

This is one of a series of examples developed as guidance for considering variance requests along lakes and rivers. Consult your local shoreland and floodplain ordinances.

Why is fill extending from a building important?

There are two main reasons for the requirement that fill extend at least 15 feet from an elevated building in the floodplain at no lower than 1 foot below the regulatory flood protections elevation (RFPE).

- (1) During times of rising waters and flooding, there needs to be at least one side of the building such that emergency crews can load/unload during times of flooding.
- (2) The fill protects the structure's foundation by minimizing higher velocities and wave action immediately adjacent to the foundation, and water pressure against the foundation.

Local governments have limited discretion to deviate from - or grant a variance to - the required fill. They may do so only if *all* of the variance criteria established in state statutes and their local ordinances are met. In evaluating such requests, local governments must examine the facts, determine whether all statutory and local criteria are satisfied, and develop findings to support the decision. If granted, local governments may impose conditions on variances to protect resources. An example request for a variance to the 15-feet of fill, and considerations, are provided below.

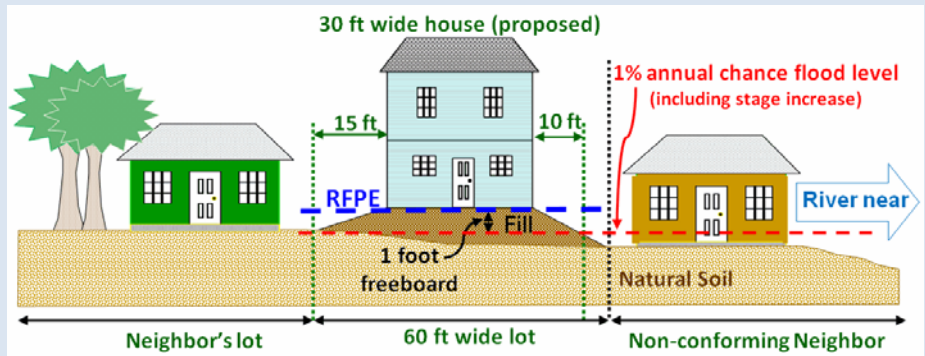
The **RFPE** is the 1% annual chance ("100-year") flood elevation, including any stage increase due to determining a floodway, plus the freeboard (state minimum is 1 foot).

For more details, click on:

[DNR Floodplain Home Page](#) &
[Residential Uses & Standards Info](#)

Example 15-feet of Fill Variance Request

A property owner requests a variance to construct a 30 foot by 40 foot house (1,200 square foot footprint) on a 60 foot by 120 foot lot (7,200 square foot) in a neighborhood of similar size lots and structures. The proposed structure would have 10 feet of fill at the flood



elevation extending from one side of the house and 15+ feet of fill extending on three sides of the house. The owner notes that extending fill 15 feet from the structure in all directions, as required by the floodplain management ordinance, results in filling on the neighboring property. The proposed structure meets the setback requirements.

Considerations for Findings

A good record and findings help keep communities out of lawsuits and help them prevail if they find themselves in one. In evaluating the facts and developing findings for this variance request, *all* of the following statutory criteria must be satisfied, in addition to local criteria:

- **Is the variance in harmony with the purposes and intent of the ordinance?**
Considering a variance request is a balancing test that requires weighing the need of an individual property owner against the purposes of the local floodplain regulations for protecting the health and safety of the landowner and the public interest. **Considerations:** *Does the proposal provide the 15 feet of fill extending on at least one side of the building such that emergency crews can load/unload during times of flooding? Does the proposal provide protection of the structure's foundation?*
- **Is the variance consistent with the comprehensive plan?**
The local comprehensive plan establishes a framework for achieving a community's vision for the future. Most plans contain goals and policies for protecting natural resources, as well as providing for public health and safety. Maps should be consulted to determine if the property is within any areas identified for protection. **Considerations:** *Which goals and policies apply? Why or why not?*

- **Are there *unique circumstances* to the property not created by the landowner?**

Unique circumstances relate to physical characteristics of the land - such as steep slopes, poor soils, wetlands, and trees - that prevent compliance with the required filling. These *do not* include physical limitations created by the property owner or personal circumstances such as a growing family or design preferences. Consider what distinguishes this property from other floodplain properties in the community that are required to meet the foundation protection requirements.

Considerations: *What physical characteristics are unique to the property that prevent compliance with the requirement to extend fill from the building? Were any difficulties in meeting the foundation protection filling created by some action of the applicant? Has the applicant demonstrated no other feasible alternatives exist that would not require a variance?*

- **Will the variance, if granted, alter the *essential character* of the locality?**

Consider the size of the proposed structure, how it sits on the lot, and how it compares to other structures in the area. If it is a riparian lot, will it detract from the natural appearance and character of the river and its riparian areas, and negatively affect the recreational value of the river.

Considerations: *Does the variance provide minimal relief or a substantial deviation from the filling required? Does it affect the appearance of the shore from the river and from neighboring properties?*

- **Does the proposal put property to use in a *reasonable manner*?**

Examine the reasons that the variance is requested and evaluate them in light of the purposes of the local floodplain management ordinance and the public safety. **Considerations:** *Is the proposed structure reasonable in this location given the depths and velocities of floodwaters anticipated? How would this structure be accessed during times of flooding?*

Note: *The last three criteria address practical difficulties. Economic considerations alone cannot create practical difficulties*

Range of Outcomes

Based on the findings, several outcomes can occur:

- If the applicant fails to prove that *all* criteria above are met, then the variance must be denied. For example, the local government may find the proposed house design creates the circumstances necessitating a variance rather than unique physical characteristics of the property.
- If the applicant demonstrates that *all* criteria are met, then the variance may be granted. For example, the local government may find that the applicant demonstrated that unique characteristics existed due to the narrow lot widths and that the proposed foundation protection was reasonable given the size of the lot and anticipated flooding depths and velocities, and there would be no impacts.
- If the variance is granted, and the house in any way increases flood damage potential for others or increases runoff, then conditions may be imposed. For example, the local government may find the proposal negatively impacts neighboring properties or does not provide adequate foundation stability or access, and impose conditions to mitigate those impacts.

Conditions on Variances

If findings support granting the variance, consideration must be given to the impacts on the lake or watercourse and the floodplain area and appropriate conditions to mitigate them. Conditions must be directly related and roughly proportional to the impacts created by the variance. Several examples are provided below:

- Modify construction designs (to minimize impact) – shape, size, alternative elevation method;
- The foundation protection design is approved by a qualified professional and addresses:
 - Fill no lower than one (1) foot below the regulatory flood protection elevation extends at least fifteen (15) feet beyond the outer limits of at least one side of the structure such that access is provided to the structure during times of flooding;
 - All remaining sides of the structure have the foundation adequately protected (using fill, vegetation, armoring, retaining walls, etc.) for the conditions associated with flooding at that site such as velocities, waves, ice jams, etc.; and
 - The design uses appropriate sloping and grading to drain the water away from the structure without increasing flood damage potential to adjoining properties.
- Require no net filling within the floodplain such that there is no loss of storage.
- Require a rain garden, buffer, or other approved method to contain, treat or infiltrate the additional runoff before entering the lake or river, and/or to direct away from a neighboring property.

More information at: www.dnr.state.mn.us/waters/watermgmt_section/shoreland/variances.html