

# **NEWPORT WATER DISTRICT NOKOMIS POND WATERSHED**

## **EXECUTIVE SUMMARY**

The Newport Water District serves approximately 1,600 people from Nokomis Pond, a 186-acre pond located in the northwestern part of Newport. The 1,111-acre watershed of Nokomis Pond is located in Newport and the adjoining town of Palmyra. The Nokomis Pond watershed has sparse residential development, but more than 90 percent of the watershed is forested, wetland, pasture or cropland. The Water District owns only a few acres near its water supply intake. The Town of Newport regulates development within 1,000 feet of the shoreline in its Water District Zone, while the Town of Palmyra relies upon the 250-foot Shoreland Zoning set forth by the state.

Two potentially significant activities were identified during the reconnaissance of the watershed and shoreland areas. One activity was underground petroleum storage at the school complex near the northern boundary of the watershed. No release has been documented at the school, and its location in a remote part of the watershed would tend to mitigate its influence on water quality. A second activity involved uncontrolled access at the southern end of the pond, from Libby Hill Road. This access could be used for unauthorized entry of motor vehicles, waste disposal and other activities that could impact water quality.

The pond is used for non-motorized recreational activities including fishing, boating and swimming. The Water District intake, located in the northeast part of the pond in approximately eight feet of water, is not isolated by buoys or identified by signs. However, new signs are being placed at critical locations around the watershed to protect the source. Available water quality data from the 1970s and 1980s classify Nokomis Pond as Mesotrophic, suggesting that the pond is moderately sensitive to land use-related impacts.

Based on the low density of development, the rural land uses and the absence of activities that handle chemicals in the watershed and near the pond, the overall susceptibility of the Nokomis Pond water supply is considered to be low.

## **SWAP RANKING AND RECOMMENDATIONS**

The SWAP assessment factors indicate that overall susceptibility of the water quality in Nokomis Pond is low. This conclusion is based on the general conditions observed, including the low density of development in the watershed, the rural land use and the absence of activities that handle chemicals. Specific factors considered in assessing the overall risk are summarized below.

## NOKOMIS POND SURFACE WATER ASSESSMENT

Zone	Measure	Findings	Risk Level
Watershed	Ambient Water Quality Existing Conditions	Class GPA, in full compliance. Land use characteristics present a low threat to water quality.	Low Low
	Future Development	Future development is not controlled by zoning or direct District control, but development pressure is not high in the foreseeable future.	Low-Moderate
	Overall		Low
Shoreland	Lake Classification Soils	Mesotrophic No identified exposures of erodible soils (Bangor (2-15%), Thorndike (2-8%)).	Moderate Low
	Activities Posing a Threat	Unauthorized pond access from Libby Hill Road.	Low-Moderate
	Potential for Future Threats Overall	Development of land outside District control.	Low Low
Intake	Raw Water Quality Ownership/Control	PEARL data, Trophic State = 39 District ownership very limited.	Moderate Low
	Activities Posing a Threat	Recreation, non-point source runoff.	Low
	Potential for Future Threats Overall	Increased recreational use, UST release.	Low Low
<b>Overall</b>			<b>Low</b>

### Recommendations

The overall ranking for the pond susceptibility to threats of contamination is low. Several additional actions could be considered by the Water District and the towns to provide added protection to the pond water quality.

- Active enforcement of the Shoreland and Water District Zone requirements should be encouraged with respect to future development of properties around the pond. Consideration may be given to strengthening the existing zoning and/or adopting more comprehensive zoning provisions that cover the entire watershed area of the source water supply.
- Steps should be taken to prohibit waste disposal activities and unauthorized access to the shoreland area from Libby Hill Road.
- Protection of the source intake is needed in the area to indicate the sensitivity of the resource to recreational activities or other public access. This can be accomplished by placing markers, signs or other provisions to be in highly visible locations.
- A program should be developed to establish permanent protection to the land surrounding the pond through conservation easements, land purchases or other controls.

**MARCH 2003**

prepared for

Source Water Assessment Program  
Drinking Water Program  
Maine Department of Human Services  
11 State House Station  
Augusta, Maine 04333



prepared by

Drumlin Environmental, LLC  
15 Franklin Street, P. O. Box 392  
Portland, Maine 04112-0392  
(207) 771-5546