FEMA

Factsheet

FEMA DR-1843-AK

Raising your rural Alaska home above the flood

What are the first steps?

Carefully inspect your home to see if the walls or floor are badly cracked or twisted. Some homes have been severely affected by a failing foundation, rot, or other causes of structural damage, and may need to be replaced rather than elevated. Next, carefully evaluate the building site to determine if relocating the house would be a better option. Advancing riverbank erosion or fast-moving floodwaters are signs that it may be much safer to move to higher ground

Elevation Systems

One way to reduce or eliminate flood damage is to raise your home to an elevation that is likely to be safe from future high water. This is simpler to do when building a new home than when raising an existing home, which may require hiring a contractor who has the experience, tools, and materials to safely lift the structure and build the new foundation.

Steel Piling Foundation—Kotlik

How high should you raise your home?

If it makes sense to elevate your home, take care to plan for an adequate level of protection. Future flood levels are impossible to predict with accuracy so plan your project so that the floor will be at or above the recommended building level for your area (if that has been established), or at least two feet above the highest previous flood level in your area. The exact locations of ice jams are nearly impossible to predict and can sometimes cause unusually high flooding.

Wood foundation system—Akiak

Steel piling foundation system—Kotlik

How will your house be supported?

The open frame work of the elevated foundation systems commonly used in Alaska allows floodwaters to pass freely beneath the building. In many rural areas of Alaska, wood pilings or posts are commonly used. Adjustable steel framework systems and steel piling foundations are expensive, but very durable alternatives.

In some areas, building on a gravel mound can help prevent both flooding of a home and foundation settlement problems. This requires a source of gravel and hauling equipment, and is not recommended at sites that are subject to erosion by fast-moving floodwaters

Triodedic foundation system—Shishmaref

House elevated on gravel mound—Tanana