



## SNOW MANAGEMENT PLAN 2011/2012

### **PURPOSE:**

The purpose of this Snow Management Plan is to define responsibilities and procedures to effectively deal with the winter conditions of snow and ice.

### **OBJECTIVE:**

The objective of this Snow Plan is to insure that procedures are defined and followed to maintain safe driving conditions for the motorist or to return the City streets to a safe, usable condition in as short a time period as possible during a major storm event.

### **EMERGENCY CONDITIONS:**

As ice and snow directly affect the safety and health of our community, mobilizing and removing snow/ice is considered an emergency situation requiring Public Works management staff to exercise prudent judgment and make decisions that may extend beyond normal City policies and procedures.

### **WEATHER PREDICTIONS:**

Show Low's average annual snowfall is approximately 40 inches. The majority of storms in Show Low fall into the six- to eight-inch range and the Snow Management Plan is designed for storms of this size. Alternate plans are also in place for storms that exceed the usual.

### **INITIAL RESPONSE:**

Initial response will depend on the time of day of the storm's onset as well as the expected storm event conditions. If the onset occurs during non-work hours, close coordination between the City's Police Department and Public Works Streets Division supervisors should insure timely initial response. Refer to the emergency call-out procedures (see next item).

### **EMERGENCY CALLOUT PROCEDURES:**

- A. After hours, the police dispatcher will notify the Streets Supervisor or his designee of the need for ice control.
- B. The Supervisor will determine the need for additional manpower/equipment due to additional public safety requirements.
- C. In the event of the need for additional manpower/equipment, the Streets Division will react as first responders on limited/full City snow plowing.

- D. In the event of full City snow plowing, Public Works personnel will split into two crews, with additional manpower from other divisions in Public Works.

**LEVELS OF RESPONSE:**

**Level 1**            0.5 to 2 inches

Priority 1 – Spot ice control as needed per road conditions. This will include cinders or a mix of cinders and deicer on priority areas.

**Level 2**            2 to 3 inches

Priority 1 – Limited plowing. Problem areas monitored. Hills, curves, and intersections plowed and abrasives applied as needed. School bus routes, collector roads, and transit routes will be closely monitored, plowed, and/or abrasives applied as needed. Staff has identified several areas around the city that historically have problems with ice buildup, resulting in increased danger to the motoring public. Beginning this year, the city has instituted a deicing policy. Deicer mixed with abrasives will be applied to these problem areas to mitigate the problems associated with ice buildup. The deicer chosen by the city is a naturally mined product that is 70% less corrosive than rock salt and has a proven track record in breaking up ice deposits. City-owned parking lots and sidewalks at City buildings will be cleared. City-owned parking lots will typically be plowed at two inches+ of accumulation. Priority will be given to City-owned parking lots and abutting sidewalks at facilities involved with public safety, i.e., the Police Department.

**Level 3**            3+ inches

Full call-out of snow removal equipment. Twelve-hour shifts will operate around the clock until storms have passed and all City streets are open and passable. After snowfall has ceased, crews will begin street widening to provide access to mail boxes and, finally, snow berm removal for citizens with a berm removal request signed by a physician. Deicing work will continue until all identified areas are free from hazards.

Whenever possible, all routes will be plowed. In the event of overwhelming snowfall, priority will be as follows.

- Priority 1            Streets with normally high-volume traffic
- Priority 2            Collector streets
- Priority 3            Subdivision streets

**Level 4**            (Haul off/Clean up)

1. Haul off of snow in parking lots, if needed.
2. Contractor support called in pending weather or need.
3. Snow will be hauled to a pre-designated area.

**SIDEWALKS:**

Sidewalks in front of or abutting City property (buildings, parking lots, parks) will be plowed and shoveled by Parks Maintenance and Facility Maintenance Departments and will typically be cleared and ice melt applied as needed. Sidewalks within the Arizona Department of

Transportation's (ADOT) right-of-way are the responsibility of ADOT, with the exception of both sides of the Deuce of Clubs from White Mountain Road west to Old Linden Road and the East side of Clark Road from the Deuce of Clubs north to Old Linden Road along the sidewalk portion of the walking path. Sidewalks and paths for which the City is responsible will be cleared as soon as snow has stopped falling and removal of snow from roadways is complete. Sidewalks in ADOT's area of responsibility are beyond our control and, therefore, the City is unable to provide a timeframe for their attention. Businesses and property owners are reminded that the snow that falls on their property is not the responsibility of the City; this snow must not be piled on sidewalks as this makes clearing them almost impossible.

#### **SHOW LOW REGIONAL AIRPORT:**

As snow/ice or rain accumulates airport Staff will perform braking action tests with a Bowmonk AFM2 decelerometer (or similar) to help determine whether to remove snow or by leaving the snow in place will yield the best braking action. (For instance, dry snow over ice typically yields better braking friction than ice alone.) When braking action test results indicate the need for snow removal plowing will begin with available staff and continue as required to yield the best braking action. In the event that braking action testing is not available snow removal will begin when there is sufficient accumulation of snow to remove. Public Works and Airport personnel will coordinate this effort. Results of braking action tests are made available to pilots upon requests.

#### **EQUIPMENT MAINTENANCE:**

For Levels 3 and 4 operations, mechanics will report to the Public Works shop to repair equipment that breaks. For sustained operations, the mechanics will split into two shifts to provide continuous coverage. The mechanics may be utilized in the plowing effort if it becomes necessary.

#### **PHONE ANSWERING:**

During any snow event there is a major increase in phone calls by residents and property owners identifying problems and inquiring when streets will be plowed. Phones will be manned between 7:00 a.m. and 4:00 p.m., Monday through Friday. At all other hours the incoming line has voice mail/voice messaging capabilities. Those choosing to leave a message will receive a return call as quickly as possible.

#### **STAFFING:**

For round-the-clock operations (Levels 3 and 4), a total of 13 pieces of equipment, 26 plow operators, and two mechanics are needed. Additionally, seven operators and four pieces of equipment are needed for the City parking lots and sidewalks. To achieve sustained operations, two shifts will be created, drawing from Public Works, Parks Maintenance, and Facility Maintenance, supplemented with Engineering personnel, as needed.

#### **SUMMARY:**

The Public Works Department fully recognizes the emergency conditions presented by snow and ice. Procedurally, the Snow Management Plan provides an organized approach to combating these emergency conditions. With resident and property owner cooperation, the Public Works Department is ready and able to keep the City streets and City-owned parking lots safe and

drivable during most storm events and, when major snow accumulation occurs, to return the City streets to a safe and drivable condition quickly following the storm event's cessation

**City crews are prohibited from plowing private property or driveways. In addition, they are prohibited from pulling or pushing stuck vehicles. Crews can and will assist citizens by calling appropriate emergency response personnel.**

**In the event of a medical or other emergency, citizens are urged to call 911. Emergency response personnel will contact City crews to provide access as needed.**

**Citizens can help facilitate snow removal by limiting travel during storms. In addition, limiting on-street parking will help crews to remove snow.**

**SNOW PLOW ROUTES AND EQUIPMENT:**

<b><u>ROUTES</u></b>	<b><u>EQUIPMENT</u></b>
1	10-WHEEL DUMP W/PLOW & SPREADER
2	10-WHEEL DUMP W/PLOW & SPREADER
3	10-WHEEL DUMP W/PLOW & SPREADER
4	6-WHEEL DUMP W/PLOW & SPREADER
5	6-WHEEL DUMP W/PLOW & SPREADER
6	LOADER W/PLOW
7	LOADER W/PLOW
8	LOADER W/PLOW
9	BLADE
10	PICKUP W/PLOW
11	PICKUP W/PLOW
12	1 1/2 TON TRUCK W/PLOW & SPREADER (Will be utilized in deicing operations)
13	PICKUP W/PLOW

