Steady Implementation of Local Source Water Protection Activities from 2011 to 2015

In mid-January 2015, Ohio’s Source Water Protection (SWAP) program sent letters to 736 public water systems, requesting they fill out an online report identifying the source water protection strategies being implemented in their communities (for municipal systems) or on their properties (for nonmunicipal systems). Only community public water systems with high or moderately susceptible source waters were targeted. By March 4, more than 470 systems had responded (64 percent). Municipal systems were more responsive than nonmunicipal systems (69 percent vs. 49 percent), and surface water systems—which are all municipal systems—were more responsive than ground water systems (67 percent vs. 45 percent).

The results are summarized here and compared to the 2011 results, when the request was made using an identical online form. The 2011 effort had a better return rate (67 percent of the systems responded in 2011 vs. 64 percent in 2015), but the time period provided in 2011 was 12 weeks instead of six. Even though the respondents in 2011 and 2015 were not identical, the results were remarkably similar. In general, the types of protective strategies being implemented varied less than 1 percentage point.

As shown in the graph below, approximately 52 percent of the targeted group reported that they were actively implementing source water protection strategies, compared to 51 percent in 2011. A significantly smaller percentage of the target group reported implementing few to no protective strategies (9 percent in 2015 vs. 13 percent in 2011).
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Favored Strategies
In both 2011 and 2015, the most commonly implemented outreach strategies were
1) sending out the annual Consumer Confidence Report;
2) hosting water plant tours; and
3) installing road signs identifying an area as a source water protection area.

Favored strategies for protecting source waters from specific contaminant sources include sewer line testing and visual inspections. Not surprisingly, the number of systems monitoring source water for cyanobacteria increased (from 11.5 to 14.0 percent) and the number that are implementing a process for harmful algal blooms (HABs) also increased (from 8.28 to 12.1 percent). Fourteen percent of the targeted systems are surface water systems.

Coordination
Perhaps the most notable improvement from 2011 to 2015 is in coordination with other groups; increased contact was reported with 9 of 14 listed organizations. Coordination with the local health department and the local emergency management agency remained the most frequently reported.

Concerns
As in 2011, oil and gas drilling topped the list of concerns for protection of drinking water sources, but increased only slightly (from 28 to 28.3 percent). A larger percentage (~38 percent) stated they had no concerns for their source water.

Incentives
Respondents indicated they would most value financial assistance for:
1) purchase of land;
2) source water sampling and analysis; and
3) best management practices (BMPs) for agricultural runoff. In 2011, the first two choices were identical, but the third-ranked choice was installing monitoring wells.

Average Number of Strategies
Although the list of strategies for municipal and nonmunicipal systems is quite different, and the total number of strategies possible for municipal systems is much longer than the list for nonmunicipal systems, both types of systems averaged implementation of 11 listed strategies. (In 2011 the average number was 10.4.) Twelve municipal systems reported implementing 30 or more strategies out of a list totaling 55.

For More Information
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