

**CITY OF KLAMATH FALLS**  
**PUBLIC WORKS DEPARTMENT**

**SNOW PLAN**  
**EXECUTIVE SUMMARY**

**PURPOSE:**

The purpose of the Snow Plan is to define responsibilities and outline procedures to effectively manage travel conditions for snow, ice and extreme temperature during the winter season.

**OBJECTIVE:**

The objective of the Snow Plan is to ensure procedures are defined and followed to maintain safe driving conditions for motorists during adverse winter conditions and to return the City streets and parking lots to a safe, usable condition in an expeditious and efficient manner.

**EMERGENCY CONDITIONS:**

As ice and snow directly affect the safety and health of the community, mobilizing and fighting snow/ice is considered an emergency situation which requires City Public Works Management Staff to exercise prudent judgement and make decisions that may extend beyond standard City policies and procedures.

**EXPECTED WINTER CONDITIONS:**

In Klamath Falls, average snow/ice conditions are based more on computations of extreme conditions rather than the median in the repetitiveness of "typical" winters. While the "average" winter consists of 40-inches of snow accumulation spread over an average 39 days of snowfall of one to ten inches or more; it has been common to have a winter of less than ten inches of snow in three to five events, as well as to have 50-inches to 100-inches in eight to 20 events. Procedurally, the City must be prepared for the large repetitive snow events. Equipment capability and reliability should allow for sustained operations for most storm events recognizing that record or near-record snow events will exceed equipment capability. Under excessive conditions, known and proven contractor support will be relied upon to supplement in-house capabilities.

**INITIAL RESPONSE:**

Initial response will depend on what time of day the storm’s onset occurs (during standard work hours, weekends or evenings) as well as the expected storm event conditions (freezing rain, light snow in higher elevations or a major storm). If a storm’s onset occurs during non-work hours and is a limited-intensity storm event, close coordination between the City’s Police Department, 911, Public Works Street Division supervisors and/or night-shift street operator(s) should ensure timely initial response. Refer to the Emergency Call-Out Procedures.

**LEVELS OF RESPONSE:**

Five (5) levels of response (Operation) are planned for as defined in the Snow Plan. These are:

- Level 1- Limited De-icing - 1 - 2 Trucks/Sander
- Level 2- Full De-icing - 4 - 6 Trucks/Sanders
- Level 3- Limited Plowing - Less than 4” of snow. Limited City Plowing/ Higher Elevations, Main Arterials & Collectors, City Bus routes. Light weather forecast.
- Level 4- Full City Plowing - 4” or more of snow. 12 pieces of equipment. Contractor Support may be needed. Weather Forecast for continued snowing.
- Level 5- Snow Haul-off/Clean up - Travel loader, dump trucks, sweeper.

**PARKING LOTS:**

City-owned and managed parking lots will be plowed by the Parks Division under the supervision of the Parks Supervisor. Parking lots will typically be plowed at 2 inches or more of accumulation. The objective is to have all City-owned parking lots plowed by 7:00 a.m. The hauling of parking lot snow, when required, will be accomplished by the Street Division or contracted out depending on conditions.

**SIDEWALKS:**

Sidewalks in front of or abutting City property (buildings, parking lots, parks) will be plowed or shoveled by the City Parks and Maintenance Divisions. High pedestrian use areas (downtown) will receive first priority. Shoveling or plowing of all other sidewalks within the City limits is the property owner’s responsibility.

## **EQUIPMENT MAINTENANCE:**

For level three and four operations, one of the two mechanics will report to the Street/Equipment shop to repair equipment that breaks. For sustained operations, the mechanics will split into two (2) shifts to provide continuous coverage. Mechanics may be utilized in the plowing effort if it becomes necessary.

## **TELEPHONE PROTOCOLS AND CALL PRIORITIES:**

During any snow event there is a major increase in phone call volume from residents or property owners identifying problems and/or inquiring on conditions or timelines for when their street will be plowed. The snow information desk will have personnel available to answer questions and assist residents. If lines are busy, voice mail messaging is available to those choosing to leave a message and will receive a return call as quickly as possible.

## **STAFFING:**

For sustained operations (Level 4) a total of 8 plow operators, two mechanics, one supervisor and one manager are needed. Additionally, four to six people are needed to work the city parking lots and sidewalks. The majority of the plow operators will require a Commercial Driver's License. To achieve sustained operations, two (2) shifts will be created drawing on as many volunteers as possible from throughout the various Public Works Divisions and supplementing where needed with contractor support.

## **NOTICE:**

- A. City Police/911 will use the Street Division (**EMERGENCY CALLOUT**) or notify the Street Division night crew of the need for ice control.
- B. Street Division night crew will notify a supervisor of the need for additional manpower/equipment to meet public safety requirements.
- C. In the event of the need for additional manpower/equipment that exceed the Street Division resources, the Street Division Supervisor will hire contractor support as needed.

## **SUMMARY:**

The Public Works Department fully recognizes the emergency conditions created by snow and ice. Procedurally, the Snow Plan provides for an organized approach to combating such emergency conditions. With resident and property owner cooperation, the Public Works Department is prepared and able to keep the streets and parking lots safe and drivable during most storm events and, when major snow accumulation occurs, to return the City to a safe and drivable condition quickly following cessation of the storm event.

## **PRIORITY SEQUENCE:**

Snow removal operations will be completed by priority in the sequence listed below. Resources permitting some lower-priority snow removal may be completed concurrently with higher-priorities if Public Safety Requirements are not jeopardized. Strict control will be exercised so that snow removal operations are optimized.

## **PRIORITIES:**

1. High
2. Moderate
3. Medium
4. Low

*\*Priorities are subject to change due to conditions.*

## **OPERATION – Level 1** (0” to trace accumulation, icy conditions)

1. Magnesium Chloride pretreatment and limited cindering.
2. Cinder routes 1 & 2 *Appendix 3*
3. 1- 2 Plow/Cinder spreaders, 1- 2 operators  
Priority 1 - Major Arterials & Hospital Area  
Priority 2 - Collectors and Hills  
Priority 3 - Secondary Roadways

## **OPERATION – Level 2** (1” to 2” of snow, icy conditions)

1. Full Cindering - limited plowing, predominantly higher elevations
2. Cinder routes 1 & 2 *Appendix 3*
3. 4 - 6 Plow/Cinder spreaders, 4 - 6 operators  
Priority 1 - All Cinder routes to be completed with increased manpower & equipment

## **OPERATION – Level 3** (Less than 4” of Snow & Snow forecast is light)

1. Limited plowing, higher elevations,  
Priority 1 - Hospital area, Main Arterials/Collectors, bus routes and Schools.  
Priority 2 - Collectors & Hills
2. Cinder route & trouble areas (*Appendix 3*)
3. 6 to 8 pieces of equipment, 6 to 8 operators
4. Street Division personnel initial responders, PW volunteer staff as needed
5. Sidewalks cleaned (Parks & Maintenance Divisions)
6. Pending weather, Parking lots Cleaned (Parks Division).

**OPERATION – Level 4:** 4” or more accumulation. Forecast is Snow likely.

1. City-wide snow plowing. Moderate to heavy snowfall.  
Priority 1 - Major Arterials & Hospital Area,  
Priority 2 - Collectors and Hills,  
Priority 3 - Secondary Roadways, Priority 4 – Residential Areas.
2. All Council Ward areas 1-5 (*Appendix 4*)
3. Parking lots/sidewalks (Parks & Maintenance Divisions)
4. Street Division personnel initial responders, PW volunteer staff as needed
5. Pending weather, 24-hour operations go into effect utilizing all available manpower (*Appendixes 1&2*) and available equipment (*Appendix 5*)
6. Snow equipment will be dispatched to areas assigned, based on availability and priority
7. Contractor support as needed (*Appendix 6*)

**OPERATION – Level 5** (Haul-off/Clean-up)

1. Snow haul-off, pending weather  
Priority 1 - All major arterials, berms in center of streets in downtown area.  
Priority 2 - Washburn Way/Plaza Shopping area  
Priority 3 - Collectors, areas with snow stored  
Priority 4 - Secondary streets, sidewalks/parking lots (*Appendix 4*)
2. City personnel/Street Division (*Appendix 1*)
3. Contractor support called in dependent upon weather or need (*Appendix 6*)
4. Snow will be hauled to a pre-designated area.
5. Cinder sweeping – All major arterials, sanding routes.

**SNOW INFORMATION DESK:**

The snow information desk will have personnel available during all snow operations to answer any questions. All telephone calls will be documented, and information forwarded to supervisors so they can address any problems that may require special attention.

**SNOW ROUTE / AREA**

<b><u>ROUTE</u></b>	<b><u>AREA</u></b>	<b><u>WARD</u></b>
1	Downtown Core	1
2	Commercial / Industrial	2
3	Riverside to Oregon Ave.	1&5
4	Behind K.U. to Biehn	2&5
5	Harbor Isles / Pelican City	4&5
6	Mills	2&3
7	Hot Springs/Knob Hill	2&4
8	Hospital Area	4
9	Stewart Lennox	1
10	Gatewood, Americana, Ferndale	1
11	Lynnwood	5
12	North Hills, Shadow Hills	3
13	Harbor View	4