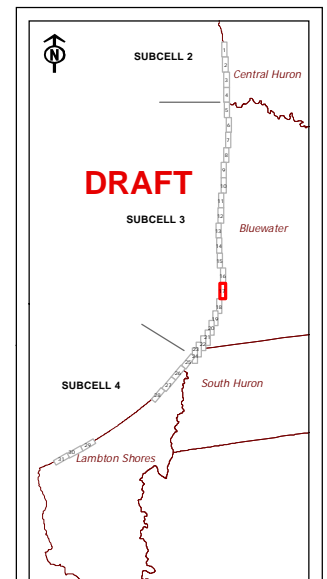
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Lakewood Gardens North

Lakewood Gardens South

442200 442400 442600

0 50 100 200 300 400 500 m

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Lake Huron Shoreline Hazards

DRAFT

SUBCELL 3

Cohesive bluffs

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building

Lakeshore Area 1

Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

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Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
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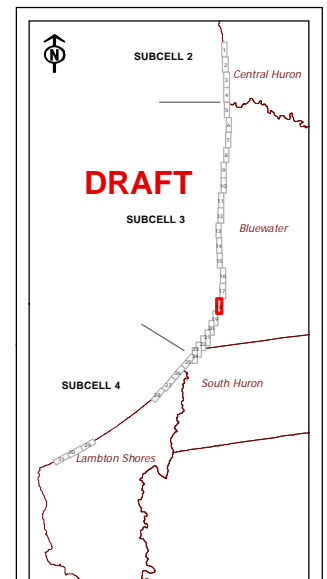
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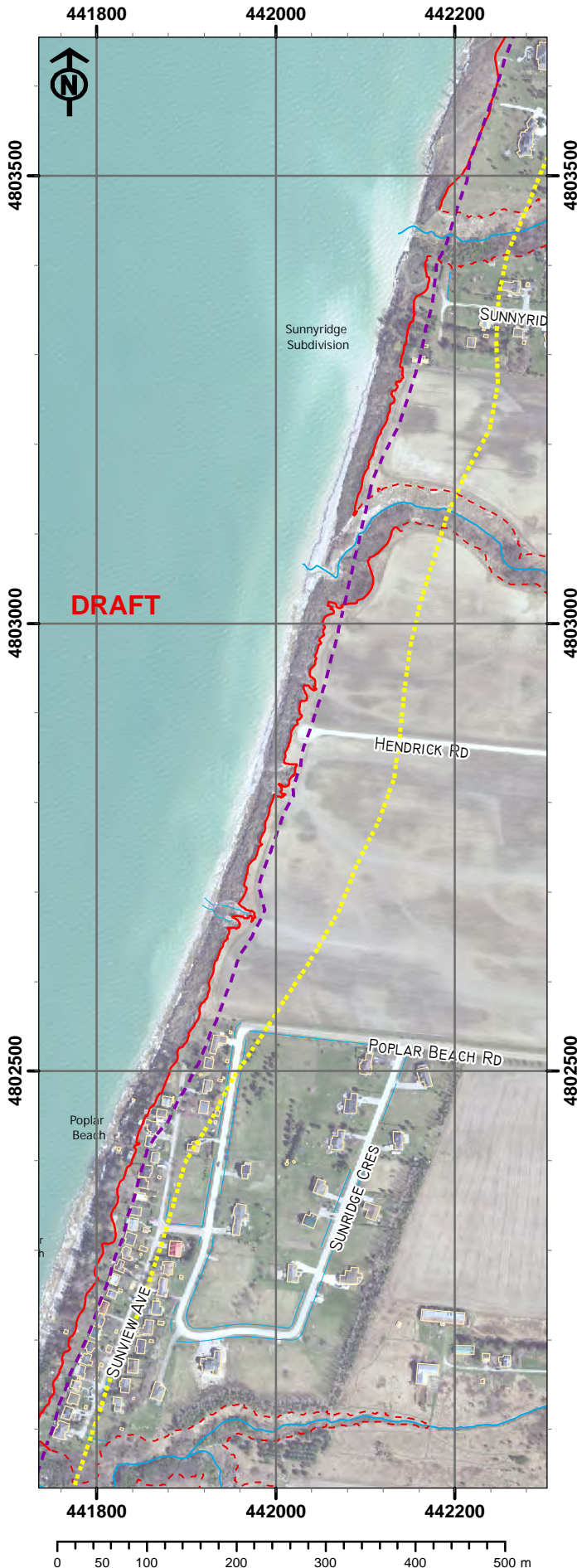
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MAP 18 of 31



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Lake Huron Shoreline Hazards

DRAFT **SUBCELL 3** **DRAFT**

Cohesive bluffs

Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

Other features

- - - Top of slope

~ ~ ~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

Lakeshore Area 1

Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

Erosion Hazard
That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.

Dynamic Beach Hazard
That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance** OR a measured distance of 45 metres from the top of the unaltered lake bluff. **The additional 15m allowance, consists of an Access Allowance of 6m plus provision for any recent erosion changes.

Dynamic Beach Hazard
That area landward (or inland) from Lakeshore Area 1 plus the Defined Portion of the Dynamic Beach which is a distance of 30 metres. This 30 m is called the "Defined Portion of the Dynamic Beach" and is also part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

Mapping Notes:

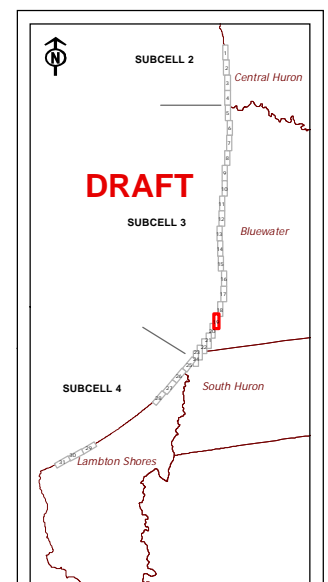
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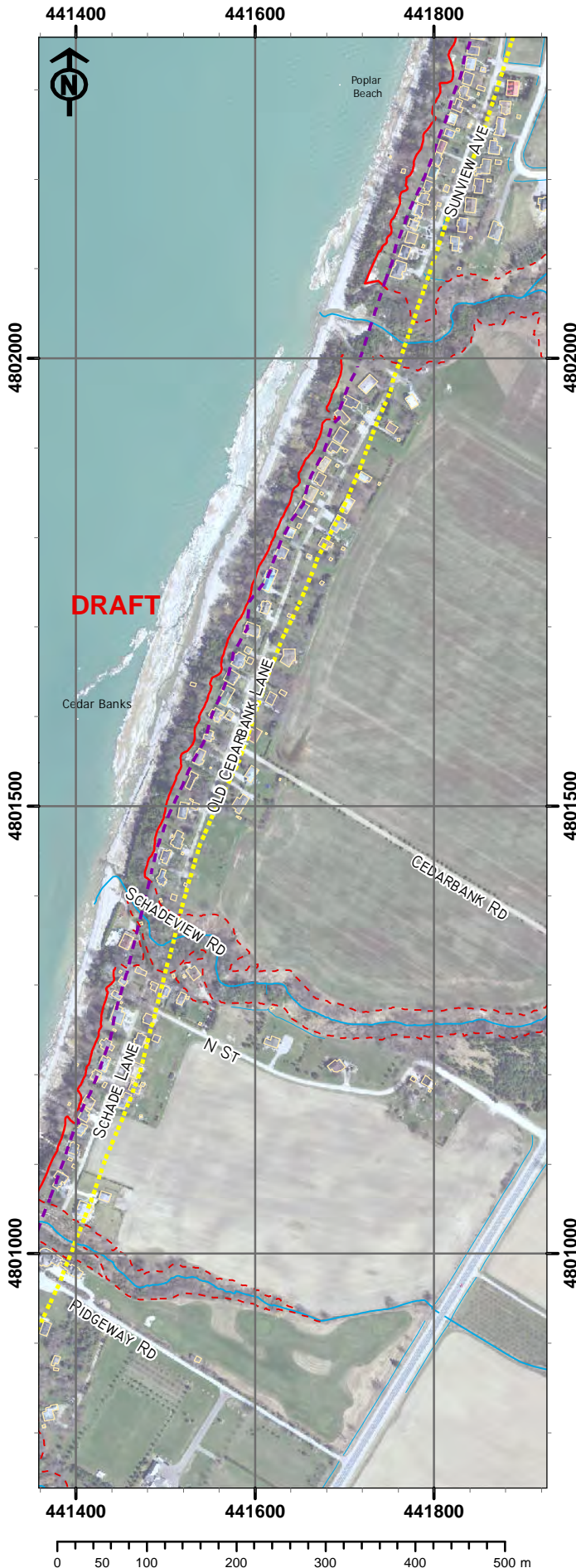
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Ausable Bayfield CA

Lake Huron Shoreline Hazards

DRAFT **SUBCELL 3** **DRAFT**

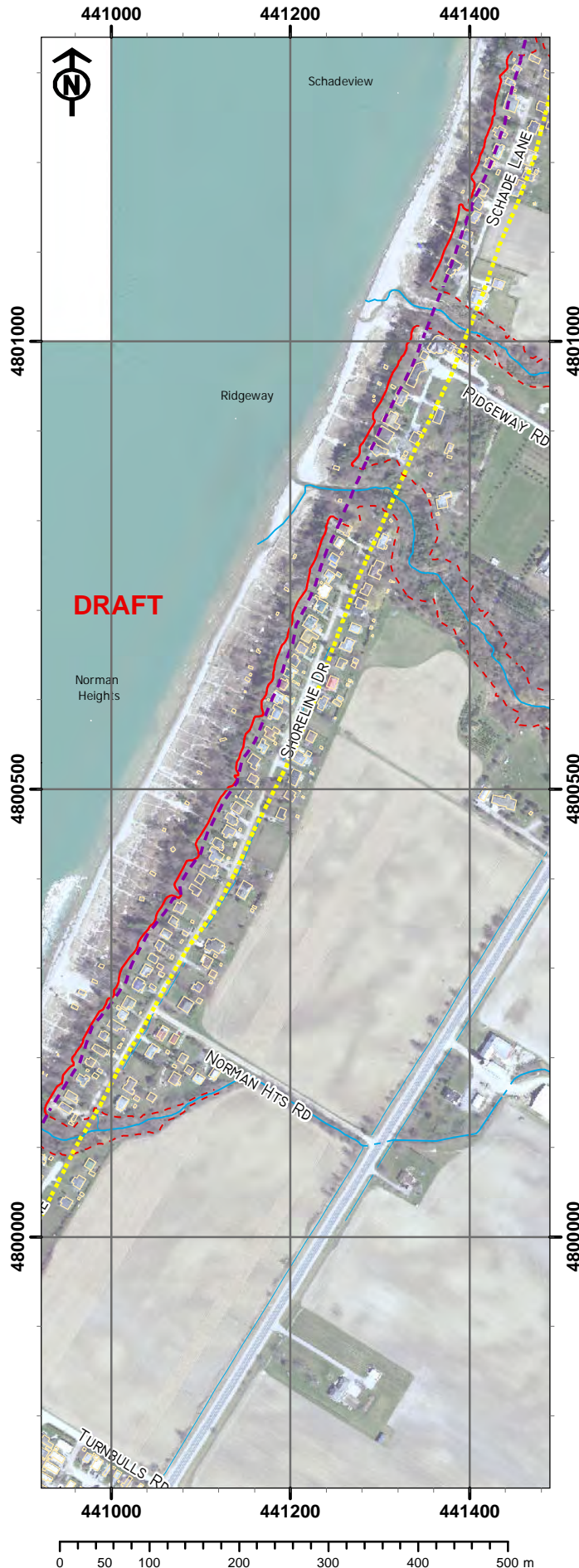
Cohesive bluffs

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



DRAFT

| Lakeshore Area 1 | Lakeshore Area 2 |
|---|---|
| Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard. | Flood Hazard – not applicable |
| Erosion Hazard
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That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance** OR a measured distance of 45 metres from the top of the unaltered lake bluff. **The additional 15m allowance, consists of an Access Allowance of 6m plus provision for any recent erosion changes. |
| Dynamic Beach Hazard
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DRAFT

Mapping Notes:

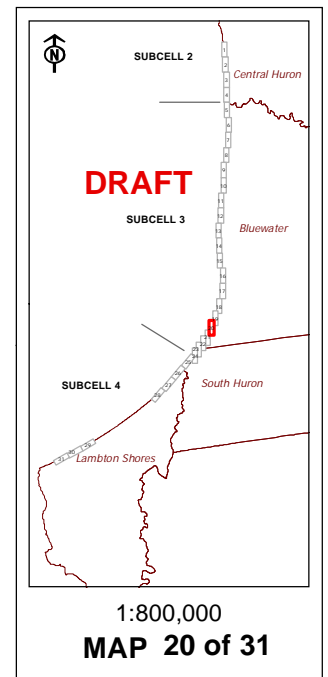
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MAP 20 of 31

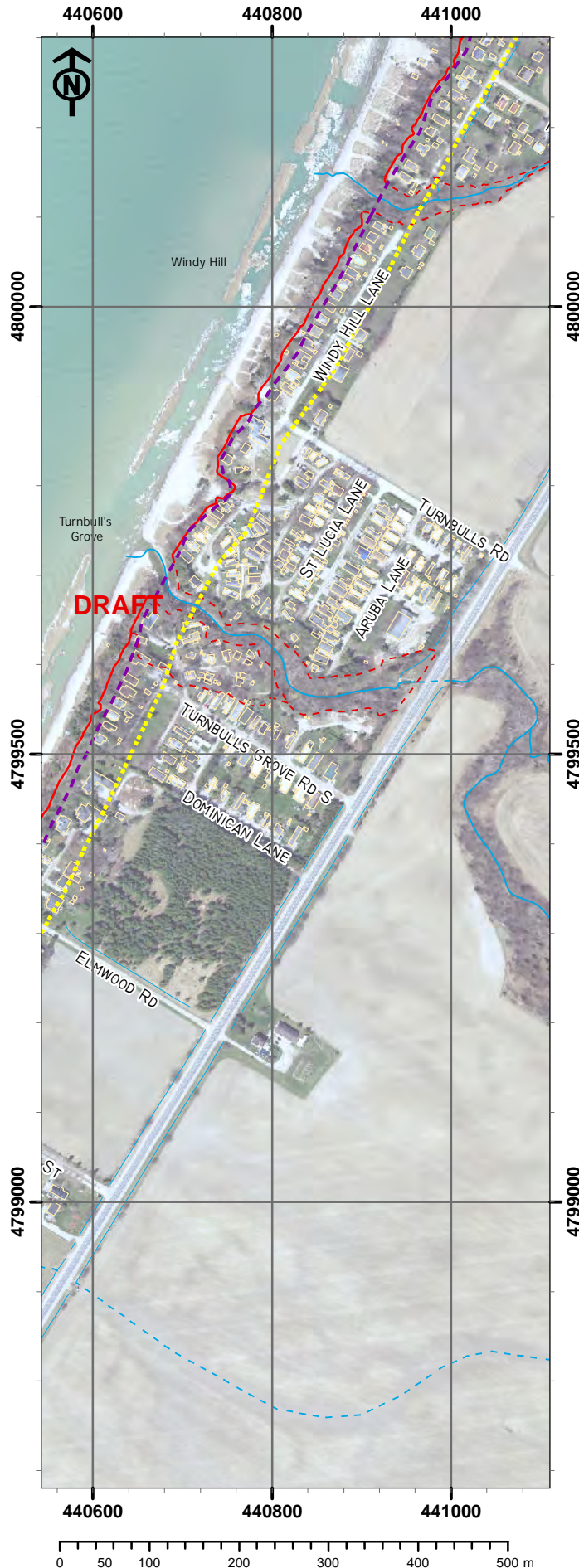
Ausable Bayfield CA
Lake Huron Shoreline Hazards
DRAFT **SUBCELL 3** **DRAFT**
Cohesive bluffs

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



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Lakeshore Area 1

Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

Erosion Hazard
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Dynamic Beach Hazard
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Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
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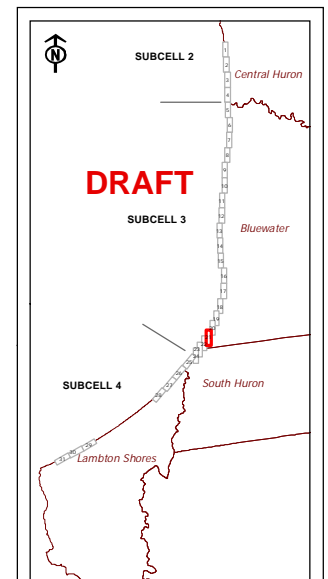
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Ausable Bayfield CA

Lake Huron Shoreline Hazards

DRAFT **SUBCELL 3** **DRAFT**

Cohesive bluffs

Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

Other features

- - - Top of slope

~ ~ ~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

Lakeshore Area 1

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Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
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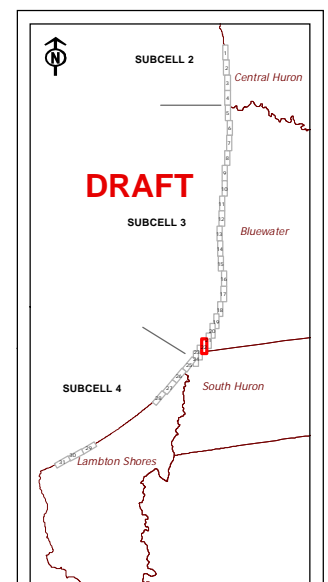
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MAP 22 of 31

Ausable Bayfield CA
Lake Huron Shoreline Hazards
DRAFT **SUBCELL 3** **DRAFT**
Cohesive bluffs

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



DRAFT

| Lakeshore Area 1 | Lakeshore Area 2 |
|---|---|
| Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard. | Flood Hazard – not applicable |
| Erosion Hazard
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Mapping Notes:

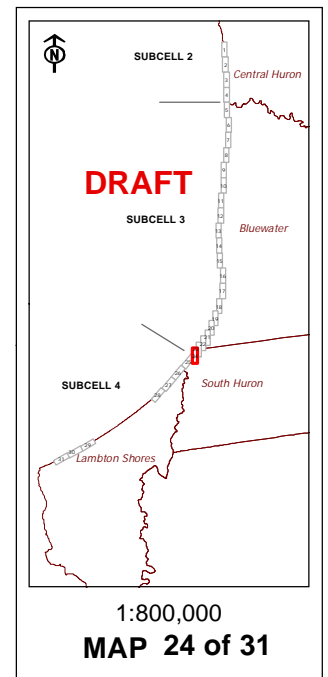
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MAP 24 of 31

Ausable Bayfield CA
Lake Huron Shoreline Hazards
DRAFT **DRAFT**

SUBCELL 4
Dynamic Beach

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



DRAFT

| Lakeshore Area 1 | Lakeshore Area 2 |
|---|---|
| Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard. | Flood Hazard – not applicable |
| Erosion Hazard
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| Dynamic Beach Hazard
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Mapping Notes:

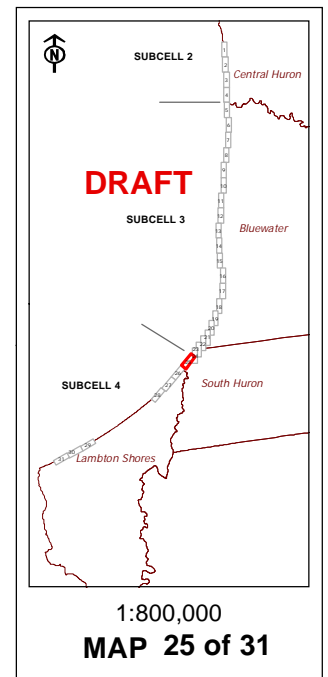
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MAP 25 of 31

Ausable Bayfield CA

Lake Huron Shoreline Hazards

DRAFT

SUBCELL 4

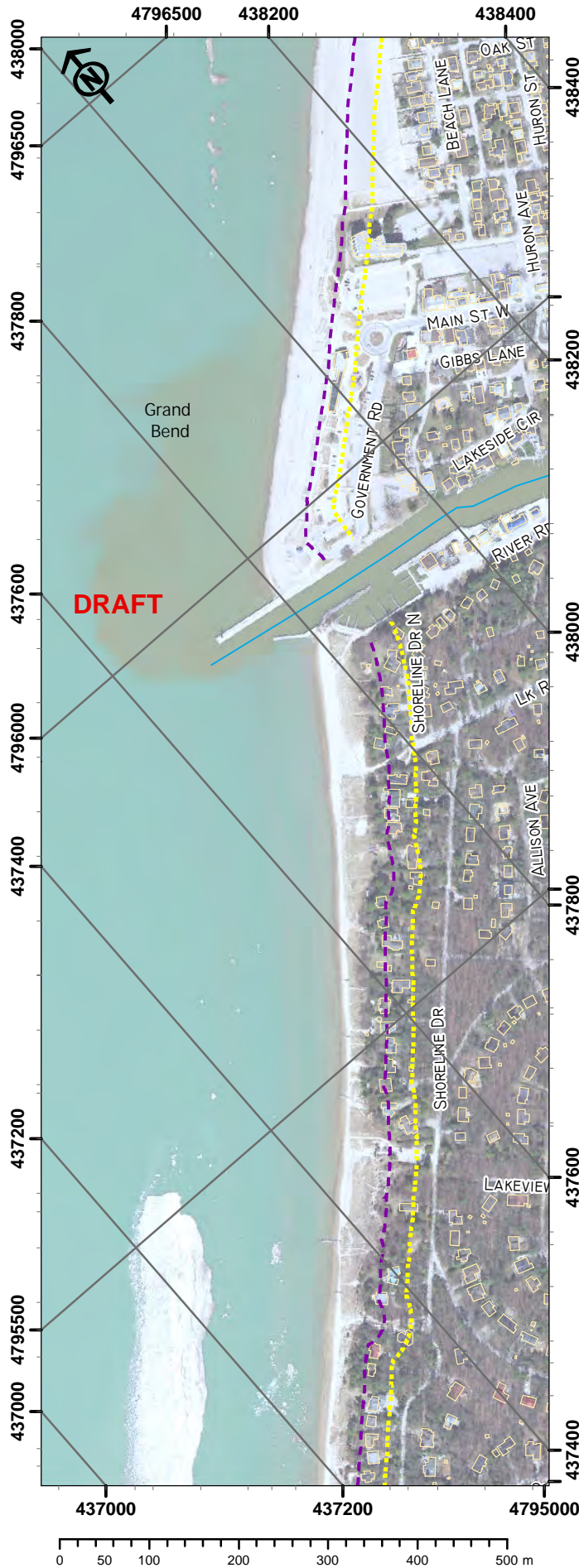
Dynamic Beach

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



| Lakeshore Area 1 | Lakeshore Area 2 |
|---|---|
| Flood Hazard
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| Erosion Hazard
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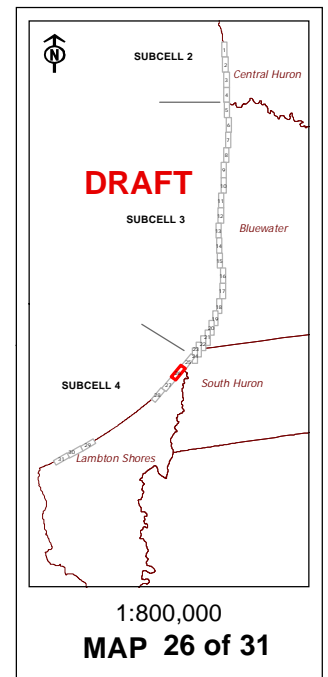
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Ausable Bayfield CA

Lake Huron Shoreline Hazards

DRAFT **SUBCELL 4** **DRAFT**

Dynamic Beach

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building

| Lakeshore Area 1 | Lakeshore Area 2 |
|---|--|
| Flood Hazard
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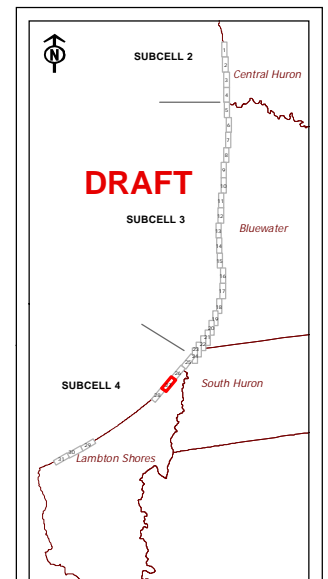
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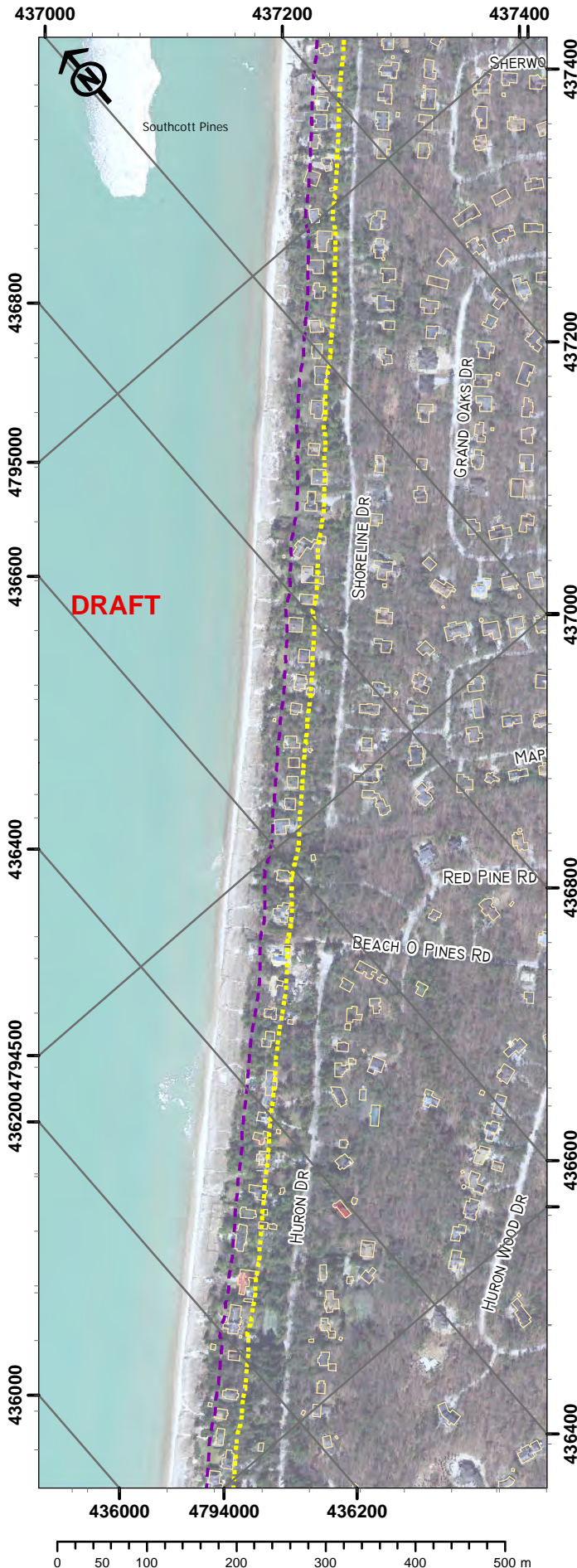
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Lake Huron Shoreline Hazards
DRAFT **DRAFT**

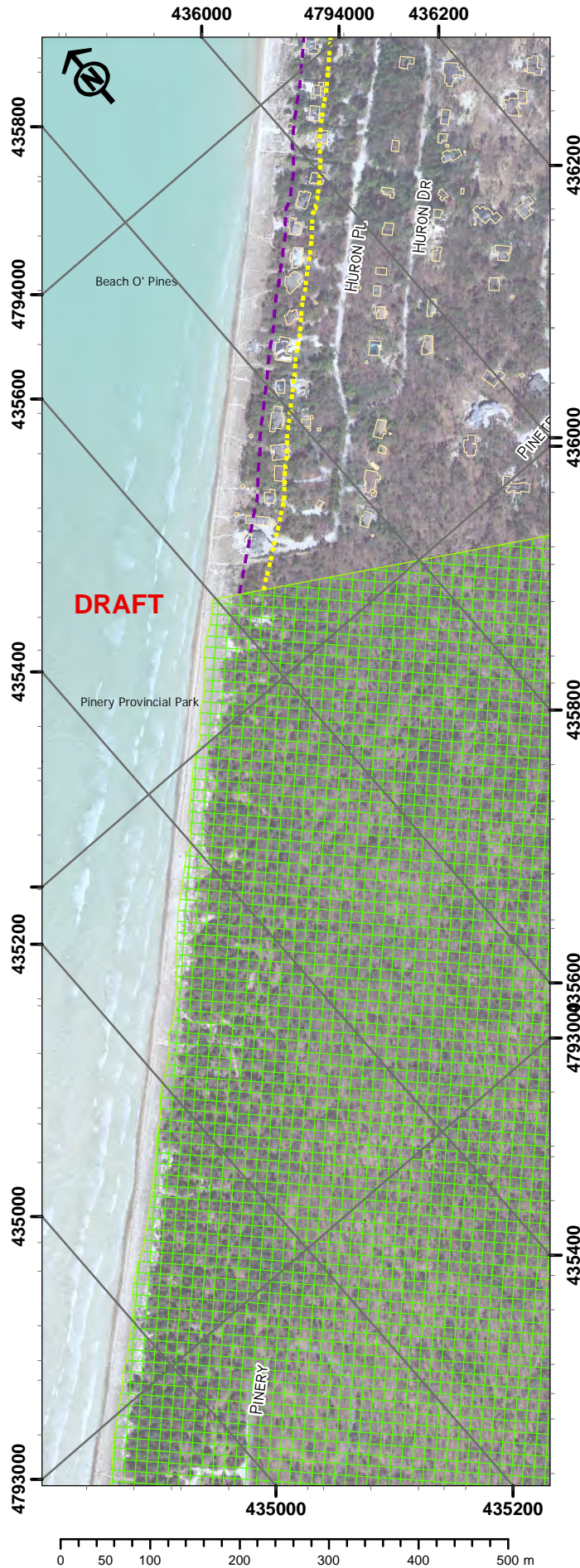
SUBCELL 4
Dynamic Beach

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



| Lakeshore Area 1 | Lakeshore Area 2 |
|---|---|
| Flood Hazard
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| Dynamic Beach Hazard
That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion). | Dynamic Beach Hazard
That area landward (or inland) from Lakeshore Area 1 plus the Defined Portion of the Dynamic Beach which is a distance of 30 metres. This 30 m is called the "Defined Portion of the Dynamic Beach" and is also part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion). |

Mapping Notes:

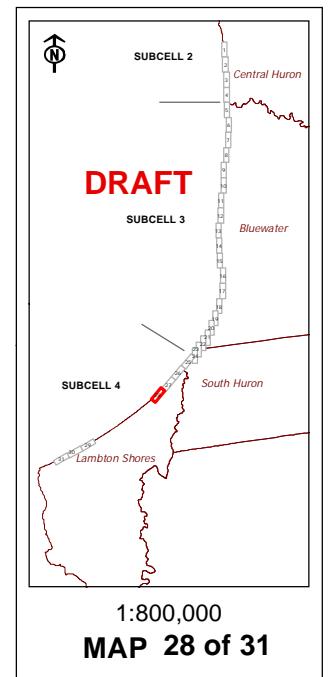
Lakeshore Area 1 in the cohesive bluffs calculated from 2007 vector data and contours acquired from First Base Solutions and a 0.25 m DEM created by the ABCA, except in areas where toe erosion has occurred. In these areas data from the 2015 SWOOP project was used.

Lakeshore Area 1 in the dynamic beach calculated from the 1988 horizontal location of the 100 year lake flood level,

Top of Bank - 2015 was collected in a 3-D mapping environment using SWOOP 2015 stereo imagery.

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Ausable Bayfield CA
Lake Huron Shoreline Hazards
DRAFT **SUBCELL 4** **DRAFT**
Dynamic Beach

Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

Other features

- - - Top of slope

~~~~~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

Lakeshore Area 1

**Flood Hazard**  
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

**Erosion Hazard**  
That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.

**Dynamic Beach Hazard**  
That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance\*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

Lakeshore Area 2

**Flood Hazard** – not applicable

**Erosion Hazard**  
That area of the shoreline located landward (or inland) from Lakeshore Area 1 extending landward to the greater of; a 100 year erosion setback (based on the 100 year Average Annual Recession Rate) or 30 m, plus an additional 15 metre allowance\*\* OR a measured distance of 45 metres from the top of the unaltered lake bluff. \*\*The additional 15m allowance, consists of an Access Allowance of 6 m plus provision for any recent erosion changes.

**Dynamic Beach Hazard**  
That area landward (or inland) from Lakeshore Area 1 plus the Defined Portion of the Dynamic Beach which is a distance of 30 metres. This 30 m is called the "Defined Portion of the Dynamic Beach" and is also part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

Mapping Notes:

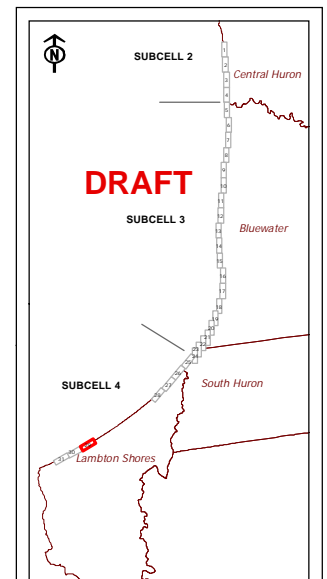
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Lakeshore Area 1 in the dynamic beach calculated from the 1988 horizontal location of the 100 year lake flood level,

Top of Bank - 2015 was collected in a 3-D mapping environment using SWOOP 2015 stereo imagery.

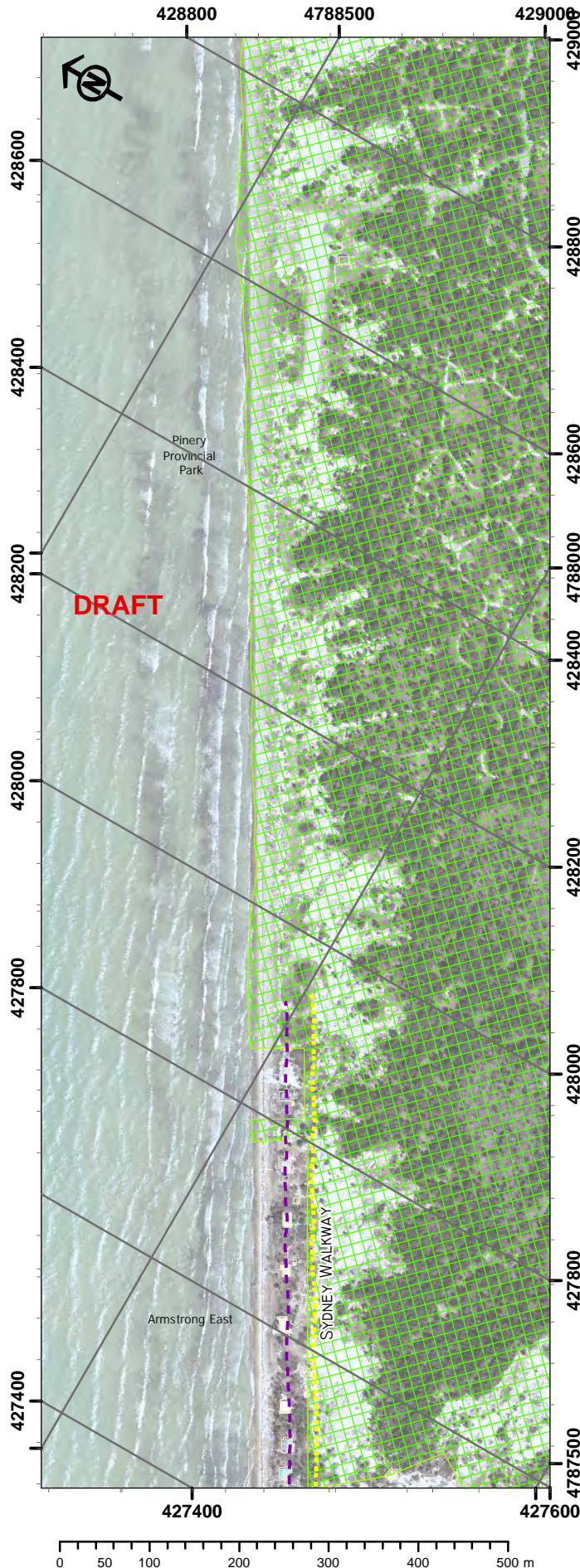
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**MAP 29 of 31**



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Ausable Bayfield CA  
Lake Huron Shoreline Hazards  
**DRAFT** **SUBCELL 4** **DRAFT**  
**Dynamic Beach**

Lakeshore features

— Top of bluff - May 2015

- - - Lakeshore Area 1

..... Lakeshore Area 2

Other features

- - - Top of slope

~~~~~ Surface watercourse

- - - Subsurface (tile) waterflow

□ Building

Lakeshore Area 1

Flood Hazard
That area of the shoreline landward (or inland) from the water's edge, including the 100-year flood level plus wave uprush and Other Water Related Hazards (OWRH) setback (which is 15m in the absence of a site specific study). This is also known as the Regulatory Flood Standard.

Erosion Hazard
That area of the shoreline landward (or inland) from the water's edge, including the stable slope line (3H:1V), from the toe of the lakebank.

Dynamic Beach Hazard
That area landward (or inland) from the water's edge including the 100-year flood level plus a distance of 30 metres measured horizontally. This 30 metres includes the 15 Wave Uprush and Other Water Related Hazards (OWRH) plus an additional ABCA 15 m allowance*. It is part of the active beach zone and portion of the dune complex which would be affected by wave action during the 100-year plus wave uprush event (or historical storm event causing dune cliffing or erosion).

Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
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Dynamic Beach Hazard
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Mapping Notes:

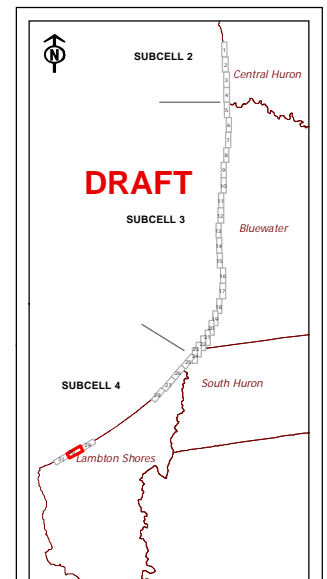
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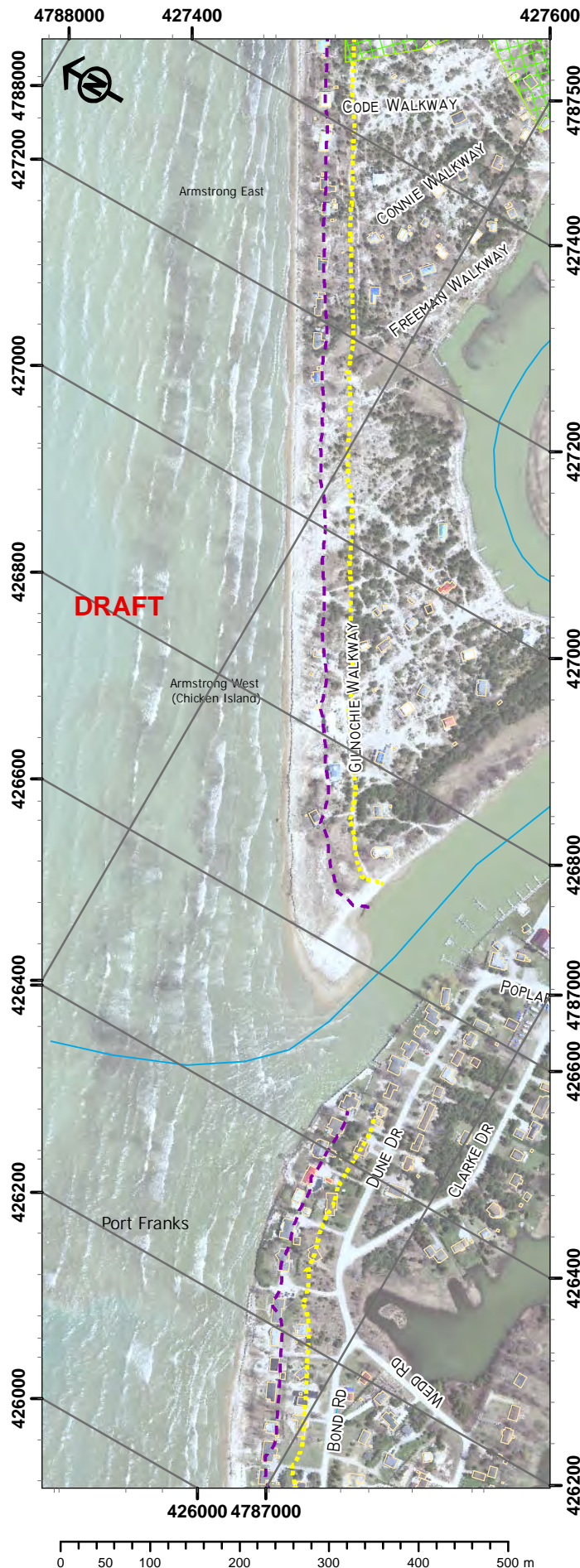
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Ausable Bayfield CA

Lake Huron Shoreline Hazards

DRAFT **DRAFT**

SUBCELL 4

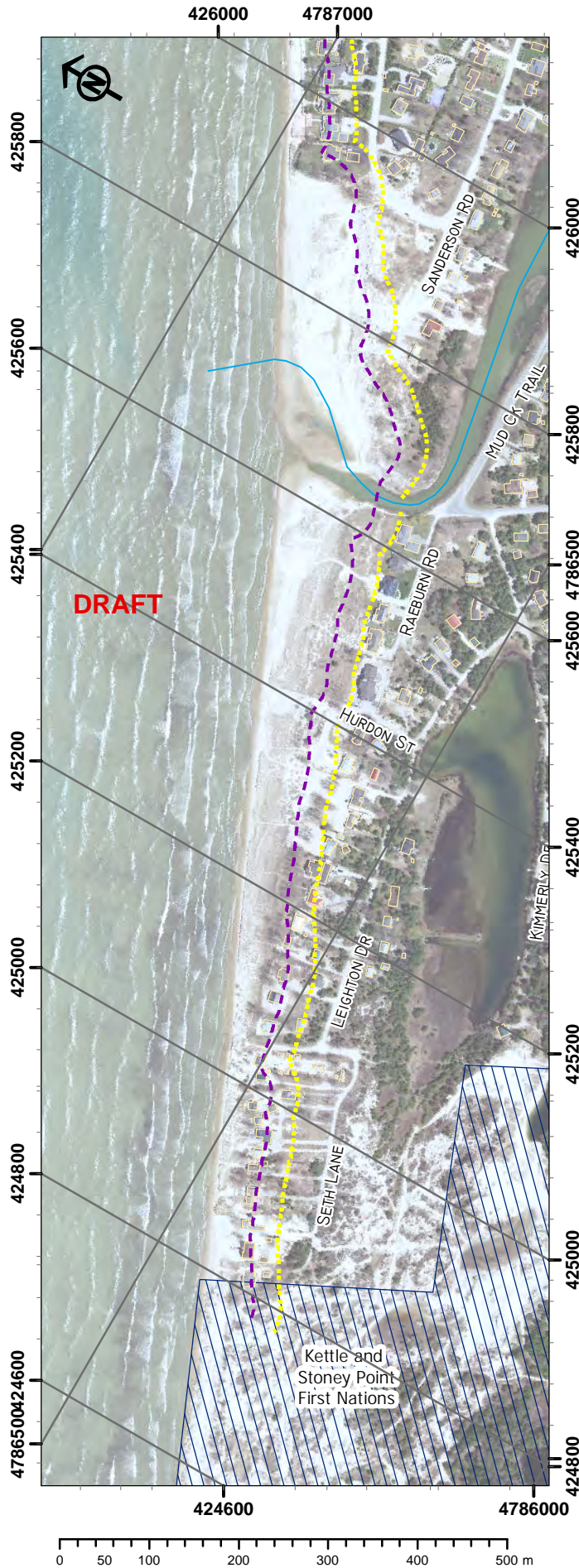
Dynamic Beach

Lakeshore features

- Top of bluff - May 2015
- - - Lakeshore Area 1
- Lakeshore Area 2

Other features

- - - Top of slope
- ~~~~~ Surface watercourse
- - - Subsurface (tile) waterflow
- Building



DRAFT

Lakeshore Area 1

Flood Hazard
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Erosion Hazard
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Lakeshore Area 2

Flood Hazard – not applicable

Erosion Hazard
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Mapping Notes:

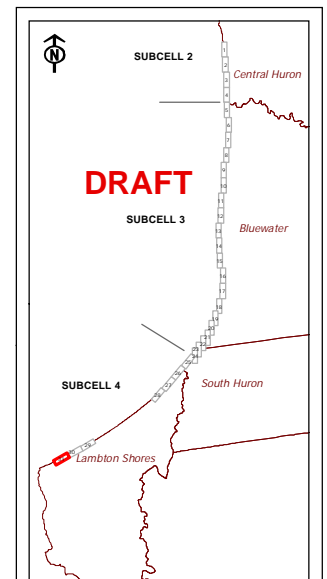
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MAP 31 of 31