



## Above the Flood

### Full Mitigation Best Practice Story

#### *Tillamook County, Oregon*

**Tillamook, OR** – The completion of a building elevation project came none too soon for the tenants of Northport Plaza along U.S. Highway 101 north of the city center of Tillamook, Oregon. The most recent flooding of the area occurred just six weeks after the Plaza's two buildings had been raised by about 3 feet, which was enough to put the floors about 1 foot above the highest level reached by the floodwaters in early December 2007.



The Western Royal Inn across the highway from Northport Plaza has the distinctive ground-level skirting of an elevated building. In 2004, the inn was raised above the Base Flood Elevation (BFE) for the area, and it has stayed high and dry during subsequent floods. The BFE represents the average floodwater depth for a 100-year flood event, meaning that buildings constructed to this standard will sit above the floodwater during all but the most serious flooding.

“We used to get flooded almost every year before the building was raised,” said manager Tamera O’Neil, “but we stayed high and dry in the November 2006 flood, and this year we didn’t get any water in the rooms. We were open and ready for guests as soon as the water went down.”

The city encouraged businesses to move to the 2-mile stretch of U.S. 101 when they annexed it 25 years ago. Many of the business owners who accepted the invitation have done well along this busy stretch of coastal highway. But the almost annual flooding of the area by the Wilson River and its associated sloughs, particularly the major, damaging flood of 1996, has caused city officials to re-think that initial pro-development stance. Businesses are now being encouraged to leave the flood zones and move to higher ground.

After the 1996 flood, Tillamook County became proactive in mitigating flood damages, according to Bill Campbell, director of the county’s Department of Community Development. The county began to work with property owners in the flood-prone areas to secure funding available through FEMA’s Hazard Mitigation Grant Program (HMGP). A key purpose of the HMGP is to ensure that critical mitigation measures to protect life and property from future disasters are considered during the recovery and reconstruction process following a disaster.

The HMGP can provide 75 percent of the funding for flood mitigation projects. The projects could involve elevation of structures within a floodplain, such as those at Northport Plaza and the Western Royal Inn in Tillamook, or relocation of structures to higher ground.

Funding to assist communities plan and implement measures to reduce flood losses is also available through FEMA’s Flood Mitigation Assistance (FMA) Program. Part of the funds used to elevate the Northport Plaza and to acquire two commercial properties along U.S. 101 were provided by the FMA Program.

“The elevation of buildings in flood-prone areas is only one way to reduce or avoid future damages,” said Mark Gervasi, Tillamook city manager and planning director. “Relocating to new or existing structures on higher ground is also an alternative. In either case, when merchants stay in town and remain open for business, employees and the community as a whole are the benefactors. These are the real success stories behind the flood mitigation efforts here in Tillamook.”

### Activity/Project Location

Geographical Area: **Single County (County-wide)**

FEMA Region: **Region X**

State: **Oregon**

County: **Tillamook County**

### Key Activity/Project Information

Sector: **Public/Private Partnership**

Hazard Type: **Flooding**

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

Structure Type: **Wood Frame**

Activity/Project Start Date: **06/2004**

Activity/Project End Date: **10/2007**

Funding Source: **Flood Mitigation Assistance (FMA); Hazard Mitigation Grant Program (HMGP); Property Owner, Commercial**

Application/Project Number: **EMS-2004-GR-0023**

### Activity/Project Economic Analysis

Cost: **Amount Not Available**

### Activity/Project Disaster Information

Mitigation Resulted From Federal Disaster? **Yes**

Federal Disaster #: **1099 , 02/09/1996**

Federal Disaster Year: **1996**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **1733 , 12/08/2007**

Repetitive Loss Property? **No**

### Reference URLs

Reference URL 1: **<http://www.floodsmart.gov>**

Reference URL 2: **<http://www.fema.gov/government/grant/fma/index.shtm>**

## Main Points

- Tenants of Northport Plaza along U.S. Highway 101 elevated the Plaza's two buildings about 3 feet.
- During a flooding event, the buildings were almost one foot above the highest level the water reached.
- The Western Royal Inn across the highway from Northport Plaza was raised above the BFE in 2004, and it has stayed high and dry during subsequent floods.
- Annual flooding of the area by the Wilson River and its associated sloughs, particularly the major, damaging flood of 1996, has encouraged businesses to leave the flood zones and move to higher ground.
- After the 1996 flood, Tillamook County became proactive in mitigating flood damages. The county began to work with property owners in the flood-prone areas to secure funding available through FEMA's HMGP.
- Funding to assist communities plan and implement measures to reduce flood losses is also available through FEMA's Flood Mitigation Assistance (FMA) Program.
- Part of the funds used to elevate the Northport Plaza and to acquire two commercial properties along U.S. 101 were provided by the FMA Program.



Northport Plaza after the flood



High water at Northport Plaza Dec 07



The Western Royal Inn was elevated in 2004