



**STAFF REPORT**

DATE: 7/12/2022

**DISCUSSION**

**TO:** City Council  
**FROM:** Molly Just, Planning Director  
**AGENDA ITEM:** Definition of Impervious Surface

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**BACKGROUND:**

At its June 21<sup>st</sup> meeting, the City Council directed staff to prepare to discuss the City’s definition for impervious surface at the July 12<sup>th</sup> Workshop.

**ISSUE BEFORE COUNCIL:**

Should the City Council consider a change to the City of Lake Elmo Code definition of Impervious Surface?

**PROPOSAL DETAILS/ANALYSIS:**

Section 1.08.010 defines impervious surface as any structure or surface which interferes to any degree with the direct absorption of water into the ground, including, but not limited to, building footprints, sidewalks, paved or gravel driveways and parking areas, patios, sport courts, or any other similar surface. Decks, pervious landscaping fabric, and retaining walls shall not be included as impervious surface.

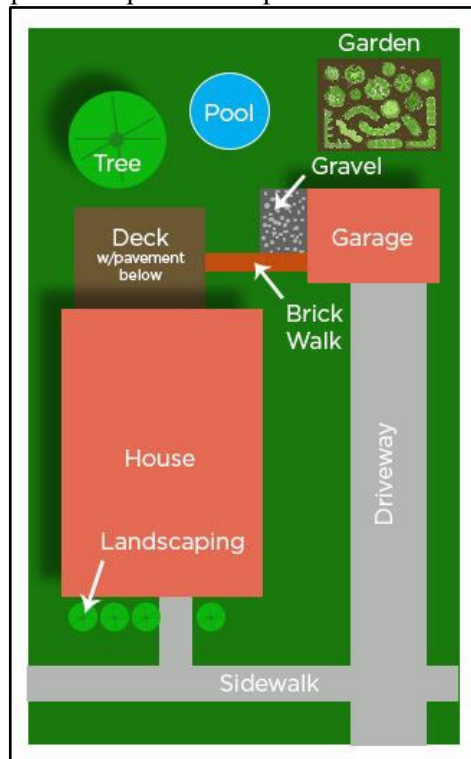
The intent of the current definition aligns with MN DNR model ordinance definition and a majority of other local governments that have a comprehensive definition. There is a strong emphasize in these definitions to consider that any surface which prevents the infiltration of runoff to any degree should be considered an impervious surface. No matter the permeability of a material, if it restricts the infiltration rate to a greater degree than what previously existed, it is an impervious surface.

What follows are definitions of impervious surface for Lake Elmo, the DNR Model Shoreland Ordinance definition, and that for 10 other communities. Eight of the 10 comparison communities have definitions.

	<b>DEFINITION</b>
LAKE ELMO	Any structure or surface which interferes to any degree with the direct absorption of water into the ground, including, but not limited to, building footprints, sidewalks, paved or gravel driveways and parking areas, patios, sport courts, or any other similar surface. Decks, pervious landscaping fabric, and retaining walls shall not be included as impervious surface.
DNR Model Shoreland Ordinance	A constructed hard surface that prevents or retards entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development, including rooftops; decks; sidewalks; patios; swimming pools; parking lots; concrete, asphalt, gravel driveways, or permeable pavers; and other similar surfaces.
WOODBURY	A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops,

	sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel road.
HUGO	Any ground cover that seals surface soils from the infiltration of surface waters.
WHITE BEAR LAKE	An artificial or natural surface through which water, air, or roots cannot penetrate.
FOREST LAKE	A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.
STILLWATER	NA
MINNETONKA	A material providing a hardsurface that prevents normal infiltration of water into the ground.
MAHTOMEDI	An area that releases as runoff, all or large portion of, the precipitation that falls on it, except for frozen soil. Roofs, sidewalks, driveways, parking lots, patios, and streets are examples of areas that are typically impervious
TONKA BAY	NA
LINO LAKES	A compacted surface or a surface covered with material (i.e., gravel, asphalt, concrete, Class 5, etc.) that increases the depth of runoff compared to natural soils and land cover. Including but not limited to roads, driveways, parking areas, sidewalks and trails, patios, tennis courts, basketball courts, swimming pools, building roofs, covered decks, and other structures
CHISAGO CITY	An artificial or natural surface through which water, air, or roots cannot penetrate.

What follows are pictures that can be used to illustrate common components of residential lots that may be considered impervious surface. They are not intended to illustrate Lake Elmo's definition but are provided for discussion purposes. The last picture depicts the impacts of increased impervious surface.



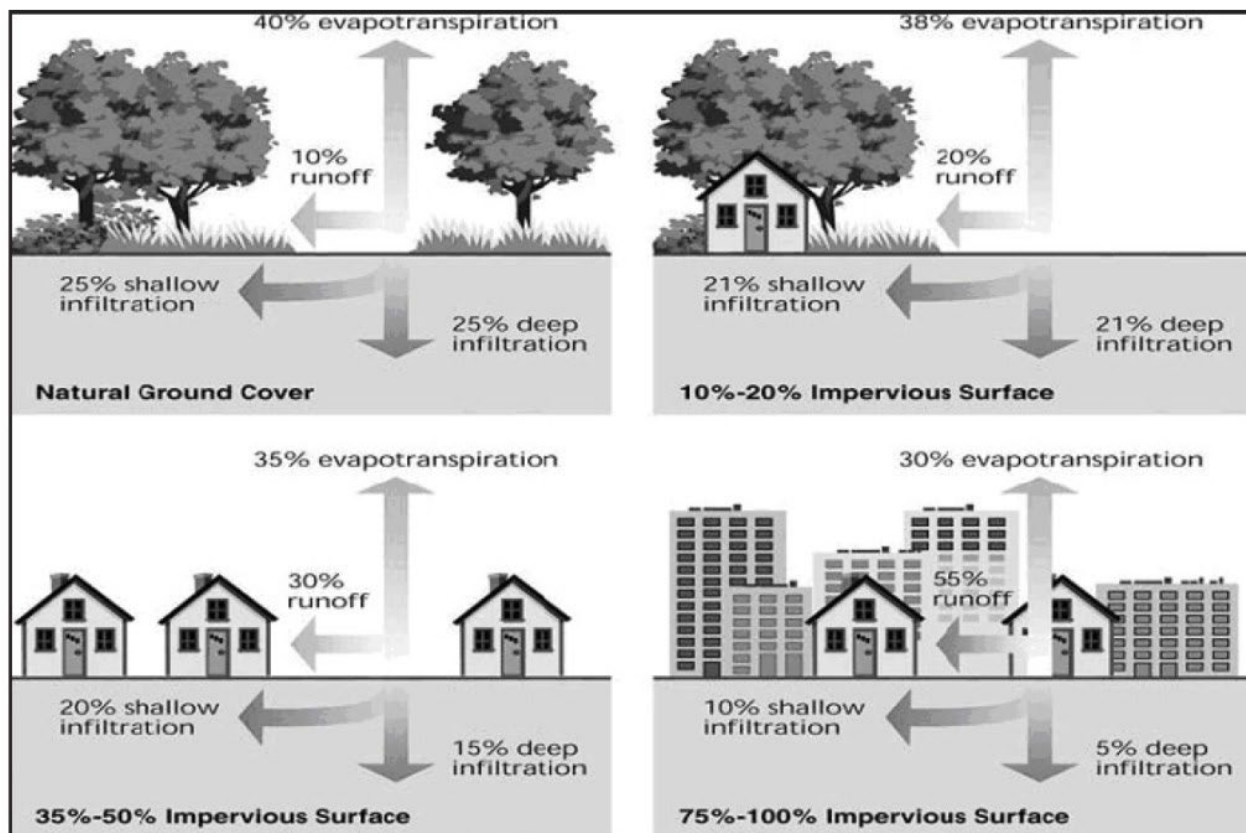
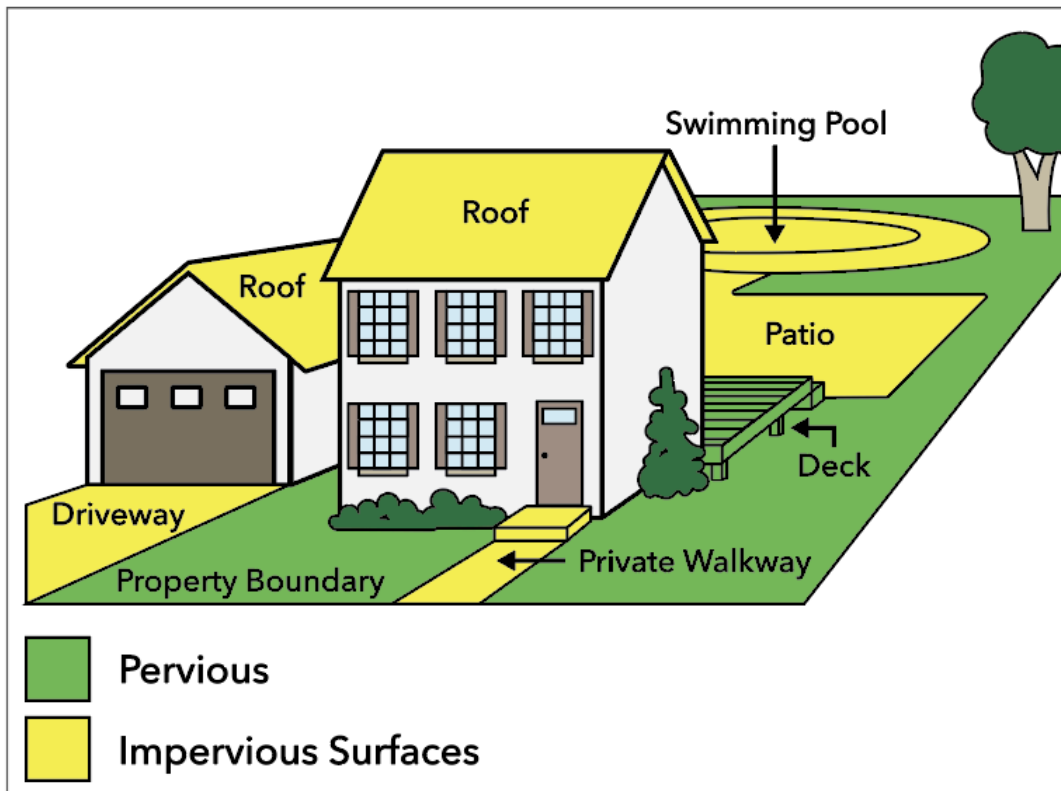


Figure 1: Changes in site hydrology with increasing impervious cover (US EPA)

**FISCAL IMPACT:**

None.