

Project Overview

Purpose of Engagement

- Share information with landowners and other stakeholders on the development policies being considered for this area
- Share updated mapping and modelling information
- Answer questions and gather feedback
- Discuss the possible implication(s) for new or existing development your land(s).

Goals of this Project

Increase community awareness and understanding about:

- Flooding,
- Risks of flooding,
- Provincial priorities, and
- How the legal planning context applies to private properties

Apply the SPI to the municipal policies:

Official Community Plan

Provides overall framework for organized, sustainable and planned development and outlines long-term vision of communities

- Align with SPI
- Explain the concern of flooding
- Create land use policies for areas prone to flooding

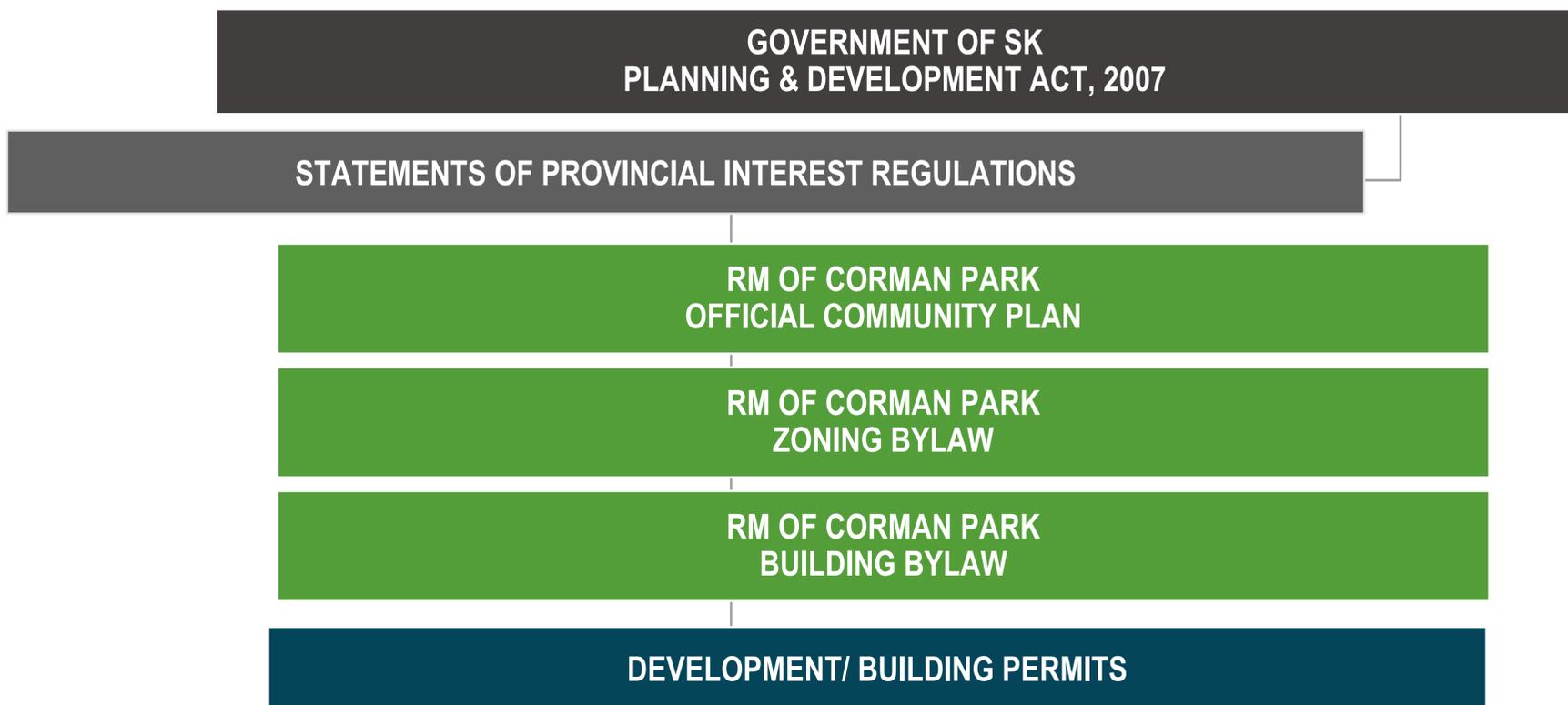
Zoning Bylaw

Regulatory document containing regulations that facilitate the OCP

- Include SPI definitions
- Introduce a two-zone flood hazard map
- Update regulations for development



Legislated Requirements



GOVERNMENT OF SASKATCHEWAN

Planning and Development Act

- Outlines municipal powers that regulate planning

Statements of Provincial Interest (SPI) Regulations

- Adopted as regulations under the Planning and Development Act

“6.5.3 Prohibit the development of new buildings and additions to buildings in the floodway of the 1:500 year flood elevation of any watercourse or water body;

6.5.4 Require flood-proofing of new buildings and additions to buildings to an elevation 0.5 metres above the 1:500 year flood elevation of any watercourse or water body in the flood fringe;

6.5.5 Incorporate available flood mapping into land use planning documents, including zoning bylaws, and decisions;”

1:500
FLOOD EVENT

- Represents a flow rate; it does not imply that flooding will only occur once every 500 years
- The 1:500 flood event has a 1 in 500 chance (0.2%) of being reached each year
- Over 50 years, the 1:500 flood event has a 9.5% chance of being reached

This standard has been applied in Saskatchewan since 1978



Recommendation 1. Flood Mapping

Flood Plain

- Any area covered in water from a water course or water body during a 1:500 year flood event and is made up of the **floodway** and **flood fringe**

Flood Fringe

the portion of the flood plain inundated by the 1:500 year flood that is not floodway

- Less than 1m depth and 1 m/s velocity

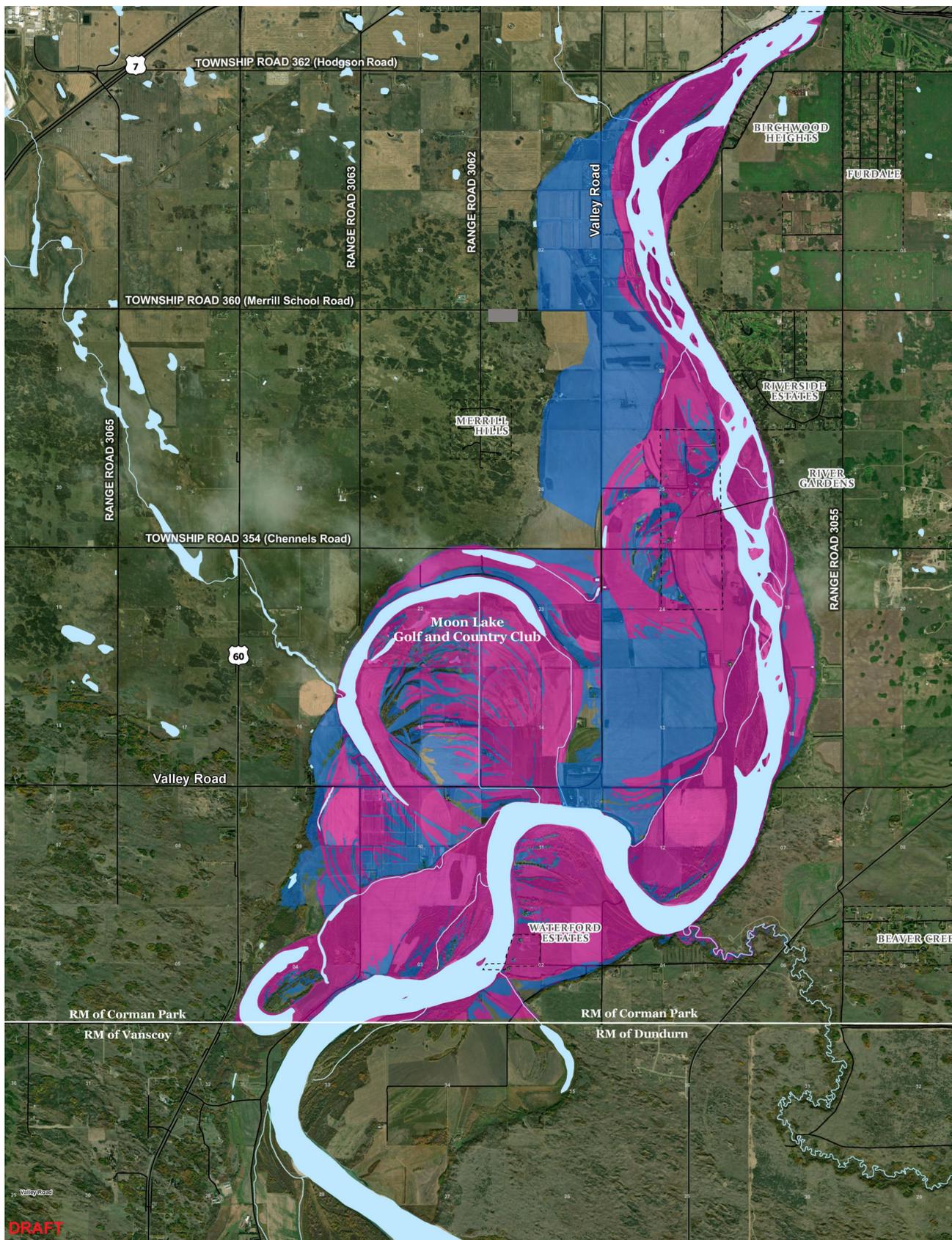
Floodway

the portion of the flood plain adjoining the channel where the waters in the 1:500 year flood are projected to:

- meet or exceed 1 m depth; or
- meet or exceed 1 m/s

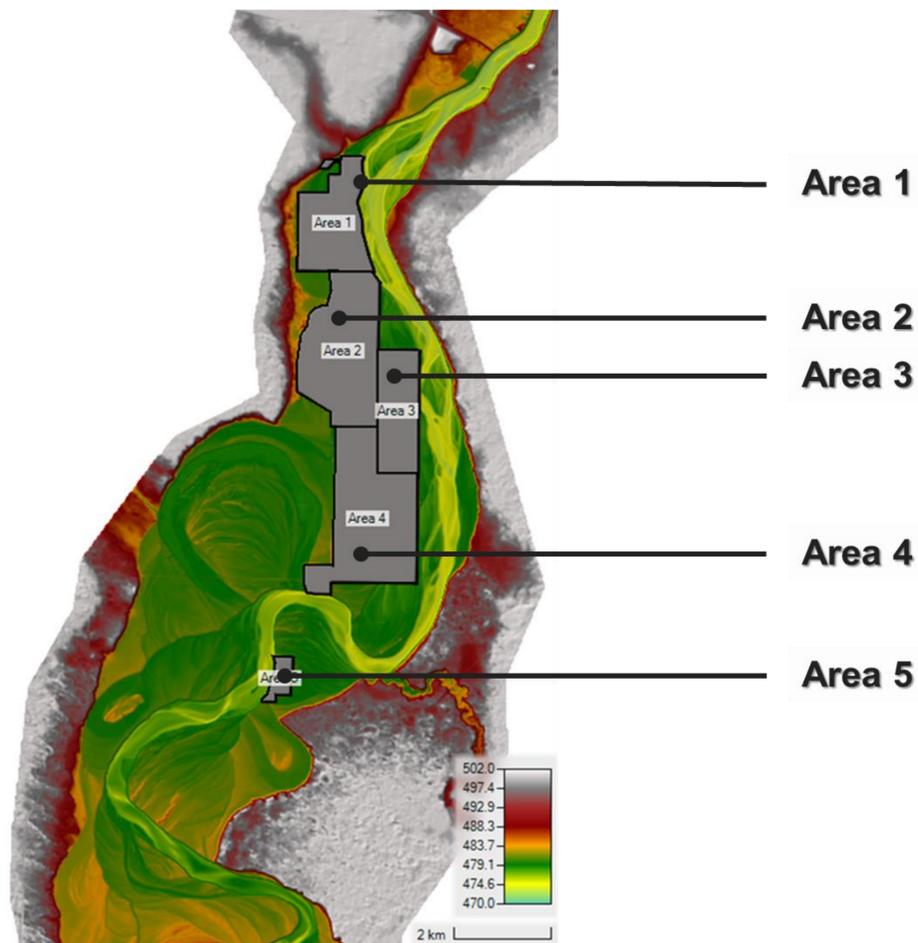
Channel aka the River

- the area where water regularly flows



Hydraulic Modelling

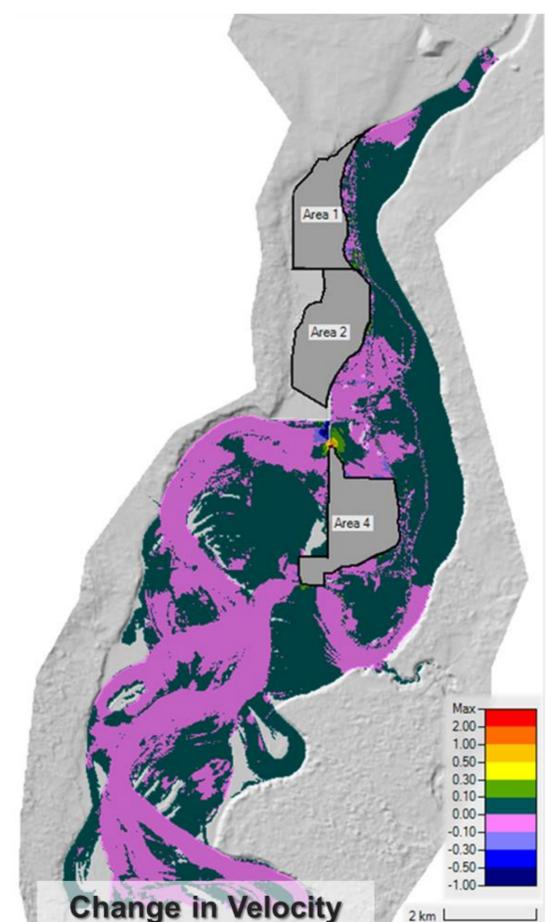
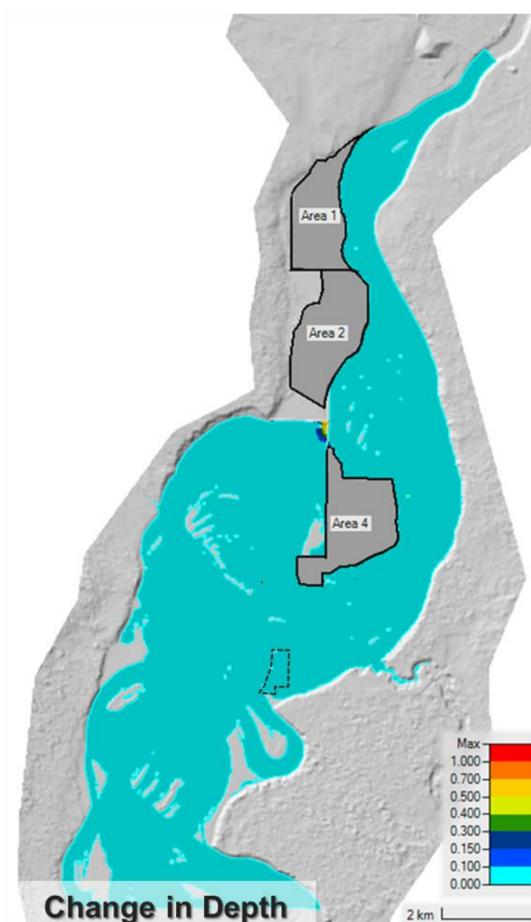
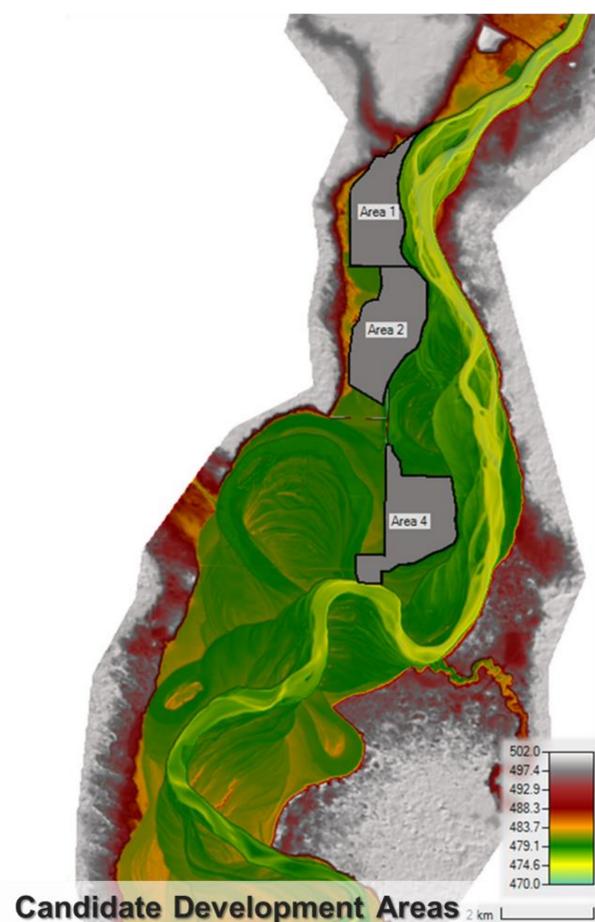
Candidate Development Areas



- Modelling must show that development in Candidate Development Areas would not have significant impact on other areas in the Flood Plain
 - Depth changes typically < 0.1 m
 - Velocity changes typically +/- 0.1 m/s

	Less than 1 m depth	Greater than 1 m depth
Less than 1m/s velocity	Flood Fringe	Floodway
Greater than 1m/s velocity	Floodway	Floodway

Modelling Iteration 4 4,200 m³/s



- Province stated that Valley Rd must be raised to provide safe access to Candidate Development Areas in the **Flood Fringe**

- Large culvert expansion required to pass flows under road at Twp Rd 354 (Channels Road)



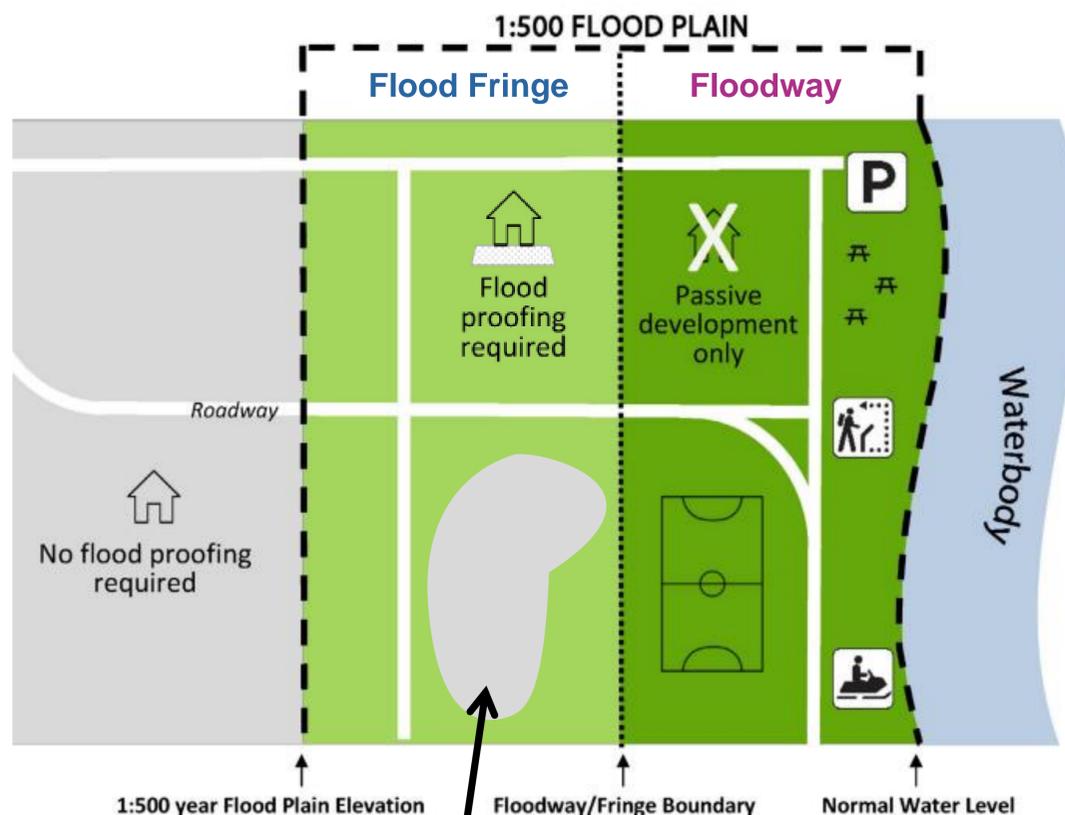
Recommendation 2. Land Use Regulations

OCP Amendments

- Incorporate the regulations of the SPI
 - Introduce the use of a two-zone flood risk map
 - Update flooding definitions
 - Reference the Zoning Bylaw as the tool used to regulate development in the Flood Plain
- Introduce policies that mitigate the negative impacts of flooding (e.g., land use regulations, emergency management)

Flood Fringe

SPI states,
“Require flood-proofing of new buildings and additions to buildings to an elevation 0.5 metres above the 1:500 year flood elevation of any watercourse or water body in the flood fringe.”



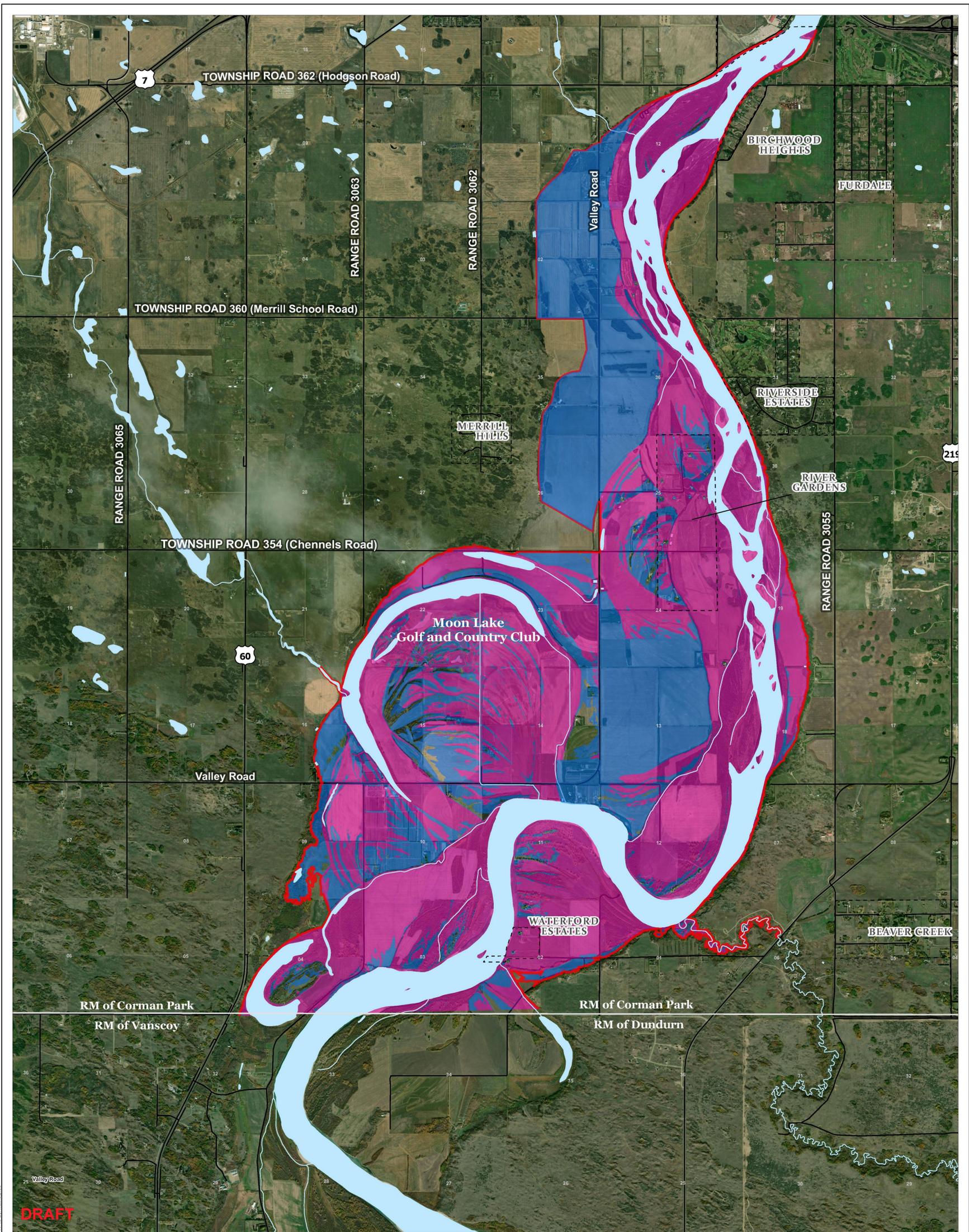
Floodway

SPI states,
“Prohibit the development of new buildings and additions to buildings in the floodway of the 1:500 year flood elevation of any watercourse or water body.”

- All uses in the **Flood Plain** must consider safe access/ egress—can they be safely evacuated during a flood event? If not, they pose a risk to life.
- Some “islands” of neither **floodway** or **flood fringe**, surrounded by areas covered in water during a flood event, also exist in the **Flood Plain**. They are essentially floodproofed; however, they do not have safe evacuation during a flood event.



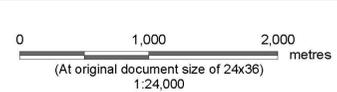
Recommendation 3. FPO Flood Plain Overlay District



DRAFT



- Legend**
- Flood Plain District Overlay Boundary
 - Flood Risk Analysis
 - Flood Fringe
 - Floodway
 - Multi Parcel Subdivision
 - Waterbody
 - Highway
 - Roads
 - Rural Municipality Boundary
 - Section



Project Location
Rural Municipality of Corman Park,
Saskatchewan

Prepared by MH on 2023-11-16
TR by LC on 2023-11-16
IR by XX on 2023-11-16

Client/Project
Rural Municipality of Corman Park
Flood Risk Analysis

144903094-003 REVA

Figure No.
3

DRAFT

Title
Flood Plain District Overlay Map

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Implications for Development

- Many existing uses and buildings will not longer be permitted after the OCP and ZBL amendments
 - They will become “non-conforming uses” and “non-conforming buildings”, as defined by *the Planning and Development Act*.
- Non-conforming uses and non-conforming buildings can continue
 - Are required to follow the regulations of the *Planning and Development Act* (e.g., at its existing intensity/ size, in the same spot, and not interrupted).

Note:
Identifying and dealing with non-conforming uses and non-conforming buildings may be complicated. Each situation can be unique, with special considerations, and must be reviewed with all the policies in mind.

Existing Uses

Floodway

- All existing uses other than those listed as permitted or discretionary in the Floodway portion of FPO Flood Plain Overlay District will be considered non-conforming uses.

SPI restricts development to seasonal, temporary, or passive uses such as parks and open spaces, crops, parking lots, campground grounds, golf courses.

Flood Fringe

- All existing uses **not** included as Permitted or Discretionary in the underlying zones (i.e., AG, AG1, CR1 or REC), or
- Those uses listed as Prohibited in the Flood Fringe portion of the FPO Flood Plain Overlay District will be considered non-conforming uses.

Subdivision

- Subdivision applications cannot be approved if they create new parcels with non-conforming uses to the Zoning Bylaw.
- Non-conforming uses can only continue in their existing state, in their existing locations.

For example:

- *A single parcel with a non-conforming use cannot be subdivided because it would create a new parcel with a non-permitted use, which is not approvable.*
- *Should subdivision be proposed for a parcel with a non-conforming use, the parcels would need to be rezoned at the time of subdivision to ensure they are both in compliance with the Zoning Bylaw.*



Implications for Development

Existing Buildings

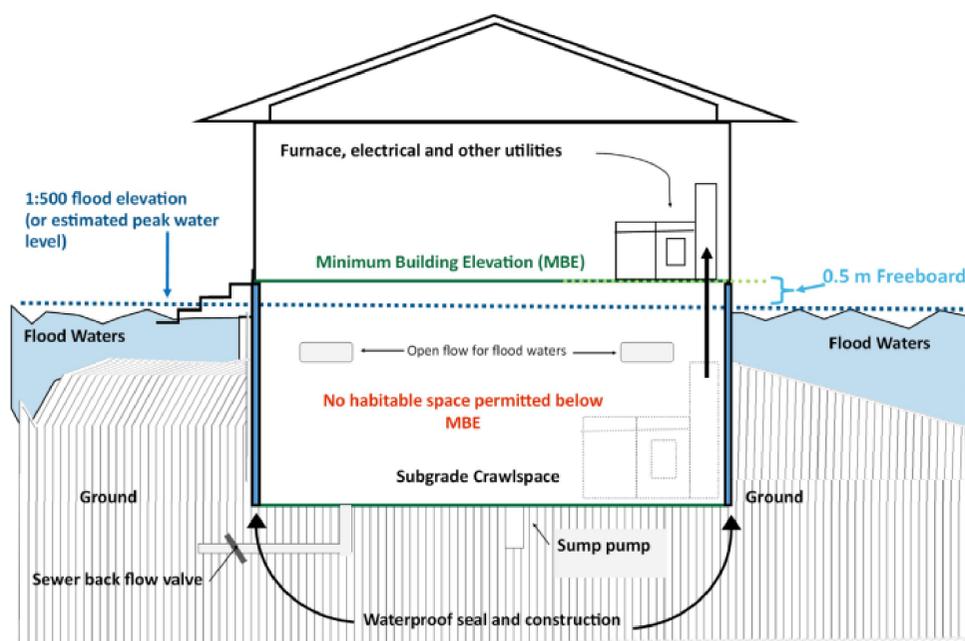
Floodway

- Generally, all existing BUILDINGS will be considered “non-conforming buildings”.
- FARM BUILDINGS may be considered “non-conforming” if they are used to occupy a non-conforming use.

Flood Fringe

- All existing buildings that are:
 - Used to occupy a non-conforming use and/ or
 - Not adequately **flood proofed** to the minimum building elevation will be considered “non-conforming buildings”.

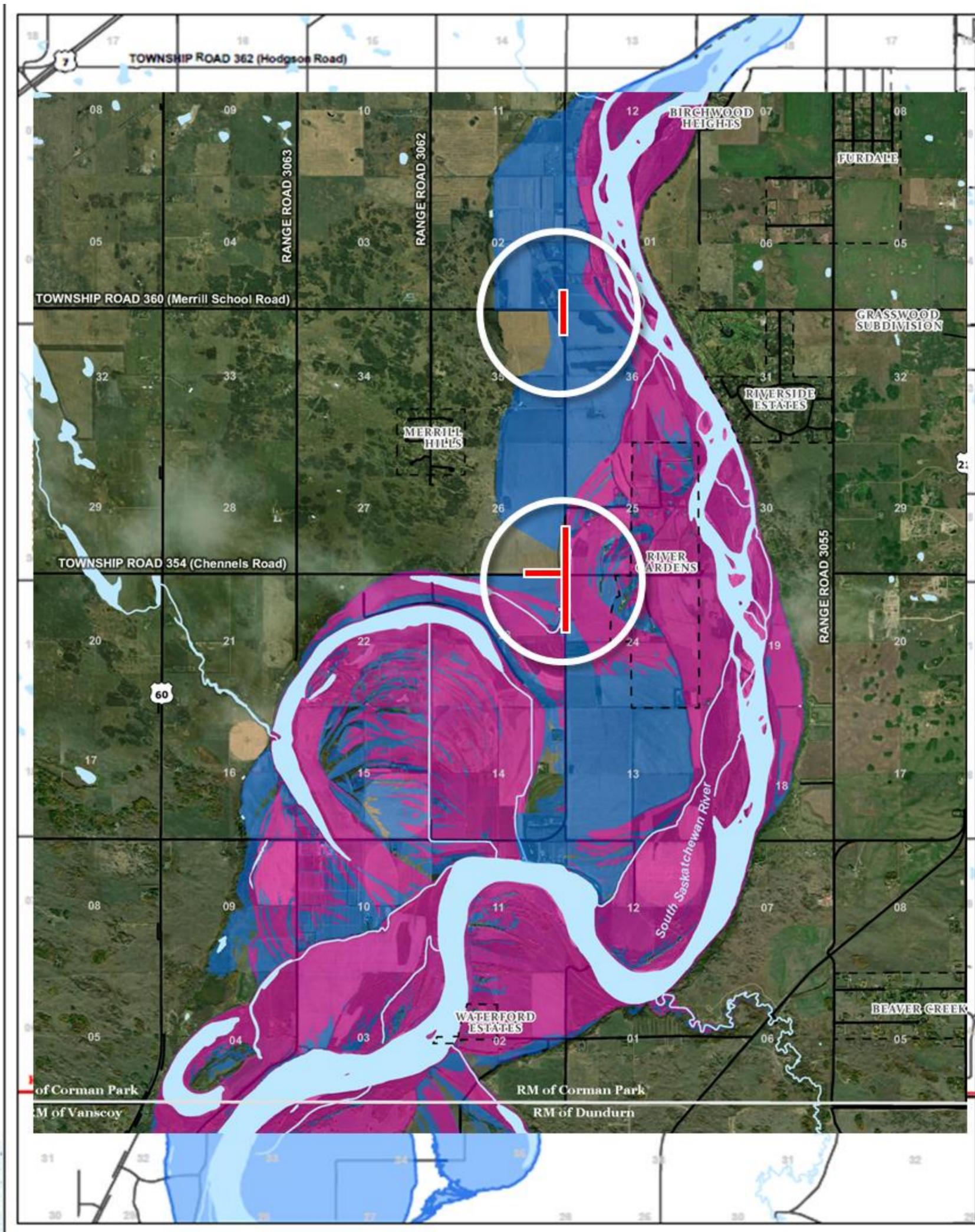
Building Bylaw Amendments



- Outlines what flood proofing standards are required for buildings in the **Flood Fringe**
 - **Dry Flood Proofing** (e.g., building to above the min. building elevation)
 - **Wet Flood Proofing** (e.g., allowing water to move through the building during a flood event without damage)
 - Not appropriate for uses that contain lives or materials that could cause environmental contamination
- All flood proofing must be designed by an architect or professional engineer



Recommendation 4. Roadway Improvements



- Intended to provide safe access and egress during a 1:500 year flood event.
- Required by WSA to support development in the Flood Plain.
- Will raise the elevation of Valley Road above the 1:500 year flood elevation level (dry floodproofing).

