

# Shoreland & Floodplain Variance Guidance Series

# **Impervious Surfaces**

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.

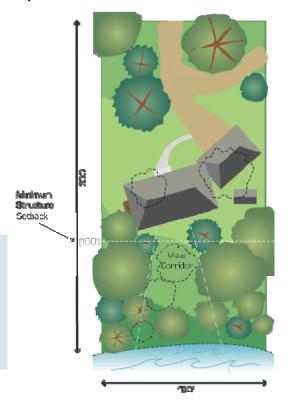
### Why are impervious surface coverage limits important?

In the protection of water quality, the management of rainwater on individual lots is one of our most important tasks. Rainwater that does not infiltrate into the ground or evaporate runs downhill to lakes,

wetlands, or rivers. As impervious surface coverage increases, the rate and amount of runoff and pollutants entering public waters increases. When runoff from impervious surface coverage is not addressed, pollution increases and the diversity of aquatic life is reduced. Local governments have limited discretion to deviate from - or grant a variance to - impervious surface limits. 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 to protect resources. An example impervious surface variance request, with considerations, is provided below.

### **Example Impervious Surface Variance Request**

A property owner wishes to build a large lakehome on a conforming lot. The lake lot includes a private driveway with a spur to the neighbor's lot, which was placed to avoid an adjacent wetland. The building plans for the new construction plus the existing private road spur to the neighbor's property would exceed the impervious surface limit provision in the local ordinance.



## **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 any 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 shoreland regulations for protecting the public interest. These purposes are derived from Minnesota Shoreland Rules, which established impervious surface caps to prevent excessive runoff from constructed surfaces. Such excessive runoff causes erosion, transport of pollutants to public waters thereby degrading water quality. *Considerations:* Will deviating from the required limit on this property undermine the purposes and intent of the ordinance? Why or why not? Is it possible to mitigate the consequences of additional impervious surface on-site such that additional runoff will not be produced? Would this mitigation be in harmony with the purposes and intent of the ordinance? Why or why not?

#### 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 and shorelands, as well as maps that identify areas of high risk or with high ecological value where development should be avoided. The variance request must be considered with these goals and policies in mind. Maps should be consulted to determine if the property is within any areas identified for protection. **Considerations:** Which goals and policies apply? Is allowing additional impervious surface and runoff consistent with these goals and policies? 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 lot dimensions, steep slopes, poor soils, wetlands, and trees. These *do not* include physical limitations or personal circumstances created by the property owner that prevent compliance with the impervious surface provision, such as size of home or design preferences. Consider what distinguishes this property from other shoreland properties to justify why the applicant should be able to deviate from the provision when others must comply. *Considerations:* What physical characteristics are unique to this property that prevent compliance with the requirement? Were any difficulties in meeting the impervious surface limit created by some action of the applicant? Has the applicant demonstrated no other feasible alternatives exist that would not require a variance, such as increasing the setback to reduce driveway length or reducing the lakehome's footprint?

#### • Will the variance, if granted, alter the essential character of the locality?

Consider the size of the proposed structure, the extent of encroachment, and how it relates to the shoreline and hydrology of the riparian area. A large addition located close to the shoreline can detract from the natural appearance and character of the lake and its riparian areas and degrade water quality by altering topography, drainage, and vegetation in the riparian area, negatively affecting recreational, natural, and economic values. **Considerations:** Does the variance provide minimal relief or a substantial deviation from the required setback? Does it affect the natural appearance of the shore from the lake? Does it affect the hydrology of the riparian area?

#### • 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 shoreland ordinance and the public water resource at stake. Since the impervious surface cap is generally intended to reduce runoff to public waters, it may not be appropriate to allow large areas of constructed surfaces so close to the water. **Considerations:** Has the applicant demonstrated that the proposed construction is reasonable in this location given the sensitive nature of the area and the purposes of the regulations? Why or why not?

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 could find that the building plans itself created the circumstances necessary for a variance rather than the any 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 could find that the construction footprint is reasonable, the circumstances are unique given the adjacent wetland, and the minor deviation in the impervious surface coverage does not alter the hydrology of the area (as determined through runoff calculations).
- If the variance is granted and the impervious surface in any way alters the hydrology of the area, then conditions may be imposed, such as to increase the structure setback from the lake by 15 feet to reduce the extent of the driveway and minimize the amount of impervious surface coverage over the limit.

#### **Conditions on Variances**

If findings support granting the variance, consideration must be given to the impacts on the public water and the riparian 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);
- Use permeable pavement systems for walkways, driveways, or parking areas (to reduce effective impervious surface area and infiltrate runoff);
- Direct rain gutter discharges away from the public waters and into infiltration basins (to reduce connected impervious coverage to allow additional areas for infiltration);
- Preserve and restore shoreline vegetation in a natural state (to intercept and filter runoff coming from structures and driveways); and/or
- Increase setbacks from the ordinary high water level (to provide infiltration near public waters).

More information at: www.dnr.state.mn.us/waters/watermgmt\_section/shoreland/variances.html