

# THE ROLE OF THE WATER OPERATION SPECIALIST IN THE DRINKING WATER SOURCE PROTECTION PROGRAM (DWSP2) PLAN PROCESS

By Steven Winkley

## Introduction

With well documented incidents of contamination in New York and elsewhere, there has been a renewed focus in recent years on the protection of drinking water sources. New York State is developing a framework to help communities develop and implement protection plans. This framework is available to review at: [https://www.dec.ny.gov/docs/water\\_pdf/dwsp2draftframework.pdf](https://www.dec.ny.gov/docs/water_pdf/dwsp2draftframework.pdf)

A Drinking Water Source Protection Program (DWSP2) Plan is a customized plan to protect sources of drinking water from potential contamination. Such a plan is developed, implemented, and maintained by communities with assistance from state agencies and various technical assistance providers such as the New York Rural Water Association (myself).

There are four phases involved with preparation of a DWSP2 Plan. These are: 1) formation of a stakeholder group; 2) formulation of a drinking water source assessment; 3) identification of protection and implementation strategies; and 4) progression and maintenance of the plan (implementation). Water system operation specialists should be a key member of the stakeholder group and can be active in each of these phases. Integral in the process of developing a drinking water source protection plan is an active stakeholder group.

## The Drinking Water Source Assessment

The first critical role of the water system operation specialist is helping the stakeholder group to develop an overview of the water system as part of a drinking water source assessment. This portion of the DWSP2 Plan is essentially an update of the source water assessment that was performed for every water system in the early 2000's in which source water assessment areas were delineated, potential contaminant inventories were mapped, and a susceptibility analysis was performed. This information, required to be part of your annual water quality report, is largely outdated.

Water system operation specialists can help the stakeholder group to complete the assessment in several ways. First, they can supply vital information on the nature of the surface or groundwater supply, the well or intake locations, data on the water system infrastructure, withdrawal rates, water monitoring results, and trends in raw and finished water quality. This information is required as part of the DWSP2 Plan framework.

The second portion of the source assessment is the drinking water source protection map. This map displays the drinking water source protection areas and land use for the drinking water sources. Information supplied by the water system operation

specialist on the nature of land use around sources and within the protection areas on this map will be utilized to inventory potential sources of contamination. This inventory is the last element of the source assessment. No one knows the land use activities in the vicinity of drinking water sources better than the water system operation specialist. A review of the potential contaminant source inventory by the operation specialist will help "ground-truth" this effort.

## Protection and Implementation Strategies

The DWSP2 Plan identifies specific protection and management methods that can minimize risks posed by the potential contaminant sources identified in the assessment. The plan framework identifies many different types of protection and management methods. Input from water system operation specialists on the selection of protection and management methods is essential. In small communities these individuals are often the same individuals that are identified to implement the protection and management methods. For example, if the use of best management practices around water supply sources is identified as a protection method, the water system operation specialist would be responsible for overseeing this.

Last, but not least, water suppliers are responsible for making the final determination of what information in the plan could represent a security-vulnerability risk. The water system operation specialist together with elected officials have the final say on what elements of the DWSP2 Plan are made available to the public. This can vary widely from community to community.

## Last Thoughts

The DWSP2 Plan framework is being finalized as I write this article. However, what will not change is the critical role of the water supply operation specialist in the drinking water source protection planning process. You may be the first person that a state agency or technical assistance provider contacts regarding the development of a DWSP2 Plan. Please keep an open mind about this process and know that your opinions and contributions are crucial. As always, you can contact me at [winkley@nyruralwater.org](mailto:winkley@nyruralwater.org) or 1-888-NYRURAL, ext. 170 with any questions. 💧💧

Steven Winkley  
Hydrogeologist & Source Water  
Protection Specialist  
[winkley@nyruralwater.org](mailto:winkley@nyruralwater.org)

