

M.D. of Foothills Proposal for a Highwood / Little Bow Flood Risk Mitigation Program

Supplemental Information

Submitted to the Government of Alberta

by the MD of Foothills No. 31

December, 2016

Background

On November 1st, 2016, the Municipal District of Foothills No. 31 submitted a *Proposal for a Highwood / Little Bow Flood Risk Mitigation Program* to the Resilience and Mitigation Branch of Alberta Environment at which time the Branch requested that the M.D. provide a presentation on the proposal. Subsequent to the presentation by the Municipal District of Foothills on December 1st, 2016, a request was made by representatives of the Government of Alberta for a proposed phasing strategy, a prioritized list of properties and further details on the proposed process.

The Council and Administration of the M.D. of Foothills have developed this submission as supplemental information to the original proposal submitted on November 1st.

Phasing and Budget Reduction

The Proposal submitted to the Province proposed an estimated total maximum budget of \$53,473,890 broken down as follows:

- Further Study (including compensation report): \$351,136
- Hoeh Dike reinforcement and easement purchase: \$283,597
- Individual Property Mitigation or Buy-Outs: \$52,839,157

The M.D. of Foothills is proposing the following to phase the program over three years:

Phase 1 – Immediate

The M.D. has submitted an application for \$123,136 under the Government of Alberta's November 2015 funding announcement. This includes all of the study suggested in the original proposal but with Phase 2 of the Scoping Study reduced by omitting additional modelling of the area surrounding the flow split and the Little Bow River. This was done due to the fact that the Town of High River has yet to determine a final design for the proposed South West Dike, so modelling in this area is deemed to be premature.

Phase 2 – 2017

Hoeh Dike reinforcement and easement purchase: \$283,597.

Buyout or protection of the properties that have been prioritized as most impacted at their residence in a mitigated (Model 28A) 2013 equivalent event to a maximum of \$20,000,000. The number of properties that can be addressed with this budget will depend on how many landowners accept offers of protection or buyout and how many properties there are where there are less costly alternatives available than a buy-out.

On advice of staff from Resilience and Mitigation Branch the M.D. of Foothills has omitted the budget for administration and will instead utilize existing M.D. staff to administer the program.

Phase 3 – 2018

Buyout or protection of properties prioritized as next most impacted at their residence in a mitigated (Model 28A) 2013 equivalent event to a maximum of \$17,000,000.

Phase 4 - 2019

Buyout or protection of remaining properties (if any) to a maximum of \$16,839,157.

It is anticipated that many of the landowners, particularly in Zone B, will reject offers for buyouts so it is likely that the actual budget will come in significantly lower than the total maximum proposed.

Remaining Modelling

At such time as the Town of High River has a finalized and approved design for the proposed south west dike, the M.D. of Foothills will likely request funding to assist with completing additional modelling to understand the impacts of this mitigation structure downstream from the Town on the Little Bow River.

Prioritization of Properties

M.D. of Foothills Council determined that the most equitable way to prioritize the properties for offers of buyouts or protection was to consider the predicted impact of potential future flooding at their residence. Geographical location in one Zone or another was not considered.

All eligible properties were ranked according to the maximum predicted depth of water at the residence in a mitigated (Model 28A) 2013 equivalent event. If the depth of water on two properties was the same, then the predicted velocity was considered.

The ranked list of properties is attached as *Appendix A – Ranked List of Properties*.

Proposed Process for Offering Protection or Buy-Outs

The M.D. of Foothills is proposing the following process for offering protection of buy-outs to landowners with impacted residences. Offers will be made in order of the ranked list in *Appendix A*. The process described below is also depicted in the Flow Chart included as *Figure 1- Proposed Process for Highwood and Little Bow Flood Risk Mitigation Program*.

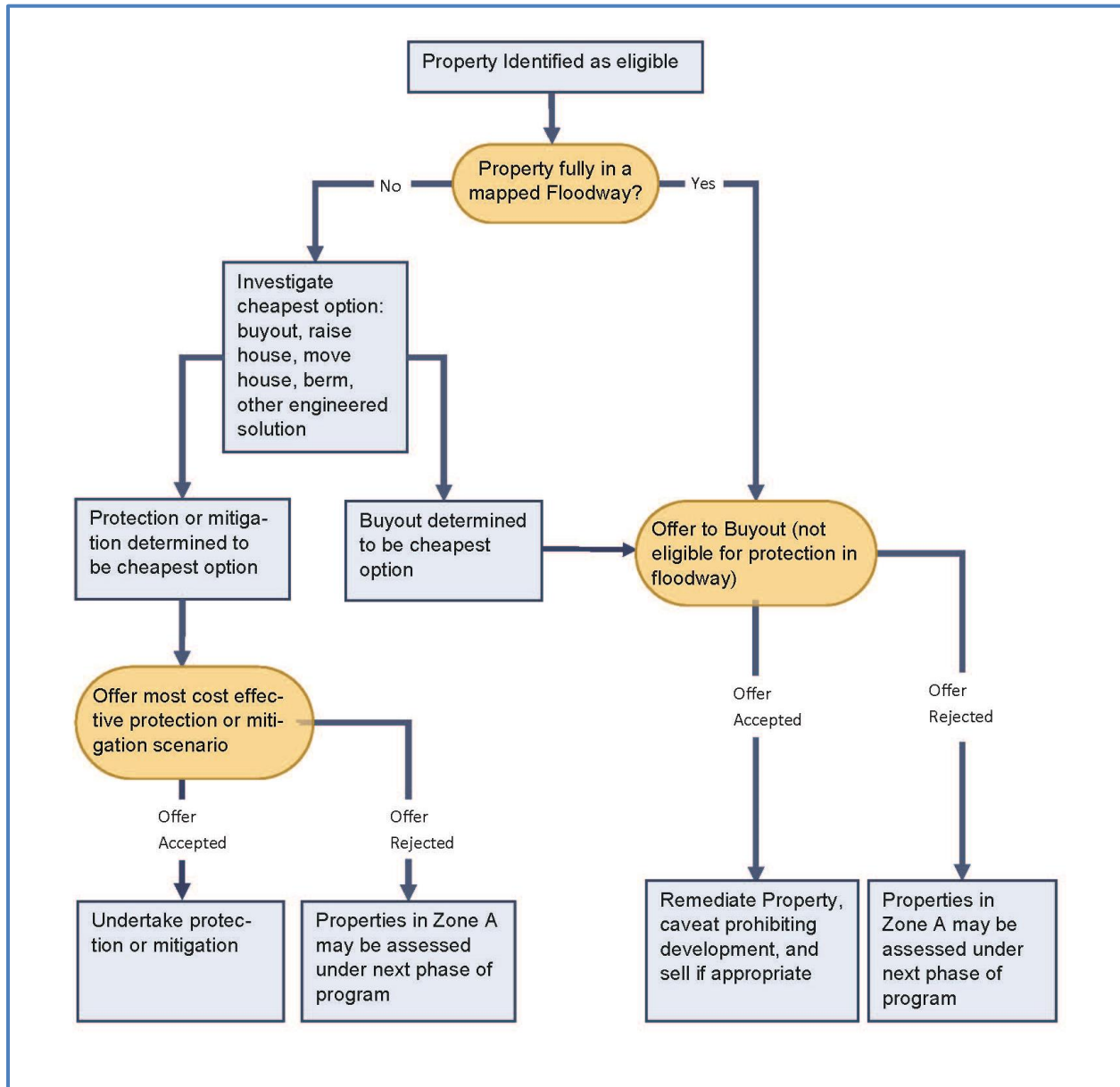
For each property, the first step will be to determine if the property is fully in a mapped Floodway (i.e. there is no location on the property that is outside of the floodway where the residence could potentially be moved).

If the property is fully in a mapped floodway protection will not be considered and a buy-out will be proposed. If the buyout offer is accepted, the property will be transferred to the M.D. and will be fully remediated, a caveat will be placed on title prohibiting development and if considered appropriate by M.D. Council, the land will be offered for sale as agricultural land. If the buy-out is rejected, the process ends, although properties in Zone A may still be part of a compensation scenario subsequent to completion of the compensation report.

If the property is not fully in a mapped floodway then options for protection or buy-out will be investigated. Options considered may include raising the house, moving the house, constructing a berm or another engineered solution or offering a buyout. If the buy-out is determined to be the least expensive option then an offer will be made as per above. Otherwise the most cost

effective option for protection will be offered. If the offer for protection is rejected the process ends, however properties in Zone A may still be part of a compensation scenario subsequent to completion of the compensation report.

Figure 1 - Proposed Process for Highwood and Little Bow Flood Risk Mitigation Program



Closure

The Council of the M.D. of Foothills sincerely appreciates the continued support of the Government of Alberta to mitigate flood hazard risk for landowners in the M.D. of Foothills along the Highwood and Little Bow rivers.

If there are questions or concerns with the information in this submission please contact Julie McLean or Rob Miller.

Appendix A – Ranked List of Properties

*Net Buyout Cost = Cost to purchase + cost of remediation – value as agricultural land