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Subject: Review of Clean Water Act ("CWA") §101 (a) Uses - Contact Recreation Uses for Selected Segments

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The Water Quality Standards ("WQS") in Subsection B of 20.6.4.6 NMAC require the state to establish WQS consistent with the New Mexico Water Quality Act and the federal CWA to protect public health or welfare, and enhance water quality:

> *"...**B.** The state of New Mexico is required under the New Mexico Water Quality Act (Subsection C of Section 74-6-4 NMSA 1978) and the federal Clean Water Act, as amended (33 U.S.C. Section 1251 et seq.) to adopt **water quality standards that protect the public health or welfare, enhance the quality of water and are consistent with and serve the purposes of the New Mexico Water Quality Act and the federal Clean Water Act. It is the objective of the federal Clean Water Act to restore and maintain the chemical, physical and biological integrity of the nation's waters, including those in New Mexico. This part is consistent with Section 101(a)(2) of the federal Clean Water Act, which declares that it is the national goal that wherever attainable, an interim goal of water quality that provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water be achieved by July 1, 1983.** Agricultural, municipal, domestic and industrial water supply are other essential uses of New Mexico's surface water; however, water contaminants resulting from these activities will not be permitted to lower the quality of surface waters of the state below that required for protection and propagation of fish, shellfish and wildlife and recreation in and on the water, where practicable" [emphasis added].*

Accordingly, the state has adopted designated uses in the WQS that are consistent with the CWA §101(a)(2) for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water.

Section 20.6.4.10 NMAC also requires a review of the WQS consistent with the federal CWA requirements, and as needed, to revise the WQS:

> ***"20.6.4.10 REVIEW OF STANDARDS; NEED FOR ADDITIONAL STUDIES:***
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> ***A.*** *Section 303(c)(1) of the federal Clean Water Act requires that the state hold public hearings* ***at least once every three years for the purpose of reviewing water quality standards and proposing, as appropriate, necessary revisions to water quality standards****…"[Emphasis added]*

And as required in the federal water quality regulations in 40 CFR §131.20:

> "*The State shall from time to time, but at least once every three years, review applicable water quality standards and, as appropriate, modify and adopt standards.* ***Any water body segment with water quality standards that do not include the uses specified in Section 101(a) of the Clean Water Act ("CWA") shall be re-examined to determine if any new information has become available.*** *If such new information indicates that the uses specified in the CWA Section 101(a)(2) are attainable, the State shall revise its standards accordingly." [Emphasis added]*

The water quality standards contain nine water bodies designated with secondary contact uses and criteria. Criteria levels currently assigned to these nine segments are based on the EPA's 1986 guidance (EPA440/5-84-002, January 1986). This guidance allowed for criteria based on different levels of water contact other than swimming, such as expected to occur during wading, fly fishing or boating. As these secondary contact criteria are not sufficient to protect for swimming uses they are not considered a CWA §101(a)(2) use.

In the time since the State's review conducted for the 2009 Triennial Revisions, the EPA's 1986 guidance has been superseded by new EPA recommendations for recreational use and criteria based on updated epidemiological and other scientific data, which were finalized on November 28, 2012. The latest recommended recreation criteria levels for *E. coli* include a 30-day geometric mean ("GM") of 126 cfu/100 mL and a maximum Statistical Threshold Value ("STV") of 410 cfu/100 mL for primary contact recreation uses. These criteria levels are the same as those currently assigned in the WQS to the primary contact use in Subsection D of 20.6.4.900 NMAC. However, the new EPA recommendations do not include a secondary contact recreation use or criteria, and do not include criteria based on different levels of water contact as provided under the previous EPA guidance.

Segment-specific uses with associated criteria that are not protective of the primary contact use may be proposed only through a Use Attainability Analysis ("UAA"). A UAA must demonstrate that the use is not attainable and that the use is not an existing use as defined in Subparagraph 20.6.4.10.E (3) NMAC and 40 CFR §131.3. Uses that are shown to be existing uses shall not be removed, whether they have been designated in the water quality standards or not, unless they are replaced by more stringent uses (20.6.4.15.A (2) NMAC and 40 CFR §131.10 (h) (1)). Therefore, in accordance with the three-year evaluations of CWA §101(a) uses necessary under the WQS, and as part of the 2013 Triennial Revision process, these segments are

being evaluated to determine if new information exists that indicates that primary contact uses and criteria may exist or be attainable.

Table 1 below summarizes information on the nine segments evaluated in accordance with the federal water quality regulations in 40 CFR §131.20. To prepare this summary, the Surface Water Quality Bureau ("SWQB") first completed a review of WQS records and did not locate any UAAs conducted for the nine segments that had been approved and adopted by the Water Quality Control Commission ("WQCC") and approved by the U.S. Environmental Protection Agency ("EPA"). Second, the SWQB did not receive any UAAs for these segments during the public comment period. Nor is the SWQB aware of new information or supporting analyses that primary contact recreation uses on these segments are not attainable due to a factor listed under 40 CFR 131.10(g). Finally, and most importantly, as shown in Table 1, SWQB found significant information to indicate that primary contact recreation as defined in Subparagraph 20.6.4.7.P (5) NMAC may be an existing use for water bodies in most of these segments and is likely an attainable use. Of particular note is documentation of boating access and recreation. Based on SWQB's experience where boating occurs primary contact recreations is almost always an existing use and is almost certainly an attainable use. To collect this information, SWQB reviewed surface water quality monitoring data records, conducted website reviews, and consulted with SWQB permits staff. SWQB also reviewed field observations with SWQB monitoring staff and with the New Mexico Department of Game and Fish. Therefore, the consideration to assign primary contact use and criteria to the nine segments is appropriate in context of the information on recreation contact uses in these segments and the new EPA guidance on criteria.

Table1. Segment, name (brief waterbody description), NPDES permit information, WQS history and notes on the existing or highest attainable CWA 101(a)(2) recreational uses for nine segments in the WQS.

Segment in 20.6.4 NMAC	**Name**	**Permits**	**WQS History**	**Use Notes**
.103 Rio Grande Basin	Rio Grande (RG) Caballo to Elephant Butte Dam; perennial tribs to RG in Sierra and Socorro Counties	NPDES Permit: NM0020681 (T or C WWTP) Permit limits: 548 cfu/30-Day Avg; 2507 cfu/ Daily Max (E. coli)	1988-2005: Secondary use and criteria Fecal coliform 1000 (GM); 2000 (SSM) 2005-Present: Secondary use and criteria E. coli 548 (GM); 2507 (SSM)	SWQB Survey 2011-2012. *Riverbend Hot Springs* park is located in this segment.[1] Website describes the public pools where the "…cold and clear Rio Grande is also accessible for swimming at your own risk..."[2]
.116 Rio Grande Basin	Rio Chama upstream to Abiquiu, Rio	NPDES Permit: NM0024830 (Abiquiu WWTP)	1988-2005: Secondary use and criteria	SWQB Survey 2012. Includes Ojo

[1] http://www.riverbendhotsprings.com/
[2] http://www.riverbendhotsprings.com/springs.html

Segment in 20.6.4 NMAC	Name	Permits	WQS History	Use Notes
	Tusas, Rio Ojo Caliente, Abiquiu Creek, and El Rito Creek (to below El Rito)	Permit limits: 47 cfu/30-Day Avg 88 cfu Daily Max	Fecal coliform 1000 col/mL (GM); 2000 col/mL(SSM) 2005-Present: Secondary use and criteria E. coli 548 col/mL(GM); 2507 col/mL (SSM)	Caliente hot springs. Rafting and float trips observed.[3] Ohkey Owingeh (San Juan) is downstream with Primary/Ceremonial Use.[4] Rio Grande at the confluence is primary contact.
.124 Rio Grande River Basin	Sulphur Creek from confluence with Redondo Creek and upstream to its headwaters	NONE	2005: Segment created from .108 which had Primary use. 2005-Present: Secondary use and criteria E. coli 548 col/mL (GM); 2507 col/mL (SSM)	SWQB Surveys in 2003; 2013-14. Valles Caldera National Park is accessible via guided tours. Privately owned hot springs includes evidence of existing contact recreation use.
.204 Pecos River Basin	Pecos River from Avalon Reservoir to Brantley Dam	NONE	1988- 2010: Secondary use and criteria E. coli 548 (GM); 2880 (SSM); SSM lowered to 2507 in last TR (2010).	SWQB Surveys in 2004; 2013. Swimming occurring in segment reported June 2014[5] Information regarding access suggests use likely existing and attainable.
.206 Pecos River	Pecos River from Brantley reservoir	NPDES Permit: NM0022268	1988 – 2005: Secondary use	SWQB Surveys in 2004; 2013.

[3] SWQB staff has observed rafting and float trips on this segment. The Bureau of Land Management offers rafting activities on lower and upper segments of the Rio Chama: http://www.blm.gov/nm/st/en/prog/recreation/taos/rio_chama_wsr.html

[4] Apr 1- Sept 30 (100/200 col/mL) and Secondary (200/400 col/mL) Oct 1- March 31.

[5] Primary contact use (swimming) noted by the New Mexico Department of Game and Fish (June 2014).

Segment in 20.6.4 NMAC	Name	Permits	WQS History	Use Notes
Basin	to Salt Creek near Acme and several tributaries	(Artesia WWTP) Permit limits: 548 cfu/30-Day Avg; 2507 cfu/ Daily Max (E. coli)	and criteria Fecal coliform 1000 col/mL (GM); 2000 col/mL(SSM) 2005-Present: Secondary use and criteria E. coli 548 col/mL(GM); 2507 col/mL (SSM)	Brantley Reservoir (downstream) is Primary contact use.
.207 Pecos River Basin	Pecos River main stem from Salt Creek (near Acme) to Sumner Dam	NPDES Permit: NM0023477 (Fort Sumner WWTP) Permit limits: 548 cfu/30-Day Avg 2507 cfu/ Daily Max (E. coli)	1988 – 2005: Secondary use and criteria Fecal coliform 1000 col/mL (GM); 2000 col/mL(SSM) 2005-Present: Secondary use and criteria E. coli 548 col/mL(GM); 2507 col/mL (SSM)	SWQB Surveys in 2005; 2012. Remote in places, but accessible. Primary contact use observed by SWQB staff.
.213 Pecos River Basin	McAllister Lake	NONE	1988 – 2005: Secondary use and criteria Fecal coliform 1000 col/mL (GM); 2000 col/mL(SSM) 2005-Present: Secondary use and criteria E. coli 548 col/mL(GM); 2507 col/mL (SSM)	SWQB Survey in 2001. McAllister Lake is publicly accessible; camping, boating and fishing when open (fall, spring and summer). [6]
.219 Pecos River Basin	Avalon Reservoir (Lake Avalon)		2005-Present: Secondary use	Primary contact use existing - kayaking,

[6] Accidental water alteration, algal bloom and salinity caused fish kill in 2007 which has limited fishing in the lake since.

Segment in 20.6.4 NMAC	Name	Permits	WQS History	Use Notes
		NONE	and criteria E. coli 548 col/mL(GM); 2507 col/mL (SSM)	scuba game fishing according to EMRD park website.[7]
.308 Canadian River Basin	Charette Lakes	NONE	1988 – 2005: Secondary use and criteria Fecal coliform 1000 col/mL (GM); 2000 col/mL(SSM) 2005-Present: Secondary use and criteria E. coli 548 col/mL(GM); 2507 col/mL (SSM)	SWQB Survey in 2006. Upper lake is shallow, but accessible for wading. Lower lake is much deeper. Fishing, paddle craft and primitive camping allowed Mar 1 – Oct 31.

In previous Triennial and interim revisions, and in the current proposal for the 2013 Triennial Review, the SWQB has clarified the presumption of CWA §101(a)(2) uses for all surface water of the state, including those not "classified" or described in segments under Sections 20.6.4.101-899 NMAC. In the review of the nine classified surface water segments with secondary contact uses assigned, one segment, 20.6.4.116, is currently listed for *E. coli* impairment. Within this segment, 20.6.4.116 NMAC, two Assessment Units, NM-2113_50 "Abiquiu creek" and NM-2113-40, "El Rito creek", are impaired for secondary contact use and neither is impacted by a NPDES permittees. Finally, as summarized in Table 1, the segments reviewed include either demonstrated primary contact recreation as an existing use, or significant likelihood as an attainable use, as defined in the state's WQS and the federal WQS regulations.

[7] Avalon Reservoir promotes paddle craft, kayaking and game fishing (scuba) activities:
http://www.emnrd.state.nm.us/SPD/BOATINGWeb/AvalonReservoir.html
http://www.ohranger.com/avalon-reservoir
http://www.recreation.gov/recreationalAreaDetails.do;jsessionid=97AF31D4403D68DBDBA54248E67B013A.web05-ny?contractCode=NRSO&recAreaId=87