

MANAGEMENT BRIEF

DATE: December 10, 2024

TO: Mayor Robinson and City Councilmembers

FROM: Chris Long, Assistant Director, Mobility Operations, 452-6013

Adam Weir, Streets Maintenance Superintendent, 452-4891

Transportation Department

SUBJECT: Winter Weather Preparedness and Response

Introduction

Bellevue experiences a wide range of weather during the winter season including heavy rains, strong winds, snow and ice. The seasonal forecast strongly indicates a La Niña weather pattern, which is a change from the El Niño pattern we experienced last year. During La Niña years we anticipate the jet stream to pull colder and wetter storms down from the Gulf of Alaska. A La Niña pattern tends to increase the frequency of storms, including an increase in the chance of wind storms, which we have already experienced.

Although we consider seasonal forecasts, this information is used for awareness as we consistently prepare to respond to weather events throughout the year. The shorter term (current to 14-day) forecasts are far more useful to execute equipment, material and staff planning for weather-related events.



Wind Event (132nd Ave NE in Bridle Trails)



Flooding Event (SE 7th PI in Wilburton)



Snow Event (Somerset)

Preparedness, Response, and Recovery - One City Approach

Eligible staff from Transportation, Utilities, Parks and Community Services, and Finance and Asset Management (Facilities and Fleet) are trained in response and recovery activities prior to the winter season with this year's training occurring throughout the month of October. Over 150 staff participated in this year's full day training event where each person rotates through various classroom sessions and hands-on stations to learn how to drive a plow route, install tire chains, address vegetation issues during a snow event, maintain a plow assembly and properly load sand and anti-icing liquid.

New Innovations for 2024/2025 Season

Every truck outfitted with a plow also carries a two-inch thick binder with maps showing each plow route in the city. In 2025 these maps will go digital. We have purchased a product that will load all the maps onto iPads that will be mounted in each plow vehicle. The dispatch center can assign plow routes in real time to each driver and can make notations for hazards like roadwork in the area. Turn-by-turn navigation is provided

which will increase the safety and efficiency of the plow operations. This same system can be used for street sweeping and anti-icing operations as well.

Interdepartmental Support for Winter Weather Response

Transportation is the lead department for snow and ice events but only has half the staff required to manage a large event on their own. A typical snow event that extends to the lowlands requires 58 staff. It requires a "One-City" approach to properly manage a snow event. The following summarizes the roles of our partners:

- Finance and Asset Management is a critical department in winter weather response activities. Not only do they address facility needs, they also service vehicles and equipment before, during, and after snow events.
- The Parks and Community Services Department provides additional support personnel for plowing and dispatch and leads snow removal efforts at city buildings and fire stations.
- The Utilities Department also provides personnel for plowing and dispatch and leads the response for flooding, water main breaks and sewer issues.
- The Office of Emergency Management (OEM) conducts training and exercise
 activities for operational departments using winter weather scenarios. The
 OEM is also able to quickly staff the Emergency Operations Center with trained
 city personnel during significant winter weather events to assist with the
 coordination of public safety announcements.
- The Communications team in the City Manager's Office communicates with responding departments to gather relevant details and keep community members informed. They also disseminate information before events to help the community prepare for extreme weather.

Ice and Snow Response Management

Bellevue's topography presents a unique challenge for ice and snow response. Since many ice and snow events occur only at higher elevations, resources are usually enough to service residential streets in addition to priority routes. However, if snow or ice is accumulating citywide, only priority routes will receive continuous plowing and/or de-icing until conditions stabilize. The ability to get plows into neighborhoods during citywide events is influenced by event intensity and time of day/day of week. Attachment A shows how different roadways are prioritized throughout the city.

A major ice or snow occurrence is considered an emergency event, so our top priority, when an event starts, is life safety. We focus on making sure our arterial roadways are passable for emergency responders and other essential public services. The next priority is property damage. We work to address issues in the public right-of-way that could lead to damage on private property, such as erosion, flooding and falling trees. Once emergency situations are addressed and priority routes are passable, we start working on other arterials and neighborhoods streets to provide for public transportation, school transportation and the general public to start traveling throughout the city.

Communications

The public can obtain a real-time view of road conditions during a winter weather event using the City's traffic map and camera page on the following website: https://trafficmap.bellevuewa.gov/.

The public facing winter event response map shows when roads were last plowed, and can be accessed at the following website: https://bellevueWA.gov/winter-response-map.

The public can also signup for extreme weather emergency alert via email or text notification at: https://bellevuewa.gov/city-government/departments/city-managers-office/communications/emergencies-and-extreme-weather. King County ALERT can also be utilized.

The Communications team also keeps the public informed through social media, news releases and website updates.

Summary

Bellevue devotes significant resources to winter weather preparedness and response with a coordinated, One City approach. These resources help us provide people who live, work, play and study in Bellevue with top level service during hazardous weather events. For questions, please contact Chris Long at CLong@bellevuewa.gov.

Attachment

A. Snow Response Priorities Map