



## Higher and Higher: Life Above the Waters

### Full Mitigation Best Practice Story

#### *Lewis County, Washington*

**Lewis County, WA** - Over the past three decades, Washington State has experienced numerous record floods resulting in widespread destruction of property and tragic loss of life. These events have demonstrated the necessity of building stronger, safer, and smarter to protect the people, homes, and businesses in flood affected areas.



Retrofitting existing structures or designing new buildings to be disaster resistant can significantly reduce the threat of future damage and lower long-term financial risk. While staying out of the path of potential floodwater is the best choice for avoiding danger, this is not always an option. In such situations, the next best choice is to be above it.

Following the flooding of 1996, Bob and Loyann Munyan, residents of the flood-prone City of Centralia in Lewis County, were approached by a neighbor with information about a home-elevation program. The Federal Emergency Management Agency (FEMA) had available funding through the Hazard Mitigation Grant Program (HMGP). The HMGP provides 75 percent funding for approved projects, which frequently include home elevations or relocations, while the State, Local governments, and often homeowners themselves, contribute the balance. Grants are applied for by local communities working in partnership with the State and FEMA.

“We added our name to the list,” said Loyann Munyan, “and we were told we had been approved for a 100 percent grant to raise the house.”

The Muniyans elevated their home 5 feet, 10 inches above its previous height, bringing their floor level one foot higher than expected maximum flood levels for their community. Without the grant, they were informed that the elevation would have cost approximately \$30,000.

During the December 1st flooding of 2007, record setting storms brought water to within seven inches of their front door.

In the nearby City of Chehalis, schoolteacher Kevin Fields watched the waters rise on December 1st, but felt confident that his house would remain safe, even while the homes of his neighbors began to flood. Like the Muniyans, Mr. Fields’ home had been inundated during the 1996 floods. The previous owner, tired of the repeated cycle of flood damage and repair, decided to sell.

At the time, Mr. Fields’ business, coincidentally, was raising houses. While engaged on a job lifting a home, he saw that the house across the street was for sale. Knowing the history of flooding in the area, he bought the home with the intention of elevating it.

“The City wanted me to elevate at least four feet,” said Mr. Fields. “That would have been one foot above the 1996 flood levels. I went four feet higher than that and elevated a full eight feet.”

Given his expertise and easy access to equipment and materials, the cost of the elevation was less than \$10,000. According to Mr. Fields, since the elevation, there have been at least a dozen floods in his neighborhood. Though typical water levels in the area only reach ankle to knee deep, this would still be sufficient to flood the first floor of a ground level home.

Despite his choice to elevate much higher than the City’s requirements, water from the December 1st floods still came within two feet of his floor.

“This flood was bad,” he said. “It was definitely non-typical. And the scary thing is it will probably happen again. I’m glad to have the house as high as it is, but it’s so stressful. You usually can’t get to your home for a week after a flood. It’s good to know that your home and belongings are above the water.”

### Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region X**

State: **Washington**

County: **Lewis County**

City/Community: **Centralia**

### Key Activity/Project Information

Sector: **Private**

Hazard Type: **Flooding**

Activity/Project Type: **Elevation, Structural**

Structure Type: **Wood Frame**

Activity/Project Start Date: **01/1997**

Activity/Project End Date: **09/1998**

Funding Source: **Hazard Mitigation Grant Program (HMGP)**

Funding Recipient: **Property Owner - Residential**

Application/Project Number: **Unknown**

### Activity/Project Economic Analysis

Cost: **Amount Not Available**

### Activity/Project Disaster Information

Mitigation Resulted From Federal  
Disaster? **Yes**

Federal Disaster #: **1100 , 02/09/1996**

Federal Disaster Year: **1996**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **1734 , 12/08/2007**

Repetitive Loss Property? **Unknown**

## Reference URLs

Reference URL 1: <http://www.fema.gov/government/grant/mitmeasures/elevate.shtm>

Reference URL 2: <http://www.floodsmart.gov>

## Main Points

- Over the past three decades, Washington State has experienced numerous record floods resulting in widespread destruction of property and tragic loss of life.
- Following the flooding of 1996, Bob and Loyann Munyan, residents of the flood-prone City of Centralia in Lewis County, decided to elevate their home.
- Through HMGP and other sources, they approved for a 100 percent grant to raise the house.
- The Munityans elevated their home 5 feet, 10 inches above its previous height, bringing their floor level one foot higher than expected maximum flood levels for their community.
- In the nearby City of Chehalis, schoolteacher Kevin Fields watched the waters rise on December 1st, but felt confident that his house would remain safe, even while the homes of his neighbors began to flood - he had elevated his home eight feet.
- Because both the Munityans and Mr. Fields elevated their homes, both were protected from major flood damage during the Decembet 1st, 2007 flood.



Picture of Kevin Fields



Picture of the Munityans and their home