

CITY OF KLAMATH FALLS
PUBLIC WORKS DEPARTMENT

SNOW PLAN

2011 / 2012

EXECUTIVE SUMMARY

PURPOSE:

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

OBJECTIVE:

The objective of the Snow Plan is to insure procedures are defined and followed to maintain safe driving conditions for motorists during a major storm event 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 judgment 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 capability.

INITIAL RESPONSE:

Initial response will depend on what time of day the storm’s onset occurs at (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 and Public Works Street Division supervisors and/or night-time street sweeping operator(s) should insure 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.)

- Level 4- Full City Plowing - 12 pieces of equipment, sustained operations. 4 or more inches of snow. Weather Forecast for continued snowing.

- Level 5- Snow Haul-off - Travel loader plus dump trucks.

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 or four operations, one of the two mechanics will report to the Street/Equipment shop to repair equipment that breaks. For sustained operations, the mechanic will split into two (2) shifts to provide continuous coverage. The 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 call volume from residents or property owners identifying problems and/or inquiring on conditions or timelines for when their street will be plowed. The one incoming line now has voice mail / voice messaging, and while this one line gets "saturated" with incoming calls, those choosing to leave a message will receive a return call as quickly as possible.

STAFFING:

For sustained operations (Level 4) a total of 8 plow operators, two mechanics, two lead operators, and one supervisor are needed. Additionally, four 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 non-volunteers.

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.

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 due to additional Public Safety Requirements;
- C. Appendix No. 1;
- D. In the event of the need for additional manpower/equipment, the Street Division will react as first-responders on limited snow plowing/full City snow plowing;
- E. In the event of full City snow plowing, Street Division personnel will split into two crews with additional manpower coming from contracted sources; and
- F. Appendix No. 2, Personnel from other Public Works Divisions for snow removal.

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 as long as 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

- 1. LIMITED SALTING
- 2. Salt routes 1 & 2 Appendix 3
- 3. 1- 2 Salt/Sand spreaders, 1- 2 operators
 - Priority 1 - Major Arterials & Hills
 - Priority 2 - Collectors and Hills
 - Priority 3 - Secondary Roadways

OPERATION – Level 2

- 1. FULL SALTING - limited plowing, predominantly higher elevations
- 2. Salt routes 1 & 2 Appendix 3
- 3. 4 - 6 Salt/Sand spreaders, 4 - 6 operators
 - Priority 1 - All salt routes to be completed with increased manpower and equipment.

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

1. Limited plowing, higher elevations, Hospital area, Main Arterials/Collectors, bus routes and School areas.
2. Salt route & trouble areas (*Appendix 3*)
3. 6 to 8 pieces of equipment, 6 to 8 operators
4. Street Division personnel will respond
5. Sidewalks cleaned (Parks Department)
6. Pending weather, Parking lots Cleaned (Parks Department).

OPERATION – Level 4 (4” or more accumulation. Full deicing operations)

1. City-wide snow plowing. Moderate to heavy snow fall.
2. All Council Ward areas 1-5 (*Appendix 4*)
3. Parking lots/sidewalks (Parks Department)
4. Street Division personnel initial responders
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
 - Priority1 - All major arterials, berms in center of streets.
 - Priority2 - Collectors
 - Priority3 - Secondary, 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.
 - Priority 1- Central business district; Spring Street storage area
 - Priority 2- Washburn Way plaza/ shopping area; Washburn storage area
 - Priority 3- Parking lots/sidewalks; Spring Street storage area

SNOW INFORMATION DESK:

The snow information desk may 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.

APPENDIX INDEX

APPENDIX #1 - EMERGENCY CALLOUT

#2 - PRIORITY RESPONSE

#3 - SALT ROUTE

#4 - SNOW ROUTE / AREAS

#5 - EQUIPMENT LIST

#6 - CONTRACTOR SUPPORT



City of Klamath Falls Street Division

1199 S. Spring Street

Klamath Falls, Oregon 97601

Snow Plan 11/12

Priority Response

Priority response in event of snow fall of 2” or more accumulation will be in the following order.

- 1. Hospital area** – EMS, medical clinics and doctor offices access.
- 2. Schools** – All city schools from higher elevations to lower areas.
- 3. Main Arterials** – All main routes of travel. Truck Route.
- 4. High Country** – All areas with a higher elevation consisting of steeper grade streets.
- 5. Downtown Core** – Main St./ Klamath Ave. business area.
- 6. Washburn Way/S. 6th St. Shopping District** – Shasta Way and plaza areas.
- 7. Residential Areas** – Higher elevations to lower elevation as time and resources allow.
- 8. Snow haul off and clean up** - Removal of all snow stored in the center of city streets within the city right of way. Snow in the center of the streets will be hauled off within 24 hours (Main St. for example). Additional snow within the ROW will be hauled off when time allows or the need for further snow storage occurs due to timing of storm events.
- 9. Unimproved Streets and alleys** – As time and resources allow.
- 10. Maintain de-ice cinder/salt routes.** As needed for icy conditions that impair the public driving conditions.

***Priorities may change due to storm conditions, safety concerns or resources available.**

Area	SR	Locations:
3&1	1	Riverside School area, Payne Alley to Ewauna St. to Center St., 6th St. to Lincoln to 5th St., Lincoln St. to Main St. to 3rd St. back to Main St. Lincoln to 8th St, Grant St. to 9th and 10th St., Prospect St. to 9th to Pine St., 11th and Washington St.
9	1	K.U. High School back to 11th St., Worden St. to Delta St., Sargent St. to Donald St. back to Worden back to 11th,
4	1	Upham St. from Oregon Ave. to Calif. Ave., Conger School to Siskiyou St. to Trinity St. down Lakeview to Oregon Ave. Biern St. intersection.
12	1&2	Lakeshore Dr. to Lynwood Blvd., Lynwood area.
5	1&2	Nevada / Calif. Ave intersection to Pelican School , Lakeport to Montelious St.
9	1	Lytton St. to Worden St. to Shelly St. to Crescent St. to Portland St.
7	1&2	Portland St. to Roosevelt School , Eldorado Ave. to Esplanade to Melrose St. up to Hillside Ave. to Laguna St. to Loma Linda to Linda Vista back to Loma Linda down to Old Fort Rd. to James Martin Ct. to Angela Ct. over to Ponderosa School area.
6	1&2	Mills School area to
8	2	Hospital area.
6	1	Shasta Plaza area to Lucile O'Neal School to Washburn Way. All intersections with traffic signals on S. 6th St. and Washburn Way - from Washburn Way to East Main St. and from Shasta Way to Lavern St.
10	1	Stewart Lennox area.
11	2	Gatewood, Hosanna School , Ferndale and Americana areas.
		Notes: Night Shift - Dan Aspera, Sun. - Wed. 2:00 a.m. to 12:00 p.m. Joe Pridemore, Wed. - Sat. 2:00 a.m. to 12:00 p.m.

SNOW ROUTE / AREA

<u>ROUTE</u>	<u>AREA</u>	<u>WARD</u>
1	CBD (Central Business District)	1
2	Commercial / Industrial	2
3	Hills N & W of the CBD	1&5
4	Oregon – 97	5
5	Harbor Isles / Pelican City	4
6	Mills	2&3
7	Hot Springs	2&4
8	Campus	4
9	Oregon – Eastside Express way	4
10	Stewart Lennox	1
11	Gatewood, Americana, Ferndale	1
12	Lynnwood	1
13	North Hills, Shadow Hills	3
Misc.	Parking Lots	1

Cemeteries, Parks

STREET DIVISION SNOW EQUIPMENT

10 YD DUMP TRUCKS W/ PLOW – 3

T - 97 – 4	PLOW / SNOW HAULING
T - 96 - 1	PLOW / LARGE SANDER
T - 00 – 1	PLOW / SNOW HAULING

5 YD DUMP TRUCKS – 2

T - 95 - 2	4X4 / LARGE SANDER
T – 08 – 3	4X4 / LARGE SANDER

GRADERS – 1

E - 98 - GR	SNOW PLOW
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LOADERS – 4

E - 98 - L	PLOW/ BUCKET/SNOW BLOWER
E - 98 - BKHOE	BUCKET
E – 02 – BKHOE	BUCKET
E – 99 – GT	BUCKET / BOX

TRAVEL LOADERS – 1

E - 99 - TL	ATHEY
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1 TON TRUCKS – 8

T - 09 – 1	4X4 / SMALL SANDER
T - 02 - 1	4X4 / SMALL SANDER
T – 05 – 1	4x4 / SMALL SANDER
T- 11 -1	4X4 / PLOW
T-11 – 02	4X4 / PLOW
T –11 - 03	4X4 / PLOW
T- 08-1	4X4 / PLOW
T- 08-2	4X4 / PLOW

4X4 PICKUPS / W PLOWS - 2

P - 99 – 1	4X4 / PLOW
P – 99 – 2	4X4 / PLOW

SUPPORT EQUIPMENT - 1

FLEET MAINT SERVICE TRUCK

TOTAL - 22