

US EPA ARCHIVE DOCUMENT

PROTECTING WHAT DOESN'T EXIST: WEST VIRGINIA'S STATEWIDE PUBLIC WATER SUPPLY USE DESIGNATION

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The West Virginia Environmental Quality Board, the agency that sets West Virginia's water quality standards, has begun applying the public water supply use in all state streams, regardless of whether the stream is used as a drinking water supply. A universal designation of this sort is appropriate for aquatic life or water contact uses (the fishable/ swimmable uses), which can be present throughout a stream, but it creates problems where the use can be fairly limited to a particular place. In this case, the public water supply use can be narrowly circumscribed as the place where the withdrawal of water occurs.

In some situations there are significant differences between the criteria for the public water supply use and the mandatory Clean Water Act fishable/swimmable uses. In public water supplies, coal mining operations must remove manganese to 1 mg/l, even though there is no downstream intake, and even though manganese reduction requires high pH levels for treatment that are costly and not environmentally beneficial. In addition, the public water use criteria for carcinogens are much lower than other use category criteria. The limits in National Pollutant Discharge Elimination System (NPDES) permits for industrial dischargers must be set at levels sufficient to meet public water supply use criteria immediately outside a mixing zone, even though there is no drinking water supply downstream that could be affected by the discharge.

Rather than identifying public water intakes and setting upstream controls as appropriate to protect them, West Virginia is proposing to remove the public water supply use where it would interfere with industrial or municipal operations. However, the reasons for the use removal do not easily fit the use removal categories in 40 C.F.R. §131.10(g). A use that is not an existing use is only removed where the use cannot be attained, or where attaining the use would cause widespread social and economic harm. In many locations the public water supply use could be attained, but it simply does not exist and is unlikely to exist in the future. Therefore, the use removal standards in the regulation may be ill-suited to removing the "optional" uses (those other than fishable/swimmable mandated by the Clean Water Act).

The presentation would explore aspects of use designation and removal that have applicability beyond West Virginia. We would consider whether designation of the public water supply use, and similar optional uses, require a use attainability analysis before a state may adopt them, as provided by 40 C.F.R. 131.10(j). We will also look at the ways uses could be removed where the use is capable of being achieved, but the use simply does not exist, and provide suggestions for approving use removals in those situations. Finally, we will compare Region 3 states' various methods of protecting public water supply uses.