

BANGOR WATER DISTRICT FLOODS POND WATERSHED

EXECUTIVE SUMMARY

The Bangor Water District has 10,000 service connections serving an overall population of approximately 55,000 from Floods Pond. The 5,602-acre watershed of Floods Pond and nearby Burnt Pond is located in Otis, Dedham and Clifton. The surface area of Floods Pond is of moderate size. The average depth of the pond is shallow to moderate with one area in excess of 100 feet deep. Nearly the entire watershed area is covered by forest growth. The shoreland and upland watershed areas are owned by the Water District or protected through conservation easement and landowner agreements. Using locked gates, posted signs, public awareness education and visual observation, the Water District maintains a high level of control to prohibit access and recreational activities in the watershed.

No significant land use threats were identified during the reconnaissance of the watershed. The Water District oversees the forest through a management plan that is protective of the water resource. In addition, watershed protective measures preclude agricultural activities including grazing animals and other farming activities as a multi-barrier approach to eliminate the introduction of Giardia and Cryptosporidium into the water supply.

The Water District operates a pump station and treatment plant in the watershed of Floods Pond to draw water from the intakes and deliver it into the distribution system. The water is used as an unfiltered source. Treatment includes prechlorination, ozonation, chloramination, fluoridation and lime addition for pH adjustment. Raw water monitoring of the pond for several parameters and testing after treatment show good water quality from this source, i.e., all test parameters meet applicable state and federal drinking water standards.

Based on the undeveloped, forested nature of the watershed, extensive ownership and protection controls by the Water District, recreational controls and public awareness, the overall susceptibility of the Floods 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 Floods Pond is low. This conclusion is based on the protections that exist for 98 percent of the watershed, the forested land use and the absence of potential threats from land use activities. Specific factors considered in assessing the overall risk are summarized below.

FLOODS POND SURFACE WATER ASSESSMENT

Zone	Measure	Findings	Risk Level
Watershed	Ambient Water Quality	Class GPA, in full compliance.	Low
	Existing Conditions	Land throughout a majority of the watershed is protected; forest cutting managed to be protective; public use is prohibited.	Low
	Future Development	Water District ownership and protective agreements will prevent future development in a majority of the watershed.	Low
	Overall		Low
Shoreland	Pond Classification	Oligotrophic	Low
	Soils	Steeply sloping soils are covered by natural forest growth although erosion potential is high, if disturbed.	Low
	Activities Posing a Threat	None identified.	Low
	Potential for Future Threats	None identified.	Low
Intake	Raw Water Quality	Testing shows good quality.	Low
	Ownership/Control	Water District ownership protection around intake area.	Low
	Activities Posing a Threat	Access to intake area is not allowed without Water District permission.	Low
	Potential for Future Threats	None identified.	Low
Overall			Low

Recommendations

The overall ranking for the pond susceptibility to threats of contamination is low. The Water District has established protection for a majority of the watershed land area. The Water District controls public access and prohibits recreational activities using signs and through visual observation and monitoring. The quality of water in the pond is monitored through an extensive testing program. The forest is managed through a plan that promotes harvesting practices that are protective of water resources. The Water District is active in maintaining strong public awareness for water supply protection in the surrounding communities. The Water District can continue its efforts with watershed protection through the following activities.

- Continue to implement a thorough water quality-monitoring program to look for potential trends over time.
- Continue working with landowners to establish protection on the land area that remains in private ownership.
- Ensure that materials handling procedures are reviewed and updated, as needed, with changes in personnel or changes with vendor deliveries.

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