This is an information report and no Council action is required.

BACKGROUND
Historically, the City of Palo Alto and approximately 85 percent of water utilities in the United States use main flushing to improve water quality for water customers. Water utilities may flush distribution mains for a variety of reasons: corrosion control, sediment removal, taste and odor control, control of color, to reduce turbidity, to reduce chlorine residuals, or to reduce bacteriological growths, or as a response to customer complaints. The main objectives of Palo Alto's flushing program are to improve water quality, control bacterial growth and remove built-up sediment.

Between 1990 and 1993, the Palo Alto Water Utility did not perform an annual main flushing program because of the drought. During this period, customer water consumption was also reduced, thereby accelerating sediment buildup in the mains. During 1992, numerous calls were received complaining about water quality. At that time, staff took water samples in response to these calls and found that the reduced water quality was due to the buildup of sediment in the mains. Also, City Fire Department personnel found more sediment in their equipment from the City's water system during 1992. Water Operations staff flushed mains every year between 1993 and 2003. Staff did not receive water quality complaints due to sediment build up in the distribution mains during that period because of the success of the annual water distribution system flushing program. Between 2004 and the present, the water distribution has not been flushed on an annual basis primarily because of an insufficient number of staff to dedicate to the project.

DISCUSSION
As a result of improved staffing levels, beginning April 22, 2007 and continuing through April 28, 2007, the City's Water Utility Operations Section will open fire hydrants to flush out
sediment that has collected in the mains during the past 3 years. Flushing of the mains may cause some slight, but temporary, reduction in water pressure and possible water discoloration.

Residents will see fire hydrants and blow-off valves opened by staff and used as flush-out points from the distribution system mains. Water flushed from hydrants and blow-off valves is dechlorinated and discharged to clean street surfaces, flush storm drains, or is used to clean sanitary sewers. It is not practical to attempt to recapture this water for re-use for irrigation, filling residential swimming pools or other purposes. The water system main flushing map and schedule will be displayed in the Palo Alto Weekly, Palo Alto Daily, City Internet Home Page, and scrolling messages on the Midpeninsula Community Media Center (MCMC) community public access channels.

ATTACHMENTS

2007 Water System Flushing Schedule and Map

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