AGENDA

Utah Water Quality Standards Workgroup February 22, 2021 1:00-2:00 Remote Meeting

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C. Bittner cell phone if problems connecting 801-243-0180

Subject	Discussion	Details/Supporting Documents
	Lead	
Welcome and roll call	Chris Bittner, DWQ	
Progress Update: Implementation of EPA (2013) ammonia criteria	Chris Bittner, DWQ	2013_NH4_Implement_updt_02222021.pdf
Progress Update: EPA (2016) selenium criteria recalculation	Chris Bittner, DWQ	Selenium_Species_Deletion_Proc_ID02222021.pdf
Proposed next meeting		May 17, 2021 1:00 PM



Meeting Summary Utah Water Quality Standards Workgroup February 22, 2021

2013 EPA Ammonia Criteria Implementation

Mr. Bittner provided an update on DWQ's progress with implementing the 2013 EPA ammonia criteria for Utah (see supporting materials). In response to questions, the group discussed the EPA definition of "residents" from EPA (2013) recalculation procedure. Defining residents is a critical step for criteria development because criteria are derived to protect the residents that comprise the aquatic community. An essential concept is that residents are not limited to current presence or absence¹.

Per EPA (2013), the equivalent terms "resident" or "occur at the site" includes life stages and species that:

- a. are usually present at the site,
- b. are present at the site only seasonally due to migration,
- c. are present at the site intermittently because they periodically return to or extend their ranges into the site,
- d. were present at the site in the past, are not currently present at the site due to degraded conditions, but are expected to return to the site when conditions improve, or
- e. are present in nearby bodies of water, are not currently present at the site due to degraded conditions, but are expected to be present at the site when conditions improve.

The terms "resident" or "occur at the site" do not include life stages and species that:

a. were once present at the site but cannot exist at the site now due to permanent alterations of the habitat or other conditions that are not likely to change within reasonable planning horizons, or b. are still-water life stages or species that are found in a flowing-water site solely and exclusively because they are washed through the site by stream flow from a still-water site.

The resident definition was discussed in the context of the Jordan River. While unionid mussels historically were present in the Jordan River, they are not expected to return within reasonable planning horizons. Mr. Meyers noted that the invasive mollusk, corbicula, may prevent the return of unionid mussels even if degraded conditions improve. Competition from invasive species is considered when evaluating if unionid mussels are residents. Mr. Bittner noted that DWQ coordinates with the Utah Division of Wildlife Resources when evaluating whether unionid mussels are residents. The Jordan River has been surveyed for unionid mussels with the exception of the upper Jordan River and Little Cottonwood Canyon. These surveys are expected to be completed by the Wasatch Front Water Quality Council this spring.

The toxicity tests conducted for the unionid species potentially present in Utah demonstrate that these species are less sensitive than some of the unionid mussels relied upon for deriving the EPA (2013) ammonia water quality criteria. DWQ currently anticipates recalculating the unionid-present criteria for statewide implementation in Utah. When unionids aren't present, the ammonia criteria could be adjusted on a site-specific basis.

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¹ Note that any species that comprise an "existing use" (R317-1-1; November 28, 1975) would also be considered a resident.

2016 EPA Selenium Criteria.

Mr. Bittner presented the progress made on implementing the 2016 EPA selenium criteria for Utah (see supporting materials). Mr. Crawford shared an example of the current selenium criterion being exceeded during low flows in Six Water creek. Adoption of the more stringent EPA (2016) water criteria could increase the frequency/occurrence of these exceedances. DWQ always considers the potential impacts of adopting more stringent criteria and one of the purposes of the workgroup is to identify these impacts. Fish tissue measurements are the first step to evaluate if selenium uptake at the site are similar to the uptake modelled for the national criteria.

The uptake take rates for selenium are dependent on site-specific conditions. Site-specific fish sampling is recommended to confirm the assumptions on which the EPA (2016) water concentrations are based. Utah does not currently have specific fish sampling protocols for selenium (they are available for mercury) but DWQ is currently working on these. DWQ's authority to address flow impacts to water quality is limited; there are some exceptions to those limitations including DWQ's consideration of flow in the context of 401 Water Quality Certification and with regard to assessing dischargers' compliance with established water quality standards (R317-2-9).

Ms. Cline asked if the EPA (2016) criteria are protective of waterfowl and other water-dependent birds. Birds were not explicitly considered in deriving the EPA (2016) criteria. The data necessary for these types of evaluations is probably unavailable.

Ms. Rice asked if the adoption of EPA (2016) criteria would affect stormwater permits. Ms. Kirschner noted that EPA just reissued the multisector stormwater permit and again confirmed that excursions of benchmarks do not constitute permit violations. Adoption of the same criteria as benchmarks in Utah's industrial stormwater permit would not be likely to have an immediate impact at sites but would need to be evaluated on a site-by site basis to permit compliance obligations that could be triggered by excursions of benchmarks. Utah's current multisector general permit expires at the end of 2023.

Mr. Myers suggested that this information be presented to the Wasatch Front POTW managers and Ms. Rice concurred. Mr. Myers will send Mr. Bittner an invitation.

Next Meeting: May 24, 2021

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Meeting Sign-In Sheet					
Meeting	Water Quality Standards Workgroup	Meeting Date:	February 22, 2021		
Chair:	C Bittner	Place/Room:	Remote via internet		

Name	Affiliation	Attendance
Chris Bittner	DEQ/DWQ	
Ben Holcomb	DEQ/DWQ	
George Parrish	USEPA R8	
Lisa Kirschner	PBL/RTKC	
Jay Olson	Utah Dept of Food and Agriculture	
Leland Myers	WFWQC	
Joe Crawford	CUWCD	
Brad Rasmussen	Aqua Engineering	
Chris Cline	USFWS	
Brian Somers	Utah Mining Association	
Marian Rice	SLC Public Utilities	
Paul Dremann	Trout Unlimited	
Elise Hinman	DWQ	
Jeff Ostermiller	DWQ	

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