## 2023/2024 SNOW OPERATIONS PLAN

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## Mission Statement

Our mission is to manage the snow and ice removal operation safely and efficiently for drivers, residents, and businesses who utilize the streets of Post Falls.

## Background and Purpose

This document guides the snow operations efforts for public streets within the City of Post Falls. The purpose of this Snow and Ice Control Plan is both to provide the general public and City officials with an insight into the complexity of snow and ice control operations and to summarize procedures which are followed by City personnel.

## Goals

The following goals guide the development and implementation of this plan.

- To provide reasonable driving conditions during winter conditions
- Expedient management of the most heavily traveled City Streets, enabling ongoing safe navigation for drivers, especially Public Safety personnel
- Use of plow gates to reduce driveway berms. Although we use gate mounted plows to reduce the size of berms in driveways, this operation is a lesser priority compared to plowing snow from city streets.


## RESOURCES

Personnel
Snow Operations are conducted by various personnel in several departments throughout the City. Public Works Streets staff are generally responsible for clearing the public streets. Parks staff provide assistance and maintain City parking lots, sidewalks adjacent to City properties, paths. Public Work Utilities staff provide backup assistance and maintain City infrastructure access such as to wells, lift stations, the Water Reclamation Facility, and lift stations. During snow events, the following Public Works staff are available for snow operations above other priorities:

Public Works:
(1) Maintenance Manager
(1) Department Specialist
(1) Streets Supervisor
(3) Streets Leads (as of $12 / 1 / 232$ of the 3 positions are filled)
(15) Streets Maintenance Worker Positions (as of $12 / 1 / 23,13$ of the 15 positions are filled)
(2) Seasonal Street Maintenance Workers

Others:
The following staff are available to assist with Snow Operations when other priority job duties have been addressed:
(4) Fleet Staff (1 Supervisor, 3 mechanics)
(1) Water Operator
(2) Water Reclamation Operators
(1) Stormwater Technician

Water and Water Reclamation Operators operating pickup plows used to clear Utilities facilities may be available on a case-by-case basis to assist operations.

## Equipment

The following equipment is available for use in snow removal operations:

| Quantity | Description |
| :---: | :---: |
| DEDICATED DEICER EQUIPMENT |  |
| 1 | Deicer Truck - 2300-gallon tank |
| 1 | Deicer Truck - 1300-gallon tank |
| 1 | Deicer Truck - 500-gallon tank |
| PLOW EQUIPMENT |  |
| 4 | City Loaders w/ plows |
| 4 | City Loaders each w/ gated plow |
| 1 | Plow Truck - Single axel dump |
| 1 | Plow Truck - Single axel dump |
| 1 | Plow Truck - Single axel dump |
| 1 | Plow Truck - Single axel dump w/ wing plow and 1K-gallon deicer tank |
| 1 | Plow Truck - Single axel dump w/ wing plow and sander |
| 1 | Plow Truck - Single axel dump w/ sander |
| 1 | Plow Truck - Single axel dump w/ sander |
| 1 | Plow Truck - Single axel dump w/ 1000-gallon deicer tank |
| 1 | Plow Truck - Tandem axel dump w/ sander |
| 9 | Total Dump Truck Plows |
|  |  |
| 1 | Ford 550 Pickup w/ plow |
|  |  |
|  |  |
| ADDITIONAL EQUIPMENT |  |
| 1 | 2004 Backhoe |
| 1 | 2013 Skid steer with plow |
| 1 | Ventrac Sidewalk Plow/Snowblower |
| 1 | Truck Mounted Ice Breaker |
|  | Walk behind Snowblowers (multiple) |

## Scheduling and Shifts (as of 12/1/23)

| Shift | Scheduled Staff |
| :--- | :--- |
| Day Shift | 9 Plow Operators |
| Night Shift | 8 Plow Operators |
| Day Shift, Support | 1 Supervisor, 3 Mechanics, 1 Dept. Specialist |

Day shifts begin at 6:00am, Monday - Friday. Night shifts begin at 6:00pm on Sunday night and run through Friday morning. Office staff shifts are 7:00am to $3: 30$, Monday - Friday.

At the discretion of the Maintenance Manager (or in his absence the shift supervisor) in cases where operations require more than 8 -hour shifts, crews will extend the end-time of their shift up to 4 hours. For staff and citizen safety, Snow Operations staff will work a maximum of 12 -hours per shift with at least a 10 -hour rest period following a shift. Also, staff may work a maximum of 10 consecutive days. To accomplish this, when conditions require continuous operations, after 5 continuous days of operations, crews will begin a rotating 5day schedule working four 12-hour days followed by one day off until conditions and operations permit a return to regular workdays. This may result in decreased service during extended operations.

If snow is forecast at the end of an 8 -hour shift, the Maintenance Manager (or in his absence the shift supervisor) may extend the shift by 2 hours. If no snow has fallen, the shift will generally be ended at the 10 -hour point.

Generally, night shifts will begin mid-December and continue through mid-March. This is subject to change based on weather forecasts and may be suspended during holiday weeks, if authorized by the Public Works Director.

## Roles and Responsibilities

Public Works Director
Responsible for the overall operation of the Public Works Department, including snow operations. Provides updates to the Mayor and City Council and City Management.

## Maintenance Manager

Oversees Snow Operations and Fleet operations, as well as coordination with other departments and entities. Monitors status and progress of Snow Operations. Monitors weather and road conditions. Makes crew scheduling decisions. Addresses escalated citizen concerns. Prioritizes work efforts.

Department Specialist
Fields phone calls, emails, and other feedback. Organizes information related to Snow Operations. Routes information to the Streets Supervisor, Maintenance Manager, Streets Leads, and Public Works Director as appropriate.

## Streets Supervisor

Monitors status and progress of Snow Operations. Monitors weather and road conditions. Makes crew scheduling decisions. Oversees and directs crews, reviews field issues, coordinates efforts of Streets Staff with other assisting City Staff, assists in plowing effort as backup plow operator, backup deicer operator, operates pickup plow to address issues.

Streets Leads
Lead Plow Teams, operate snowplows or deicer equipment, oversee assigned shift and coordination with other staff in absence of Streets Supervisor

## Operators

Operate equipment, monitor road conditions, escalate identified issues. (Includes Street Maintenance Workers and other staff assigned to Public Works Snow Operations, e.g. Stormwater Technician, Mechanic, etc.)

## Fleet Mechanics

Maintain snow removal equipment and repair as needed on both day and night shift. As workload and priorities permit, assist in snow plowing operations or deicing operations as assigned by the Maintenance Manager.

## OPERATIONS

Priority 1 Streets
Priority 1 Streets generally consist of major and minor arterial road classifications To ensure these roads are cleared as quickly as possible, in circumstances where the use of snow gates significantly slow operations, their use may be suspended, and snow gates will only be utilized for residential driveways.

## Priority 2 Streets

Priority 2 Streets generally consist of major and minor collectors and other roads accessing schools, medical facilities, public facilities, etc. Plow operations along these routes will generally include the use of snow-gates to minimize berms placed in approaches and driveways.

## Priority 3 Streets

Priority 3 Streets generally consist of all other roads within the City, including cul-de-sacs. Plow operations along these routes will include the use of snow-gates to minimize berms placed in approaches and driveways (alleys do not receive winter maintenance).

## Deicer Routes

Deicer routes generally consist of the combination of Priority 1 and Priority 2 streets.

## Quadrants

For purposes of snow removal, the City has been divided into 4 quadrants. Following completion of Priority $1 \& 2$ routes within a quadrant, plowing of Priority 3 roads will be commence if warranted.

## Snow Event Sequence

Generally, snow operations will escalate and de-escalate along the operational conditions described below.

## Plowing

Generally, plow operators will plow streets with the direction of traffic. To do otherwise is a safety risk to the operator as well as others using our city's rights-of-way.

## Regular Operations

Roadways under this condition are not covered in ice or snow and may be wet or dry. During this condition, supervisors will monitor the streets, particularly if road surfaces are wet, to determine when freezing might occur. Monitoring activities used will consist primarily of monitoring weather forecasts, temperature, moisture conditions and actual conditions of the roadway.

## De-icing Operations

This operation is a vital tool for the City of Post Falls snow and ice operations. Our City applies Magnesium Chloride onto street surfaces prior to expected icy conditions or during freezing conditions. De-icing operations involve crews applying de-icer to the City's planned route. At the discretion of staff, de-icer may be applied in other areas as necessary.

Deicing operations will continue until the de-icing route is complete or conditions change. In all other operational conditions, de-icing of localized ice or compact snow may occur at the discretion of Street Leads, the Street Supervisor, or the Maintenance Manager. Staff operating equipment with de-icing equipment may also de-ice areas in need of attention, at their discretion.

## Sanding Operations

When temperatures drop to the point that Magnesium Chloride deicer is no longer effective, sand will be used to provide traction on roadways. Sanding is generally completed in conjunction with plowing. Sanding alone is conducted when roads are icy, or plowing is ineffective on snow-packed roads. Once operations have begun, sanding will continue until the selected streets have been completed. Depending on the weather conditions, priority 1 and 2 streets may receive multiple applications along with other high use intersections or streets with inclines. All sand that the city uses is stored at the Post Fall Highway District facility on Seltice Way. The city does not currently store sand onsite.

## Salt Operations

Salt application is new operation for the Streets Division as of the winter of 2023-24. A certain amount of salt (as budgets allow) is stockpiled undercover at the Street operations yard. Primarily, salt will be used to melt snow and ice in our most problematic areas (hills, roundabouts, intersections). As this is a new process to the City, it is expected that there will be a learning curve to its use.

## Snow Drift Operations

This condition occurs when snow drifts are rapidly forming in a way which blocks traffic on a road. The primary response to this condition will be to mobilize any staff and equipment available but not actively plowing elsewhere. This may include support from other departments or staff on shift beyond the minimum staffing requirements.

If no additional staff or equipment are available, crews will be diverted from their current assignments to clear the drifts. Generally, crews in lower priority routes will be diverted first but0 this will depend on the circumstances at the time. The decision to remove drifts will be made by the Maintenance Manager or his designee

## Minor Snow Event

Generally, two to four (2-4") inches of accumulation of snow on the roadway.
Resources will be committed to Priority 1 streets first. Only after Priority 1 streets are cleared will available resources be shifted to Priority 2 streets. Similarly, the same resources will be used to serve Priority 3 streets only after goals have been met on Priority 1 and 2 streets.

## Priority 1 - Major and Minor Arterial Streets.

Generally cleared within 24 hours after the end of the storm.

Priority 2 - Generally consists of major and minor collectors and other roads accessing schools, medical facilities, public facilities, etc. Generally cleared within 24-48 hours after the end of the storm.

Priority 3 - Generally, Priority 3 streets will not be plowed for a minor event.

## Moderate to Heavy Snow Event

Generally, four plus (4"+) inches accumulation of snow on the roadway.
Resources will be committed to Priority 1 streets first. Only after Priority 1 streets are cleared will available resources be shifted to Priority 2 streets. Similarly, the same resources will be used to serve Priority 3 streets only after goals have been met on Priority 1 and 2 streets.

Priority 1 - Major and Minor Arterial Streets.
Generally cleared within 24 hours after the end of the storm.

Priority 2 - Generally consists of major and minor collectors and other roads accessing schools, medical facilities, public facilities, etc.
Generally cleared within 24-48 hours after the end of the storm.
Priority 3 - All Other Non-Priority 1 and 2 Streets. Priority 3 streets addressed only after goals have been met on Priority 1 and 2 streets.
Generally cleared within 72 hours after the end of the storm.

## Cleanup Operations

This condition begins when roads have been cleared but snow berms, snow floor, ice, or other conditions require attention in specific areas of the City.

In cleanup operations, crews will generally work 8 -hour shifts. Weekend or overtime work may be authorized by the Maintenance Manager, but needs will be weighed against the additional costs.

During the snow event, a list of cleanup tasks will be developed. This list will be prioritized by the Maintenance Manager or his designee(s) and issues will be addressed during Cleanup Operations, generally on the highest priority roads first. Activities may involve re-plowing areas previously unable to be plowed (due to parked cars for example), pushing back snowbanks, removal of snow/ice floor, hauling of snow from congested areas, or other activities as needed.

Cleanup Operations will continue until no longer needed or until plowing operations are again called for.

## Snow Gate Approach

The City has four loaders equipped with snow gates available for operations (one per quadrant). The snow gates help to reduce the snow berm size that would otherwise be left in front of driveways. They work well in light, powdery snow; however they do not work well in wet, heavy snow conditions. At the discretion of the Public Works Director, or Maintenance Manager in his absence, streets may be plowed in all quadrants without the use of gates. This effort will clear the traveled section of the streets but will not be curb-to-curb. Following completion of a quadrant in which gates were not used, operators will return to each quadrant during cleanup operations to plow the remainder of the road and removing driveway berms as best as possible, which have not been cleared by residents.
If a gate-equipped loader is out of service, Priority 2 and 3 streets will be plowed in one or more quadrants without the use of gates. If conditions permit, operators will return during cleanup operations and attempt to address driveways.

Operators will endeavor to use gates to avoid creating berms in driveways. However, operators are generally not able to avoid creating berms in front of mailboxes, fire hydrants, etc.

Also, at the discretion of the Public Works Director, or Maintenance Manager in his absence, gates may be used only for residential driveways on arterials, if plowing all driveways is significantly delaying the removal of snow from high priority streets.

## Cul-De-Sacs \& Knuckles

City plow operators will plow/pile snow within cul-de-sacs and knuckles to their center. If an operator arrives onsite to find an obstacle (vehicle, trailer, etc.) in the cul-de-sac or knuckle, they may not plow that location at that time. Individual driver discretion will be used to plow these locations. These areas are difficult to plow and the risk of damaging a vehicle or other obstacle is high.

## Alleys

The City does not plow alleys.

## Sidewalks

City staff maintain sidewalks adjacent to City owned properties throughout the City. Parks staff generally plows as soon as possible to clear sidewalks in front of parks as well as trails. In areas where sidewalks will not be maintained by City Crews, Operators will do their best to avoid plowing snow onto the sidewalk. Reasonable efforts will be made to keep ADA approaches to sidewalks open for pedestrian access.

## Obstacles

When staff encounter obstacles, which prevent plowing a street, the following procedure will be used:

1. For Priority 1 and Priority 2 routes:
a. Take photo if possible
b. Contact Streets Division Office Staff
c. Contact Police Non-Emergency Number to request assistance if necessary
d. When notified obstacle has been cleared, plow as soon as practical
2. For Priority 3 Routes:
a. Take photo, if possible,
b. Contact Streets Division Office Staff
c. Notify Code Enforcement
d. Add street to Cleanup Operations list
e. Plow during Cleanup Operations

When Streets Division Office Staff are available, they will coordinate these issues with the Police Department.

## City Facilities

City Facilities such as the City Hall parking lot, the Police Station parking lot, and other City lots are maintained by multiple City Departments. Public Works Street Division plow operators are expected to focus on street-related snow removal.

## COMMUNICATIONS

## Communications Status

City Staff will publish the following information on using the City's social media platforms:

- Operational status and time initiated
- Progress through quadrants and time updates


## Contacting City Staff

Public Works Staff may be contacted in any of the methods listed below. Requests will be consolidated prioritized by the Maintenance Manager and addressed during Cleanup or Regular operations, regardless of the method of communication. Suggestions for future Snow Operations Plans may be submitted through any of the methods below.

## Online Request/Feedback Form: https://www.postfalls.gov/snow-issues/ <br> Email: snow@postfalls.gov

Phone:
Streets Division: 208-773-1722
Post Falls City Hall: 208-773-3511
Police Department: 208-773-3517

## News Media

New Media covering snow events should contact the City's Public Information Officer (PIO) via the methods listed below. The PIO will communicate ongoing snow control operations with the public and media through social media.

Phone: 208-457-3341
Email: MediaCenter@postfalls.gov

## ORDINANCES

The following ordinance applies to plowing snow into the streets and to parking:

## Snow Removal

### 10.48.010: REMOVAL OF SNOW AND ICE FROM SIDEWALKS:

Every owner or lessee of real property abutting a sidewalk must remove any snow, slush, or ice that accumulates on the sidewalk or pedestrian path, including curb ramps, abutting their property within forty-eight (48) hours following any storm causing the accumulation of snow, slush, or ice or within twenty-four (24) hours after receiving an official warning from the City requiring that the snow, slush, or ice be removed.

### 10.48.020: PLACING SNOW ON PUBLIC PROPERTY:

No owner or lessee of real property, or operator of snow removal equipment on private property, may remove snow, slush, or ice from private property and place it in any manner on public property or streets or around fire hydrants.

### 10.48.030: PLACING DIRT OR DEBRIS ON PUBLIC PROPERTY:

No person may place sand, salt, gravel, deicer, or similar materials on public streets without obtaining the written permission of the City's Public Works Director.

## Parking

Municipal Code 10.20.050:
No vehicle, including major recreational vehicles or equipment, shall be parked continuously at the same location or combination of locations within the same block on any public street or public alley on any public street or alley in the city for more than twenty-four (24) hours. For the purpose of this chapter, "major recreational vehicles and equipment" are defined as including, but not limited to, boats and boat trailers, pickup campers or coaches (designed to be mounted on automotive vehicles), motorized dwellings, and tent trailers. (Ord. 1201, 2010)

