



Department of Public Works  
**City Engineering Division**

Item 17

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**Date:** May 12, 2008  
**To:** Madison Parks Commission  
**From:** Larry D. Nelson, Interim Water Utility Manager  
**Subject:** Use of Madison Park Properties for Water Utility Unit Well Sites

The Madison Water Utility is considering various sites on the near east and west sides of the city for potential well sites. These sites are to replace wells within the developed portions of the city that have been or may be abandoned. Examples include Unit Well 3 at the intersection of Johnson and First Streets and Unit Well 10 in Nakoma.

A unit well site with a well, pumping station, and reservoir would require between ½ and 1 acre.

Over the last 10 years, pumpage of groundwater has been level or slightly declining due in large part by conservation efforts on the part of the University of Wisconsin and Oscar Mayer, the loss of our "wet industries", such as Bancroft Dairy, and to a lesser extent, the use of water saving fixtures.

Balancing the declining water sales has been an increased effort to maintain and improve the quality of water. Wells are taken out of service as soon as water quality issues are detected, which requires more wells to provide the necessary service level. Furthermore, we are becoming increasingly aware that pumping a few wells at maximum capacity for long periods results in the movement of pollutant plumes to the well borehole. That was the case with Unit Well 3.

In the development of new wells, the Water Utility has been encouraged to identify Park Lands, which have been dedicated or acquired in fee by the City, as potential well sites. During the search for a well site to replace Unit Well 3, a well at Tenney Park was discussed by the siting committee but rejected by the Water Utility Staff as being contrary to the interests of the Utility.

In addition, the master plan for the Water Utility has identified a replacement site for Unit Well 10 at Malborough Park. That site is also regarded as problematic by Water Utility staff.

With that background, we request guidance from the Commission regarding the use of Parks for the installation of Water Utility Unit Wells. We will be available for questions or additional information.

Larry D. Nelson, P.E.  
Interim Water Utility Manager

cc. Richard Grasmick, Acting Park Superintendent

