I. INTRODUCTION

The U.S. Environmental Protection Agency (U.S. EPA) has been promoting the integration between Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) Programs for some time now. As highlighted in the FY14/15 National Water Program Guidance, collaborative actions are strongly encouraged that integrate CWA and SDWA source water protection (SWP) activities to advance public health and environmental protection objectives.

The recently released CWA/SDWA Toolkit—*"Opportunities to Protect Drinking Water Sources and Advance Watershed Goals through the Clean Water Act: A Toolkit for State, Interstate, Tribal and Federal Water Program Managers*"—was the result of a multi-year effort by state and U.S. EPA clean water and safe drinking water programs. This Toolkit is designed to enable state and U.S. EPA water quality practitioners to better protect drinking water supplies using regulatory and non-regulatory provisions of the Clean Water Act and achieve mutual goals—better protected sources of drinking water and improved water quality. While the Toolkit provides numerous examples of activities that can be integrated, a number of Region 5 states believed another tool was needed to evaluate the extent to which programs were integrated. Based upon that input, Region 5 has developed a draft CWA/SDWA Integration Guide in the form of a checklist.

II. PURPOSE OF THE GUIDE—REGIONAL VERSION

This regional version of the CWA/SDWA Integration Guide is intended to be used by Region 5's Water Division to identify where we should focus efforts to improve our regional collaboration process to incorporate SWP into clean water programs and vice versa, as well as to encourage communication among regional and state programs. Using this guide may help us to identify where we can share information and influence each other's (i.e., CWA and SDWA) programs to protect water resources. We can also encourage CWA/SDWA integration within the region as part of our coordination with state programs to protect drinking water sources and promote SWP, as well as to determine how the SWP program can support the CWA program. Attachment A provides a list of reasons why we should integrate our CWA and SDWA activities.

III. CWA/SDWA INTEGRATION GUIDE QUESTIONS

The Integration Guide checklist below will be completed by the CWA/SDWA Integration Team. The information collected will be used to establish a baseline for determining CWA/SDWA integration success and checking progress periodically by conducting regular evaluations. The CWA/SDWA Integration Team will also make suggestions about where there are opportunities for improvement of implementation activities at the regional level.

PROGRAM- AND STATE-SPECIFIC QUESTIONS	YES	NO	DESCRIPTION/EXPLANATION
1. WATER QUALITY STANDARDS FOR DRINKING WATER USE (WQB, GWDWB) *The purpose of the following questions is to gather information about what water quality standards (WQS) states have adopted to protect the drinking water (also often called public water supply) use and regional input to date.* **Region 5 program contact: Tom Poleck**			
a. Did the region provide input to each state, either as part of the state's triennial standards review process or as new national guidance is developed, on new guidance related to drinking water designated uses and criteria? Please describe.	☐	☐	
b. Do any regional program-specific checklists/SOPs/ methodologies/etc. exist that incorporate SWP? Please describe.	☐	☐	
i. If so, have these documents been shared with regional SWP programs? Please describe.	☐	☐	
2. MONITOR/ASSESS WQS ATTAINMENT FOR DRINKING WATER USE (WQB, WWB, GWDWB) *The purpose of the following questions is to determine whether states are monitoring and assessing waterbodies for drinking water use as described in the monitoring strategy and assessment methodology and regional input to date.* **Region 5 program contacts: Tom Poleck, Ed Hammer, Donna Keclik**			
a. Has the region provided comments on each of the state monitoring strategies related to assessing waterbodies for drinking water use? If so, please describe when and what were each of the state's responses to those comments?	☐	☐	
b. Has the region provided comments on each of the state assessment methodologies related to assessing waterbodies for drinking water use? If so, please describe when and what were each of the state's responses to those comments?	☐	☐	
c. Do any regional program-specific checklists/SOPs/ methodologies/etc. exist that incorporate SWP? Please describe.	☐	☐	
i. If so, have these documents been shared with regional SWP programs? Please describe.	☐	☐	

PROGRAM- AND STATE-SPECIFIC QUESTIONS	YES	NO	DESCRIPTION/EXPLANATION
3. LIST IMPAIRED WATERS FOR DRINKING WATER USE IMPAIRMENTS (WQB, WWB, GWDWB) *The purpose of the following questions is to determine whether states are making drinking water use impairment determinations and regional input to date.* **Region 5 program contacts: Donna Keclik**			
a. Has the region provided comments on each of the state CWA Section 303(d) lists related to drinking water use impairment decisions? If so, please describe when and what were each of the state's responses to those comments.	☐	☐	
b. Do any regional program-specific checklists/SOPs/methodologies/etc. exist that incorporate SWP? Please describe.	☐	☐	
i. If so, have these documents been shared with regional SWP programs? Please describe.	☐	☐	
4. TMDL DEVELOPMENT FOR DRINKING WATER USE IMPAIRMENTS AND IN SOURCE WATERS (WWB) *The purpose of the following questions is to determine whether and how the drinking water program is involved in the development of TMDLs or other pollution control plans needed to address: (1) drinking water use impairments and (2) other types of impairments in sources of drinking water.* **Region 5 program contacts: Dave Werbach**			
a. Have we developed or reviewed a TMDL or another type of pollution control plan to address drinking water use impairments? If so, please describe how the regional drinking water program is involved in this planning process.	☐	☐	
b. Have we developed or reviewed a TMDL or another type of pollution control plan to address another use impairment (e.g., recreation, aquatic life) in a waterbody also used as a drinking water source? If so, please describe how the regional drinking water program is involved in this planning process.	☐	☐	

PROGRAM- AND STATE-SPECIFIC QUESTIONS	YES	NO	DESCRIPTION/EXPLANATION
c. Do any regional program-specific checklists/SOPs/ methodologies/etc. exist that incorporate SWP? Please describe.	☐	☐	
i. If so, have these documents been shared with regional SWP programs? Please describe.	☐	☐	
5. INTEGRATED WATERSHED PLANNING/IMPLEMENTATION (WWB, GWDWB) *The purpose of the questions below is to determine whether and how source water, ground water, and water quantity considerations are incorporated into integrated watershed planning (or integrated water resource management or IWRM[1]) initiatives, where they exist.* **Region 5 program contacts: Paul Thomas, Cary McElhinney**			
a. Where integrated watershed planning processes exist in SWP areas, is the regional drinking water program involved (e.g., to incorporate the source water assessment or any SWP plans)? Please describe. *Question: How does the region find out about these plans (e.g., through the state 319 program)?*	☐	☐	
b. Where integrated watershed planning processes exist in SWP areas, is the region involved in reviewing these processes to ensure that ground water quality, surface/ground water quantity, water efficiency, and storm water are incorporated? Please describe. *Note: For example, see the Chicago Metropolitan Agency for Planning (CMAP) GO TO 2040 comprehensive regional plan for northeast Illinois developed with some CWA funding, which includes these elements.*	☐	☐	
c. As part of the region's review of watershed-based plans, do the plans also consider SWP?	☐	☐	
i. Is it a state requirement?	☐	☐	

[1] The U.S. EPA *National Water Program 2012 Strategy: Response to Climate Change* "… uses IWRM to describe opportunities for state, interstate, tribal, and local officials to voluntarily collaborate at watershed or aquifer scales, with support from federal agencies, to protect and preserve freshwater resources through mutually beneficial solutions. IWRM calls for intersector planning (e.g., between the energy, water, and agricultural sectors) to sustainably manage water resources. A shorthand way to think of IWRM is 'one water.' To be most effective, IWRM should take into account water quantity and quality, surface water and ground water, salinity of coastal estuaries, land use, floodplain management, point and nonpoint sources of pollution, green and grey infrastructure, and climate change adaptation and mitigation."

PROGRAM- AND STATE-SPECIFIC QUESTIONS	YES	NO	DESCRIPTION/EXPLANATION
d. Does the region review state watershed planning guidance?	☐	☐	
i. If so, does the region recommend prioritizing SWP areas? Please describe. *Note: U.S. EPA issued watershed planning guidance at http://water.epa.gov/polwaste/nps/handbook_index.cfm.*	☐	☐	
e. Do any regional program-specific checklists/SOPs/methodologies/etc. exist that incorporate SWP? Please describe.	☐	☐	
i. If so, have these documents been shared with regional SWP programs? Please describe.	☐	☐	
6. CONTROL NONPOINT SOURCES (WWB, STPB) *The purpose of the questions below are to determine whether SWP is incorporated into the regional CWA Section 319 and Clean Water State Revolving Fund (CWSRF) programs, where appropriate.* **Region 5 program contacts: Janette Marsh, Paul Thomas**			
a. Has the region reviewed the state CWA Section 319 program assessment and management plans to recommend that they mention SWP? Please describe.	☐	☐	
b. As the states revise their Section 319 management plans, is the regional source water protection program routinely providing review and comment on the plan? Please describe.	☐	☐	
i. Please describe how many states have recently updated their plans and how many of the state plans include SWP. *Note: In general, states revise their plans every five years, and each Region 5 state is on a different schedule. Any activity funded by Section 319 funds must be discussed in these plans.*	☐	☐	
c. Is the regional drinking water program involved in the review of Section 319 grant applications in SWP areas? Please describe.	☐	☐	

PROGRAM- AND STATE-SPECIFIC QUESTIONS	YES	NO	DESCRIPTION/EXPLANATION
d. Do state CWSRF programs and intended use plans (IUPs) prioritize funding for controlling nonpoint sources in source waters? Please describe.	☐	☐	
e. Do any regional program-specific (Section 319 or CWSRF) checklists/SOPs/methodologies/etc. exist that incorporate SWP? Please describe.	☐	☐	
i. If so, have these documents been shared with regional SWP programs? Please describe.	☐	☐	
7. CONTROL POINT SOURCES WITH PERMITS (NPDESB, UICB, STPB) *The purpose of the following questions is to determine how SWP can be integrated into and prioritized within the permitting process.* **Region 5 program contacts: George Azevedo, Ross Micham, Julianne Socha, Bob Newport**			
a. Is the region prioritizing its review of NPDES permits based on proximity to source water protection areas? Please describe.	☐	☐	
b. Is the region sharing guidance with states and municipalities about implementing green infrastructure in ways to avoid ground water contamination in source water protection areas? Please describe.	☐	☐	
c. Do state CWSRF programs and IUPs prioritize funding for controlling point sources in source waters? Please describe.	☐	☐	
d. Do any regional program-specific (NPDES or CWSRF) checklists/SOPs/methodologies/etc. exist that incorporate SWP? Please describe.	☐	☐	
i. If so, have these documents been shared with regional SWP programs? Please describe.	☐	☐	
8. ENFORCEMENT (WECAB) *The purpose of the questions below is to determine how SWP areas can be prioritized in regional enforcement programs.* **Region 5 program contacts: Ryan Bahr, Rhiannon Dee**			
a. Does the regional enforcement program have a policy or strategy that gives priority to SWP areas? Please describe.	☐	☐	

PROGRAM- AND STATE-SPECIFIC QUESTIONS	YES	NO	DESCRIPTION/EXPLANATION
b. Is the region sharing guidance with states and municipalities about implementing green infrastructure in ways to avoid ground water contamination in source water protection areas? Please describe.	☐	☐	
c. Do any regional program-specific checklists/SOPs/ methodologies/etc. exist that incorporate SWP? Please describe.	☐	☐	
i. If so, have these documents been shared with regional SWP programs? Please describe.	☐	☐	
9. SPECIAL INITIATIVES AND CONTINUING PLANNING PROCESS[2] (WQB, WWB, NPDESB, UICB, WECAB, STPB, GWDWB) *The purpose of the questions below is to determine whether additional opportunities exist to more effectively integrate SWP into CWA and SDWA programs—either through special initiatives, the continuing planning process, or tracking project outcomes.* **Region 5 program contacts: Tom Davenport, Santina Wortman**			
a. Has the region reviewed the state's nutrient reduction strategy and provided comments to the state about whether it addresses SWP? Please describe.	☐	☐	
b. Do other CWA or SDWA initiatives or opportunities exist to integrate SWP (e.g., headquarters-sponsored SWP workshops) at the regional level? Please describe. *Question: In general, how could we use the outcomes that are tracked in each of the programs (e.g., decrease in point and nonpoint source loadings, reduced drinking water treatment costs, impairment delistings) to inform the continuing planning process?*	☐	☐	
c. Where applicable, in the regional reviews of these processes and plans, do the state continuing planning processes and water quality management plans address SWP (e.g., see CWA Sections 208 and 303(e) and 40 CFR Part 130)? Please describe.	☐	☐	

[2] CWA Section 303(e) indicates that each state shall have a "continuing planning process" that will result in plans including effluent limitations; Section 208 areawide waste management plans; TMDLs; adequate implementation, including compliance schedules for revised or new WQS, etc.

PROGRAM- AND STATE-SPECIFIC QUESTIONS	YES	NO	DESCRIPTION/EXPLANATION
d. Do any regional program-specific checklists/SOPs/ methodologies/etc. exist that incorporate SWP? If so, please describe, for example, if there are regional/headquarters checklists to review the state nutrient reduction strategies.	☐	☐	
10. SWP PROGRAM[3] (WQB, WWB, NPDESB, UICB, WECAB, STPB, GWDWB) *The purpose of the questions below is to document the status of the state and tribal SWP programs. Question: Are there any other questions we could ask of the regional SWP program to evaluate integration (e.g., to track which state-specific documents the regional SWP program has recently reviewed, to ensure the usefulness of the information the regional SWP program is providing to regional/state/tribal CWA programs)?* **Region 5 program contacts: Wendy Drake, Cary McElhinney, Bill Spaulding, Joe Janczy (WI)**			
a. Are the state drinking water programs updating source water assessments, working to make sure that protection plans are in place, and tracking implementation, etc.? Please describe.	☐	☐	
i. Are CWA programs part of the review of these documents? Please describe.	☐	☐	
b. Are there any U.S. EPA funding sources that can be used by programs to fund on-the-ground activities or provide technical assistance in SWP areas? Please describe.	☐	☐	
c. Does the regional SWP program know which SWP areas are state priorities? Please describe.	☐	☐	
i. If so, please describe how this information is communicated to regional CWA programs.	☐	☐	
d. Do any regional program-specific checklists/SOPs/ methodologies/etc. exist that document how to conduct SWP-related reviews?	☐	☐	
i. If so, have these documents been shared with regional CWA programs? Please describe.	☐	☐	

[3] See attachment B for SWP-related information that the Region 5 GWDWB SWP program can provide to Region 5 CWA programs.

ATTACHMENT A: Why we should integrate our CWA and SDWA activities

Incorporating source water protection (SWP) into our CWA programs provides a more holistic, efficient, and economical means to manage water resources; leverages additional funding sources; and allows for increased engagement with stakeholders with a vested interest in water quality improvements. These benefits are explained below:

- HOLISTIC: **Better protect source water for *all* uses; SWP of both surface and ground water drinking water sources provides a more holistic approach to water resource management and includes issues related to both source water *quality* and *quantity*.** For example, surface water impairments could be the result of contaminated ground water, which would not be discovered unless ground water monitoring data that states collect are considered. Also, in Region 5 where ground water is prevalent, ground water impacts should be considered where green infrastructure is promoted to help clean up urban waters. Green infrastructure can have both positive and negative impacts on ground water; green infrastructure can increase the recharge to dwindling ground water supplies, but it is also necessary to make sure that surface water pollution isn't redirected to underground sources through infiltration without any natural treatment. Protection of underground sources of drinking water involves careful siting and selection of green infrastructure practices in wellhead protection areas, especially at brownfields/cleanup sites.

  Another example is excess salts (primarily chlorides) discharged by wastewater treatment plants (WWTPs) that originate from individual residential water softening units in amounts that cannot be removed to protective levels (for aquatic life and other uses) by WWTPs. In this case, one potential outcome that would reduce the amount of salt entering the WWTP is the centralization of softening treatment at the public water system and removal of the individual residential softeners. This would require significant and unique coordination and communication between government programs, municipal water departments, and residents.

- EFFICIENT: **Better bang for the buck: on-the-ground activities, such as agricultural best management practices (BMPs), can have multiple benefits to CWA and SDWA programs.** For example, green infrastructure measures that take into account how the water infiltrates into the ground can serve to protect ground water quality and quantity, as well as address flooding and runoff problems that affect surface waters. In addition, in areas where the ground water is susceptible to contamination or where there is a connection between ground water and surface water, BMPs that protect surface water quality will likely also protect ground water and vice versa in some cases.

- ECONOMICAL: **The increasing costs of drinking water treatment may not be sustainable in the long term.** The treatment costs at public water systems (PWSs) to remove anthropogenic contaminants in source waters is increasing in certain areas (e.g., where harmful algal blooms are increasing), which may impact system resiliency, particularly for smaller systems, because PWS customers bear the cost of this additional treatment.

- LEVERAGE: **SWP-related funding may be leveraged in SWP areas.** Although it is unknown whether these funding sources will continue to be available, the first two are potential sources of SWP-

related technical assistance that could be used to enhance stakeholder outreach in SWP areas, and the third is a potential source for on-the-ground activities in SWP areas:

(1) The U.S. EPA headquarters SWP program has provided contractor assistance to help coordinate stakeholder outreach workshops in the regions (e.g., to help with planning and facilitation, creating mailing lists, sending invitations, preparing workshop summaries, etc.). In the recent past, headquarters has provided this funding to support a sensible salting workshop in Illinois, a nutrients and pesticides workshop in Indiana for commercial applicators and water plant operators, and a drinking water designated use workshop with Wisconsin CWA and SDWA program managers.

(2) The Source Water Collaborative (SWC) is supporting three SWP pilot projects, including one in Wisconsin, in which they're providing contractor assistance (e.g., to develop communication plans).

(3) In addition, Wisconsin is using Drinking Water State Revolving Fund (DWSRF) wellhead protection set-aside funding to support on-the-ground activities (i.e., agricultural best management practices) for its nitrate in ground water project that is also one of the SWC pilot projects mentioned above.

- STAKEHOLDERS: **Involving the drinking water community may bring to the table a broader group of stakeholders who are invested in the quality and quantity of their source waters from a public health and economic perspective.**

  – In some cases, PWSs, particularly larger ones, may have resources to become stakeholders in various initiatives. PWSs have a vested interest in the quality of the source water and may be interested in participating in the implementation of Total Maximum Daily Loads (TMDLs), for example. In addition, PWSs collect some ambient water quality monitoring data that they might be willing to share, and the state agencies that oversee the PWSs may have access to monitoring data that could be useful to track trends/progress.

  – Outreach to connect the public to their drinking water sources (e.g., through U.S. EPA's WaterSense water conservation program) can potentially increase the number of people interested in learning about how to help protect water resources. People might be more willing to get involved in protection efforts if they know that the quality and quantity of water available to their children can be impacted by their actions. Therefore, focusing on drinking water may be a good way to connect people to the other important functions of water resources, such as the quality of fish and wildlife habitat.

ATTACHMENT B: What information can the Region 5 GWDWB SWP program provide to Region 5 CWA programs?

In addition to providing source water protection (SWP)-related comments on state-specific documents, the Region 5 GWDWB SWP program may be able to provide the following types of information that could be useful to Region 5 CWA programs to protect source waters:

(1) Locations of SWP areas and public water systems (PWSs), although this information is sensitive, so the exact locations are kept "close hold." However, information about the number of PWSs in a particular location (e.g., by watershed, county) can be aggregated so that it can be made available more broadly. (Source: Safe Drinking Water Information System/Federal version (SDWIS/Fed), which can be accessed by some GWDWB and Water Division staff. In addition, aggregated PWS data are available via the Drinking Water Mapping Application to Protect Source Waters (DWMAPS), MyWATERS Mapper, and Nitrogen and Phosphorus Pollution Data Access Tool (NPDAT).

(2) Information from a PWS source water assessment, which includes a description of the SWP area, an inventory of potential contaminant sources within the SWP area, a susceptibility analysis, and protective strategies. (Sources: Some states post these assessments online or via password-protected websites, and if not, this information could be requested from the state SWP programs.)

(3) Information from a PWS's SWP plan (SWPP), if one exists. (Source: The state SWP program may have access to SWPPs and may have additional information about a particular SWP area, such as whether there have been special investigations conducted.)

(4) PWS health-based SDWA violations in the last 10 years. (Source: Envirofacts)

(5) Contaminant detects and treatment used. Some states (IL, IN, and WI) make PWS monitoring data publicly available, which includes detects in finished water, as well as some raw (ambient) water quality data (e.g., total organic carbon). Consumer confidence reports (CCRs), if available online, are prepared by community water systems each year by July 1st and include detects of contaminants and can include other useful information (e.g., the type of treatment used, such as activated carbon for taste and odor issues, which can be related to nitrogen and phosphorus pollution). The type of treatment used by PWSs can also be found in SDWIS/Fed, but this information may not be the most up-to-date. Some larger PWSs have websites with treatment and other useful information, too. The state drinking water program also may be able to obtain information. (Sources: The web, SDWIS, or state drinking water programs.)

(6) Proximity of the SWP area to a designated sole source aquifer (SSA), which indicates that the ground water resource is recognized by U.S. EPA as sensitive and critical and warrants special attention. (Source: Bill Spaulding is the regional SSA coordinator.)

(7) Ambient ground water quality data that states and USGS are collecting. (Sources: state SWP programs (e.g., IL, IN, OH, MN, WI) and USGS websites.)

(8) Potential stakeholders, such as any PWSs or other entities mentioned in the source water assessment or SWP plan. (Sources: PWS source water assessments, SWP plans, and PWS websites.)