

Linnton's history with disaster preparedness is decades old. It has grown and is increasingly complicated by our heightened awareness of the issues that may warrant an emergency response or evacuation. A summary of issues, Neighborhood Emergency Team (NET) efforts, and estimates of preparedness follow:

## 1. Toxic Leak or Spill

Our primary local risk is an isolated toxic leak or spill due to our proximity to industry, specifically but not exclusively, the CEI Hub. NET has connected with hazards experts, studied other locations' experiences with toxic leaks, and followed Portland Bureau of Emergency Management's (PBEM) directive and the State Fire Marshal's recommendation that Shelter-in-Place (SIP) is the recommended procedure to follow. SIP has proved to save lives when evacuation has led to deaths.

NET has distributed SIP literature and diagrams, provided multiple live demonstrations and trainings at Linnton Community Center and in various neighborhoods, spoken at Linnton Neighborhood Association (LNA) meetings, written articles for the Linnton newsletter, emailed information via our monthly NET Neighborhood News, made literature available at the Linnton Community Center (LCC), and promoted SIP at community gatherings such as the annual Community Picnic and local "hill" social events since 2018, 4 years ago.

It is safe to say that most residents here have heard of SIP. How many are registered with the Public Alerts notification system? We estimate that may be 60% of our population. How many have saved valuable time given the immediacy of the needed response by identifying the best room to shelter in, pre-cutting and labeling the plastic to cover windows and openings, and putting together the supplies that will be needed? Not sure, but not all. NET's work here is not finished.

## 2. Fire

With climate change and the corresponding dramatic increase of wildfires, a spotlight is on Linnton's fire risk because of our proximity to the forest and Hwy 30/St. Helens Rd., in an area known as the wildland-urban interface (WUI). Several years ago, Linnton joined Firewise, a program that provides a free WUI home assessment by Portland Fire & Rescue (PF&R) and includes specific recommendations for residents to reduce their wildfire risk. About 35 homes (of about 500 homes here) have taken advantage of this--not nearly enough. And, we're not sure how many of these homes have taken the recommended steps to make their homes more secure and thereby lessen their risk and the risk to their community.

Our fire risk is believed to be most highly correlated with a burning item thrown from a car on Hwy 30 but we are also vulnerable to lightning strikes and fires started by folks who are hiking

or camping in the forest. Given the right conditions, a fire here can move from Hwy 30 to the crest of the hills in as little as 16 minutes.

Early warning is the key to safety. Fortunately, there are warning systems available. In addition to Public Alerts, Pulse Point Respond, a 911-connected app that has been adopted by PF&R, operates in our area. It's a modern-day scanner app that can immediately inform residents of fires and other emergencies occurring nearby and can also request help for someone that needs CPR. Pano360 has partnered with PGE to install video monitoring equipment with software that conducts a firewatch every day and can quickly identify fires within .1 mile accuracy.

Multiple handouts supplied by PF&R /Firewise have been distributed door-to-door in neighborhoods by NET volunteers, and articles have been published in the newsletter and circulated via NET Neighborhood News monthly email. We believe most residents are aware of our fire risk but we don't believe all of our folks know enough about fire behavior to respond appropriately. PF&R advocates getting off the hills and not into the forest. More awareness and preparation is needed.

### **3. Earthquake**

A major earthquake is, by far, our most serious threat, due primarily, but not exclusively, due to the existence of the CEI Hub with its huge volume of flammable fuels. The tanks are situated on unstable soil and most lack adequate safety regulations.

The best response following an earthquake is to stay at home if it is safe to do so, but evacuate if that's necessary. That means residents need to be prepared to remain at home and be prepared to leave home. As with almost all disasters, the specific details of the event are unknown and will dictate the appropriate response at the time. This means residents need to be prepared to ask themselves the relevant questions and base their emergency response on their unique situations.

How many people are prepared to remain at home for 2 or more weeks with stored food, water and supplies? Our recent COVID experience has actually been helpful in prompting people to store more food and water; however, that is not unanimous.

What are the earthquake risks here? Fatalities, human health and safety. Building and bridge collapse. Fires and smoke. Downed trees. Landslides. Chemical leaks and explosions. Blocked evacuation routes. Weather exposure. Again, these risks are greatly exaggerated by our proximity to the CEI Hub which is expected to create an unparalleled disaster in the event of a significant seismic event.

Following a major event, evacuation in any direction may be seriously or totally compromised by our geographic location. Our one major north-south road, St Helens Rd./Hwy 30 may not be passable. West-bound Germantown and Newberry Roads may also be impassable.

Eastward, damage to bridges, toxic chemicals, and fires coming from the CEI Hub may limit evacuation via the bridge and river and the high risk to St Johns may additionally reduce our options of where to go.

Each neighborhood here is a functional island with unique characteristics and hazards, separated from other neighborhoods by distance or ravines. No Linnton neighborhood is free from risk but we cannot expect agreement among neighborhoods about evacuation routes because of their unique locations. Proximity to the CEI Hub is equated with greater risk but the magnitude of a disaster and other factors may imperil those who are more distant.

Typically, there is only one access road into and out of each neighborhood that connects it with Hwy 30/St Helens Rd. Some communities currently have better access than others to walkable trails and fire lanes that tie in with paved roads, such as Skyline and Germantown Road. Others have narrow, winding, or steep trails making them challenging or an impossible evacuation route for some older or physically challenged people. Landslides and downed trees will complicate neighborhoods' egress routes differently. Because of our environment, many residents have familiarity with the trails here and have more survival equipment (chainsaws generators, etc.) than the average Portlander.

All Linnton neighborhoods have considered their egress routes, but consensus about evacuation routes, even within a neighborhood, is complicated by the unique locations of each residence. Saltzman, the most southerly community here, has not responded to NET outreach efforts of a door-to-door campaign, or newsletter and LNA meeting requests.

NET has distributed earthquake preparedness literature, organized a giveaway of 50 "go bags," spoken at LNA meetings, written articles for the Linnton newsletter, emailed information via our monthly NET Neighborhood News, promoted community connection to foster discussion and increase resilience, inventoried residents' survival equipment and relevant skills to assist others, shared information at community gatherings such as the Community Picnic and local "hill" social events, and made literature available at Linnton Community Center over the last decade.

Each community has at least one NET member or volunteer who is responsible for being the neighborhood NET contact there for building community, sharing information, and asking for information or assistance from NET as needed. Each neighborhood has a cache with a starter set of emergency supplies, secured by a PBEM grant, to which they are encouraged to add supplies that they deem important. Additionally, a container centrally located in Linnton on Front St. has more emergency supplies and the BEECN radio.

Neighborhoods were polled for this report about their evacuation knowledge and likely routes; in several neighborhoods, the appropriate NET member/representative responded on behalf

of the neighbors. Most respondents are aware that evacuation routes to the northwest, away from the CEI Hub, may be preferable to going southeast toward the city. For most, evacuation routes west through the forest are considered a daunting last resort. People understand that vehicle evacuation, if at all possible, may also require walking, hiking, or water access to get to safety.

**Neighborhood feedback summary, from northwest to southeast:**

- **Newberry and Riverview** neighborhoods have access to Newberry Road for egress. While Newberry residents are spread out, Riverview and both North and South Marina residences are close together so neighbors are more well-connected. **Marina Way's** floating home residents are on a mile+-long stretch of Multnomah Channel and have access to boats if water evacuation is possible. By car or on foot, they can access Newberry Road from the bridge end of the moorages but are concerned about the two existing crossings to Hwy 30 being blocked and trapping them. Also, a gas line runs under Larson's moorage walkway 3. All residents here are farther from the CEI Hub than other communities, providing a measure of additional time to respond, unless chemicals/fires reach them via the river.
- **Harborton's** egress is challenging via Creston Rd. to Firelane #12 but they also have the advantage of being farther northwest/downstream and have possible river egress options from a marina across Hwy 30. Their smaller community (25 residences) means better social connectedness.
- **Linnton Hill** has access to Linnton Trail to the southeast and Fire Lanes 10 and 9, but egress would be challenging with landslides and downed trees. There are 2 paved egress routes (1<sup>st</sup> St. and 112<sup>th</sup> Ave.) and stairs that connect homes to Hwy 30. Being the largest Linnton community (70 residences) means less total social connection, although most people know several neighbors and several blocks have very good connections.
- **Hoge/Waldermere's** location near multiple fuel tanks presents risks. It has good access to a trail and Fire Lane 9. Also, their relatively small population (31 residences) and buildings in close proximity has meant good community connectedness.
- **Glen Harbor** stretches along Germantown with some homes being at a higher elevation and farther away from the river, felt to be advantageous in terms of both the Hub and landslides. Their access to Germantown Road is good; some are near Harbor Blvd. with more direct connection with Hwy 30. The length and spread of the neighborhood impacts their community identification and connectedness.
- **Springville** is close to the CEI Hub but has elevation which may afford some protection. It uses Bridge Avenue to reach Hwy 30 or the St. Johns Bridge. The second largest community, it has access to a relatively easy egress trail near the top of the hill and west to Skyline Road but it has a locked gate and neighbors have not gotten a satisfactory response from officials about their options. Trail evacuation may be challenging for some but their community is felt to be well-connected.

In this poll, Linnton residents offered specific suggestions to reduce our risk and heighten our safety and resilience. We ask PBEM and LNA to consider the following and provide support:

**A. Study alternative evacuation routes for each community; create/improve those routes**

- Create a navigable connection between specific “hills” to connect neighborhoods.
- Clear and/or widen trails.
- Discourage parking on narrow streets; post “evacuation route” signs on streets.
- Investigate water rescue, including identification of access points.
- Evaluate using helicopters with a landing pad at Linnton School Place or near Linnton Community Center, both fairly central locations.

**B. Adopt safety measures**

- Establish a local fire station and fire boats, as advocated by a former PDX fire chief.
- Require an early warning system for the community by the tank farms.
- Notify residents of emergency broadcast channels.
- Provide first aid training for NET members/residents.

**C. Supply equipment**

- Bullhorns
- “Evacuation route” signposts
- Water catchment systems
- Boltcutters/gate key (Springville)
- Chemical masks/respirators
- Drones to document trails and determine their condition following an event
- Appropriate two-way radios (Marina Way)

**NET is committed to strengthening or adopting these goals:**

- Request PF&R to write an article for the Linnton Newsletter about fire risk and guide NET efforts to educate residents, sharing a protocol for fire response.
- Support Firewise efforts to increase the number of residences who request the home assessment and take steps to decrease their fire risk.
- Provide first aid information to residents.
- Encourage each NET or neighborhood representative to renew neighborhood discussions and connectedness.
- Confirm residents’ awareness of their staging area, cache location, detailed trail maps, and relevant digital resources.
- Encourage each community to add to their emergency supply caches.
- Revisit “meet up” locations after evacuating from Linnton: along Skyline at intersections with Germantown Rd., Newberry Rd., Newton Rd., and near the fire station.
- Connect with Linnton merchants to learn their emergency plans, further educate and support their emergency preparedness, and determine how they can support the larger community during or after an event.
- Identify community members with boats who are willing to volunteer to transport folks in emergency situations.
- Ask community members with drones to volunteer their time and equipment to educate NET members.