CAPITAL CITY FIRE/RESCUE **SOG NUMBER 15.0**

STANDARD OPERATING GUIDELINES **DATE: August 30, 2006**

REVISION DATES:

EMERGENCY RESPONSE - FLOOD / DAM BREAK

OBJECTIVE:

To describe the standard response to an incident involving a break in the Salmon Creek dam and a resultant flood.

GUIDELINE:

15.1 Salmon Creek Dam was constructed in 1915. It is a 167 foot high concrete dam that was refurbished in 1967. A 36 inch penstock outlet is controlled by a butterfly valve and sliding valve. The dam provides water to a lower generator house located next to Bartlett Regional Hospital.

The reservoir contains up to 18,000 acre-feet of water at an elevation of 1,172 feet. The maximum elevation during a major flood is 1,165.5 feet. The damn is capable of holding this depth of water for up to 96 hours and may be operated normally at 1,140 feet.

15.2 The dam is monitored remotely by AEL&P at the Thane plant. Daily and monthly inspections are conducted by AEL&P personnel. In the event of a problem at the dam, AEL&P will initiate one of three levels of response.

- **Condition Green**: High water condition at the dam. (water level above 1,140 feet elevation). AEL&P will open two valves to reduce the water elevation. The Fire Chief is advised. Remote hourly evaluations of water levels are made. Site visit is made by AEL&P. **No action on the part of CCF/R.**

- **Condition Yellow**: Damage or high water level conditions result in a potentially hazardous condition developing at the damn. Includes potential damage from an earthquake. AEL&P monitors water levels hourly and conducts inspection daily. The Fire Chief is advised and in conjunction with AEL&P Engineer, decides on activation of Emergency Plan or other actions.

  CCF/R actions: If ordered, conducts evacuation of threatened area.

- **Condition Red:** Failure of Salmon Creek Dam is imminent or has occurred. The Thane operator will initiate the Emergency Action Plan immediately.

Thane operator will initiate sirens at Lower Salmon Creek.
Thane operator will activate auto-dialer to the facilities in the lower slamoin creek flood area.
Thane operator will notify JPD Control and activate the Emergency Alert System.

CCF/R actions:

CCF/R will evacuate persons in the flood path. **In the unlikely event of a complete dam failure, the wave of water will take approximately 6 minutes to reach the lower salmon creek area.**

Evacuation routes:

KJNO radio and south : proceed past DIPAC along Egan Drive.
Valley Medical Care to Bartlett Regional evacuate **by foot** and proceed to BRH.
North of Salmon Creek Bridge evacuate to Jack's Plumbing.
Bartlett Regional Hospital: Stay in place.
North Douglas Highway: evacuate to North Juneau or to boat launch ramp area. (A surge may travel across the inlet)

15.3 Staging should be located at Channel Vista Drive and Eagan Drive north of the Salmon Creek bridge.

15.3.1 Traffic should be stopped at Channel Vista and Eagan and Eagan at Vanderbilt Hill Road. This will allow traffic to turn around.

15.4 It is expected that debris for a catastrophic flood will damage or destroy the bridges, power lines, roads, water lines, telephone lines and the structures in the area. Eagan drive most probably will be impassible. CCF/R personnel must be cautious around downed power lines and debris.

Alternate access to the hospital from the south will be through Channel Vista Drive and gravel roads. These may not be passable to vehicles. Access to BRH from the north if the roads are blocked will be either be by boat or helicopter.

15.5 CCF/R will conduct search and rescue from the damaged area, **only** after access is approved by AEL&P and the Incident Commander.

15.6 All CCF/R personnel will wear proper Personal Protective Equipment and have radio communications with the Incident Command Post. All personnel will check in and check out through Staging. The accountability system will be used by all personnel.