Floodway Development Regulation Task Force

Discussion Paper

FLOODWAY DEVELOPMENT REGULATION

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Draft Discussion Paper Floodway Development Regulation

1. Introduction

In 2014, Alberta Municipal Affairs established a Task Force of municipal government and development industry stakeholders to provide input on the creation of the Floodway Development Regulation.

This discussion paper presents the Task Force's views on the approaches that should be considered on new and existing development in floodways, and on exemption provisions and other related policy considerations. In some cases, the Task Force members agreed on the approaches to be considered and have provided input for consideration during the drafting of the regulation. As the perspectives of all members of the Task Force have been documented, cases of caution and differing opinions have also been noted.

As a next step in the process of developing the regulation, a wider audience of municipalities (with identified flood hazard areas) and development industry officials are being invited to comment on this discussion paper by September 26, 2014, through completing and submitting a workbook via e-mail, or hard-copy mail and/or by attending a one-day symposium on September 12 to further share their views. The Discussion Paper and workbook will also be posted on the Municipal Affairs' website to enable other interested parties to submit their input via e-mail, or hard-copy mail no later than September 26, 2014.

2. General Background

While flooding has been a historical risk associated with Alberta's multitude of rivers and streams, an increase in extreme weather events and population growth have increased the impact of floods in terms of public safety and the magnitude of property damage and loss. Flood damages represent a significant expense in recent years for the public, municipalities and provincial and federal disaster assistance programs.

While the weather cannot be controlled, action can be taken to reduce flood impacts by restricting development in high risk areas. As part of a commitment to implement new controls on future development in flood hazard areas, and to minimize flood impacts and support resilient communities, the Government of Alberta, in December 2013, enacted Bill 27, the *Flood Recovery and Reconstruction Act*, which amends the *Municipal Government Act (MGA)* in order to provide for:

 Regulation-making powers for controlling, regulating or prohibiting any use or development in a floodway, as well as establishing authorized uses; and Ministerial exemptions for a municipal authority or class of municipal authorities from some or all of the general provisions of the Regulation.

The Government of Alberta is currently working with the Regional Municipality of Wood Buffalo (Fort McMurray) and the Town of Drumheller, which have special circumstances and significant existing development in the floodway, to develop exemption zones.

Once a regulation under this legislation comes into force, it will apply to those municipalities where there are flood hazard areas mapped by Alberta Environment and Sustainable Resource Development (ESRD). The Regulation will ensure that a consistent, minimum level of land use control will apply in the floodway(s) within these municipalities. Municipalities may choose to impose more restrictive measures within their Land Use Bylaw and statutory plans.

Municipalities currently without ESRD flood hazard mapping may implement interim control measures through their land use bylaws on development in potential floodway areas until ESRD mapping is completed. At this time, mapping has been complete for approximately 70% of Alberta's populated areas and for approximately 10% of the total geographic area. While the province has made a significant investment in mapping (\$8.7 million over the next 6-7 years), there is no identified completion date for flood hazard mapping throughout the province. As well, post flood assessments are underway to determine any required changes to existing maps, particularly for high risk communities.

3. List of Task Force Member Organizations

The Task Force is comprised of administrative leaders with subject matter or policy expertise relating to planning and development in flood hazard areas. Membership consists of representatives from the following organizations:

- Alberta Association of Municipal Districts and Counties
- Alberta Urban Municipalities Association
- City of Calgary
- City of Edmonton
- Town of Canmore
- Town of Drumheller
- Town of High River
- Regional Municipality of Wood Buffalo
- Urban Development Institute Alberta

4. Task Force Terms of Reference

The Floodway Development Regulation Task Force was established by Municipal Affairs as a working group of municipal and development industry stakeholders brought together to share perspectives, and to provide input for the province to consider when developing the Floodway Development Regulation. The objective of the Floodway Development Regulation Task Force is

to support the province's efforts to prevent future flood damage and rebuild safer and stronger communities, while balancing the interests of all stakeholders.

The scope of work of the Task Force was directly related to providing input on development in floodways as defined in the Section 693.1 (1) amendment of the *MGA* and the proposed Floodway Development Regulation. Under this scope, the Task Force was asked to provide advice on topics that include:

- Regulation definitions;
- authorized uses in the floodway;
- considerations for regulating existing development in the floodway;
- considerations for prohibiting or restricting new development in the floodway;
- considerations for existing and new development in areas exempt from the Regulation;
- the application of provisions based on ESRD's Flood Hazard Maps;
- implementation requirements including those that affect other provincial legislation and administrative systems; and
- other considerations relating to planning and development in flood hazard areas that the Task Force members may wish to raise for future government consideration.

5. Application of Act (Section 693.1 of MGA)

The authority for land use planning and development rests with the municipality. Part 17 of the *MGA* sets out the specific municipal authority for planning including the authority to prepare and adopt plans and bylaws, receive and approve subdivision and development permit applications, and in some cases, to establish boards to hear most appeals of planning decisions.

The interaction of the proposed Floodway Development Regulation with other legislation and regulations will be considered at the regulatory drafting stage.

Once the proposed Floodway Development Regulation is in force:

- Municipalities will need to ensure that their statutory plans and land use bylaws are consistent with provisions of the Floodway Development Regulation, where applicable.
- Municipalities may not approve an application for subdivision in a floodway if the application is inconsistent with the provisions of the Regulation.
- Municipalities may not issue a development permit for any use or development of vacant land in a floodway if the proposed development is inconsistent with the provisions of the Regulation.

6. Definitions

The following are concepts that may require clarification through definition in the Floodway Development Regulation. The first four concepts are from ESRD's publication on the Flood Hazard Identification Program, and the "building" and "development" descriptions are from the MGA. Additional concepts that may require clarification through definition, including new development, existing development, and flood map, will be identified and developed as determined necessary to support the provisions of the Regulation.

- **Flood Hazard Area:** The flood hazard area is the area of land that will be flooded during the design flood event under encroached conditions. Once this area is defined, the flood hazard area is typically divided into two zones, the floodway and the flood fringe.
- **Floodway:** The floodway is the area within which the entire design flood can be conveyed while meeting certain water elevation rise, water velocity and water depth criteria. The floodway includes areas where the water is 1 m deep or greater, the local velocities are 1 m/s or faster and if the river were encroached upon, the water level rise would be 0.3 m or more. Typically the floodway includes the river channel and adjacent overbank areas.
- Flood Fringe: The flood fringe is the land along the edges of the flood hazard area that has relatively shallow water (less than 1 m deep) with lower velocities (less than 1 m/s). Technically, it is the part of the flood hazard area that is not included in the floodway. The final flood elevations on the flood hazard maps assume that the entire flood fringe has been filled in and all the flow is conveyed by the floodway.
- **Overland Flow:** Areas of overland flow are part of the flood hazard area outside of the floodway, and typically considered special areas of the flood fringe.
- Building: As per Section 616 of the MGA, "building includes anything constructed or placed on, in, over or under land, but does not include a highway or road or a bridge that forms part of a highway or road."
- New Building: A building which has not received a development permit from the
 appropriate development authority at the time the Floodway Development Regulation
 takes effect. In case of specific situations where a municipality may not require a
 development/building permit, any new development shall be considered a New
 Building.
- **Development:** As per Section 616 of the *MGA*, i) an excavation or stockpile and the creation of either of them, ii) a building, or an addition to or replacement or repair of a building, and the construction or placing of any of them on, in, over, or under land, iii) a change of use of land or a building or an act done in relation to land or building that results in, or is likely to result in a change in the intensity of use of the land or building, or iv) a change in the intensity of use of land or a building that results in, or is likely to result in a change in the intensity of use of the land or building.

- **Infill:** Development in the existing built-up areas of a municipality, occurring on vacant or underutilized lands, or behind or between existing developments.
- Non-structural: A use or activity that does not involve the use or construction of a building.
- **Berm/Dike:** An embankment, mound, or structure of earthen material constructed to confine or control the flow of water and to prevent flooding of adjacent upland areas.

7. Potential Considerations

Appropriate development consists of non-obstructive development that will not increase flow levels in the case of a flood event and includes low salvage cost uses, or infrastructure that needs to be near a river, such as drain outlets.

Immediate action to mitigate future risks from extreme flooding is needed. From a public health and safety perspective and to minimize the taxpayers' financial burden associated with property damage and loss, it is most effective to keep people and property away from the flood water, rather than attempting to keep the flood water away from people and property. Therefore, the basic principle going forward is that: there should be no new inappropriate development in floodways, while respecting the investment and choices made by current owners of properties in a floodway, regardless of whether they have been affected by a disaster. This will require achieving a policy balance between the desire for no obstructions in the floodway and allowing for necessary or appropriate development in the floodway.

The Regulation will enable municipalities to manage floodway development by applying the concept of authorized uses. Authorized uses refer to uses that will not adversely affect flood elevations and that will minimize threats to public safety, while decreasing the potential for flood damages. Although there may still be flood damages associated with the authorized uses, these damages will be much less than if inappropriate development had been allowed in the floodway.

The Task Force generated lists of input for consideration in the drafting of a Floodway Development Regulation, under these four sub-headings:

- New Development in Floodways (prohibitions and authorized uses);
- Existing Development in Floodways (prohibitions and authorized uses/development);
- Exemption Provisions; and
- Other Related Discussions (Appendix 1)

Task Force members also rated these inputs based on the general degree to which they supported them, in the form of:

- Support/Consensus
 - The Task Force agreed that this input should be considered when drafting the regulation
- Input Raised with Caution
 - Some Task Force members raised certain cautions about this input being considered when drafting the regulation.
- Input Raised with Disagreement
 - Some Task Force members did not agree whether this input should be considered when drafting the regulation. Where the input raised received disagreement by most of the members, it was noted.

The intent of rating the input this way was to identify areas of consensus while ensuring that all perspectives were heard.

7.1 New Development in Floodways

a. Prohibitions/Restrictions

Support/Consensus:

- No new buildings should be constructed in the floodway, where a building is defined as per Section 616 of the MGA.
- Elevating a building (above a determined flood level) as a form of mitigation against flood waters in a floodway is not considered appropriate.

b. Proposed Authorized Uses

Support/Consensus:

- New uses (excluding buildings) that may be authorized in a floodway are as follows:
 - Public parks, green spaces, and pathways/walking trails, provided they are engineered in a way that minimizes damages and the obstruction of the flood flow.
 - Agricultural uses such as crop production, grazing, horticulture, forestry, sod farming and wild crop harvesting.
 - Projects such as roads or utility infrastructure that are approved by the municipal/ regulatory authority and are engineered in a way that minimizes damages and the obstruction of the flood flow.
 - Uses designated as Environmental Reserve (ER).

Input Raised with Caution:

- New uses that may be authorized in the floodway are as follows:
 - A new storm sewer drainage system or sanitary outfall pond, if there is no adverse impact on flood water levels up or down stream.
 - o Agricultural structures requiring development approval by a municipal authority.

- There may be inconsistencies between municipalities as each jurisdiction may have different development permit requirements.
- Berms and dikes may be considered depending on ESRD approval.
 - Berms and dikes obstruct flow up and down stream. Additionally, if the flood flow is beyond their designed capacity, these structures have a greater probability of failure.
- Gravel pits, subject to an ESRD approval license.
 - Significant aggregate resources are located near water bodies like rivers that are needed to support construction and development.
 - Gravel pits and stockpiles may create an obstruction to the flood flow if left in the same location for an indefinite period of time.

Input Raised with Disagreement:

- Public and private recreations may be authorized provided no major buildings or equipment related to the recreational use occur in the floodway and no other aspects of the use occur in a manner that would result in major obstacles on the land in the floodway, causing an obstruction to flood flow.
 - o Private recreations and major buildings need to be defined.
 - Certain private recreations will require some sort of permanent structure that may obstruct the flood flow up and down stream.
- All floodway land should be designated as ER.
 - If all floodway is designated ER then it may provide a high level of flood mitigation through controlling erosion and creating a healthy riparian habitat.
 - The floodway's highest purpose is flood control. Activities (even green ones) that fall outside of ER limitations should be prohibited. Certain parks/crops/turf areas strip away riparian vegetation that slows down water flow and provides bank stabilization.
 - The majority of stakeholders did not share this view and provided the following reasons for their disagreement:
 - Designating all floodway areas as ER would be overly restrictive and not allow for reasonable low impact uses (without passing a bylaw), such as parks, public or private recreational uses without buildings that would provide a significant benefit to the community without obstructing the flood flow.
 - Designating all floodway as ER would create a negative impact on many agricultural lands that use the floodway, and would place a large burden on municipalities to manage the land.
 - Municipalities can only require the dedication of ER at the time of subdivision. Municipalities may not subsequently or retroactively take ER in settled areas.

7.2 Existing Development in Floodways

a. Prohibitions/Restrictions

Support/Consensus:

- There is to be no redevelopment or additions to existing buildings in the floodway that will result in expanding the building footprint and/or changing the building use.
 - The purpose is to prohibit any additional building footprints in the floodway that would increase obstruction to the flood flow.
- There should be no infill development in the floodway, even within existing developments, as it may obstruct the flood flow both up and down stream, creating a safety threat to the public and increasing property damage to existing development.
- Even if community mitigation efforts (berms, reservoirs) are in place, additions or extensions to existing buildings in floodways should not be allowed.
- Subdivisions and vacant lots in existing neighborhoods should allow for authorized, low impact uses, such as parks, which will not obstruct the flood flow.

Input Raised with Caution:

- Part of a property in the floodway does not designate the whole property in the floodway for the purpose of applying the Regulation provisions.
 - If only part of a property is in the floodway, development on the part of property which is outside of the floodway may be authorized, subject to a municipality's development conditions. Development within the floodway, other than authorized uses, should be prohibited.
- Subdivisions and vacant lots in existing neighborhoods should allow for authorized, low impact uses, such as roads, which will not obstruct the flood flow.
 - However, a road is not a natural state. Removing any riparian vegetation reduces natural flood mitigation.

Input Raised with Disagreement:

- Development with provisions for small, ancillary, non-habitable buildings may be authorized in rural situations where there is limited potential to obstruct the flood flow and impact neighboring properties, buildings, and public safety.
 - However, any new building or structure in a rural floodway situation may create an obstruction to the river flow and create a threat to the safety of the public.

b. Proposed Authorized Uses/Development

Support/Consensus:

- Existing uses/development that may be authorized in the floodway are:
 - Rebuilding in the floodway on an existing building footprint for the same use.
 - Repairs or renovations of existing buildings for the same type of use on the existing building footprint.

- Parks and non-structural recreational uses, with limitations (Ex: no recreational vehicle (RV) parks, since such parks may pose a hazard to life and property if the RVs are left stationary for indefinite periods of time and a flood event occurs).
- Small renovations within the existing building footprint (ex: 5% to 10% of the floor area).
- Major renovations within the existing building footprint (ex: greater than 10% of the floor area), including rebuilding, should trigger mitigation requirements as prescribed by the approval authority to protect and ensure the building is as flood resilient as possible.
- Required municipal infrastructure.
- Berms, dikes, or gravel pits may be considered depending on circumstances, subject to ESRD approval.

7.3 Exemption Provisions

The Minister of Municipal Affairs may exempt a municipal authority or class of municipal authorities from the application of all or part of the Regulation, thereby allowing the government to vary how the Regulation will apply in situations where it would be impractical, impossible, or economically detrimental to restrict development in the floodway, provided there are adequate measures in place to protect against a flood event.

Support/Consensus:

- Stakeholders' proposed definition of exemption:
 - o a geographical area in which, based on circumstances, the Regulation or parts thereof do not apply; or
 - o a geographical area in which certain development activities can be undertaken that are not normally allowed in the floodway.
- Any exemptions for floodway areas need to be based on an agreed set of criteria, and need to demonstrate appropriate mitigation measures that are sufficient enough to remove/minimize risk to life and property of the users, such as diversions, dry dams, dikes and other such measures (depending upon engineering analysis).

Input Raised with Disagreement:

- Municipalities should have the power to decide on exemptions.
 - The majority of stakeholders did not share this view and provided the following reasons for their disagreement:
 - A municipality may not have the capacity to complete an engineering analysis and devise a consistent process to carry out appropriate risk management strategies for exempted areas.
 - If municipalities are allowed to dictate exemptions, they may not have the capacity to analyze the risk caused by exemptions to downstream and neighboring communities.

- Details are needed on how an appeal process would work for affected communities to voice their concerns on the impact of an exemption.
- Liability for a loss associated with an exemption must be addressed.



Appendix 1: Other Related Discussions

Support/Consensus:

- There should be one portal (ex: website) for all provincial flood information.
- The Regulation should have consideration for existing local and provincial policies for effective implementation at the local level.
- There should be consistent application of the Regulation across the province based on common criteria.
- Clarity of responsibilities for addressing flooding issues is needed between the federal and provincial governments, and municipalities.
- Tools for municipalities to deal with flood hazard areas need to be developed, including tools to apply innovative options for discouraging development in the floodway.
- The floodway boundaries should be updated based on the most current and complete flood event data.
- There should be consideration for an additional regulation dealing with the flood fringe.

Input Raised with Caution:

- Place caveats or notifications on existing properties in the floodway whether they have received DRP funding or not.
 - Some felt caveat/notification provisions should not include municipal or provincial properties.
 - Certain provincial and federal legislation does not allow for registering caveats on certain types of properties such as Municipal and Environmental Reserves.
 Additionally, there may be concerns regarding accommodating the registration of certain types of caveats in the land titles system/database.
 - If caveats or other notifications are registered to properties, there must be a mechanism to remove these caveats if/when the flood hazard maps change and it results in a property no longer being in a designated floodway.
- Consideration for a consistent buyout policy should be looked at in the future.
 - A proactive buyout policy should be considered. Buyouts may be less expensive than mitigation options to reduce risk.

Input Raised with Disagreement:

- Expand the uses of ER and ER easements.
 - A significant number of stakeholders wanted the intended use of ER to remain the same as currently stated in Section 671(1) of the MGA.
- There should be avenues to appeal any Subdivision and Development Authority (SDA)
 decision for land in the floodway with the understanding that the minimum standards
 in the Regulation would apply.

- General appeal provisions already exist under the MGA.
- When a municipality goes beyond the provincial standards, as set out in the Regulation, the municipality should have the legislative tools provided in the Regulation for use in defending the municipality's more restrictive standards.
- Attention needs to be given to addressing how to deal with liabilities for private recreation in floodways in case of a flood event.
- A policy should address the non-structural mitigation approach, including buyouts and incentives.
 - After a buyout, the provincial government should consider giving the land back to the municipality, if appropriate.
 - If incentives are permitted, there may be inconsistencies across the province due to local bylaws.
 - Non-structural mitigation may not work in developed areas due to a number of factors, including existing municipal services, property values, and other amenities which may not be available in a new location.

Flood Hazard Mapping:

Support/Consensus:

- A policy is needed for municipalities with no flood hazard maps. Stakeholders indicated
 that many municipalities would like to complete their own flood hazard mapping in
 partnership with ESRD, ensuring that a common provincial standard is maintained.
 - o Funding support from the province should be considered.
- Municipal statutory plans and land use bylaw/zoning maps should, at a minimum, be aligned with ESRD flood hazard area maps.
- There should be a policy on the timing of periodic reviews/updates of flood mapping (ex: how often maps are updated).
- Regulation should address future floodway levels (maps) as they change, including
 providing legal protection to municipalities for liabilities which may arise from decisions
 made based on a previous set of maps, which may no longer reflect current conditions.

Input Raised with Caution:

• Policy attention is needed for areas outside mapped flood hazard areas.

Appendix 2: General Background on the Subdivision & Development Approval Process

The intent of this appendix is to provide a general overview for those who may be unfamiliar with municipal planning processes. Municipal statutory plans and bylaws may vary across the province, so long as they stay within the provisions set out by the *Municipal Government Act*.

All development must comply with the *Alberta Land Stewardship Act (ALSA)* regional plans, Part 17 of the *Municipal Government Act (MGA)*, the *Subdivision and Development Regulation (SDR)*, and the land use bylaw. Most development will require a development permit. In some cases, statutory plans and land use bylaws must be amended, or subdivision applications approved, before a development permit can be issued.

Statutory Plan and Land Use Bylaw Amendments

If a development proposal cannot be approved because it does not conform to the land use bylaw, a proponent may apply to the municipal council to amend the bylaw. If a statutory plan amendment is also required to accompany the land use bylaw amendment, municipalities generally will coordinate these amendments where required. A staff report and recommendation are usually prepared and forwarded to council. Notice must be given of an application for both a statutory plan and a land use bylaw amendment and council must hold a public hearing before giving second reading (*MGA* section 692).

Council's decision on proposed amendments to the land use bylaw or statutory plans is final. There is no legislated time frame within which council must consider applications for amendment. Ordinarily, the minimum time is that required for at least two meetings of council, during which period notice must be given and the public hearing held. Depending on the complexity of the amendment, additional time may be necessary to prepare more extensive staff reports and review.

Subdivision Application

If a development proposal requires land to be subdivided, a subdivision application must be submitted to the municipal subdivision authority. The proposed subdivision must conform to *ALSA* regional plans, any statutory plan, land use bylaw, the *MGA*, and the *SDR*. Under section 6 of the *SDR*, a subdivision authority must decide on an application within 60 days. An applicant may consider a failure to make a decision within this 60-day period a "deemed refusal." The subdivision authority may refuse an application, approve it, or approve it with conditions. The written decision of the subdivision authority must include reasons for its decision under section 8 of the *SDR*.

Development Permit Application

After any required subdivision has been approved or statutory plan or land use bylaw amendments passed, a developer may apply for a development permit. An application for a permitted use that complies with the standards for a district must be approved, with or without

conditions. Applications for discretionary uses or applications for permitted uses that do not meet all the standards set out for a district may be approved, conditionally approved, or refused. Applications for uses that are neither permitted nor discretionary within a district must be refused.

The development authority must make a decision on a development permit within 40 days, unless the applicant and development authority agree to extend the time, and notify affected persons of the decision in accordance with the land use bylaw. An applicant may consider a failure to make a decision within this period a "deemed refusal."



Appendix 3: Background on the Appeals Process

The intent of this appendix is to provide a general overview for those who may be unfamiliar with the subdivision and development appeal process.

Subdivision Appeals

The subdivision authority's decision or deemed refusal may be appealed to the subdivision and development appeal board. An appeal may be launched by the applicant, a provincial government department that was referred the application originally, council of the municipality (if the municipality is not the subdivision authority), or school authority (for matters related to municipal reserve and school reserve). Notice of the appeal must be filed with the subdivision and development appeal board within 14 days of receipt of the notice of the decision or the deemed refusal. If the notice was mailed, section 678(3) of the *MGA* allows 5 days for the notice to be received. This means the appeal period extends to 19 days if the notice is mailed. If, based on the legislation, the application is determined to involve a provincial interest; the appeal must be to the Municipal Government Board. The subdivision and development appeal board must hold a hearing within 30 days and give a written decision with the reasons for the decision within 15 days of concluding the hearing.

The Municipal Government Board must hold a hearing within 60 days and give a written decision with reasons for the decision within 15 days of concluding the hearing. Regardless of which board makes the decision, it can be further appealed to the Court of Appeal on a question of law or jurisdiction.

Development Permit Appeals

An appeal may be launched by the applicant or by other affected persons by filing a notice of appeal with the subdivision and development appeal board within 14 days of receiving notice of the decision or of the deemed refusal. If mailed, the *Interpretation Act* deems the notice delivered after 7 days have lapsed, bringing the appeal period to 21 days. Where the use is permitted under the land use bylaw, decisions may be appealed only if the appellant believes the provisions of the bylaw were relaxed, varied, or misinterpreted. The subdivision and development appeal board must hold a hearing within 30 days of receiving the notice of appeal and must give a written decision within 15 days of the conclusion of the hearing. The board's decision may be further appealed to the Court of Appeal on a question of law or jurisdiction.