STATE OF NEW MEXICO
NEW MEXICO WATER QUALITY CONTROL COMMISSION

In the Matter of:

PROPOSED AMENDMENTS TO
***STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS*, 20.6.4 NMAC** **No. WQCC 20-51 (R)**

SAN JUAN WATER COMMISSION'S
NOTICE OF FILING REBUTTAL TECHNICAL TESTIMONY

COMES NOW San Juan Water Commission ("SJWC"), by and through its counsel of record, Taylor & McCaleb, P.A., and in accordance with 20.1.6.202 NMAC, the November 9, 2020, *Procedural Order*, and the April 1, 2021, *Order Granting Amigos Bravos' Unopposed Motion for Extension of Time to File Notices of Intent to File Direct and Rebuttal Testimony* filed herein, hereby files this *Notice of Filing Rebuttal Technical Testimony* for the Triennial Review scheduled to begin July 13, 2021.

A copy of the written rebuttal technical testimony of SJWC's expert witness, Jane DeRose-Bamman, is attached hereto as Exhibit "SJWC 3." Ms. DeRose-Bamman's rebuttal testimony addresses the written direct technical testimony filed by the New Mexico Environment Department and other Triennial Review participants. SJWC reserves the right to call any person to provide sur-rebuttal testimony and to offer sur-rebuttal exhibits pursuant to Paragraph No. 5 of the *Procedural Order*.

In accordance with the time limitation set forth in Paragraph No. 3 of the *Procedural Order*, and as noted in SJWC's May 3, 2021, *Notice of Intent to Present Technical Testimony* (at 2), the oral presentation of a summary of Ms. DeRose-Bamman's direct and rebuttal technical testimony is anticipated to take no more than 30 minutes per issue.

The exhibits SJWC intends to submit in support of Ms. DeRose-Bamman's rebuttal testimony are attached to her written rebuttal testimony filed herewith. For ease of reference, Bates numbers have been added to Ms. DeRose-Bamman's written rebuttal testimony and supporting exhibits, as follows:

Exhibit Number	Document	Bates Number Range
SJWC 3	Rebuttal Technical Testimony of Jane DeRose-Bamman	2020 TR SJWC 0191-0223
SJWC 3-A	EPA's *Water Quality Standards Handbook* Website	0224
SJWC 3-B	Excerpts from Chapter 4 of EPA's *Water Quality Standards Handbook*	0225-0228
SJWC 3-C	Undated NMED Memo: *Review of Clean Water Act ("CWA") §101(a) Uses—Contact Recreation Uses for Selected Segments* (2014 Triennial Review SWQB Rebuttal Ex. 2 (No. WQCC 14-05(R))	0229-0234
SJWC 3-D	Written Rebuttal Technical Testimony of James Hogan (2014 Triennial Review SWQB Rebuttal Ex. 1 (No. WQCC 14-05(R))	0235-0256
SJWC 3-E	Excerpts from 2014 Triennial Review Transcript of Proceedings (Vol. 1) (No. WQCC 14-05(R))	0257-0271
SJWC 3-F	Written Rebuttal Testimony of Charles L. Nylander (2014 Triennial Review Ex. SJWC D (No. WQCC 14-05(R))	0272-0281
SJWC 3-G	Excerpts from 2014 Triennial Review Transcript of Proceedings (Vol. 3) (No. WQCC 14-05(R))	0282-0294
SJWC 3-H	48 Federal Register 51400 (Nov. 8, 1983)	0295-0309
SJWC 3-I	Photos of Rio Hondo	0310-0311
SJWC 3-J	NMED Website	0312

Respectfully submitted,

TAYLOR & McCALEB, P.A.

/s/ Jolene L. McCaleb
Jolene L. McCaleb
Elizabeth Newlin Taylor

P.O. Box 2540
Corrales, NM 87048-2540
(505) 888-6600
jmccaleb@taylormccaleb.com
etaylor@taylormccaleb.com

Attorneys for San Juan Water Commission

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of San Juan Water Commission's Notice of Filing Rebuttal Technical Testimony was served on the following persons by e-mail this 22nd day of June 2021:

Annie Maxfield, Esq.
John Verheul, Esq.
Assistants General Counsel
Office of General Counsel
New Mexico Environment Department
121 Tijeras, NE, Ste. 1000
Albuquerque, NM 87102
annie.maxfield@state.nm.us
john.verheul@state.nm.us
Attorneys for the New Mexico Environment Department

Robert F. Sanchez, Esq.
Assistant Attorney General
Office of the Attorney General
P.O. Box 1508
Santa Fe, NM 87504-1508
rfsanchez@nmag.gov
Attorney for the New Mexico Office of the Attorney General

Louis W. Rose, Esq.
Kari Olson, Esq
Montgomery & Andrews, P.A.
P.O. Box 2307
Santa Fe, NM 87504-2307
lrose@montand.com
kolson@montand.com
Attorneys for Triad National Security, LLC and the U.S. Department of Energy

Silas R. DeRoma, Esq.
Stephen Jochem, Esq.
U.S. Department of Energy
National Nuclear Security Administration
Los Alamos Site Office
3747 W. Jemez Road
Los Alamos, NM 87544
silas.deroma@nnsa.doe.gov
stephen.jochem@nnsa.doe.gov
Attorneys for the U.S. Department of Energy

Tannis Fox, Esq.
Western Environmental Law Center
208 Paseo del Pueblo Sur, #602
Taos, NM 87571
fox@westernlaw.org
Attorney for Amigos Bravos

Maxine McReynolds, Esq.
Office of the General Counsel
Los Alamos National Laboratory
P.O. Box 1663, MS A187
Los Alamos, NM 87545
mcreynolds@lanl.gov
Attorneys for Triad National Security, LLC

Dalva Moellenberg, Esq.
Gallagher & Kennedy
1239 Paseo de Peralta
Santa Fe, NM 87501-2758
dlm@gknet.com
Attorney for New Mexico Mining Association

Kyle Harwood, Esq.
Luke Pierpont
Egolf + Ferlic + Martinez + Harwood, LLC
123 W. San Francisco St., Floor 2
Santa Fe, NM 87501
kyle@egolflaw.com
luke@egolflaw.com
Attorneys for the Buckman Direct Diversion Board

Stuart R. Butzier, Esq.
Christina C. Sheehan, Esq.
Modrall Sperling Roehl Harris & Sisk, P.A.
P.O. Box 2168
Albuquerque, NM 87103-2168
srb@modrall.com
ccs@modrall.com
Attorneys for New Mexico Mining Association

Charles de Saillan
New Mexico Environmental Law Center
1405 Luisa Street, Suite 5
Santa Fe, NM 87505-4074
(505) 989-9022
cdesaillan@nmelc.org
Attorney for Communities for Clean Water and Gila Resources Information Project

/s/ Jolene L. McCaleb
Jolene L. McCaleb

REBUTTAL TECHNICAL TESTIMONY
OF
JANE DEROSE-BAMMAN

FOR

THE 2020 TRIENNIAL REVIEW

Hearing No. WQCC 20-51 (R)

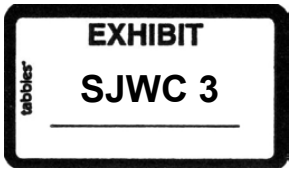
June 22, 2021

Submitted by:

San Juan Water Commission
7450 East Main
Farmington, New Mexico 87402

Jane DeRose-Bamman
DeRose-Bamman Consulting
Technical Consultant for San Juan Water Commission

P.O. Box 8007
Roswell, NM 88202
505-228-6851



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PROPOSED AMENDMENTS TO
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***INTRASTATE SURFACE WATERS,* 20.6.4 NMAC** **No. WQCC 20-51 (R)**

REBUTTAL TECHNICAL TESTIMONY OF JANE DEROSE-BAMMAN

INTRODUCTION

I previously provided written direct technical testimony on behalf of San Juan Water Commission ("SJWC") that addressed SJWC's objections to various proposals set forth in the Petition and Amended Petition filed by the New Mexico Environment Department ("NMED"). On behalf of SJWC, I have now reviewed the written direct technical testimony and exhibits submitted by NMED, Triad National Security, LLC and the United States Department of Energy (collectively, "LANL"), Amigos Bravos ("AB"), and the New Mexico Mining Association ("NMMA"). Following is my rebuttal technical testimony, which addresses new information or issues raised in the direct technical testimony filed by these other Triennial Review participants.

WRITTEN REBUTTAL TECHNICAL TESTIMONY

1. 20.6.4.6(D) and 20.6.4.7(C)(4) NMAC—PROPOSED "CLIMATE CHANGE" OBJECTIVE AND DEFINITION (NMED AND AB)

In my written direct technical testimony, I noted that NMED's "Statement of Reasons provide[d] no explanation of, or technical or regulatory support for, the adoption of" its proposed climate change objective. Ex. SJWC 2 at 4 (2020 TR SJWC-0007). Shelly Lemon, Chief of the Surface Water Quality Bureau ("SWQB"), has now provided written direct technical testimony in support of NMED's proposal. NMED Ex. 1 at 11-12.

However, Ms. Lemon's testimony does not provide any justification for elevating climate change above, or treating it differently from, any other cause of water quality impairment.

Ms. Lemon states:

> The State's water quality standards protect, and have always protected, water quality from anthropogenic impacts by ensuring that the antidegradation policy maintains existing use protections and that designated use protections (goals) are attainable and not arbitrarily lowered without defensible investigation and demonstration under state and federal regulations. These protections for the surface waters of the State *inherently protect the State's water resources against all foreseen and unforeseen sources threatening surface water quality, including climate change.*
>
> . . . [T]he state [Water Quality Act] directs the Commission to consider amendments to the water quality standards that originate from the federal [Clean Water Act]. Acknowledging the need to address the inherent threats to water quality resulting from climate change falls into that category.
>
> Including language to clarify that one of the objectives of the water quality standards is, *and has been*, to plan for anticipated human-caused impacts and promote watershed resiliency due to climate change is explicitly clear in its intent and is beneficial for implementation of the standards. This addition updates the Standards to acknowledge that *climate change is a threat to surface water quality* and to explicitly recognize that an objective of the Standards is to protect against this threat.

Id. at 11:20-12:14 (emphasis added). But Ms. Lemon fails to explain why climate change should be the only anthropogenic activity highlighted in the objectives section of the State's surface water quality standards ("WQS"). Human-caused fires, accidental chemical spills, point source discharges and myriad other human activities threaten surface water quality. As Ms. Lemon states, the WQS already "inherently protect the

State's water resources against all foreseen and unforeseen sources threatening surface water quality, including climate change." *Id.* at 12:2-3.

So, what is the purpose of NMED's proposal, why is it needed, and what is its potential impact? Ms. Lemon goes on to state:

> Adoption of the new objective and the corresponding definition for 'climate change' does not affect implementation, as the standards already accommodate for impacts to water quality (either local or global), but does clarify that the State's Water Quality Standards ensure protection of the waters of the state against the threats posed by climate change.

Id. at 12:20-23. The proposal has no purpose because, as Ms. Lemon admits, the standards "already accommodate for impacts to water quality." *Id.* at 12:21. There simply is nothing to "clarify."

Further, if the new language "does not affect implementation," *id.*, why is it needed? As I explained in my direct testimony, climate change is not a discharged pollutant that can be regulated through the WQS; rather, it is a threat to water quality similar to drought that may provide a basis for an impairment listing. Ex. SJWC 2 at 5-6 (2020 TR SJWC-0008 to -0009). Finally, at this moment it is impossible to determine what potential impact the adoption of NMED's proposal may have in the future, and the Water Quality Control Commission ("WQCC") should protect against unintended consequences.

For these reasons, and the reasons set forth in my direct testimony, SJWC recommends that the WQCC reject NMED's climate change proposal. For these same reasons, SJWC recommends that the WQCC reject the climate change objective proposal set out in AB's May 3, 2021, *Notice of Intent to Present Direct Testimony*. AB

Ex. 1 at 1; AB Ex. 3 at 4-6 (Conn). The first six sentences of the AB proposal simply assert that the climate is changing, and climate change affects surface water quality because of drought, increasing water temperatures, and an increase in polluted runoff. AB Ex. 1 at 1. However, no other source of water quality impairment is highlighted in the objectives section of the WQS. The last sentence of the AB proposal states: "Development of New Mexico surface water quality standards should take into account the importance of protecting of *[sic]* water quality in light of climate change." *Id.* As I explained in my written direct technical testimony (and NMED agrees), the general purpose of the WQS is to protect against *all* causes of surface water quality impairment. Ex. SJWC 2 at 6 (2020 TR SJWC-0009); NMED Ex. 1 at 12:1-3 (Lemon) (WQS "protect the State's water resources against all foreseen and unforeseen sources threatening surface water quality, including climate change").

Further, in the absence of a climate change objective, there is no need to adopt a definition of "climate change," as proposed by NMED. Ms. Lemon refers to a definition of climate change found on an EPA webpage. NMED Ex. 1 at 12:18-19; NMED Ex. 33. However, the fact that EPA has a webpage generally discussing climate change is irrelevant. The cited webpage simply provides "Basic Information," is not in any way related to EPA's Clean Water Act Authority, and contains a non-regulatory definition of "climate change" from 2017. The page is not a part of the current EPA website.

Neither the New Mexico Water Quality Act, the federal Clean Water Act, nor associated state and federal regulations specifically refer to climate change. The WQS already protect against climate change impacts. There is no basis for elevating climate change above other sources of impairment in the WQS objectives.

2. 20.6.4.7(E) NMAC—PROPOSED "EXISTING USE" DEFINITION (AB)

By regulation, EPA has defined "existing uses" as "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." 40 C.F.R. § 131.3(e) (NMED Ex. 26 at 1). In all pertinent respects, the definition of "existing use" in the WQS mirrors the federal regulation: "**'Existing use'** means a use actually attained in a surface water of the state on or after November 28, 1975, whether or not it is a designated use." 20.6.4.7(E)(3) NMAC. There is no reason to add language to the State's definition of "existing use" that is not contained in the federal definition.

AB proposes to amend the definition of "existing use" by adding a second sentence with language from the EPA *Water Quality Standards Handbook* ("*EPA Handbook*") providing guidance concerning the method for determining whether a use is an existing use:

> **(3) "Existing use"** means a use actually attained in a surface water of the state on or after November 28, 1975, whether or not it is a designated use. An existing use can be established by demonstrating that fishing, swimming, or other uses have actually occurred since November 28, 1975; or that the water quality is suitable to allow the use to be attained.

AB Ex. 1 at 4; AB Ex. 3 at 14 (Conn). However, a definition is not the appropriate place to incorporate such guidance. EPA guidance often changes over time, and proper application of EPA guidance often is disputed. For example, as explained on EPA's website, the *EPA Handbook* has been modified numerous times since it was first issued in 1983. Ex. SJWC 3-A (2020 TR SJWC-0224). The text of Section 4.4 of the *EPA Handbook*, concerning existing uses, has not been updated since 1994. *Id.* That text is

the basis for AB's proposal. AB Ex. 3 at 13 (Conn). However, the "Updated Information" box incorporates more recent guidance pertinent to the existing use issue here—a 2008 EPA letter answering questions about existing uses that, as discussed below in Section 4(B)(iv) (at 24-28), contradicts AB's position. Ex. SJWC 3-B at 4 (2020 TR SJWC-0227); NMED Ex. 62.

A WQS definition should not need to be modified each time EPA issues a document providing more or different guidance or explanation about how to establish an existing use or any other defined term. For that reason alone, the definition of "existing use" should not be modified to incorporate EPA guidance that may change over time and often is subject to more than one interpretation.

Further, the language proposed by AB fails to completely incorporate the *EPA Handbook* guidance—it is missing the final clause of the text relied on by AB for establishing an existing use solely through water quality data: ". . . unless there are physical problems, such as substrate or flow, that prevent the use from being attained." Ex. SJWC 3-B at 4 (2020 TR SJWC-0027). Although water quality may be able to support a particular use, there may be physical limitations that prevent actual attainment of the use.

Finally, and perhaps most importantly, the shorthand description of how to establish a use found in Section 4.4 of the *EPA Handbook* does not tell the whole story. As discussed in Section 4(B)(iv) below (at 24-28), the 2008 EPA guidance letter referenced in the *EPA Handbook* (NMED Ex. 62) recommends a thorough evaluation of *both* evidence of use *and* evidence of water quality supporting the use to determine whether a use is an existing use. The letter also indicates that the State has significant

discretion when considering such evidence (or the lack of such evidence). Thus, this issue is not as straightforward as AB asserts.

For these reasons, SJWC encourages the WQCC to reject AB's proposed modification of the definition of "existing use" and retain the current definition, which is modeled on the federal definition. AB's proposal "mirrors" neither the current federal regulation defining "existing use" nor the *EPA Handbook*, as asserted by Ms. Conn. AB Ex. 3 at 14.

3. 20.6.4.10(B) NMAC—LANL'S RECOMMENDED CHANGES TO NMED'S EXISTING USE ANALYSIS PROPOSAL

In my written direct technical testimony, I identified several concerns about NMED's proposed language for a new section, 20.6.4.10(B) NMAC, regarding Existing Use Analyses ("EUA"s). Basically, those concerns were:

a. the focus on "higher quality water" is not appropriate when the federal regulation focuses on uses rather than water quality;

b. the meaning of the term "higher quality water" is unclear;

c. it is important to describe the amount and type of evidence required for an EUA in either the WQS or the New Mexico Statewide Water Quality Management Plan and Continuing Planning Process ("WQMP/CPP"); and

d. the use of the term "stringent" to describe uses is improper.

Ex. SJWC 2 at 14-15 (2020 TR SJWC-0017 to -0018).

LANL has suggested several modifications to NMED's proposal:

> In accordance with 40 CFR 131.10~~(i)~~, when an existing use of a water, as defined under 20.6.4.7 NMAC, ~~is higher quality water~~ requires a higher level of protection than ~~prescribed by~~ the current designated use and new supporting evidence

> demonstrates the presence of that use, the designated use shall be amended accordingly to protect ~~be no less stringent than~~ the existing use. This action can only be taken after the commission has established formal procedures, through the water quality management plan continuing planning process, to amend a designated use that is found to be less restrictive than an existing use. The process described in this section may not be used where the commission has already made a determination concerning the existing use of classified waters of the state.

LANL Ex. 1 at 4:1-9 (2020 TR LANL-00005). SJWC supports LANL's proposal because it appropriately addresses all of the concerns I previously identified.

In particular, for all of the reasons I discuss in Section 4(B)(iv), below, it is important for an EUA to focus on *new* proof of the existence of a particular *use*. Rather than focus solely on water quality criteria, an EUA should consider all relevant data concerning both use and water quality. Further, as Robert M. Gallegos points out on behalf of LANL,

> EPA also advises that it is appropriate to describe the existing uses of a waterbody in terms of both actual use and water quality, because doing so provides the most comprehensive means of describing baseline conditions that must be protected. . . . The proposed new 20.6.4.10(B) NMAC's description of 'supporting evidence' does not comply with EPA guidance, as EPA has advised that it expects states and tribes 'to consider the quantity, quality, and reliability of the different types of data to describe the existing use as accurately and completely as possible and to resolve any apparent discrepancies based upon that evaluation.'

LANL Ex. 3 at 36:2-5, 11-15 (2020 TR LANL-00095). As Dr. Richard Meyerhoff has testified, "EPA emphasizes the need to evaluate all the available data so that the existing use is described as accurately and completely as possible." LANL Ex. 2 at 30:1-2 (2020 TR LANL-00052).

Finally, LANL's proposal incorporates my suggestion that the amount and type of evidence required for an EUA be described in either the WQS or the WQMP/CPP. I agree with the testimony of Mr. Gallegos on this point:

> Before an EUA is used for attainability decisions, . . . the EUA procedure should undergo a thorough vetting process that includes a review, stakeholder and public input, and final approval by the WQCC. Specifically, it is inappropriate for NMED to use an ill-defined existing use analysis process that has not been reviewed or approved by the WQCC or the general public, to unilaterally, and without consideration of all available evidence, downgrade and declassify existing classified waters. . . . The WQCC should adopt a formal process, consistent with the LANL recommendation, that includes planning, investigation and analysis and that is public and transparent, before it revises a classified waters decision.

LANL Ex. 3 at 34:23-35:3, 6-8 (2020 TR LANL-00093 to -00094).

This point applies equally to the "upgrade" of a designated use. As I explain in Sections 4(B)(iv) and (v), I believe the EUA on which NMED relies to support the upgrade of five segments from the secondary contact to the primary contact designated use is flawed and fails to consider all appropriate evidence. It also was conducted without notice to, or soliciting input from, affected stakeholders (permittees) and other interested persons, including SJWC. As stated by Mr. Gallegos, the WQCC should "adopt a formal process that includes planning, investigation and analysis, before it revises a classified waters decision. Any such revision [must] be supported by a reasoned basis and a process that considers all relevant data to ensure that impartial and balanced decisions are reached." *Id.* at 37:23-26 (2020 TR LANL-00096). Dr. Meyerhoff agrees: "Importantly, any such process for re-designating or re-classifying waters needs to follow a rigorous, data-driven, and publicly transparent process, whether or not the process

leads to a demonstration that a designated use should be amended based on a more, or less, stringent existing use." LANL Ex. 2 at 34:12-15 (2020 TR LANL-00056). I believe that only through the WQCC's adoption of a formal EUA process can we ensure that future WQCC existing use decisions are consistent and appropriate.

4. 20.6.4.100 THROUGH 20.6.4.899 NMAC—NMED'S PROPOSED CHANGES TO CLASSIFIED WATERS

A. 20.6.4.105 and 20.6.4.106 NMAC: NMED's Effluent Limits Proposals

NMED proposes to apply certain community sewerage system effluent limits set forth in 20.6.2.2102 NMAC to sections 20.6.4.105 and 20.6.4.106 NMAC. In her direct written testimony, Ms. Lemon states that "[t]he inclusion of these effluent criteria does not change or modify the current designated uses or related criteria in 20.6.4.105 NMAC and 20.6.4.106 NMAC but does add clarification regarding all potential applicable criteria." NMED Ex. 1 at 15:14-16.

I wish to reiterate what I stated in my written direct technical testimony: NMED is erroneously labeling the limitations specified in 20.6.2.2102 NMAC as "criteria." Ex. SJWC 2 at 20 (2020 TR SJWC-0023). Pursuant to 20.6.2.2100-2102 NMAC, these are requirements for effluent or discharge quality—they are not water quality criteria. *Id.*; Ex. SJWC 2-L at 2-3 (2020 TR SJWC-0178 to -0179). The WQCC has not adopted, and should not adopt, these effluent limitations as surface water quality criteria. The effluent limitations are NPDES permit conditions that apply to a discharge—not to a water body. Further, by operation of 20.6.4.2100 NMAC, these effluent limits are temporary conditions that apply only until the community sewerage system comes into compliance with its NPDES permit conditions. Ex. SJWC 2-L at 2 (2020 TR SJWC-0178).

For these reasons, SJWC recommends rejecting the proposed changes.

B. 20.6.4.103/112, 116, 204, 207 and 206/231 NMAC: NMED's Proposal to Upgrade the Recreation Designated Use

i. Definition of "Primary Contact"

NMED has petitioned to upgrade five stream segments from the secondary contact to the primary contact recreation designated use. The WQCC has defined the "primary contact" recreation designated use as follows:

> **"Primary contact"** means any recreational or other water use in which there is prolonged and intimate human contact with the water, such as swimming and water skiing, involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard. Primary contact also means any use of surface waters of the state for cultural, religious or ceremonial purposes in which there is intimate human contact with the water, including but not limited to ingestion or immersion, that could pose a significant health hazard.

20.6.4.7(P)(5) NMAC. The WQCC has assigned water quality criteria for this primary contact designated use:

> **D. Primary contact:** The monthly geometric mean of E. coli bacteria of 126 cfu/100 mL or MPN/100 ml and single sample of 410 cfu/100mL or MPN 100/mL and pH within the range of 6.6 to 9.0 apply to this use. The results for *E. coli* may be reported as either colony forming units (CFU) or the most probable number (MPN) depending on the analytical method used.

20.6.4.900(D) NMAC.

ii. The WQCC rejected NMED's attempt to upgrade these segments during the 2014 Triennial Review for failure to provide evidence of human use consistent with the definition of primary contact .

During the 2014 Triennial Review, NMED petitioned to upgrade the recreation designated use for these five segments (and four others) from secondary contact to

primary contact. In support of its petition, NMED asserted there was "new information" indicating "that primary contact uses and criteria may exist or be attainable." SWQB 2014 Triennial Review Rebuttal Ex. 2 at 3 (attached as Ex. SJWC 3-C (2020 TR SJWC-0231)). That "new information," provided in testimony and an undated staff memo submitted as a rebuttal exhibit, was anecdotal information about alleged primary contact use on these segments, such as reference to a website indicating swimming was "at your own risk" in segment 20.6.4.103 NMAC. *See, e.g., id.* at 3-6. The primary rebuttal exhibit, an undated memo prepared by Dr. Bryan Dail and other NMED staff and titled *Review of Clean Water Act ("CWA") §101(a) Uses–Contact Recreation Uses for Selected Segments* ("Dail Memo"), was prepared to rebut SJWC's contention that NMED had provided no evidence of primary contact use. SWQB 2014 Triennial Review Rebuttal Ex. 1 at 11-22:268 to 12-22:276 (attached as Ex. SJWC 3-D) (Hogan) (2020 TR SJWC-0245 to -0246)); Ex. SJWC 3-E at 81:23-82:9 (Pintado and Lemon), 92:9-12 (Lemon) (2020 TR SJWC-0259 to -0260, 0270).

At the 2014 Triennial Review hearing held in October 2015, NMED witnesses Dr. James Hogan (in written rebuttal testimony) and Shelly Lemon, Kristine Pintado and Dr. Bryan Dail (in oral hearing testimony) relied on the Dail Memo as evidence of existing primary contact use in the five segments again at issue in this Triennial Review. *See generally* Ex. SJWC 3-D at 11-22:268 to 13-22:306 (Hogan) (2020 TR SJWC-0245 to -0247); Ex. SJWC 3-E at 80:20-83:8, 92:9-12 (Pintado, Lemon, Dail) (2020 TR SJWC-0258 to -0261, 0270). The following information concerning alleged primary contact use was provided via Dr. Hogan's written testimony and the Dail Memo.

20.6.4.103 NMAC

> Also, in testimony the SWQB stated that primary contact recreation was observed in Segment 20.6.4.103 NMAC. Additionally, it has been noted by field staff that the Rio Grande is accessible for swimming, and there is a commercial hot springs park located in this segment, which features access to the river.

Ex. SJWC 3-D at 12-22:283-286 (2020 TR SJWC-0246) (Hogan).

> SWQB Survey 2011-2012. *Riverbend Hot Springs* park is located in this segment. Website describes the public pools where the '…cold and clear Rio Grande is also accessible for swimming at your own risk...'

Ex. SJWC 3-C at 3 (2020 TR SJWC-0231) (Dail Memo Table 1 (footnotes omitted that provide URLs to supporting websites)).

20.6.4.116 NMAC

> It was stated in testimony that Segment 20.6.4.116 NMAC includes the Rio Ojo Caliente, which has swimming at the hot springs located in it. Rafting and float trips have been observed by SWQB staff, and the United States Bureau of Land Management ("BLM") offers rafting activities on the lower and upper segments of the Rio Chama. . . . 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*

Ex. SJWC 3-D at 12-22:286-290 & n.3 (2020 TR SJWC-0246) (Hogan).

> SWQB Survey 2012. Includes Ojo Caliente hot springs. Rafting and float trips observed. Ohkey Owingeh (San Juan) is downstream with Primary/Ceremonial Use. Rio Grande at the confluence is primary contact.

Ex. SJWC 3-C at 3-4 (2020 TR SJWC-0231 to -0232) (Dail Memo Table 1 (footnotes omitted that provide URL to website and Ohkey Owingeh's water quality criteria)).

20.6.4.204 and 206 NMAC

> Evidence of primary contact recreation has been observed by SWQB staff in Segments 20.6.4.204 and 206 NMAC, particularly upstream and downstream of Brantley Reservoir.

Ex. SJWC 3-D at 13-22:295-301 (2020 TR SJWC-0247) (Hogan).

> SWQB Surveys in 2004; 2013. Swimming occurring in segment reported June 2014. Information regarding access suggests use likely existing and attainable. [Segment 204]
>
> SWQB Surveys in 2004; 2013. Brantley Reservoir (downstream) is Primary contact use. [Segment 206]

Ex. SJWC 3-C at 4-5 (2020 TR SJWC-0232 to -0233) (Dail Memo Table 1 (footnote omitted stating Game and Fish staff observed swimming in June 2014)).

20.6.4.207 NMAC

> Segment 20.6.4.207 NMAC is the main stem of the Pecos River and includes over 100 miles including the Salt Creek wilderness used by hikers and backpackers. While some of this area is very remote, contact recreation is possible. There is easy access just below Sumner Dam, there are daytime recreational-use sites on both sides of the river, and fishing activities are common.

Ex. SJWC 3-D at 13-22:297-301 (2020 TR SJWC-0247) (Hogan).

> SWQB Surveys in 2005; 2012. Remote in places, but accessible. Primary contact use observed by SWQB staff.

Ex. SJWC 3-C at 5 (2020 TR SJWC-0233) (Dail Memo Table 1).

Although the Dail Memo indicates that primary contact recreation had been observed on some segments by SWQB staff or Game & Fish staff, NMED provided no documentation or testimony describing what was observed, when, and by whom. Nor did NMED provide information from the referenced websites.

SJWC presented expert evidence in the 2014 Triennial Review that NMED failed to provide any credible scientific data or other appropriate evidence showing that primary contact was an existing use on these segments. In particular, SJWC's expert witness, Charles Nylander, testified that accessibility of a water body does not mean that primary contact recreation is an existing use, the secondary contact designated use is appropriate where swimming or other primary contact recreation is at the public's own risk, fishing and boating are secondary contact uses, and NMED failed to provide evidence of the alleged primary contact activities described in the Dail Memo. *See generally* Ex. SJWC 3-F at 24-31 (2020 TR SJWC-0274 to -0281); Ex. SJWC 3-G at 467:12-468:4, 511:6-15, 513:3-5, 10-16, 525:16-526:5, 558:13-24, 559:7-560:4, 581:22-582:24 (2020 TR SJWC-0283 to -0294)**.**

The WQCC adopted SJWC's reasoning. As explained in NMED's Existing Use Analysis,

> On January 10, 2017, the WQCC provided its final order towards the petition to amend designated secondary contact use to primary contact which stated: 'The upgrade from secondary contact to primary contact suggested by the Department in Sections 20.6.4.103, .116, .124, .204, .206, .207, .213, .219, and .308 is rejected by the Commission. The Commission instead accepts the reasoning proposed by the San Juan Water Commission to maintain secondary contact for the nine enumerated segments.' (WQCC 2017).

NMED Ex. 56 at 10. As noted in my direct technical testimony, the WQCC further held:

> The Department has not presented sufficient technical information to support its proposal to upgrade the . . . segments to primary contact. Adopting more stringent water quality standards absent information and data proving use is attainable is unadvised. Federal regulations require new and substantive information to upgrade a designated use, which the Department has failed to provide. Upgrading the . . .

> segments to primary contact would burden the State of New Mexico with unwarranted transactional costs. Maintaining secondary contact for the . . . segments is in compliance with CWA Section 101(a)(2). Therefore, the . . . segments will retain their secondary contact use designations. Based on the weight of the evidence, the Commission finds San Juan Water Commission's proposal to maintain secondary contact uses in certain segments is well taken, and therefore accepted.

Ex. SJWC 2 at 23 (2020 TR SJWC-0026); Ex. SJWC 2-M at 40-41, ¶¶ 101-105 (2020 TR SJWC-0188 to -0089) (paragraph numbering and internal citations omitted).

iii. <u>In the past, when upgrading the recreational contact use, the WQCC has relied on evidence of use rather than water quality.</u>

As noted in AB testimony, the WQCC approved upgrading the recreational use designation for the Gallinas River near Montezuma Hot Springs outside of Las Vegas from secondary to primary recreational contact based on evidence of actual use by humans:

> During the 2005 Triennial Review, Amigos Bravos provided evidence to the Commission and NMED of current and historic swimming in the Gallinas River near the Montezuma Hot Springs outside Las Vegas through photographs. Based on this evidence, NMED proposed to upgrade the recreational use in this segment of the river from secondary to primary contact in its proposed amendments. The Commission adopted NMED's proposal, referencing Amigos Bravos' evidence as a reason for upgrading the designated use in its final Statement of Reasons for the 2005 Triennial Review.

AB Ex. 3 at 14 (Conn).

Similarly, the WQCC has relied on evidence concerning recreational use rather than water quality when designating a recreation use in the first instance. As evidenced by the written direct technical testimony of Dr. Meyerhoff, waters within 20.6.4.126 NMAC and 20.6.4.128 NMAC became classified waters in 2005. LANL Ex. 2 at 8:7-9, 8:23-9:8

(2020 TR LANL-00030 to -00031). At that time, the WQCC assigned the secondary contact recreation use to these segments, finding that "secondary contact is the appropriate subcategory of recreation because full-body contact in these small streams is unlikely and infrequent, and if it does occur the proposed criteria offer a proper level of protection." *Id.* at 13:22-23, 33-36, 14:8-9, 20-23 (2020 TR LANL-00035 to -00036). EPA took no action on the WQCC's secondary contact use designations, indicating that a UAA was required to support the designations. *Id.* at 15:1-16:11 (2020 TR LANL-00037 to -00038).

In response to EPA, NMED submitted a UAA stating:

> Hydrologic modifications do not currently affect recreational opportunities, *and water quality likely supports both secondary and primary contact activities*. *Nevertheless, primary contact is not an attainable use because flows and water levels are generally too low for full body immersion or prolonged and intimate contact with the water.* This is the factor identified in 40 CFR 131.10(g)(2): 'Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use . . .' *Hazardous high-flow conditions and restricted access also limit the feasibility of primary contact recreation.*

Id. at 16:13-28 (2020 TR LANL-00038) (emphasis added). Based on these findings, EPA approved the classification of segments 126 and 128 and the secondary contact designated use. *Id.* at 17:5-21 (2020 TR LANL-00039). The WQCC should remain consistent and require evidence of primary contact activities before assigning the primary contact use.

iv. <u>NMED now relies solely on mostly old water quality data to support the proposed upgrades to primary contact use; NMED has provided no evidence, much less new evidence, that human recreation in the subject segments (if any) meets the definition of primary contact.</u>

During the last Triennial Review, the WQCC rejected NMED's petition to upgrade the recreation designated use for these five segments because of the lack of evidence (such as photos) of primary contact use. Rather than attempt to collect such evidence, NMED now contends that the primary contact designated use is mandated simply because each stream segment has met the primary contact water quality criteria at least once since 1975. The WQCC should reject NMED's approach as an improper end-run around the definition of "primary contact."

During the 2014 Triennial Review, NMED never asserted that water quality data supported its petition—or that water quality is the only relevant consideration when determining whether primary contact recreation is an existing or attainable use. In fact, NMED provided no water quality data at all. Instead, NMED appropriately focused on activities of the type identified in the definition of "primary contact":

> 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 *[sic]* 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.

Ex. SJWC 3-C at 3 (2020 TR SJWC-0231).

The secondary contact designated use has been in place in the New Mexico surface water quality standards for each of the subject waters since 1988. *Id.* at 3-5 (Table 1) (2020 TR SJWC-0231 to -0233). 40 CFR section 131.20(a) requires that, during this Triennial Review, the WQCC evaluate "any new information [that] has become available" since the last Triennial Review about waters where section 101(a)(2) uses are not adopted:

> (a) *State review.* The State shall from time to time, but at least once every 3 years, hold public hearings for the purpose of reviewing applicable water quality standards adopted pursuant to §§ 131.10 through 131.15 and Federally promulgated water quality standards and, as appropriate, modifying and adopting standards. The State shall also re-examine any waterbody segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act every 3 years to determine *if any new information has become available.* If such *new information* indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State shall revise its standards accordingly. Procedures States establish for identifying and reviewing water bodies for review should be incorporated into their Continuing Planning Process . . . .

NMED Ex. 21 (emphasis added). In all pertinent respects, this regulation has remained unchanged since it was adopted in 1983. 48 Fed. Reg. 51400, 51407-08 (attached as Ex. SJWC 3-H (2020 TR SJWC-0303 to -0304)). For the following reasons, NMED has failed to provide "any *new* information [that] *has become available*" to justify upgrading the five segments to primary contact.

For this Triennial Review, NMED conducted what it has called an EUA. NMED relies on that EUA to support its petition, stating that it "provides a comprehensive investigation that demonstrates the existing recreational use attained by these waterbodies, through the evaluation of available data (NMED Exhibit 56)." NMED Ex. 3

at 7 (Aranda). However, the EUA relies primarily on old water quality data already available during one or more past Triennial Reviews. The EUA provides no evidence that primary contact recreational *use* is occurring on any of these segments—only that, at least once, the segments' water quality met the *criteria* established for the primary contact designated use. It is quite possible that these segments met the primary contact criteria at the time the WQCC assigned them the secondary contact use. If that is the case, then there is no evidence that anything has changed. As already noted, in the past, the WQCC has focused on the type of human use, not the water quality, when assigning recreation uses.

Further, other than quoting the definition of "primary contact" in the EUA, NMED essentially ignores the issue of actual human use of these five segments involving "prolonged and intimate human contact with the water, such as swimming and water skiing, involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard." NMED Ex. 56 at 9. Instead, NMED refers in passing, in one short paragraph, to the "evidence of these uses" it provided during the last Triennial Review:

> SWQB does not monitor or gather information on recreational use demonstrating full immersion, such as swimming and wading. However, visitor brochures and recreational websites encourage popular recreational activities, such as swimming, kayaking and wading, in waters related to the five classified segments evaluated as part of this EUA. Several sections, including the Rio Grande between Elephant Butte and Caballo Reservoirs, the Rio Chama between Abiquiu Reservoir and the Rio Grande, and the Rio Ojo Caliente, are noted in guides to river rafting in New Mexico. Furthermore, as stated in direct written testimony of SWQB, entered into the pleadings log as part of the last triennial review (WQCC Docket 14-05(R)),

> evidence of these uses has not only been encouraged, but also has been recorded.

Id. at 23.

However, as already discussed, during the last Triennial Review the WQCC rejected these unsupported assertions, holding they did not constitute evidence of primary contact use. NMED has made no effort to support these assertions with actual evidence here. NMED has not provided the referenced visitor brochures or website information as exhibits. Nor has NMED provided the allegedly "recorded" documentation of primary contact that presumably can be found in NMED surveys or memoranda to the file. Instead, NMED inexplicably states it does not gather such information. *Id.* I also note that wading and recreational boating, such as kayaking and river rafting, are secondary contact uses. 20.6.4.7(S)(1) NMAC.

I find NMED's position to be inconsistent—especially given its focus during the last Triennial Review on actual primary contact in these segments. During the last Triennial Review, NMED "reviewed field observations with SWQB monitoring staff and with the New Mexico Department of Game and Fish." Ex. SJWC 3-C at 3 (2020 TR SJWC-0231). Based on my experience, I know NMED staff often document information about site conditions (*e.g.*, weather, flow) in field notes. Clearly, NMED does, or easily could, gather information on recreational use. The general findings could be included in the survey summary along with details on what monitoring was conducted and the field conditions, similar to surveys conducted under the Hydrology Protocol, where NMED staff photograph site features. NMED Ex. 63 at 13-14.

In fact, during the last Triennial Review, NMED asserted that NMED personnel had witnessed boating and other human activity (though secondary contact activity) on some of the segments during prior water quality surveys. Ex. SJWC 3-C at 4-5 & n.3 (2020 TR SJWC-0232 to -0233). There also were undocumented assertions that staff witnessed swimming and other primary contact activities. *Id.* at 5 (segment 207) (2020 TR SJWC-0233); Ex. SJWC 3-E at 81:10-22 (Lemon) (2020 TR SJWC-0259). If primary contact activity occurs in these five segments, it should not be difficult to obtain proof of such activity—and NMED has had four years to do so. In fact, I recently visited and took photos of the Rio Hondo near the effluent outfall for the City of Roswell Wastewater Treatment Plant, which is in segment 20.6.4.206 NMAC. A copy of those photos is attached as Exhibit SJWC 3-I (2020 TR SJWC-0310 to -0311). It is my position that the photos show that primary contact recreation is unlikely in this segment because of the physical difficulty in reaching the river. In addition, at that point, the Rio Hondo flows through private property and the depth does not appear to accommodate swimming, boating or wading. Upstream, the Rio Hondo flows through the City of Roswell through concrete channels also not conducive to primary contact recreation. NMED's EUA states: "Even though urban areas can affect water quality, this document focuses on existing use data. The identified urban areas do not provide direct evidence to support or refute an existing use analysis." NMED Ex. 56 at 22. The photos document a different perspective and show primary contact is unlikely. If NMED is going to conduct an EUA, actual site visits should be made.

The definition of "primary contact" as a use "involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard" does not indicate that the

primary contact use is occurring whenever water quality has, at least once in the past, met the numeric criteria set for the primary contact use. 20.6.4.7(P)(5) NMAC. This is the tack NMED is taking in this Triennial Review. Rather than provide the evidence of primary contact use asserted during the last Triennial Review or visit the segments during the past four years to obtain proof of primary contact use, NMED chooses to now assert, through the direct technical testimony of Ms. Aranda and the EUA, that primary contact use is demonstrated simply because water quality data show the pH and *E.coli* criteria established for that use, as specified in 20.6.4.900 NMAC, have been met at least once since 1975 in each segment. NMED Ex. 3 at 10-13; NMED Ex. 56 at 22-28. I disagree.

First, under 40 CFR 131.20(a), an upgrade to primary contact is required only if "any *new* information *has become available*." NMED Ex. 21 (emphasis added). NMED has provided limited "new" water quality data for segments 103 and 207—and none for segments 116, 204 and 206. The *E. coli* and pH data NMED relies on is found in Appendix B of the EUA. NMED Ex. 56 at 38-48. The data summarized in Appendix B was collected between 2004 and 2019, and only a small percentage of that data was collected after the last Triennial Review was initiated in 2014.

Segment	Number of Results in Appendix B	Number of <u>complete</u> *E. coli* and pH sets	Number collected in 2019	Number Collected in 2014	Number collected prior to 2014
103	69	60	10	14	36
116	36	35	0	0	36
204	9	6	0	0	6
206	66	57	0	0	57
207	46	40	2	0	38
TOTAL	226	198	12	14	173

As shown in this table, of the 198 complete sets of data provided by NMED, only 12 (or about 6 percent) were collected after the last Triennial Review concluded and can be considered "new information" that has "become available." No new data is provided for segments 116 (most recent data was collected in 2012), 204 (most recent data was collected in 2013) or 206 (most recent data was collected in 2013). And, as I already mentioned, it is even possible that the water quality of these segments met primary contact criteria when the WQCC assigned the secondary contact designated use.

Second, and more importantly, water quality data alone is not enough to prove primary contact use is existing or attainable—proof of human recreation meeting the definition of primary contact also is needed. As explained in guidance contained in a 2008 EPA letter to the State of Oklahoma Water Resources Board, "[e]xisting use determinations should be made on a site-specific basis . . . ." NMED Ex. 62 at 4, 5. NMED agrees that "[w]hen conducting a designated use analysis, site-specific conditions can be used to inform the decision and justify the proposed amendment." NMED Ex. 56 at 18. In fact, "NMED reviewed site conditions to assist in the determination of the existing use and appropriate designated use." *Id*. However, despite NMED's assertion, it apparently did not review the "site-specific conditions" of the five segments at issue that would be pertinent to the primary contact use, such as evidence of swimming (prolonged immersion), instead making an excuse that it does not gather such information. *Id.* at 23. Did NMED visit these segments? If so, where is the documentation of their conditions and accessibility for human water-based recreation?

NMED's discussion of "site conditions" is general, describes the applicable ecoregions (such as Chihuahuan Desert), and provides no specific information about the

conditions of the five segments under consideration because "NMED determined that the general site conditions (e.g., physiographic and ecological conditions, land use, ownership) do not provide direct evidence to support or refute the proposed amendments." *Id.* at 19-20. How can site conditions be irrelevant? Either a segment is accessible and has conditions that would allow primary contact recreation or it does not. During a site visit, NMED personnel might even observe primary contact recreation. Contrary to EPA guidance, NMED has disregarded physiographic conditions that would support a determination about whether primary contact is an existing use. An EUA should include a site visit, not just a review of water quality data and generic ecoregion data on a computer screen.

EPA guidance stresses that proof of actual primary contact use by humans is critical to show that primary contact is an existing use: "It is appropriate to describe the existing uses of a waterbody in terms of *both actual use and water quality* because doing so provides the most comprehensive means of describing the baseline conditions that must be protected." NMED Ex. 62 at 7 (emphasis added). "EPA considers the phrase 'existing uses are those uses actually attained' to mean *the use and water quality* necessary to support the use that have been achieved in the waterbody on or after November 28, 1975." *Id.* at 3 (emphasis added). Further,

> [a] state or tribe should determine existing uses on a *site-specific basis* to ensure it has identified the highest degree of uses and water quality necessary to support the uses that have been achieved since November 28, 1975. When describing existing uses, states and tribes should articulate not only the *use(s) that has been achieved*, but also the water quality supporting the specific use(s) that has been achieved.
> . . . .

> Although EPA interprets the definition of 'existing use' to require consideration of the available data and information on *both actual use and water quality*, all the necessary data may not be available. In these circumstances, a state or tribe may choose, in implementing its water quality standards program, to determine an existing use based on the strength of evidence that a use has actually been achieved or the strength of evidence that water quality supporting a use has been achieved. In other words, where data may be limited or inconclusive, *EPA expects states and tribes to consider the quantity, quality, and reliability of the different types of available data to describe the existing use as accurately and completely as possible and to resolve any apparent discrepancies based upon that evaluation*.

Id. at 5 (emphasis added). The WQCC should stand by its determination during the last Triennial Review that evidence of actual primary contact is required to upgrade these segments to the primary contact recreation designated use and find that NMED has failed to meet its burden. This is especially true given the definition of primary contact in the WQS.

This approach is favored by EPA:

> In a 1985 Antidegradation Questions and Answers document, EPA said 'An existing use can be established by demonstrating that fishing, swimming, or other uses have actually occurred since November 28, 1975 or that the water quality is suitable to allow such uses to occur (unless there are physical problems which prevent the use regardless of water quality.)' While this approach allows states to make an existing use determination where it only has information on one or the other type of information, some have interpreted this statement as obligating states to ignore one set of information where both types are available. EPA has found that, in practice, taking into account all the available information results in a more accurate articulation of the existing uses. . . . Where the water quality achieved was sufficient to support a use on or after November 28, 1975, but the use (i.e., some degree of use related to aquatic life, wildlife, and human activity) has not occurred, the federal

> regulations provide states and tribes the discretion to determining *[sic]* whether or not the use is an existing use.
>
> . . . .

Id. at 6. Significantly, EPA notes that even if water quality is suitable to support a use, the use is not existing if "there are physical problems which prevent the use regardless of water quality." *Id.* NMED's EUA is seriously lacking for failure to investigate site conditions. In my opinion, the photos of the Rio Hondo I have provided show primary contact recreation use is not existing or attainable, at least in a portion of segment 20.6.4.206 NMAC.

Basically, EPA leaves it to the WQCC to use its "reasonable" or "best professional" judgment, considering both "water quality sufficient to support" a use and "evidence of actual use," to determine whether a use is an existing use:

> Example 3
>
> A waterbody has a healthy shellfish community that is propagating and thriving in a biologically suitable habitat and the water quality is sufficient to support both this healthy shellfish community and shellfish consumption by humans. However, there is not available information indicating that shellfish have been harvested since November 28, 1975. Because the water quality is sufficient to fully support a healthy shellfish community and a shellfish community actually exists, the existing use may be described as 'a healthy shellfish community' or . . . *the state or tribe may choose to determine shellfish harvesting is the existing use by weighing the evidence on water quality sufficient to support the use and evidence of actual use, and relying on one to a greater extent than the other. If the available data is lacking or inconclusive on whether shellfish are actually being harvested and consumed, a state or tribe may determine the existing use based on a reasonable judgment.*
>
> . . . .

Example 4

> Since November 28, 1975, a particular waterbody has met the human health criteria necessary for a waterbody to be used as a source of public water supply. However, there has never been a drinking water intake because the waterbody has never been used as a source of drinking water. Is public water supply an existing use for this scenario?
>
> As stated above, EPA expects states and tribes *to look at the available data and information on both water quality and actual use to determine if it is an existing use.* If data are clear that the water quality was sufficient to support a public water supply (PWS) use, but no PWS use actually occurred since there was no PWS intake, then the Federal regulations do not *require* that the state or tribe find that there is an existing public water supply use. . . . [S]tates and tribes may choose, in implementing their water quality standards program, to determine that a public water supply use is an existing use *based on the strength of evidence that a use is actually occurring or the strength of evidence that water quality supports a potential use*. . . . In addition, where data are unavailable or inconclusive, a state or tribe has the *discretion* to determine whether or not there is an existing public water supply use *based on best professional judgment.*

Id. at 9-10 (emphasis added).

As EPA cautions, it is important to get an existing use determination right. "In identifying an existing use, it is important to have a high degree of confidence because a state or tribe may not remove an existing use when revising designated uses, regardless of whether the existing use remains attainable. This is also important because EPA's antidegradation provisions require any CWA authorization of a discharge or activity that may result in a discharge to protect the existing use." *Id.* at 7. Five NPDES-permitted treatment plants are located on the stream segments NMED proposes to upgrade to primary contact, and four of them "currently have *E. coli* discharge limits greater than the primary contact numeric criteria and may be affected by the proposed amendments."

NMED Ex. 3 at 10 (Aranda); NMED Ex. 56 at 21. Those four plants are: Truth or Consequences wastewater treatment plant, Roswell wastewater treatment plant, Artesia wastewater treatment plant, and Fort Sumner wastewater treatment plant. NMED Ex. 56 at 21. If the WQCC upgrades the designated use for recreation to primary contact, these dischargers will be required to meet the primary contact criteria at the point of discharge, and there may be economic burdens associated with upgrading treatment technology. If, in the future, primary contact recreation is not supported, a UAA will be required to prove that the primary contact designated use is neither an existing use nor an attainable use. UAAs carry their own economic costs. Thus, it is most logical to make sure that a robust amount of evidence is available to support this change—including, as EPA recommends, evidence that primary contact recreation use is occurring.

v. <u>The secondary contact waters should not be reclassified before the WQCC adopts a formal EUA process, after public input, and NMED produces an EUA pursuant to that process.</u>

The EUA is the sole basis for NMED's primary contact proposal and thus plays an important role in the WQCC's decision-making process. Because of the significance of this, and any other, EUA, it is important that the public have input into the process used to conduct an EUA. Further, a formal EUA process should be adopted by the WQCC.

Here, it is important to recognize that the EUA was developed solely by NMED staff, as was the procedure underlying its creation. The EUA was not provided to SJWC or the other Triennial Review participants until May 3, 2021. Thus, SJWC is being forced to react, on very short notice, to the review procedure used by NMED. There has been no time to review the validity of the analytical data NMED has relied on, much less present other data for consideration by the WQCC.

NMED's updated mission statement is focused on four tenets: Science, Innovation, Collaboration and Compliance. Ex. SJWC 3-J (2020 TR SJWC-0312). This EUA process has not reflected those tenets. NMED did not collaborate on the development of the EUA. There was no public participation in, or even awareness of, the EUA prior to NMED's filing of its Triennial Review petition in August 2020. When I inquired about evidence supporting NMED's primary contact proposal during a November 2020 NMED Triennial Review presentation to stakeholders, I was told that the EUA was not yet finalized. NMED did not even provide the EUA to the parties participating in the Triennial Review when it filed its Amended Petition in March 2021.

NMED has known about SJWC's interest in this issue for about seven years. In fact, the EUA specifically refers to the concerns raised by SJWC, and the expert evidence and legal arguments made by SJWC, during the 2014 Triennial Review. NMED Ex. 56 at 9-10. Nevertheless, NMED chose not to involve SJWC in the EUA planning stages. Nor did NMED share any draft EUA with SJWC. Surprisingly, NMED did not even involve affected permittees in the EUA process. Permittees were only directly notified (via e-mail) about NMED's proposal to "change[] the designated recreation use in several waterbodies" in January 2021. NMED Ex. 58. Nowhere in that e-mail notice did NMED mention the EUA.

Collaboration is important. By informing and involving stakeholders, including the public and potentially impacted permittees, NMED adds credibility to its actions. Further, it is important to involve other stakeholders in order to obtain the best data for a robust analysis. I, and SJWC, agree with LANL's position, articulated by Dr. Meyerhoff, that a formal process for EUAs should be developed:

> Importantly, any such process for re-designating or re-classifying waters needs to follow a rigorous, data-driven, and publicly transparent process, whether or not the process leads to a demonstration that a designated use should be amended based on a more, or less, stringent existing use. The process followed by NMED should be broadly similar in terms of data needs, analysis, and public review and should be applicable to any classified segment in the State of New Mexico. Moreover, in my opinion because the EUA is intended to be similar to a UAA, implementation of a UAA-like process is important, regardless of whether the outcome is re-designation of a waterbody to a more or less stringent use or level of aquatic life protection.
> . . . .
>
> - Improved public communication leads to improved public acceptance.
>
> Finally, the approach used to conduct an existing use analysis should be adopted by the WQCC and included as a process in the WQMP/CPP.

LANL Ex. 2 at 34-35 (2020 TR LANL-00056 to -00057).

Although Dr. Meyerhoff was testifying on the EUA for segment 128, these points apply equally to the EUA for recreational contact. This is the first opportunity to comment on the EUA, which is much too late in the process. As I stated in my written direct technical testimony, and as Dr. Meyerhoff and Mr. Gallegos agree, the EUA components and development process should be spelled out, if not within the water quality standards, then within the WQMP/CPP. Ex. SJWC 2 at 14-15, 23-24 (2020 TR SJWC-0017 to -0018, SJWC-0026 to -0027); LANL Ex. 2 at 34-35 (2020 TR LANL-00056 to -00057); LANL Ex. 3 at 34-35, 37 (2020 TR LANL-00093 to -00094, -00096).

vi. Conclusion

To conclude, SJWC agrees that existing uses must be protected. SJWC does not object to the assignment of the primary contact designated use to waterbodies where

appropriate data and other information shows it is an existing use. However, SJWC does not believe that old water quality data showing that the segments at issue have met the currently existing numeric criteria for pH and *E. coli* at least once since 1975 is sufficient evidence that primary contact recreation is an existing use. The WQCC also should require evidence that primary contact recreation is occurring. If access is difficult, hazards (such as dam releases) exist, legal access is restricted, or water flow is insufficient to allow immersion, then the primary contact designated use should be rejected. EPA guidance indicates the WQCC has that discretion. During the last Triennial Review, the WQCC indicated that evidence on these issues is required—or at least is relevant information that must be considered. NMED chose to ignore the WQCC's instruction.

EPA expects states and tribes to look at the available data and information on *both* water quality *and* actual use to determine whether there is an existing use. For example, EPA has indicated that, if data shows water quality is sufficient to support a PWS use, but no PWS use actually occurs because there is no PWS intake, then the Federal regulations do not *require* a state or tribe to find that there is an existing PWS use. NMED Ex. 62 at 9-10. At the very least, EPA leaves it to the WQCC to use its "reasonable" or "best professional" judgment, considering both "water quality sufficient to support" a use and "evidence of actual use," to determine whether a use is an existing use. *Id.* Until evidence of actual or attainable primary contact recreation use by humans is presented, through a publicly vetted and WQCC-approved EUA process, the WQCC should retain the secondary contact designated use for these stream segments.

This concludes my rebuttal testimony on behalf of SJWC.

Water Quality Standards Handbook

The *Water Quality Standards Handbook* is a compilation of EPA's water quality standards (WQS) program guidance including recommendations for states, authorized tribes, and territories in reviewing, revising, and implementing WQS. The guidance in this handbook supports EPA's WQS regulations at 40 CFR Part 131.

The *Water Quality Standards Handbook* was first issued in 1983 and provided a compilation of EPA's WQS guidance to-date.

In 1994, *The Water Quality Standards Handbook: Second Edition* was issued and retained all of the guidance in the 1983 handbook unless such guidance was specifically revised in subsequent years. The 1994 handbook also contained new EPA guidance that was developed between 1983 and 1994.

In 2007, EPA updated the online version of the handbook to provide links to additional information and resources that EPA developed subsequent to 1994 in an "Updated Information" box. In 2012, EPA revised the "Updated information" boxes to reflect any additional EPA guidance since 2007. EPA did not revise the text of the chapters in either 2007 or 2012.

In 2014, EPA updated the text of the online versions of Chapters 1, 5, 6, and 7 to reflect current EPA guidance, and incorporated the information from the "Updated Information" boxes. EPA also streamlined the text of these chapters to make the document more user friendly.

In November 2017, EPA published an update to Chapter 3 of its Water Quality Standards (WQS) Handbook. Chapter 3 contains information relevant to water quality criteria.

For any questions related to the guidance in this Handbook, please contact us. Copies of any referenced document can be obtained by clicking on the hyperlink or visiting the *Reference Library of Water Quality Standards Policy and Guidance Documents* page.

Modernizing Public Hearings for WQS Reviews

The document below suggests how states and authorized tribes can conduct online public hearings in lieu of in-person public hearings, consistent with federal public hearing requirements.

- Modernizing Public Hearings for Water Quality Standard Decisions Consistent with 40 CFR 25.5 (PDF) (31 pp, 686 K)

Related Information

The *Reference Library of Water Quality Standards Policy and Guidance*

EXHIBIT
tabbies
SJWC 3-A

[https://www.epa.gov/wqs-tech/water-quality-standards-handbook]

United States Environmental Protection Agency

Office of Water
EPA-823-B-12-002
2012

Water Quality Standards Handbook

Chapter 4: Antidegradation

The WQS Handbook does not impose legally binding requirements on the EPA, states, tribes or the regulated community, nor does it confer legal rights or impose legal obligations upon any member of the public. The Clean Water Act (CWA) provisions and the EPA regulations described in this document contain legally binding requirements. This document does not constitute a regulation, nor does it change or substitute for any CWA provision or the EPA regulations.

Water Quality Standards Handbook
CHAPTER 4: ANTIDEGRADATION

(40 CFR 131.12)

4.4 Protection of Existing Uses – 40 CFR 131.12(a)(1)

UPDATED INFORMATION

Letter: Mr. Derek Smithee, State of Oklahoma Water Resources Board. Questions and Answers on EPA's Existing Use Policy (2008) (PDF) - This letter answers Oklahoma's questions on several issues related to existing uses.

This section requires the protection of existing uses and the level of water quality to protect those uses. An "existing use" can be established by demonstrating that:

- fishing, swimming, or other uses have actually occurred since November 28, 1975; or
- that the water quality is suitable to allow the use to be attained—unless there are physical problems, such as substrate or flow, that prevent the use from being attained.

An example of the latter is an area where shellfish are propagating and surviving in a biologically suitable habitat and are available and suitable for harvesting although, to date, no one has attempted to harvest them. Such facts clearly establish that shellfish harvesting is an "existing" use, not one dependent on improvements in water quality. To argue otherwise would be to say that the only time an aquatic protection use "exists" is if someone succeeds in catching fish.

Full protection of the existing use requires protection of the entire water body with a few limited exceptions such as certain physical modifications that may so alter a water body that species composition cannot be maintained (see section 4.4.3, this Handbook), and mixing zones (see section 4.4.4, this Handbook). For example, an activity that lowers water quality such that a buffer zone must be established within a previous shellfish harvesting area is inconsistent with the antidegradation policy.

Section 131.12(a)(l) provides the absolute floor of water quality in all waters of the United States. This paragraph applies a minimum level of protection to all waters. However, it is most pertinent to waters having beneficial uses that are less than the section 101(a)(2) goals of the Act. If it can be proven, in that situation, that water quality exceeds that necessary to fully protect the existing use(s) and exceeds water quality standards but is not of sufficient quality to cause a better use to be achieved, then that water quality may be lowered to the level required to fully protect the existing use as long as existing water quality standards and downstream water quality standards are not affected. If this does not involve a change in standards, no public hearing would be required under section 303(c). However, public participation would still be provided in connection with the issuance of a NPDES permit or amendment of a section 208 plan or section 319 program. If, however, analysis indicates that the higher water quality does result in a better use, even if not up to the section 101(a)(2) goals, then the water quality standards must be upgraded to reflect the uses presently being attained (131.10(i)).

If a planned activity will foreseeably lower water quality to the extent that it no longer is sufficient to protect and maintain the existing uses in that water body, such an activity is inconsistent with EPA's

antidegradation policy, which requires that existing uses are to be maintained. In such a circumstance, the planned activity must be avoided or adequate mitigation or preventive measures must be taken to ensure that the existing uses and the water quality to protect them will be maintained.

Section 4.4.1, this Handbook, discusses the determination and protection of recreational "existing" uses, and section 4.4.2, this Handbook, discusses aquatic life protection "existing" uses (of course, many other types of existing uses may occur in a water body).

4.4.1 Recreational Uses

Recreational uses traditionally are divided into primary contact and secondary contact recreation (e.g., swimming vs. boating; that is, recreation "in" or "on" the water.) However, these two broad uses can logically be subdivided into a variety of subcategories (e.g., wading, sailing, power boating, rafting). The water quality standards regulation does not establish a level of specificity that each State must apply in determining what recreational "uses" exist. However, the following principles apply.

- The State selects the level of specificity it desires for identifying recreational existing uses (that is, whether to treat secondary contact recreation as a single use or to define subcategories of secondary recreation). The State has two limitations:
    - the State must be at least as specific as the uses listed in sections 101(a) and 303(c) of the Clean Water Act; and
    - the State must be at least as specific as the written description of the designated use classifications adopted by the State.

- If the State designated use classification system is very specific in describing subcategories of a use, then such specifically defined uses, if they exist, must be protected fully under antidegradation. A State with a broadly written use classification system may, as a matter of policy, interpret its classifications more specifically for determining existing uses—as long as it is done consistently. A State may also redefine its use classification system, subject to the constraints in 40 CFR 131.10, to more adequately reflect existing uses.
- If the use classification system in a State is defined in broad terms such as primary contact recreation, secondary contact recreation, or boating, then it is a State determination whether to allow changes in the type of primary or secondary contact recreation or boating activity that would occur on a specific water body as long as the basic use classification is met. For example, if a State defines a use simply as "boating," it is the State's decision whether to allow something to occur that would change the type of boating from canoeing to power boating as long as the resulting water quality allows the "boating" use to be met. (The public record used originally to establish the use may provide a clearer indication of the use intended to be attained and protected by the State.)

The rationale is that the required water quality will allow a boating use to continue and that use meets the goal of the Act. Water quality is the key. This interpretation may allow a State to change

NEW MEXICO
ENVIRONMENT DEPARTMENT

SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

Harold Runnels Building
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, NM 87502-5469
Phone (505) 827-0187 Fax (505) 827-0160
www.nmenv.state.nm.us

RYAN FLYNN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

To: Kristine Pintado, Water Quality Standards Coordinator
Monitoring, Assessment and Standards Section
Surface Water Quality Bureau

From: Bryan Dail, Environmental Scientist
Jodey Kougioulis, Environmental Scientist
Surface Water Quality Bureau

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

---

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.

EXHIBIT
tabbies
SJWC 3-C

SWQB Rebuttal Exhibit 2

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:***
>
> ***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

STATE OF NEW MEXICO
BEFORE THE WATER QUALITY CONTROL COMMISSION

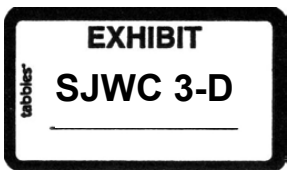
In the Matter of:	)	
PROPOSED AMENDMENTS TO *STANDARDS FOR INTERSTATE AND INTRASTATE WATERS*, 20.6.4 NMAC	)	**No. WQCC 14-05 (R)**
New Mexico Environment Department,	)	
Petitioner.	)	

REBUTTAL TESTIMONY OF JAMES HOGAN

I. INTRODUCTION

My name is James Hogan and I am currently bureau chief of the New Mexico Environment Department ("NMED") Surface Water Quality Bureau ("SWQB"). A copy of my resume is marked as SWQB Exhibit 3, in the Notice of Intent ("NOI") direct testimony filed on December 12, 2014. It is accurate and up-to-date.

I am presenting this written rebuttal testimony on behalf of the SWQB to first clarify issues raised by the San Juan Water Commission ("SJWC") about Sections 20.6.4.97 through .99 New Mexico Administrative Code ("NMAC"). I will then present rebuttal testimony in response to the SJWC regarding SWQB's proposed amendments to certain waters in Sections 20.6.4.101 through .899 NMAC. Finally, I will present rebuttal testimony to the Amigos Bravos ("AB") proposal to change the aquatic life use in Section 20.6.4.128 NMAC.



II. PROPOSALS AND REBUTTAL

A. Overview of Designated Uses

The issues I will address in my rebuttal testimony all center on designated uses - in particular the rebuttable presumption for §101(a)(2) "fishable/swimmable" uses, the process by which to set/change these designated uses for ephemeral or effluent dependent waters, and the requirements to review those waters that do not meet the §101(a)(2) uses. For this reason I will start with an overview of designated uses to set the framework within which the responses to specific issues can be properly addressed.

Designated Uses are an Integral Part of the Water Quality Standards

Section 74-6-4.D of the New Mexico Water Quality Act ("WQA") provides that the Water Quality Control Commission ("WQCC") *"shall adopt water quality standards for surface and ground water of the state subject to the Water Quality Act. The standards shall include narrative standards and as appropriate, the designated uses of the waters and the water quality criteria necessary to protect such uses. The standards shall at a minimum protect the public health or welfare, enhance the quality of water and serve the purposes of the Water Quality Act."* The federal Water Pollution Control Act (i.e. the Clean Water Act ("CWA")) regulations provide similar direction:

"States adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act." 40 CFR §131.2.

Rebuttable Presumption for 101(a)(2) "Fishable/Swimmable" Uses

Section 101(a)(2) of the CWA states *"it is the national goal that wherever attainable, an interim goal of water quality which 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."* Federal regulations specify that the requirement to adopt standards that "serve the purposes of the Clean Water Act" means that *"(as defined in Sections 101(a)(2) and 303(c) of the Act) water quality standards should, wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife, recreation in and on the water, and agricultural, industrial, and other purposes including navigation."* 40 CFR §131.2. Finally, in accordance with 40 CFR §131.10(j):

"(j) A State must conduct a use attainability analysis as described in § 131.3(g) whenever:

(1) The State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the Act, or

(2) The State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or to adopt subcategories of uses specified in section 101(a)(2) of the Act which require less stringent criteria."

Where a use attainability analysis (UAA) is defined as *"a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in §131.10(g)."* 40 CFR §131.3(g).

Taken together, these federal regulations for Water Quality Standards ("WQS") regulations establish the "rebuttable presumption" that the CWA §101(a)(2) uses are attainable and therefore must be assigned to a water body, unless a State demonstrates, with appropriate documentation, that such uses are not attainable.

The New Mexico WQS have similar requirements:

"The commission may remove a designated use specified in Section 101(a)(2) of the federal Clean Water Act or adopt subcategories of a Section 101(a)(2) use requiring less stringent criteria only if a use attainability analysis demonstrates that attaining the use is not feasible because of a factor listed in 40 CFR 131.10(g). Section 101(a)(2) uses, which refer to the protection and propagation of fish, shellfish and wildlife and recreation in and on the water, are also specified in Subsection B of 20.6.4.6 NMAC." Section 20.6.4.15(A)(1) NMAC.

Secondary Contact and Limited Aquatic Life are not 101(a)(2) uses

In the 2005 Triennial Review, the SWQB argued that the limited aquatic life and secondary contact uses proposed for ephemeral waters under Section 20.6.4.97 NMAC were consistent with §101(a)(2) uses. However in its review of the 2005 Triennial Review, the U.S. Environmental Protection Agency ("EPA") determined these uses are not consistent with §101(a)(2) goals and rejected assigning the ephemeral designation by default because a UAA is required in order to do so. The EPA Record of Decision ("ROD") at p. 36[1] states:

> *In designating a limited aquatic life use subcategory for ephemeral waters, the WQCC explained in its SoR (paragraph 188), that:*
>
> > *"...the limited aquatic life subcategory "fits" the type of aquatic communities likely to be found in nonperennial waters. Finally, the limited aquatic life subcategory is appropriate because it satisfies the CWA and EPA regulations while avoiding the substantial burden on the state of preparing UAAs to justify not designating another subcategory of the aquatic life use for nonperennial waters."*
>
> *EPA supports the concept, but disagrees with the Commission's interpretation that adopting a limited aquatic life use subcategory satisfies the CWA and EPA regulations. Although ephemeral waters may only be capable of supporting a limited aquatic community selectively adapted to the conditions typical of these waters, this limited use does not serve the purposes*

[1] http://www.nmenv.state.nm.us/swqb/documents/swqbdocs/Standards/TriennialReview/2005/ROD-EPAReviewDRAFT11-16-06.pdf

of the Act as defined in CWA sections 101(a)(2) and 303(c). These statutes require water quality standards to provide, wherever attainable, water quality for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water – functions commonly referred to as fishable/swimmable uses. EPA's current water quality regulation effectively establishes a rebuttable presumption that fishable/swimmable uses are attainable and therefore should apply to a water body unless it can be demonstrated that such uses are not attainable. EPA does not expect the State to adopt uses for ephemeral waters that cannot be attained, but in those instances, the State must submit a UAA to support an aquatic life designation that does not meet the CWA 101(a)(2) objective as required by 40 CFR131.10(j)(1).

Likewise the ROD at p. 38 states:

"Designating a secondary contact use is likely to be appropriate for ephemeral waters. However, following the same logic explained in the discussion of the limited aquatic life use, EPA's current water quality regulation effectively establishes a rebuttable presumption that "fishable/swimmable" uses are attainable unless it can be demonstrated that such uses are not attainable. As noted in that earlier discussion, 40 CFR 131.10(j)(1) requires that a UAA be submitted supporting designated uses for waters that are lower than the goal uses described in CWA Section 101(a)(2)."

Required Review of Waters that do not Include 101(a)(2) uses

In accordance with the water quality standards in Section 20.6.4.10 NMAC and the federal water quality regulations require that:

"...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." 40 CFR §131.20(a).

B. Ephemeral waters proposed in Subsection C of 20.6.4.97 NMAC

In their NOI, the SJWC requests that the WQCC reflect on the transactional costs associated with the underlying WQCC-approved water quality standards for ephemeral waters designations and encourages the SWQB and the WQCC to approach the EPA to determine the most efficient way to undo the damage caused by changes adopted in the 2009 triennial standards review. While the SWQB is always willing to engage with interested parties to find ways to improve the clarity and efficiency of the WQS and ensure that waters are neither under- nor over-protected, it is not clear that the SJWC's proposal is tenable.

The SWQB disagrees with the SJWC's request to simply revoke the §101(a)(2) rebuttable presumption for several reasons. First, as noted in previous testimony, the EPA considers limited aquatic life and secondary contact to not meet §101(a)(2) goals of the CWA, as clearly documented in their disapproval of the default ephemeral designations approved by the WQCC in the 2005 triennial review. For this reason the SJWC is incorrect in their assertion that the rebuttable presumption adopted by the WQCC in 2009 could easily be reverted back to the pre-2009 designated uses and criteria for secondary contact recreation and limited aquatic life uses without the performance of a UAA.

Likewise the SJWC has provided no evidence supporting their statement of "damage caused by the 2009 action". I present testimony below to demonstrate that the SWQB currently has an expeditious and cost-effective approach that will meet relevant State and federal regulations.

SJWC: All unclassified waters are now assigned the designated use of wildlife habitat, primary contact and marginal warmwater aquatic life, and those uses can be downgraded only through

the performance of a UAA. The SJWC believes this requirement places an unreasonable transactional cost burden on the state and its citizens that is simply unnecessary.

Rebuttal Response: The SWQB does not agree that UAAs place an unreasonable transactional cost burden on the state and its citizens. For example, during 2008-2009, the SWQB conducted 18 Hydrology Protocol ("HP") UAAs for a total of $25,000 in contractor expenses, plus SWQB staff time. In the SWQB's opinion, a cost of less than $1,500 per UAA plus staff time does not seem an unreasonable financial burden given that this work supports a WQS rulemaking change, avoids the costs associated with development of individual Total Maximum Daily Loads ("TMDLs"), and also avoids unnecessary investments in point and non-point source pollution reduction technologies within these stream segments. Most importantly, the appropriate attainable and scientifically defensible uses and criteria have been identified for these streams for CWA use in §303(d) assessments, NPDES permits, and TMDLs.

SJWC: The SJWC claims that the Hydrology Protocol, cited in Subsection 20.6.4.15.C NMAC, elevates this guidance document to the status of an enforceable regulation, thus circumventing the due process rights of those against whom the guidance documents are applied.

Rebuttal Response: The SWQB disagrees with the SJWC's assessment of the Hydrology Protocol. The HP is not merely a guidance document - it is part of the State's Water Quality Management Plan ("WQMP") and was adopted by the WQCC following two rounds of public comment. As a part of the WQMP, the HP does not set enforceable regulations; rather it is a WQCC-approved policy document that sets the procedure by which the regulations, as

documented in Subsection 20.6.4.15.C NMAC, can be implemented. Under this protocol, data are collected to demonstrate that a waterbody cannot achieve the presumed primary contact or aquatic life uses, which are assigned by default. As such, any WQS change adopted following a HP UAA will only lead to a designated use with less stringent criteria. However, adopting such a change must follow the administrative hearing process, which does not circumvent due process.

While the approval process in Subsection 20.6.4.15.C NMAC provides for an expedited process to revise the designated use of a water body, it does not circumvent due process, as the public notice and comment period is still required prior to the SWQB approval and submission to the EPA. Once approved by the SWQB and the EPA, HP UAAs are also subject to public hearing and approval by the WQCC through the Triennial Review process.

SJWC: The SJWC argues that the EPA should be receptive to a proposal allowing New Mexico to return to the WQS that were in place for ephemeral streams prior to 2009, given recent public comments on EPA's proposed "waters of the United States" rule. *See* Definition of "Waters of the United States."[2] Numerous submitted comments demonstrate that ephemeral waters may not be classified as waters of the United States and thus federal jurisdiction for water quality protection purposes does not apply to such waters.

Rebuttal Response: The SWQB recognizes that many parties, including the NMED, have raised concerns about the federal jurisdictional authority over ephemeral waters. Until a final rule is promulgated, however, it is premature to interpret the impact of EPA's waters of the United States rule, or to determine if a state level designation of ephemeral waters could be made.

[2] SJWC cites the proposed rule published by the EPA on April 21, 2014. 79 FR 76, p. 22188 (Definition of ''Waters of the United States'' Under the Clean Water Act; Proposed Rule).

Regardless, per Subsection 20.6.4.15(A)(1) NMAC, designated uses may only be removed or made less stringent if a UAA demonstrates that attaining the existing use is not feasible because of a factor listed in 40 CFR §131.10(g).

SJWC: Arizona has a reasonable approach to unclassified waters; New Mexico should adopt their concept of effluent dependent waters.

Rebuttal Response: The SJWC provides no suggestions as to how Arizona's regulations on effluent dependent waters ("EDWs") could be incorporated into New Mexico's WQS. While Arizona's approach may appear reasonable, in the opinion of the SWQB it would be fraught with implementation challenges if adopted for New Mexico. First, as defined in Arizona's WQS, *"an effluent-dependent water is a surface water that, without the point source discharge of wastewater, would be an ephemeral water."* (R18-11-101) This would require an extensive, statewide study of all waters with point source discharges to determine if, without the point source, the water would be ephemeral. Second, Arizona's WQS define a special designated use and associated standards for EDWs. As such the term "EDW" describes the source of the water, rather than the uses supported by the water and the criteria to protect these uses, as in New Mexico's WQS. It is likely that EDWs in New Mexico support a wide variety of uses, thus defining a single use for all EDWs would be difficult. Likewise, effluent quality, and thus the resulting in-stream water quality, would likely be variable in EDWs, thus establishing one set of standards to protect the source of the water would be difficult. Therefore, adopting standards similar to Arizona's would require careful consideration of the overall impact to all of New Mexico's WQS. Finally, it is unclear whether having a designated use of EDW would imply that

the stream has a designated use for waste transport and assimilation. This is a significant issue because waste transport and assimilation is not considered an acceptable designated water body use. The federal regulations at 40 CFR §131.10(a) states:

"§131.10 Designation of uses.

(a)** Each State must specify appropriate water uses to be achieved and protected. The classification of the waters of the State must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation.* ***In no case shall a State adopt waste transport or waste assimilation as a designated use for any waters of the United States. *[Emphasis added]*

Therefore, as for other discharges, the effluent quality must be maintained at treatment levels sufficient enough that degradation does not occur, and also consistent enough to ensure that all attainable uses are met. Furthermore, as the Department already has several regulatory tools, such as the HP, to determine what uses and criteria should apply for receiving streams, such a broad category as an EDW designated use is not necessary.

C. Proposal for Certain Segments in Section 20.6.4.100-899 NMAC to Change to Primary Contact Recreation

The SJWC argues that the WQCC should not adopt the SWQB's proposed revisions for upgrading recreational use in nine waterbody segments because such a use already meets §101(a)(2) goals and therefore there is no need to make this change, and because the SWQB provides no information and data proving the use is attainable. As detailed previously, secondary contact does not meet the §101(a)(2) goal and as such, per 40 CFR §131.20(a), the State is required to review these waters during the Triennial Review to determine if the

§101(a)(2) goal remains unattainable. In conducting this review, the SWQB found no evidence of a UAA to support the designation of a secondary contact use or evidence that primary contact use is unattainable in these waters. To the contrary, all evidence found indicated that the primary contact recreation was an existing use, or at the very least attainable given the significant amount of other water-based recreation occurring. For these reasons, the SWQB argues that the WQCC should reject the SJWC recommendation and adopt the changes as proposed by the SWQB.

SJWC: Because the current designated use of secondary contact recreation, previously approved by EPA, meets CWA §101(a)(2) goal for recreation in and on the water there is no need to impose this change.

Rebuttal Response: In previous Triennial Reviews, the SWQB made the same argument presented by the SJWC when the ephemeral standards under Section 20.6.4.97 NMAC were first adopted. As noted above in its review of the 2005 Triennial Review, the EPA determined that secondary contact is not consistent with §101(a)(2) goals and rejected assigning the ephemeral designation by default because a UAA is required in order to do so.

SJWC: The SWQB does not offer any data, documentation, or evidence that primary contact is occurring and is attainable.

Rebuttal Response: This is not correct; in the SWQB petition and testimony, evidence of primary contact recreation as an existing or an attainable use is provided. As discussed above, the State is required to periodically review waters that do not meet §101(a)(2) goals; in

conducting this review, the SWQB found no evidence to support that primary contact in these waters is not attainable. This information is summarized in SWQB Rebuttal Exhibit 2 (memo) and hereby added to the rationale already presented in the petition and testimony.

For example, in Segment 20.6.4.219 NMAC, for Avalon Reservoir, the petition Basis for Change states the following:

"In this case, kayaking and scuba for game fishing are activities allowed and described on the reservoir park website. The Department has no evidence that this use is not attainable and information indicates that primary contact use may be existing and is likely attainable."

(Pintado Testimony, SWQB Exhibit 13, p. 81)

Also, in testimony the SWQB stated that primary contact recreation was observed in Segment 20.6.4.103 NMAC. Additionally, it has been noted by field staff that the Rio Grande is accessible for swimming, and there is a commercial hot springs park located in this segment, which features access to the river. It was stated in testimony that Segment 20.6.4.116 NMAC includes the Rio Ojo Caliente, which has swimming at the hot springs located in it. Rafting and float trips have been observed by SWQB staff, and the United States Bureau of Land Management ("BLM") offers rafting activities on the lower and upper segments of the Rio Chama.[3]

While nominally accessible to park scientists and guided tours, the SWQB also has anecdotal information from the National Park Service (Valles Caldera National Park) that Segment 20.6.4.124 NMAC has an existing use (as defined under Subsection 20.6.4.7 (E)(3) NMAC) of primary contact recreation in hot springs in this segment with features named

[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

"footbath springs", and "Ladies' and Men's bathhouses". Evidence of primary contact recreation has been observed by SWQB staff in Segments 20.6.4.204 and 206 NMAC, particularly upstream and downstream of Brantley Reservoir. Segment 20.6.4.207 NMAC is the main stem of the Pecos River and includes over 100 miles including the Salt Creek wilderness used by hikers and backpackers. While some of this area is very remote, contact recreation is possible. There is easy access just below Sumner Dam, there are daytime recreational-use sites on both sides of the river, and fishing activities are common.

Segments 20.6.4.213, 219 and 308 NMAC are all lakes on state parks with activities noted in the testimony, which includes scuba, fishing (includes scuba game fishing and fly fishing), wading, kayaking, canoeing and paddlecraft, and use of small trolling boats. The SWQB considers such water-based recreation to indicate a significant potential for primary contact, either on purpose or by accident.

SJWC: The SWQB also states in their Basis for Change "to be consistent with the latest EPA recommendations for recreational contact… the designated use…is upgraded." However, the EPA announcement published in the Nov 29, 2012 Federal Register applies to the availability of the 2012 Recreational Water Quality Criteria, a document that contains EPA's recreational water quality criteria recommendations for protection human health in ambient waters that already are designated for primary contact recreation- not secondary contact. EPA's recommendation does not apply unless or until the waters have a designated use of primary contact.

Rebuttal Response: The SWQB disagrees with the SJWC's comment. The relevant requirement is in 40 CFR §131.20(a), which requires states to review WQS that do not meet §101(a)(2) uses.

The SWQB reference to 77 FR71191, November 29, 2012 is merely to note that the primary contact standards meet the latest EPA recommendations for recreational contact and CWA §101(a) goals (77 FR71191, November 29, 2012).

D. Section 20.6.4.128 NMAC – LANL Waters in Segment 128

Amigos Bravos submitted a proposal to change the limited aquatic life use to the marginal warmwater aquatic life use in Segment 20.6.4.128 NMAC ("Segment 128") for the following reasons: 1) non-perennial waters are important; 2) the current uses and criteria (e.g., acute) in this segment are not based on sound science, do not meet the review required under 40 CFR §131.20(a) and should be revised; 3) intermittent streams on LANL property should have the same protections as for other intermittent waters in New Mexico; and 4) Segment 128 uses and criteria are based on a "fatally flawed" UAA. (Amigos Bravos NOI Testimony, Pleading Log Item 19) Los Alamos National Lab ("LANL") has filed a notice of intent to present direct technical testimony in opposition to Amigos Bravos' proposal. (LANL NOI Testimony, Pleading Log Item 22)

The SWQB's rebuttal testimony is in opposition to Amigos Bravos' proposal, and is presented below. In summary, the WQCC and EPA have previously determined that limited aquatic life is the highest attainable use for the intermittent and ephemeral waters in Segment 128. Amigos Bravos presents no new information to indicate that the marginal warmwater aquatic life use is an existing or attainable use, in fact the arguments they provide was considered, and rejected, by the WQCC during the last Triennial Review. Likewise the argument that these criteria are based on a "fatally flawed" UAA is not supported by the record supporting

the WQCC's adoption and the EPA's review and approval. For these reasons, as detailed below, the SWQB recommends that the Commission not adopt Amigos Bravos' proposal.

AB: Amigos Bravos proposes to change Segment 128 from a limited aquatic life use to a marginal warm water aquatic life use because intermittent waters on LANL are given weaker protections than all other intermittent waters in New Mexico. Amigos Bravos' testimony provides an account of the importance of non-perennial streams and includes an inventory of birds, mammals and aquatic species documented in Los Alamos County and in the Jemez Mountains region.

Rebuttal Response: The SWQB agrees that non-perennial streams are important. However, Amigos Bravos' most recent proposal for Segment 128 relies upon, and reinterprets, the same information considered by the WQCC when the limited aquatic life use was first assigned to ephemeral and intermittent streams in Segment 128.[4] This same information was presented again by Amigos Bravos in a proposal to change the limited aquatic life use in Segment 128 during the 2008-2009 Triennial Review. At that time, the WQCC did not approve Amigos Bravos' proposed change to the limited aquatic life use, noting four main reasons:

1. The WQCC does not adopt Amigos Bravos' proposal to replace limited aquatic life use with aquatic life use because this segment was created and designated uses were assigned in the last triennial review; Amigos Bravos presented no new evidence regarding current water quality conditions that would support a change in the standards.

[4] Discussion is in the 2003-2005 Triennial Review Hearing Officer's Report, Attachment A, pp. 189-199.

2. A UAA was completed and approved by the EPA for this segment. The UAA noted that the 2002 study referenced by Amigos Bravos "provide[s] information from numerous sources indicating that ephemeral and intermittent streams in the Jemez Mountains support aquatic life that includes aquatic invertebrates and perhaps amphibians, but not fish." Amigos Bravos relies on information that the WQCC already considered in assigning the limited aquatic life use.
3. The EPA approved this provision based on the hearing record and the UAA submitted by the SWQB, and has not indicated any problem with that decision.
4. The UAA for this segment acknowledges the presence of aquatic invertebrates, and even amphibians, but not fish, and therefore concludes that the waters cannot attain the CWA §101(a)(2) goal of water quality providing for the "protection and propagation of fish, shellfish and wildlife."

(SWQB Rebuttal Exhibit 3)

AB: The LANL UAA is fatally flawed because it was improperly drafted as an after-the-fact rationalization for the 2004 decision by the WQCC to change 20.6.4.128 NMAC.

Rebuttal Response: During the time the 2003-2005 Triennial Review was conducted, the SWQB and the WQCC considered the 2002 report (Lusk and McRae) to provide the necessary documentation to support of uses assigned to Segments 126-128. In accordance with CWA §303(c) and 40 CFR §131.20(c), amendments to the WQS, including for Segments 126-128, were submitted to the EPA for review on July 1, 2005. The WQCC's Statement of Reasons for Amendment of Standards, the hearing record, all transcripts and exhibits, and the 2002 U.S. Fish

and Wildlife study were provided to support the changes, pursuant to 40 CFR §131.6(b) and (f). The EPA approved the majority of the amendments (SWQB Rebuttal Exhibit 4). However, for Segment 128, the EPA took no action and requested further documentation, citing 40 CFR §131.6(b) and (f), and stating:

> *"…In today's action, EPA is approving the majority of these amendments. However, based on a review of the record, EPA was unable to take action on a few provisions because they did not meet the minimum requirements for a water quality standards submission. See 40 CFR 13 1.6(b) and (f). Specifically, EPA was unable to take action on the limited aquatic life, aquatic life and or secondary contact recreation use designations for Sections 20.6.4.97, 20.6.4.98 and 20.6.4.99. EPA strongly supports the concept the State has used in developing standards for unclassified ephemeral, intermittent and perennial surface waters; however, adequate supporting documentation (such as a use attainability analysis) was not available which would allow us to take action on all portions of these provisions. Similarly, EPA was unable to take action on the new and for revised use designations and modifications for six classified segments because adequate supporting documentation (such as a use attainability analysis) was not available to support the modifications. See segments 20.6.4.126, 128, 221, 310, 701 and 702.*
>
> *The enclosed detailed Record of Decision ["ROD"] explains EPA's basis for the approval action taken and* ***provides an explanation of the type of documentation that is necessary for EPA to be able to approve the remaining provisions. We would be glad to work with you and provide technical assistance regarding the needed supporting documentation." [Emphasis added]***
>
> (SWQB Rebuttal Exhibit 4)

The EPA also made specific comments on Segment 128 in the ROD accompanying its letter:

> *"…As with the two previous Sections, New Mexico has established this segment, classifying waters within LANL property. The State based use designations for this segment on the same intensive study by the Service (Lusk and MacRae 2002) mentioned in the previous sections. This segment has been designated for limited aquatic life and secondary contact based on likelihood of exposure by ingestion and a light frequency of use, as well as the State's default livestock watering and wildlife habitat uses that have been applied.*
>
> *The limited aquatic life and secondary contact uses may be the highest uses that can be attained in this segment. However, as discussed in Section 20.6.4.126, such designations are not compatible with the uses specified in section 101(a)(2) of the Act and must be supported by a UAA based on one of the factors listed in 40 CFR 131.10(g). Again, the most logical factor is 131.10(g)(2) - natural, ephemeral, intermittent, or low-flow conditions or water levels prevent attainment of the use. The supporting UAA for waters in this segment and Section 20.6.4.126 may be combined.*

Action: EPA takes no action on this Section."

(SWQB Rebuttal Exhibit 5)

To suggest that the UAA was completed "after the fact" and is therefore "fatally flawed" is without merit. The UAA report was requested under 40 CFR §131.6 to support the uses adopted in 2005 by the WQCC for the ephemeral and intermittent waters in Segments 126 and 128. The EPA worked with the SWQB on the UAA, which was submitted to the EPA on August 17, 2007, and approved on August 31, 2007.

The allegation that the UAA is "fatally flawed" based on a predetermination decision is not applicable in the context of WQS revisions, especially when the federal regulations allow for additional information to be submitted before final CWA §303(c) approval by EPA. The federal regulations at 40 CFR §131.21(a)(1)-(2) require the EPA to review and either approve or disapprove a state's WQS only after they have been adopted and certified by the state.[5] Therefore, to comply with the federal regulations all WQS revisions could be considered "after the fact." AB cites *Davis v. Mineta*, 302 F.3d 1104 (10th Cir. 2002) for the proposition that the UAA was "fatally flawed" as a result of some "predetermination." That case is not relevant as it dealt with the National Environmental Policy Act ("NEPA") process, a procedural statute requiring federal agencies to evaluate the impact of their actions upon the environment before engaging in that action. That process is very different than the EPA approval of a UAA submitted by a state agency, where the EPA would almost certainly consider the same evidence as the state agency did in evaluating how to classify these waters.

[5] According to 40 CFR 131.21, those WQS revisions submitted after May 30, 2000, are applicable for CWA purposes only after EPA's final approval.

Furthermore, in the 2011 ROD for the EPA's review of the 2008-2009 Triennial Review, the EPA reiterated its approval of the uses and criteria for ephemeral and intermittent streams in Segment 128:

> *"In its 2005 action, New Mexico designated limited aquatic life and secondary contact uses for this segment. In 2006, EPA took no action on this new segment, noting that the State had not provided adequate support justifying the limited aquatic life or the secondary contact use designation. EPA noted that 40 CFR 131.6(b) and (f) requires the submission of supporting analyses and other general information that would assist EPA in determining the adequacy of standards that don't include uses specified in §101(a)(2)of the Act. EPA noted that to comply with the regulation, New Mexico must submit a UAA to demonstrate why attaining the limited aquatic life and secondary contact recreation uses are not feasible based on one of the factors listed in 40 CFR 131.10(g).*
>
> *Following that recommendation, NMED developed a UAA in August 2007, to support the limited aquatic life and secondary contact use designations for this segment. The State's UAA identified the streams included in this segment as ephemeral and intermittent. Given that these streams do not flow for varying periods throughout the year and the lack of upstream source populations, it is unlikely that this segment could support a higher use. EPA approved the limited aquatic life and secondary contact use designations for this segment on August 31, 2007."*
>
> (SWQB Rebuttal Exhibit 6)

AB: The UAA also does not take into account the well-documented presence of shellfish and macroinvertebrates that are indicators of a 101(a)(2) use.

Rebuttal Response: As noted in the testimony above, the WQCC found that the UAA does acknowledge the presence of aquatic invertebrates, and even amphibians, however it concluded that that the waters cannot attain the CWA §101(a)(2) goal. It is important to note that designation of limited aquatic life use for the ephemeral and intermittent streams in Segment 128 does not ignore the presence of macroinvertebrates, including shellfish and clams. In fact, the definition for limited aquatic life states that the subcategory *"includes surface waters that support aquatic species selectively adapted to take advantage of naturally occurring rapid*

environmental changes, ephemeral or intermittent water, high turbidity, fluctuating temperature, low dissolved oxygen or unique chemical characteristics." Subparagraph 20.6.4.7.L (2) NMAC

AB: Amigos Bravos suggests that in accordance with the federal regulations in 40 CFR §131.20(a), the SWQB should reevaluate the waters in Segment 128 by applying use of the HP.

Rebuttal Response: The SWQB does not agree. The federal regulations in 40 CFR §131.20(a) do not require states to revisit every UAA, or to generate new data. Rather, the SWQB is required to consider if new data are available for segments without CWA §101(a)(2) uses, and whether those data indicate that a higher use is attainable. The SWQB is not aware of, nor has Amigos Bravos presented, new and credible data demonstrating that the marginal warmwater aquatic life use is existing or attainable in Segment 128.

AB: Segment 128 should be assigned the warmwater aquatic life use consistent with the default uses and criteria (e.g., acute and chronic) consistent with intermittent streams in Section 20.6.4.98 NMAC.

Rebuttal Response: It is not required, nor is it necessarily appropriate, to always assign default uses and criteria (e.g., under Sections 20.6.4.97 through .99 NMAC) to certain types of water bodies when using the UAA methodology. Instead, the WQS require that UAA methods must be scientifically defensible, and provides examples of such methods (Subsection 20.6.4.15.B NMAC). In the case of Segment 128, the UAA for this segment acknowledges the presence of aquatic invertebrates, wildlife, amphibians, but not fish, and therefore concludes that the waters

cannot attain the CWA §101(a)(2) goal of water quality providing for the "protection and propagation of fish, shellfish and wildlife." (SWQB Rebuttal Exhibit 3) The UAA also acknowledges that the ephemeral and intermittent streams in this segment experience a low-flow regime subject to high variability, which limits the aquatic species to those well adapted to those conditions, such as for the limited aquatic life use defined in Subparagraph 20.6.4.7.L (2) NMAC.

AB: Amigos Bravos points to the HP as new guidance, which was in development during the 2008-2009 Triennial Review process[6] that provides better and clearer guidance on how to complete UAAs in ephemeral and intermittent streams. They assert that if this new protocol had been used, many of the waters in these segments would merit the protections of a marginal warmwater aquatic life use designation rather than a limited aquatic life use designation.

Rebuttal Response: Amigos Bravos states in testimony that according to the HP, "…the presence of macroinvertebrates signal that the water is in fact intermittent, not ephemeral, and therefor merits CWA §101(a)(2)…" [Conn Testimony, Amigos Bravos NOI, Pleading Log Item 19 p. 3] While this is correct, it is important to understand that the HP UAA is designed to be an expedited process to demonstrate that attainment of CWA §101(a)(2) aquatic life and recreational uses are not feasible due to the factor identified in 40 CFR §131.10(g)(2): *natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the use*. Due to the expedited nature of the HP the presence of macroinvertebrates requires additional data

[6] The HP was approved by the WQCC on May 10, 2011 and by the EPA on December 23, 2011 as Appendix C of the state's Water Quality Management Plan (WQMP) / Continuing Planning Process (CPP) document.

collection, beyond the basic Level 1 Evaluation, to demonstrate that limited aquatic life is the highest attainable use.

As such, the HP notes that for the Level 1 Evaluation, ephemeral streams with scores below 9 but in which aquatic macroinvertebrates and/or fish have been observed, the stream is at least intermittent. [HP Table 5, p.33] However, the HP further states that:

> *"…In most instances, the use of a Level 1 Evaluation should be sufficient to make a final hydrological determination.* ***If after conducting Level 1 Evaluation, a hydrological determination cannot be made because more information is required, then a Level 2 Evaluation which uses more intensive data collection can be conducted."***

STATE OF NEW MEXICO

BEFORE THE WATER QUALITY CONTROL COMMISSION

No. WQCC 14-05(R)

IN THE MATTER OF:
PROPOSED AMENDMENTS TO
STANDARDS FOR INTERSTATE
AND INTRASTATE SURFACE
WATERS, 20.6.4 NMAC

TRANSCRIPT OF PROCEEDINGS

BE IT REMEMBERED that on the 13th day of October, 2015, this matter came on for hearing before Morris Chavez, Hearing Officer, and the Water Quality Control Commission, at the State Capitol Building, Room 307, 490 Old Santa Fe Trail, Santa Fe, New Mexico, at the hour of 1:02 PM.

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primary contact use may be existing and is likely attainable."

Is that correct?

MS. PINTADO: Yes.

MS. McCALEB: Is it the Bureau's position that no evidence a use is not attainable is the same showing as evidence that a use is attainable?

MS. PINTADO: Based on the rebuttable presumption, yes.

MS. McCALEB: And is it the Department's position that a determination that primary use may be existing is the same as evidence that a use is existing?

MS. PINTADO: Yes.

MS. LEMON: Yes.

MS. McCALEB: And it's your conclusion that primary -- because primary contact use is likely attainable, that's the same as evidence that the use is attainable?

MS. PINTADO: Yes.

MS. McCALEB: Let's look at these segments individually, beginning with segment 20.6.4.103.

And you state -- or, I'm sorry, the Bureau states in its petition that "While swimming in this area is 'at your own risk,' this portion of the Rio Grande is accessible for swimming and bodily contact can occur

with a risk of ingesting water."

Is it the Bureau's position that if a water is accessible that it must be assumed that swimming is a use that is occurring in that water?

MS. PINTADO: Yes.

MS. LEMON: We do have evidence that swimming is likely for -- or water-based recreation, with the result of possible immersion or ingestion, is occurring in these nine stream segments.

MS. McCALEB: But in the basis for change and in the direct testimony -- for example, for this segment, you state that swimming in the area is at your own risk.

And what evidence has been provided of that other than this statement?

MS. LEMON: There are hot springs located right on the river, and there is swimming that does occur, that we have Bureau staff who have witnessed swimming not only in this segment but in other segments, or boating and water-based recreation, that could possibly meet the definition -- that could meet the definition of primary contact.

MS. McCALEB: And is all the evidence you have of that nature provided in the Department's Rebuttal Exhibit 2?

MS. PINTADO: Yes.

MS. LEMON: And you provided this as an exhibit. What is that exhibit?

Yes.

MS. McCALEB: And has the Bureau provided any evidence at all other than this Rebuttal Exhibit 2 showing evidence of primary contact use in these nine stream segments?

MS. LEMON: No.

MS. McCALEB: Okay. Could we take a look at this Rebuttal Exhibit 2, please?

I notice it does not have a date on it. Can you tell me when it was prepared?

MR. DAIL: I believe that's the memo --

MS. LEMON: Yes.

MR. DAIL: -- from Bryan Dail.

MS. McCALEB: Yes.

MR. DAIL: That was prepared over the course of several months prior to submission of testimony, the NOI.

MS. McCALEB: Prior to the Department's submission of its NOI?

MR. DAIL: Correct.

MS. McCALEB: Can you tell me why it wasn't referred to in any of the direct testimony and it was

provided only after all rebuttal testimony had been filed -- or it was provided with the rebuttal testimony?

MS. PINTADO: It was finalized for rebuttal. It was finalized for rebuttal.

MS. McCALEB: Okay. So you did not intend to rely on this when you provided your direct testimony?

MS. PINTADO: I wouldn't necessarily say that. It was provided for rebuttal, when it was necessary.

MS. McCALEB: And could we look at page three, please, of Exhibit -- Rebuttal Exhibit 2?

With regard to segment 103 in the Rio Grande basin, the Department is relying solely on a website describing public pools accessible for swimming at your own risk. Is that correct?

MR. DAIL: If I might interject. Bryan Dail.

Segment 103 relies on web-based information, but also Department personnel who have witnessed kayaking on that segment and swimming.

MS. McCALEB: And where have you provided evidence of Department personnel stating that they have witnessed kayaking at that segment?

MR. DAIL: It was a personal communication that may not have made it to that document.

MS. McCALEB: So that evidence has not been presented in this hearing, is that correct?

MR. DAIL: Not to my knowledge.

MS. McCALEB: And let's look at segment number 116 of the Rio Grande basin.

This memo notes that Ojo Caliente Hot Springs is in that segment and rafting and float trips have been observed.

MR. DAIL: Yes.

MS. McCALEB: Observed -- who observed those float trips?

MR. DAIL: Often it's Departmental personnel, in the context of them performing surveys, which occur probably between May and September of the year -- of the survey year that would have included those segments.

MS. McCALEB: But there is no evidence provided here of who saw the rafting and float trips and when, is that correct?

MS. LEMON: Footnote 3 does. It says, "Bureau staff has observed rafting and float trip on this segment. The Bureau of Land Management offers rafting activities on lower and upper segments of the Rio Chama."

MS. McCALEB: And the BLM information is based on their website, is that correct?

MS. LEMON: And from our own information, yes.

MS. McCALEB: And from your own information.

But you do not provide any information about what staff observed the rafting or when, is that correct?

MS. LEMON: It's Bureau monitoring staff. Our monitoring staff.

Do you need a specific name?

MS. McCALEB: I'm just asking --

MS. LEMON: Is that what you're looking for?

MS. McCALEB: I'm just asking, other than this statement that Bureau staff has observed it, there is no evidence provided about who observed it and when; is that correct?

MS. LEMON: That's correct.

MS. McCALEB: And there is no evidence provided about any documentation that the Department has indicating that this was observed. Is that correct?

MS. LEMON: That's correct.

MS. McCALEB: With regard to segment 124, what evidence is there that privately owned hot springs provide evidence of existing contact recreation use?

MR. DAIL: In historical documents on that particular segment, it includes a private in-holding within what is now the park which was developed for hot springs use. It is not currently used, but there is indication that attainability, post Water Quality Act November 25th --

MS. PINTADO: 1975.

MR. DAIL: -- 1975, has indeed occurred.

MS. McCALEB: But it's not currently being used as such, is that correct?

MR. DAIL: I don't believe so.

MR. KOUGIOULIS: But, by definition, an existing use since -- it was since 1975.

MS. McCALEB: But post-1975, the Water Quality Control Commission designated this with a secondary contact use. Is that correct?

MR. DAIL: I believe so.

MS. McCALEB: With regard to segment 206 in the Pecos River basin, on page five, this is a segment -- Pecos River from Brantley Reservoir to Salt Creek, and the notes indicate simply that Brantley Reservoir downstream of this segment has primary contact use. Is that correct?

MR. DAIL: Correct.

MS. McCALEB: Is there any evidence provided here that this segment upstream of Brantley Reservoir has primary contact use?

MR. DAIL: Well, not that I submitted for this particular memo, unless it's listed -- it's footnoted.

MS. LEMON: No. But we do need to protect downstream uses.

MS. McCALEB: The basis for your proposal to upgrade the use here is because primary use is an existing -- primary contact is an existing or attainable use, correct?

MS. LEMON: I would have to look at our basis for change.

Under the basis of change for segment 206, it says, "The Department has no evidence that this use is not attainable and information indicates that primary contact use may be existing and is likely attainable. To be consistent with the latest EPA recommendations for recreational contact and Clean Water Act Section 101(a) goals, the designated use for secondary contact is upgraded to the primary contact use with corresponding criteria."

MS. McCALEB: And that's the same statement that the Bureau has made in each basis of change for these nine segments, correct?

MS. LEMON: I would have to check.

MS. McCALEB: And there is nothing in this statement of basis about needing to protect downstream uses, correct?

MS. LEMON: Not in this one. As far as I can tell.

MS. McCALEB: With regard to segment 213 in

the Pecos River basin, which is McAllister Lake, this memo notes that McAllister Lake is pubically accessible for camping, boating and fishing when open. There is no statement here about swimming.

Was that an oversight, or was it an assumption that because there is boating, there will also be swimming?

MS. LEMON: It is likely -- or it is a possibility that somebody could be immersed in the water, either accidentally or on purpose, if there is boating occurring on the lake.

MS. McCALEB: And what is the definition of secondary contact use?

MS. LEMON: Do you have it?

"'Secondary contact' means any recreational or other water use in which human contact with the water may occur and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing, wading, commercial and recreational boating and any limited seasonal contact."

MS. McCALEB: So in its water quality standards, the Commission has determined that recreational boating is a secondary contact use; correct?

MS. LEMON: Yes.

MS. McCALEB: And with regard to McAllister Lake, there is a footnote here about accidental water alteration and algal bloom that caused a fish kill which has limited fishing in the lake since 2007.

So if fishing in the lake is limited, would that necessarily also mean that perhaps any swimming, if any, is also limited?

MS. LEMON: I can't answer that. I don't know.

MS. McCALEB: But you've provided no evidence that the primary contact use of swimming is occurring at McAllister Lake, correct?

MS. LEMON: Our assumption, as I stated before, is that if there is water-based recreation, such as kayaking, boating, fishing, swimming, that when you're on top of the water, there is a probability that, either accidental or on purpose, you will go swimming, and there is a potential for that risk of ingestion of water.

MS. McCALEB: But under the definitions of New Mexico Surface Water Quality Standards, fishing, wading and boating are secondary contact uses; correct?

MS. LEMON: Correct.

MS. McCALEB: Are you familiar with 74-6-4(D) of the New Mexico Water Quality Act, which provides that

surface water quality standards adopted by this Commission must be based on credible scientific data and other evidence appropriate under the Act?

MS. LEMON: Yes. And we found no evidence for the secondary contact use. No scientific support for that use to be applied.

And based on the rebuttable presumption that all waters are fishable/swimmable, that would mean primary contact use should be implemented in these segments.

MS. McCALEB: And EPA -- you testified that EPA, after the 2005 triennial review, talked about the need to do a UAA for -- before ephemeral waters could be designated with non-101(a)(2) uses; correct?

MS. LEMON: Yes.

MS. McCALEB: And a UAA is required to downgrade the use to secondary contact or limit aquatic life, correct?

MS. LEMON: Not just for ephemeral waters. Correct.

MS. McCALEB: Okay. Correct.

EPA issued that determination or made its position known with respect to an activity where the Water Quality Control Commission was, in the first instance, designating a use; is that correct?

MS. LEMON: In the -- are you referring -- can you rephrase that?

MS. McCALEB: Yes.

During the 2005 triennial review, the Water Quality Control Commission drew an objection from EPA because it was at that time designating certain streams as having secondary contact uses and limited aquatic life uses. Is that correct?

MS. LEMON: I would have to look at their record of decision for their basis for these segments, because -- do we have that? I don't have it.

MS. PINTADO: I don't think we do.

MS. McCALEB: Let me ask the question another way.

Do you have any evidence that EPA has stated that you must have a UAA supporting a previously designated use of secondary contact?

MS. LEMON: Yes. We are supposed to review any segments that do not meet the fishable/swimmable goals, and if there is no UAA or other scientific evidence to support that lesser designation, then we are required to evaluate and see if that use is attainable in this segment or existing in the segment.

MS. McCALEB: And where in the direct testimony or any of the exhibits that you've provided is

there evidence that you have to do a UAA?

What I see in the direct testimony is the statement "If any new information has become available, if such new information indicates that the uses specified in Section 101(a)(2) are attainable, the state shall revise its standards accordingly." And that was in Ms. Pintado's direct testimony at page 77-89.

MS. PINTADO: Right.

MS. McCALEB: And so all of the new information that you have found is provided in SWQB Rebuttal Exhibit 2, is that correct?

MS. LEMON: Yes.

MS. McCALEB: If the Water Quality Control Commission approves your petition on these nine segments and changes their designated uses from secondary contact to primary contact, if in the future there is a need to downgrade that use, a UAA will be required. Is that correct?

MS. LEMON: There should be a UAA to designate it as secondary contact right now.

MS. McCALEB: But it's already been designated as secondary contact in some cases for decades, correct?

MS. LEMON: It's been -- it has been for possibly since the '80s.

I mean, on Exhibit 2, it doesn't say the

specific date that the actual secondary contact use was adopted, so I would have to go through the history and look up to see when -- exactly the date that it was adopted, but it is possible that it's been decades, yes.

MS. McCALEB: Okay. And one other basis of support for the Bureau's position with regard to these nine segments is set out in Ms. Pintado's direct testimony at page 77-89 where you refer to the latest EPA guidance for recreational contact, which is the Bureau's Exhibit Number 37.

MS. PINTADO: Yes.

MS. McCALEB: And could you please look at Exhibit Number 37?

MS. PINTADO: Yes. Got it.

MS. McCALEB: Could you please read the first sentence?

MS. PINTADO: "EPA has released its 2012 recreational" -- "EPA has released its 2012 recreational water quality criteria (RWQC) recommendations for protecting human health in all coastal and non-coastal waters designated for primary contact recreation use."

MS. McCALEB: So this is additional guidance from EPA about water quality criteria for human health in those waters that have been designated with the primary contact designated use, correct?

REBUTTAL TECHNICAL TESTIMONY

OF

CHARLES L. NYLANDER

FOR

THE 2014 TRIENNIAL REVIEW

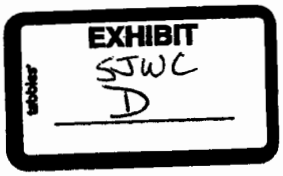
February 13, 2015

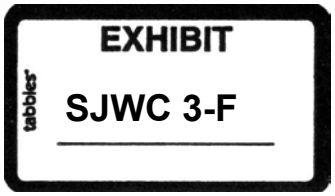
Submitted by:

San Juan Water Commission
7450 East Main
Farmington, New Mexico 87402

Charles L. Nylander
Watermatters, LLC
Technical Consultant for San Juan Water Commission

7 Grillo Loco
Santa Fe, NM 87506
505-820-6318





Associates ("DBSA"). The UAAs were performed beginning in 2012, and the draft UAA report was submitted for public comment on July 27, 2012. *Id.* at 12-14. EPA provided technical approval of the UAA documentation on January 30, 2013. *Id.* at 13-14. Personal communication with DBSA personnel indicates that its services cost approximately $25,000. The transactional costs incurred by NMED in performing the UAAs and developing the final report for public comment are unknown at this time. However, given the disparate locations of the 20 water segments studied, and the time involved in report writing, public participation activities and communications with EPA, the costs could exceed $100,000.

In my opinion, this magnitude of costs (in terms of both time and money) is absurd for both citizens and state government, especially when the costs are incurred solely to demonstrate that ephemeral waters cannot sustain primary contact and marginal warm water aquatic life uses and criteria. The economy of New Mexico is too poor and fragile to afford such an onerous regulatory approach to WQS. SJWC therefore recommends that, given the new proof of the adverse impact of the 2009 adoption of the "rebuttable presumption," the WQCC take whatever steps are necessary to reverse course and abandon the rebuttable presumption concept.

3. 20.6.4.100-20.6.4.899 NMAC: NMED's Primary Contact Proposal

In her direct testimony, Ms. Pintado describes and supports NMED's proposal to change the recreation designated use of nine classified water segments from secondary contact to primary contact. The nine segments are 20.6.4.103, 20.6.4.116, 20.6.4.124, 20.6.4.204, 20.6.4.206, 20.6.4.207, 20.6.4.213, 20.6.4.219, and 20.6.4.308 NMAC. I previously submitted direct technical testimony regarding these proposed changes.

Ms. Pintado begins her direct technical testimony regarding the basis for these proposed amendments on page 77-89 of SWQB Ex. 13, where she addresses the water segment defined in 20.6.4.103 NMAC. Ms. Pintado provides a similar basis for the change of the designated use from secondary contact to primary contact for the other eight water segments.

A. 20.6.4.103 NMAC

Ms. Pintado provides the following basis for changing the recreation use for this water segment from secondary contact to primary contact:

> For this segment and several others discussed later in this testimony, the SWQB has no record of a UAA approved by the WQCC and the EPA to support secondary contact use, which EPA considers not to meet the 101(a)(2) use. Also, the latest EPA guidance for recreational contact and CWA Section 101(a) goals finalized during 2012 (77 FR71191) provides new recommendations for recreational criteria based on several recent health studies and new science. SWQB Exhibit 37 . . . . However, the new EPA recommendations do not address secondary contact recreation criteria and do not allow for the levels of contact in the same manner as the previous guidance (EPA, 1986). SWQB Exhibit 38.
>
> Finally, even though swimming in this area is considered "at your risk" and depends on the fluctuating river level, this portion of the Rio Grande is accessible and primary contact recreation has been observed. Therefore, primary contact recreation is likely an existing use as defined under subparagraph 20.6.4.7 (E)(3) NMAC, and the designated use for secondary contact is upgraded to the primary contact use with the applicable criteria set forth in subsection D of 20.6.4.900 NMAC.

SWQB Ex. 13 at 77-89 to 78-89. I disagree with the assertion that a UAA must support the existing designated use of secondary contact. In my direct technical testimony, I addressed NMED's assertion that, according to EPA, secondary contact does not meet

CWA § 101(a)(2) goals. The secondary contact use for 20.6.4.103 NMAC has been in place for decades and repeatedly has been approved by EPA. Secondary contact recreation most certainly meets the § 101(a)(2) goals, even if EPA recently has re-interpreted the CWA with the intent to require the highest attainable use, as proposed in pending EPA rulemaking. *See* Ex. SJWC C-3.

40 CFR § 131.20(a) regarding review and revision of water quality standards states in part:

> [U]ses specified in section 101(a)(2) of the Act shall be re-examined every three years to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State shall revise its standards accordingly.

Ex. SJWC D-3. The recent EPA guidance for recreational contact cited by Ms. Pintado only addresses primary contact recreation, and it should have no bearing on the WQS for secondary contact recreation. EPA's altered guidance for primary contact does not require an upgrade of the existing secondary contact use and associated criteria. Further, accessibility of a portion of a water body does not mean primary contact recreation is "likely an existing use," as claimed by Ms. Pintado. In fact, there is no documentation of the asserted primary contact. Federal regulations require new and substantive information to upgrade a designated use. Because NMED has provided no significant factual information justifying the upgrade to primary contact, the WQCC should reject NMED's proposal. The secondary contact use should continue where primary contact recreation is at the public's own risk and should not be condoned or encouraged (*e.g.*, swimming in arroyos and flood channels during runoff events).

B. 20.6.4.116 NMAC

The WQCC should reject NMED's proposal to upgrade the recreation use for this segment from secondary contact to primary contact for the same reasons explained in my rebuttal testimony concerning 20.6.4.103 NMAC. NMED has not provided any substantive information justifying an upgrade in use to primary contact. Ms. Pintado states that "the SWQB has no evidence that this use is not attainable and information indicates that primary contact use may be an existing use." SWQB Ex. 13 at 79-89. This statement is vague, uses double negative wording to support the proposed upgrade, and is not substantive. These perennial tributaries are located in a rural area without point source discharges. Nonpoint discharges in the watershed are not controlled by best management practices, and secondary contact uses likely are more prevalent (*e.g.*, fishing, rafting, and wading). Absent more substantial justification, NMED's proposal should be rejected. The primary contact designated use should not be applied where such use is not condoned.

C. 20.6.4.124 NMAC

The WQCC should reject NMED's proposal to upgrade the recreation use for this segment from secondary contact to primary contact for the same reasons explained in my rebuttal testimony concerning 20.6.4.103 NMAC. NMED has not provided any substantive information justifying an upgrade in use to primary contact. Ms. Pintado states that "the SWQB has no evidence that this use is not attainable and information indicates that primary contact use may be an existing use." SWQB Ex. 13 at 79-89 to 80-89. This statement is vague, uses double negative wording to support the proposed upgrade, and is not substantive. This perennial tributary is located in a rural area

without point source discharges. Nonpoint discharges in the watershed are not controlled by best management practices, and secondary contact uses likely are more prevalent (*e.g.*, fishing). Absent more substantial justification, NMED's proposal should be rejected. The primary contact designated use should not be applied where such use is not condoned.

D. 20.6.4.204 NMAC

The WQCC should reject NMED's proposal to upgrade the recreation use for this segment from secondary contact to primary contact for the same reasons explained in my rebuttal testimony concerning 20.6.4.103 NMAC. NMED has not provided any substantive information justifying an upgrade in use to primary contact. Ms. Pintado states that "the SWQB has no evidence that this use is not attainable and information indicates that primary contact use may be an existing use." SWQB Ex. 13 at 80-89. This statement is vague, uses double negative wording to support the proposed upgrade, and is not substantive. Absent more substantial justification, NMED's proposal should be rejected.

E. 20.6.4.206 NMAC

The WQCC should reject NMED's proposal to upgrade the recreation use for this segment from secondary contact to primary contact for the same reasons explained in my rebuttal testimony concerning 20.6.4.103 NMAC. NMED has not provided any substantive information justifying an upgrade in use to primary contact. Ms. Pintado states that "the SWQB has no evidence that this use is not attainable and information indicates that primary contact use may be an existing use." SWQB Ex. 13 at 80-89. This statement is vague, uses double negative wording to support the proposed

upgrade, and is not substantive. Absent more substantial justification, NMED's proposal should be rejected.

F. **20.6.4.207 NMAC**

The WQCC should reject NMED's proposal to upgrade the recreation use for this segment from secondary contact to primary contact for the same reasons explained in my rebuttal testimony concerning 20.6.4.103 NMAC. NMED has not provided any substantive information justifying an upgrade in use to primary contact. Ms. Pintado states that "the SWQB has no evidence that this use is not attainable and information indicates that primary contact use may be an existing use." SWQB Ex. 13 at 81-89. This statement is vague, uses double negative wording to support the proposed upgrade, and is not substantive. Absent more substantial justification, NMED's proposal should be rejected.

G. **20.6.4.213 NMAC**

The WQCC should reject NMED's proposal to upgrade the recreation use for this segment from secondary contact to primary contact for the same reasons explained in my rebuttal testimony concerning 20.6.4.103 NMAC. NMED has not provided any substantive information justifying an upgrade in use to primary contact. Ms. Pintado states that "the SWQB has no evidence that this use is not attainable and information indicates that primary contact use may be an existing use." SWQB Ex. 13 at 81-89. This statement is vague, uses double negative wording to support the proposed upgrade, and is not substantive. This lake is located in a rural area without point source discharges. Nonpoint discharges in the watershed are not controlled by best management practices, and secondary contact uses likely are more prevalent (*e.g.*,

fishing, boating and bird watching). Absent more substantial justification, NMED's proposal should be rejected.

H. 20.6.4.219 NMAC

The WQCC should reject NMED's proposal to upgrade the recreation use for this segment from secondary contact to primary contact for the same reasons explained in my rebuttal testimony concerning 20.6.4.103 NMAC. NMED has not provided any substantive information justifying an upgrade in use to primary contact. Ms. Pintado states that "the SWQB has no evidence that this use is not attainable." SWQB Ex. 13 at 81-89. This statement is vague, uses double negative wording to support the proposed upgrade, and is not substantive. Nonpoint discharges in the watershed are not controlled by best management practices, and secondary contact uses likely are more prevalent (*e.g.*, fishing, boating). Ms. Pintado states that a website mentions scuba for game fishing, and that the lake is a public park. However, absent more substantial justification, NMED's proposal should be rejected. The primary contact designated use should not be applied where such use is not condoned.

I. 20.6.4.308 NMAC

The WQCC should reject NMED's proposal to upgrade the recreation use for this segment from secondary contact to primary contact for the same reasons explained in my rebuttal testimony concerning 20.6.4.103 NMAC. NMED has not provided any substantive information justifying an upgrade in use to primary contact. Ms. Pintado states that "the SWQB has no evidence that this use is not attainable." SWQB Ex. 13 at 82-89. This statement is vague, uses double negative wording to support the proposed upgrade, and is not substantive. This lake is located in a rural area without point source

discharges. Nonpoint discharges in the watershed are not controlled by best management practices, and secondary contact uses likely are more prevalent (*e.g.*, fishing, boating). Absent more substantial justification, NMED's proposal should be rejected. The primary contact designated use should not be applied where such use is not condoned.

Ms. Pintado concludes her testimony regarding these proposed recreation use upgrades for nine classified segments in her technical testimony on page 87-89. Ms. Pintado assumes that secondary contact recreation does not meet the interim goals of the CWA because EPA recently has voiced that position. For the reasons stated, I believe otherwise.

Ms. Pintado also states that the proposed use upgrade is consistent with 40 CFR § 131.20 regarding WQS revisions based on "new" information. However, Ms. Pintado's testimony provides scant new information, and instead relies on vague and suggestive information. It simply does not meet the requirements of Section 131.20.

Next, Ms. Pintado states that the proposed upgrades are consistent with new EPA guidance regarding bacterial criteria for primary contact use. SWQB Ex. 13 at 87-89; SWQB Ex. 37. However, the cited EPA publication does not address secondary contact use, and it provides no requirement or rationale for upgrading designated recreation uses. SWQB Ex. 37.

Finally, on page 88-89, Ms. Pintado restates the assertion that WQS regulations effectively establish a "rebuttable presumption" that the CWA 101(a)(2) uses are attainable and must be assigned to a water body, unless a State affirmatively demonstrates with a UAA that the use is not attainable. She goes on to state that there

are no UAAs to support the secondary contact use and criteria for the nine segments discussed previously. All of these statements are symptomatic of the "rebuttable presumption house of cards" previously disputed in my testimony.

EPA long has approved New Mexico's secondary contact uses, and there is no clear evidence that EPA's newest interpretation of CWA goals require the WQCC to adopt primary contact uses or perform UAAs in support of the secondary use designations.

This concludes my rebuttal technical testimony on behalf of SJWC.

STATE OF NEW MEXICO

BEFORE THE WATER QUALITY CONTROL COMMISSION

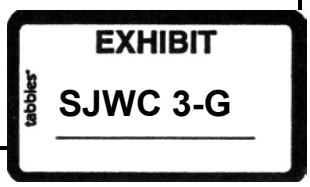
No. WQCC 14-05(R)

IN THE MATTER OF:
PROPOSED AMENDMENTS TO
STANDARDS FOR INTERSTATE
AND INTRASTATE SURFACE
WATERS, 20.6.4 NMAC

TRANSCRIPT OF PROCEEDINGS

BE IT REMEMBERED that on the 15th day of October, 2015, this matter came on for hearing before Morris Chavez, Hearing Officer, and the Water Quality Control Commission, at the State Capitol Building, Room 307, 490 Old Santa Fe Trail, Santa Fe, New Mexico, at the hour of 9:00 a.m.

Volume 3



fishing and -- and it's just nonsensical to spend time and resources doing unnecessary paperwork to demonstrate that.

Q. Thank you.

So, Mr. Nylander, let's move to the final topic that you're going to address today.

Would you please summarize your written testimony regarding the Department's proposal to amend Sections 20.6.4.101 through 503 NMAC by upgrading nine surface water segments from secondary contact recreation to primary contact recreation?

A. Yes. Most of the Department's rationale in their proposal for upgrading the designated use from secondary to primary contact for these nine segments was not supported by sound scientific evidence.

The statements of reason that were in the proposal contained or relied on anecdotal evidence, web site publications, the fact that an area was open to the public, and -- and there was even some double negative language that basically said we have no information to say that it might not be attainable, and so on and so forth.

So I think in looking through it and looking for actual good, sound, scientific data, I didn't see much, and it seems like they really are relying more on

the rebuttable presumption that I've already talked about, that they have to basically assign the highest attainable use to those waters according to EPA's concept.

Looking at all nine of these segments, the secondary contact, I think, is the more appropriate use for most of the segments. And as I mentioned previously, you can preserve the existing secondary contact use as is but accomplish what the Department is wanting to accomplish by just increasing and reassigning the bacterial criteria that comports with the primary contact use.

EPA's water quality handbook, as I said, basically allows this and presents it as option number two when you're differentiating between primary contact and secondary contact use.

So it is a way that -- and when you look at the bacterial limitations, the criteria for primary use versus secondary use, they're very, very close as far as the number of organisms per hundred mLs.

So I would suggest an easy way would be to just leave secondary contact and, if you really want, assign the higher bacterial criteria to those nine segments.

Q. Mr. Nylander, day before yesterday, did you

contact use, and the Department's proposing to upgrade that to primary contact. And EPA would not require a UAA to upgrade it to primary contact. They would require it if you were going to downgrade it from primary to secondary.

Q. So while I understand -- so am I correct to understand that your position is still to support the upgrade for those nine segments?

MS. MCCALEB: Objection. I don't believe that that was Mr. Nylander's position, that he supported the upgrade of the nine segments.

MR. NYLANDER: No. In fact, in my testimony, I basically found that there was scant evidence to require the upgrade and -- and question -- question why -- why not just leave it as secondary contact.

And I demonstrated in my testimony that you could leave it as secondary contact and just increase the bacterial criteria to the more stringent primary contact criteria and accomplish what the Department wants to accomplish or -- or the EPA might require.

The problem is once you upgrade --

Q. (BY MS. BECKER) Mr. Nylander --

A. -- to a use, then you are stuck with having to do a UAA in the future if you ever wanted to downgrade it.

Q. I think we need to be clear about the distinction here. And I didn't mean to misunderstand your testimony. So let's break it down into twofold.

I recognize you have issues with the rebuttable presumption and that, in fact, your recommendation as contained in your direct is to encourage the Department and the WQCC to approach EPA and -- and better determine a routing for that -- for the -- for unclassified waters to be considered ephemeral unless proven to be intermittent or perennial; is that correct?

A. That is correct.

Q. And that's still your position.

A. Yes.

Q. Okay.

But the other issue is that you've identified that a UAA is not required to go from secondary to primary contact; isn't that right?

A. A UAA is not required to upgrade to primary contact.

Q. And therefore, the Department did not conduct a UAA for those nine water body segments, did they?

A. That's correct.

Q. And it's not required, and therefore, is your position that you do not support the find -- the

Department's position that, in fact, they be primary contact?

A. I didn't find enough evidence that was compelling to say that primary contact was indeed an attainable use.

Q. And yet we've established that the final rule did not require a UAA to do so.

So this is based on your idea of what is enough evidence?

A. No. The water quality standards regulations require that you have sufficient scientific evidence to support a change in standards, and you're changing the standard here by upgrading it, but I find that the supporting rationale is fairly scant, and that's why I said it didn't look like there was enough evidence to support the upgrade.

Q. And I do think I understand your position that there's not enough.

But furthermore, you did identify, you've read the final rule, a UAA is not required, and specifically a state may -- has an obligation to review and consider an upgrade --

A. Right.

Q. -- with the evidence it does have. Okay.

A. That is correct.

land management agencies would be obligated to consider the effect on those when doing their land management planning and actions?

MR. NYLANDER: Mr. -- Commissioner Hutchinson, yes, I believe they would.

MR. HUTCHINSON: And are federal land management agencies required to consider water quality standards in the State of New Mexico?

MR. NYLANDER: Mr. Chairman, Commissioner Hutchinson, yes, they are.

MR. HUTCHINSON: Okay. I'll just go to the changes to the nine segments.

In the Environment Department's testimony, did you hear credible scientific data presented in support of moving from secondary to primary contact?

MR. NYLANDER: Mr. Chairman, Commissioner Hutchinson, as I stated previously in my testimony, I didn't find much in the way of credible scientific evidence justifying those upgrades.

MR. HUTCHINSON: How would you define credible scientific data?

MR. NYLANDER: Something with more weight other than just an anecdotal statement that somebody might have seen somebody swimming in the water or there's no reason to believe that somebody might not

swim in the water or -- it would be -- it would actually be a series of observations and documented observations and something with a lot more -- a lot more scientific weight than just a guess, that people could swim in the water.

MR. HUTCHINSON: Thank you.

Mr. Chairman, that's all I have.

MR. DOMINGUEZ: Commissioner DeRose-Bamman, followed by Commissioner Tongate.

MS. DEROSE-BAMMAN: Thank you, Mr. Chairman.

Mr. Nylander, I want to make sure I understand that your proposed -- the current proposal for the temporary standards language.

In your rebuttal testimony, which I think the language may be changed a little bit from your proposed -- from your petition -- your testimony, I should say, in -- let's see -- the new section -- your proposed language for the new Section 10, subsection F, paragraph (4)(a), "A petition for a temporary standard variance shall: identify the current applicable standards, the proposed temporary standard, the permittees, and the surface waters of the state." (As read.)

So you're no longer saying that the permittees need to be listed; is that correct?

So I guess what I need to do is clarify it in my mind. So excuse me if it sounds like I'm repeating some of the questions.

But is it your understanding that from what the Environment Department counsel addressed with you, that the upgrading the designation from a secondary to a primary use designation does not require a UAA?

MR. NYLANDER: That is my understanding and my belief, that you don't have to do a UAA if you're upgrading the use, you only have to do it if you're downgrading.

MR. WATERS: Downgrading the use. Okay.

And is it your position that the Environment Department basically did not have enough empirical evidence -- per your quoting of the EPA handbook in question, that they did not bring to bear enough empirical evidence to justify the change of this use designation from a secondary to a primary?

MR. NYLANDER: Yes, it is, Commissioner. I didn't find the evidence really compellingly supportive of upgrading those uses to primary. It was more speculative based on anecdotes and on basically, I think, their rebuttable presumption understanding that they just wanted to do it.

MR. LONGWORTH: Mr. Chairman, on that point?

MR. DOMINGUEZ: Yes.

MR. LONGWORTH: I'm sorry.

Commissioner Waters, just on that point?

MR. WATERS: Um-hum.

MR. LONGWORTH: Mr. Nylander, we talked -- you said empirical evidence.

Was there any quantitative or qualitative evidence provided to make the change from -- to upgrade the -- these nine segments?

MR. NYLANDER: Mr. Chairman, Commissioner Longworth, there were statements in the reasons for the change under different segments that talked about people observing people swimming in the water or web site information promoting the use of water for the public, those kind of things. They were more qualitative.

I think -- I didn't remember seeing any real demonstrative, quantitative information that -- you know, with documented observations and dates and -- and that sort of thing, to say that people indeed were using that water for swimming.

I think -- the example, I think, of Brantley Reservoir, I think they did say that the web site for that recreational area does provide for boating and for SCUBA diving and game fishing and that sort of thing.

So they're tying in some collaborative and

corroborating statements, but I didn't think that in total, when I looked at all nine segments -- I didn't think that it kind of met the threshold of real sound evidence that those uses were attainable.

MR. LONGWORTH: Thank you, Mr. Chairman.

Thank you, Commissioner.

MR. DOMINGUEZ: Back to you, Commissioner Waters.

MR. WATERS: Thank you, Mr. Chairman.

Well, following up on that, then, are you aware of any regulatory reason or any -- anything out there that would prohibit the Environment Department from providing a more empirical justification for the upgrading? Is there anything out there that would prohibit them from doing that, for -- in the regulations or the statutes?

MR. NYLANDER: Mr. Chairman, Commissioner Waters, no. I don't think anything would prohibit them from gathering more information.

And as I stated, EPA has already, in both the Water Quality Standards Handbook and in their Record of Decision on the 2005 triennial, indicated that another option for protecting secondary contact waters for occasional primary contact use would be just to raise the bacterial criteria for those segments, in line with

attainable before a non-101(a)(2) use can be designated; is that correct?

A. That is correct.

Q. And you testified the same with regard to a downgrade of the use, that a UAA is required; is that correct?

A. That is correct.

Q. Mr. Nylander, have you seen anything in that EPA rule that indicates that all preexisting secondary contact designated uses must be upgraded if a UAA has not previously been performed?

A. I do not see anything in the rule.

Q. And with respect to the nine segments that the Bureau proposes to upgrade to primary contact, isn't it true there wouldn't be any UAAs because at the time they were designated UAAs were not required?

A. That is -- that is my opinion. Yes. That's correct.

Q. And in fact, EPA previously approved the secondary contact designations.

A. That is correct.

Q. So what is the applicable standard for determining whether the nine segments should be upgraded?

Is that found in 40 CFR Section 131.20?

A. I believe it is. Yes.
Q. And do you have that in front of you?
A. I don't.
Q. I can give you a copy.
A. In my mind, I think I have an idea what it says, but --
Q. I'll just give you my copy.
And could you please read that rule for us?
A. "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 shall be re-examined to determine if any new information has become available. If such new information indicates that the uses specified in Clean Water Act section 101(a)(2) are attainable, the State shall revise its standards accordingly." (As read.)
Q. And your testimony before this Commission has been that no such information has been -- has been provided; is that correct?
A. I -- my testimony was that the information that was provided was not very substantial.
Q. Thank you for that clarification.

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Federal Register

Tuesday
November 8, 1983

Part II

Environmental Protection Agency

Water Quality Standards Regulation

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 35, 120, and 131

[WH-FRL 2466-3]

Water Quality Standards Regulation

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: This Regulation revises and consolidates in a new Part 131 the existing regulations now codified in 40 CFR Parts 120 and 35 that govern the development, review, revision and approval of water quality standards under Section 303 of the Clean Water Act (the Act). The Regulation was revised to reflect the experiences gained in the program by both EPA and the States. More explicit information is included in the Regulation on what EPA expects as part of State water quality standards reviews. The Regulation also clarifies that in promulgating Federal standards, EPA is subject to the same requirements as the States.

EFFECTIVE DATE: December 8, 1983.

FOR FURTHER INFORMATION CONTACT: David K. Sabock, Environmental Protection Agency, Chief, Criteria Branch (WH-585), 401 M Street SW., Washington, 20460 (202) 245-3042.

SUPPLEMENTARY INFORMATION: The Environmental Protection Agency (EPA) proposed changes to 40 CFR 120 and 35 on October 29, 1982 (47 FR 49234) and invited comments until February 10, 1983. Eleven public meetings were held nationwide on the proposed revisions. Nine hundred twenty people attended those meetings. EPA received 1405 letters and statements on the proposal prior to the closing of the public comment period. Comments received on the proposed Regulation may be inspected at the Environmental Protection Agency, Room 2818M, 401 M Street, SW., Washington, D.C. 20460 during the Agency's normal working hours of 8:00 a.m. to 4:30 p.m. For further information contact the individual listed above.

Information in this preamble is organized as follows:

A. Major Changes Made in the Proposed Regulation

The major additions and deletions made in the proposed Rule are discussed in this section. We have also included a table summarizing all the changes.

Commitment to the Goals of the Clean Water Act

Several changes were made in the Regulation to reassure the public that EPA is committed to achieving the goals of the Act. EPA accepted the recommendations for including regulatory language explicitly affirming EPA's commitment to have standards move toward the Section 101(a)(2) goals of the Act and to use standards as a basis of restoring and maintaining the integrity of the Nation's waters.

A "Purpose" section (§ 131.2) has been added to the Regulation. The Purpose states that standards are to protect public health or welfare, enhance the quality of water and provide water quality for the protection and propagation of fish, shellfish and wildlife and recreation in and on the water, as well as for agricultural and industrial purposes and navigation. In addition, this section describes the dual role of water quality standards in establishing the water quality goals for a specific water body and in serving as the regulatory basis for the establishment of water quality based treatment controls and strategies beyond that level of treatment required by sections 301(b) and 306 of the Act.

The final regulation also clarifies that when a State changes the designated uses of its waters such that the uses of the water body do not include the uses specified in the Section 101(a)(2) goals of the Act (i.e., the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water), the State will have to demonstrate, through a use attainability analysis, that these uses are not attainable based on physical, chemical, biological or economic factors. This use attainability analysis is required for future changes that the State may make and for previous actions that the State took to designate uses for a water body which did not include the uses specified in Section 101(a)(2). Where water quality improvements result in new uses, States must revise their standards to reflect these new uses (See § 131.10(i)). This provision continues an existing EPA requirement although it was omitted from the proposed Regulation.

In addition, as discussed below, we have revised the proposed Antidegradation Policy to provide special protection for high quality waters and waters which constitute an outstanding National resource (See § 131.12) and we have eliminated the benefit-cost analysis.

We believe that these and other changes and clarifications in the Final Rule demonstrate EPA's commitment to the objectives, goals and spirit of the Clean Water Act.

Changes in Uses

The provisions included in § 131.10(h)(1)-(6) of the proposed Regulations, which dealt with circumstances under which uses could be changed, received substantial comment. Many commenters objected that the change in the phrase "States must demonstrate" to "States must determine" that certain conditions exist would mean that EPA would require less rigorous analyses for changing a use. They indicated that "determine" merely connotates a political process whereas "demonstrate" implies substantial proof supported by exacting analyses. EPA believes that structured scientific and technical analyses should be required to justify removing or modifying designated uses that are included in Section 101(a)(2) of the Act or to justify continuation of standards which do not include these uses. EPA agrees that the word "demonstrate" better reflects Agency policy and has made that change (see § 131.10(g)).

Some commenters asked whether modifications in water quality standards, such as defining a level of protection for aquatic life or setting seasonal standards, were changes in standards subject to the public participation requirements of § 131.20(b) of the regulation. Yes, any modification or change that a State makes in its standards is subject to those requirements.

Many commenters also objected to the inclusion of a benefit-cost assessment in justifying changes in uses. Historically, economic considerations have been a part of water quality standards decisions. Senate Report No. 10 on the Federal Water Pollution Control Amendments of 1965, 89th Congress, 1st Session, included the statement that "Economic, health, esthetic, and conservation values which contribute to the social and economic welfare of an area must be taken into account in determining the most appropriate use or uses of a stream". Section 303(c)(2) of the Act provides that ". . . standards shall be established taking into consideration their use and value for . . ." various water uses. Under the 1975 regulation governing the establishment of standards in Part § 35.1550(c)(1), States were to ". . . take into consideration environmental,

technological, social, economic, and institutional factors" in determining the attainability of standards for any particular water segment. In addition, there is and has been an economic consideration in the antidegradation policy. The Agency recognizes that there are inherent difficulties in a balancing of the benefits of achieving the Section 101(a)(2) goals of the Act with the costs. As a result, the Agency was persuaded that the provision in the existing rule allowing changes in designated uses where there would be substantial and widespread economic impact better reflected the process required by the Act. For these reasons, the wording of the existing regulation has been retained.

Several commenters objected to proposed § 131.10(h)(5) which allowed States to remove or to modify designated uses which are not attainable based on physical factors. After considering the comments, the Agency decided to limit the reference to physical factors to aquatic life protection uses and to clarify the existing policy.

Physical factors may be important in evaluating whether uses are attainable. However, physical limitations of the stream may not necessarily be an overriding factor. Common sense and good judgment play an important role in setting appropriate uses and criteria. In setting criteria and uses, States must assure the attainment of downstream standards. The downstream uses may not be affected by the same physical limitations as the upstream uses. There are instances where non-water quality related factors preclude the attainment of uses regardless of improvements in water quality. This is particularly true for fish and wildlife protection uses where the lack of a proper substrate may preclude certain forms of aquatic life from using the stream for propagation, or the lack of cover, depth, flow, pools, riffles or impacts from channelization, dams, diversions may preclude particular forms of aquatic life from the stream altogether. EPA recognizes that while physical factors also affect the recreational uses appropriately designated for a water body. States need to give consideration to the incidental uses which may be made of the water body. Even though it may not make sense to encourage use of a stream for swimming because of the flow, depth or the velocity of the water, the States and EPA must recognize that swimming and/or wading may occur anyway. In order to protect public health, States must set criteria to reflect recreational uses if it appears that recreation will in fact occur in the stream.

In keeping with the purposes of the Act, the wording of § 131.10(h)(4) of the proposed Rule (now § 131.10(g)(4)) was modified so that changes in uses could only occur if dams, diversions or other types of hydrologic modifications *preclude* rather than just interfere with the attainment of the designated uses. It should also be pointed out that if physical limitations of the water body were used as the basis of not including uses for a water body that are specified in Section 101(a)(2) of the Act, those physical factors must be reviewed every three years.

While many commenters objected to the number of reasons the States could use in justifying changes in uses, the Agency decided to keep the six factors, with the changes described above, because they better explain when changes may be made. The terse wording of the existing Rule does not adequately explain when changes can be made.

A number of comments related to use attainability analyses. In demonstrating that a use is not attainable, States will be required to prepare and submit to EPA a use attainability analysis. A use attainability analysis is a multi-step scientific assessment of the physical, chemical, biological and economic factors affecting the attainment of a use. It includes a water body survey and assessment, a wasteload allocation, and an economic analysis, if appropriate.

A water body survey and assessment examines the physical, chemical and biological characteristics of the water body to: identify and define the existing uses of that water body; determine whether the designated uses in the State water quality standards are impaired, and the reasons for the impairment; and assist States in projecting the potential uses that the water body could support in the absence of pollution. A wasteload allocation utilizes mathematical models to predict the amount of reduction necessary in pollutant loadings to achieve the designated use. Economic analyses are appropriate in determining whether the more stringent requirements would cause substantial and widespread economic and social impact. These analyses should address the incremental effects of water quality standards beyond technology-based or other State requirements. The Agency's guidance suggests that States consider effects due to compliance by private and municipal dischargers. If the requirements are not demonstrated to have a substantial and widespread impact on the affected community, the standard must be maintained or made compatible with the goals of the Act.

There was considerable comment on whether the use attainability analyses should be required, and if so when. In keeping with section 510 of the Act, EPA is *not* requiring States to conduct and submit a use attainability analysis if adding a use specified in Section 101(a)(2) of the Act or a use requiring more stringent criteria. In the final rule, EPA is requiring that States conduct and submit to EPA a use attainability analysis if the State (a) is designating uses for the water body such that the water body will not have all uses which are included in Section 101(a)(2) of the Act, (b) maintaining uses for the water body which do not include all of the uses in Section 101(a)(2) of the Act, (c) removing a use included in Section 101(a)(2) of the Act or (d) modifying a use included in Section 101(a)(2) of the Act to require less stringent criteria. A State need only conduct a use attainability once for a given water body and set of uses. During subsequent triennial review, States will be required to review the basis of not including uses for the water body that are specified in Section 101(a)(2) of the Act to show that circumstances have not changed and that protection and propagation of fish, shellfish and wildlife and/or recreation in and on the water remain unattainable. If such uses have become attainable, the standard must be revised accordingly (See § 131.20(a)). However, States may wish to conduct a use attainability analysis, even where not required, if they believe that there will be questions as to whether the protection and propagation of fish, shellfish and wildlife and recreation in and on the water is, in fact, attainable.

The guidance on conducting the water body survey and assessment is included in the *Water Quality Standards Handbook*. The earlier draft of the Handbook has been revised and expanded. Test cases illustrating the water body survey and assessment guidance have been completed and are included in the Handbook. In addition, the Agency has published a *Technical Support Manual: Water Body Surveys and Assessments for Conducting a Use Attainability Analyses*. These publications may be obtained by writing or calling David K. Sabock at the address and phone number listed under **FOR FURTHER INFORMATION CONTACT.**

By publishing guidance on conducting use attainability analyses, EPA is not requiring that specific approaches, methods or procedures be used. Rather, States are encouraged to consult with EPA early in the process to agree on

appropriate methods and procedures for conducting any of the analyses before the analyses are initiated and carried out. States will have the flexibility of tailoring the analyses to the specific water body being examined as long as the methods used are scientifically and technically supportable.

EPA will review the adequacy of the data, the suitability and appropriateness of the analyses and how the analyses were applied. In cases where the analyses are inadequate, EPA will identify how the analyses need to be improved and will suggest the type of evaluation or data needed. When the State has initially consulted EPA on the analyses to be used, EPA will be able to expedite its review of the State's analyses of any new or revised State standard.

Criteria

EPA has revised the section on criteria (§ 131.12 in the proposal; renumbered to § 131.11 in the final rule) in several respects. First, EPA has accepted the recommendation that the phrase "criteria are compatible with" protecting a designated use is confusing and unnecessary and should be removed. The provision now reads: "States must adopt those water quality criteria that protect the designated use."

In addition, EPA consolidated parts of the provisions and stated more concisely the basis of EPA's review of the appropriateness of State criteria. Section 131.11(a) now reads: "Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use," eliminating the need for proposed § 131.12(c) (1)–(3).

A number of comments concerned criteria for toxic pollutants. Some questioned EPA's commitment to controlling toxic pollutants based on the fact that EPA was not "requiring" States to adopt specific *numerical* toxic pollutant criteria. EPA has made a number of changes to more clearly reflect our commitment. For example, EPA has tried to restructure § 131.11(a)(2) on toxic pollutants to assist States in providing the most effective control of toxic pollutants as possible. All States have a requirement in their standards that their waters be free from toxic pollutants in toxic amounts. States are to review their water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely impacting water quality or the designated uses or where the level of a toxic pollutant in the water is at a level to warrant concern. States are expected to conduct such reviews beginning with an in-depth analysis of water bodies with known toxic pollutant problems. States are to adopt numerical or narrative criteria for those toxic pollutants of concern. Numerical criteria are appropriate where a few specific pollutants have been identified as the concern, or where human health rather than aquatic life is the controlling factor. To implement such criteria, models are used to translate the specific criterion on a chemical-by-chemical basis into a wasteload allocation to obtain a specific permit limit.

However, where the effluent or ambient conditions are complex, due to multiple dischargers or multiple pollutants, toxic pollutant limits may be more appropriately set through narrative criteria (such as the "free from statements"). Where narrative criteria are adopted, the State should indicate as part of its water quality standards submission, how it intends to regulate the discharge of the toxic pollutants. Biological monitoring is one mechanism to test compliance with "free from" narrative criteria. Biological monitoring may include periodic sampling of the ecosystem, trend monitoring and/or periodic bioassays using the effluent. Acute and chronic toxicity testing methods have been developed that enable a permit writer to ensure that the discharge will not be toxic to aquatic life. When using biological monitoring to test compliance with narrative criteria, reference should be made to the maximum acceptable levels of toxicity and the basic means by which these levels are to be measured or otherwise determined.

Both the pollutant-by-pollutant and biological methods are being refined and need to be applied in a conservative fashion. They hold great promise and are relatively inexpensive. In many cases a combination of biological monitoring and a chemical-by-chemical approach will provide the best toxic pollutant control.

Finally, a number of comments dealt with site-specific criteria. It was apparent from the comments that some commenters had the mistaken impression that EPA was advocating that States use site-specific criteria development procedures for setting all criteria as opposed to using the national Section 304(a) criteria. Site-specific criteria development procedures are not needed in all situations. Many of the procedures are expensive. Site-specific criteria development appears most appropriate on water quality limited water bodies where:

- Background water quality parameters, such as pH, hardness temperature, suspended solids, etc., appear to differ significantly from the laboratory water used in developing the Section 304(a) criteria; or
- The types of local aquatic organisms in the region differ significantly from those actually tested in developing the Section 304(a) criteria.

The protocols for establishing site-specific criteria, as well as the test cases illustrating use of the protocols, are included in the *Water Quality Standards Handbook*. EPA also has a limited number of copies of *Recalculation of State Toxic Criteria* using the family recalculation procedure. These publications may be obtained by writing or calling David K. Sabock at the address and phone number listed under **FOR FURTHER INFORMATION CONTACT** at the beginning of this Rule.

Antidegradation Policy

The preamble to the proposed rule discussed three options for changing the existing antidegradation policy. Option 1, the proposed option, provided simply that uses attained would be maintained. Option 2 stated that not only would uses attained be maintained but that high quality waters, i.e. waters with quality better than that needed to protect fish and wildlife, would be maintained (that is, the existing antidegradation policy minus the "outstanding natural resource waters" provision). Option 3 would have allowed changes in an existing use if maintaining that use would effectively prevent any future growth in the community or if the benefits of maintaining the use do not bear a reasonable relationship to the costs.

Although there was support for Option 2, there was greater support for retaining the full existing policy, including the provision on outstanding National resource waters. Therefore, EPA has retained the existing antidegradation policy (Section 131.12) because it more accurately reflects the degree of water quality protection desired by the public, and is consistent with the goals and purposes of the Act.

In retaining the policy EPA made four changes. First, the provisions on maintaining and protecting existing instream uses and high quality waters were retained, but the sentences stating that no further water quality degradation which would interfere with or become injurious to existing instream uses is allowed were deleted. The deletions were made because the terms "interfere" and "injurious" were subject to misinterpretation as precluding any activity which might even momentarily

add pollutants to the water. Moreover, we believe the deleted sentence was intended merely as a restatement of the basic policy. Since the rewritten provision, with the addition of a phrase on water quality described in the next sentence, stands alone as expressing the basic thrust and intent of the antidegradation policy, we deleted the confusing phrases. Second, in § 131.12(a)(1) a phrase was added requiring that the level of water quality necessary to protect an existing use be maintained and protected. The previous policy required only that an existing use be maintained. In § 131.12(a)(2) a phrase was added that "In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully". This means that the full use must continue to exist even if some change in water quality may be permitted. Third, in the first sentence of § 131.12(a)(2) the wording was changed from ". . . significant economic or social development . . ." to ". . . important economic or social development. . . ." In the context of the antidegradation policy the word "important" strengthens the intent of protecting higher quality waters. Although common usage of the words may imply otherwise, the correct definitions of the two terms indicate that the greater degree of environmental protection is afforded by the word "important."

Fourth, § 131.12(a)(3) dealing with the designation of outstanding National resource waters (ONRW) was changed to provide a limited exception to the absolute "no degradation" requirement. EPA was concerned that waters which properly could have been designated as ONRW were not being so designated because of the flat no degradation provision, and therefore were not being given special protection. The no degradation provision was sometimes interpreted as prohibiting *any* activity (including temporary or short-term) from being conducted. States may allow some limited activities which result in temporary and short-term changes in water quality. Such activities are considered to be consistent with the intent and purpose of an ONRW. Therefore, EPA has rewritten the provision to read ". . . that water quality shall be maintained and protected," and removed the phrase "No degradation shall be allowed. . . ."

In its entirety, the antidegradation policy represents a three-tiered approach to maintaining and protecting various levels of water quality and uses. At its base (Section 131.12(a)(1)), all existing uses and the level of water quality necessary to protect those uses must be maintained and protected. This provision establishes the absolute floor of water quality in all waters of the United States. The second level (Section 131.12(a)(2)) provides protection of actual water quality in areas where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water ("fishable/swimmable"). There are provisions contained in this subsection to allow some limited water quality degradation after extensive public involvement, as long as the water quality remains adequate to be "fishable/swimmable." Finally § 131.23(a)(3) provides special protection of waters for which the ordinary use classifications and water quality criteria do not suffice, denoted "outstanding National resource water." Ordinarily most people view this subsection as protecting and maintaining the highest quality waters of the United States: that is clearly the thrust of the provision. It does, however, also offer special protection for waters of "ecological significance." These are water bodies which are important, unique, or sensitive ecologically, but whose water quality as measured by the traditional parameters (dissolved oxygen, pH, etc.) may not be particularly high or whose character cannot be adequately described by these parameters.

General Policies

Except for a general statement that States may adopt policies affecting the application and implementation of standards and that such policies are subject to EPA review and approval, all other elements of proposed Section 131.13 have been deleted, including the detailed statements on mixing zones, low flow exemptions, and variances.

Specific subsections on mixing zones, low flow exemptions and variances were deleted because, as the public comments suggested, they were not regulatory in nature and therefore were more appropriately addressed in guidance. More detailed information on these subjects is included as guidance in the *Water Quality Standards Handbook.*

Many objected to the temporary variance policy because it appeared to be outside the normal water quality standards setting process and because the test for granting a variance was different from that applied to changing a designated use. While a variance does not change a standard *per se,* there was concern that such a policy would stimulate "pollution shopping" or would unfairly penalize firms that had managed their operations to maintain a profit while installing pollution control equipment, to the advantage of those that had not.

EPA has approved State-adopted variances in the past and will continue to do so if: each individual variance is included as part of the water quality standard, subject to the same public review as other changes in water quality standards and if each individual variance is granted based on a demonstration that meeting the standard would cause substantial and widespread economic and social impact, the same test as if the State were changing a use based on substantial and widespread social and economic impact. EPA will review for approval individual variances, not just an overall State variance policy. A State may wish to include a variance as part of a water quality standard rather than change the standard because the State believes that the standard ultimately can be attained. By maintaining the standard rather than changing it, the State will assure further progress is made in improving water quality and attaining the standard. With the variance provision, NPDES permits may be written such that reasonable progress is made toward attaining the standards without violating Section 402(a)(1) of the Act which states that NPDES permits must meet the applicable water quality standards.

State Review

Section 131.20(a) was changed from the proposal in several respects. These changes were made in response to the public's concern that the language in the proposed regulation either removed or diluted the Act's requirement to review all standards every three years and that EPA's proposed regulatory language did not provide adequate recognition of the goals of the Act. First, the language on the 3-year review requirement was changed to read exactly as the Act. It now reads that "the State shall, from time to time, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards."

Second, a mandatory review and upgrading requirement has been added. On segments with water quality standards that do not include all of the uses specified in Section 101(a)(2) of the Act, States must reexamine the basis of that decision every three years to determine whether any new information, technology, etc. has become available that would warrant adding the protection and propagation

of fish, shellfish and wildlife and/or recreation in and on the water.

Third, EPA has retained the concept of allowing a State to select specific water bodies for an in-depth review of the appropriateness of the water quality standard. This was done in order to make maximum use of limited resources and ensure that the most critical environmental problems are addressed. This review could include an examination of the use, the existing water quality criteria, and the need for revised or additional criteria on segments where the standards are not projected to be achieved with implementation of the technology-based requirements of the Act. Factors which may cause a State to select a water body for review include areas where advanced treatment and combined sewer overflow funding decisions are pending, major water quality-based permits are scheduled for issuance or renewal, toxic pollutants have been identified or are suspected of precluding the attainment of water quality standards. This list is not meant to be all inclusive, and a State may have other reasons for examining a particular standard. The procedures established for identifying and reviewing such water bodies should be incorporated into the State's Continuing Planning Process.

There were numerous comments either advocating mechanisms to ensure the right of dischargers to petition the State to review particular standards or advocating the burden of proof be on the discharger to justify any changes in standards. EPA does not believe that it should dictate particular administrative mechanisms that States use to initiate the review of standards on particular water bodies. However, we do believe that whatever mechanism the State uses, it should be made known to the public and included in the State's Continuing Planning Process document.

SUMMARY OF THE CHANGES MADE IN THE PROPOSED REGULATION

Section No. in the proposed regulation	Section No. in the final regulation	Title	Summary of changes
131.1	131.1	Scope	No change made.
	131.2	Purpose	New section *Purpose*. Defines the dual purpose of water quality standards. Standards establish the water quality goals for a specific water body and serve as a regulatory basis for the establishment of water quality based controls beyond the technology required under the Act consistent with Section 101(a)(2) and 303(c) of the Act.
131.2	131.3	Definitions	Minor changes made in the definitions of "criteria", "Section 304(a) criteria" and "water quality standards". Definition of "uses" and "attain" were removed. A definition of a "Use Attainability Analysis" was added.
131.3	131.4	State Authority	Word "reviewing" added to sentence "States are responsible for reviewing, establishing and revising water quality standards.
131.4	131.5	EPA Authority	The wording of this section has been slightly revised to show that EPA makes a determination of "whether" State standards meet the five criteria. Subsection (c) revised to read "whether the State has followed its legal procedures for revising or *adopting* standards. Subsection (d) modified to read "whether the State standards are based on appropriate technical and scientific data and analyses" rather than whether the decision making process is based on appropriate technical and scientific data and analyses. Subsection (e) added to include minimum requirements for State submission.
131.5	131.6	Minimum Requirements for Water Quality Stds. Submissions.	Under (d) the statement now reads: "An Antidegradation policy consistent with § 131.12." Under (e) after Attorney General the phrase "or other appropriate legal authority within the State" was added.
131.10	131.10	Designation of Uses.	Statement added to (a) prohibiting designating a stream for waste transport or assimilation. Added a new (b) that in designating uses of a water body and the appropriate criteria, States are to ensure the attainment and maintenance of downstream standards. Removed (c). The Antidegradation Policy is now described in § 131.12. Section (b) renumbered (c), removed (e), Section (f) renumbered (e), and Section (g) renumbered (f). Paragraph (h) now (g) has been changed. It now requires that a State must *demonstrate* that the designated use, which is not an existing use, is not attainable. Items 4 and 6 were also reworded. Item 4 now reads that changes in uses can be justified if dams, diversions or other types of hydrologic modifications *preclude* the attainment of a use rather than just interfere with the attainment of a use. Item 5 limits the consideration of physical factors to aquatic life protection uses. Item 6 has been totally changed. It now reads that changes in uses can be made if controls more stringent than those required by Section 301(b) and 306 of the Act would result in substantial and widespread economic and social impact. In paragraph (i) now (h), (2) and (3) are consolidated. Subparagraph (4) has been eliminated because of the revision to the Antidegradation Policy (see § 131.12). Subparagraph (5) now appears in § 131.6(b). Now paragraph (i) requires States to revise their standards to reflect improvements in water quality. In paragraph (j), EPA has defined that States must conduct a Use Attainability Analysis if designating uses not specified in Section 101(a)(2) of the Act, when removing a use specified in Section 101(a)(2) or if modifying uses specified in Section 101(a)(2) by requiring less stringent criteria. Paragraph (k) clarifies that States are not required to conduct a Use Attainability Analysis when designating uses specified in Section 101(a)(2) of the Act.
131.11	.....	Analyses for Changing or Modifying Uses.	Elimated.
131.12	131.11	Criteria	Eliminated. Under (a)(1) the phrase "are compatible with" has been removed and following the first sentence the following has been added: "Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constitutents to protect the designated use. For water with multiple use designations, the criteria shall support the most sensitive use." Subparagraph (a)(2) has been revised to read that States *must* review water quality data and information and where toxic pollutants may be adversely affecting the attainment of the water quality or the attainment of the designated use or where the levels of toxic pollutants are at a level to warrant concern must adopt criteria for the toxic pollutants. Where States adopt narrative criteria for toxic pollutants, the State must adopt a policy indentifying the method by which the State intends to regulate point source discharges based on such narrative criteria. Subparts (b)(2) and (3) were combined. Paragraph (c) has been removed because the concepts are now included in paragraph (a).
	131.12	Antidegradation Policy.	The Antidegradation Policy found in the former 40 CFR 35.1550(e) has been adopted into the final Regulation with several modifications. The phrase "interfere with or become injurious to" was removed, a phrase was added in (a)(1), (2), and (3) to maintain and protect instream water quality to protect existing uses, in (a)(2) "important" replaces "significant" in the phrase on economic and social development, and "no degradation" was deleted from (a)(3).
131.13	131.13	General Policies	Paragraph (a) revised to clarify that General Policies if adopted are to be included in a State's water quality standards and are subject to EPA review and approval. Subsections (b)(c)(d) removed.
131.20	131.20	State Review and Revision of Water Quality Standards.	Paragraph (a) State Review has been rewritten to track the wording in the Act on the three year review of water quality standards. States are required to review every three years State standards on segments that do not include uses specified in Section 101(a)(2) of the Act to determine whether these standards are still appropriate. Finally a statement has been added that procedures States use to identify water bodies for review should be incorporated into their Continuing Planning Process document. Under paragraph (c) after 30 days we added a phrase, "of the final State action to adopt and certify" to clarify when the 30 day time period starts.

SUMMARY OF THE CHANGES MADE IN THE PROPOSED REGULATION—Continued

Section No. in the proposed regulation	Section No. in the final regulation	Title	Summary of changes
131.21	131.21	EPA Review and Approval of Water Quality Standards.	No Change.
131.22	131.22	EPA Promulgation of Water Quality Standards.	Paragraphs (a) and (b) were clarified to indicate Administrator may promulgate as well as just propose standards. Under paragraph (c), a requirement was added that EPA in promulgating water quality standards is also subject to the public participation requirements of this Regulation.

B. Regulatory Impact Analysis and Regulatory Flexibility Analysis and Paperwork Reduction Act Requirements

Under Executive Order 12291, EPA must judge whether a Regulation is "major" and therefore subject to the requirement of a Regulatory Impact Analysis. It is difficult for EPA to assess the likely net cost of this Regulation because of the offsetting character of its basic provisions. The Regulation does establish new obligations on the States for control of toxic pollutants. However, the Regulation also increase the ability of the States to determine the attainability of stream uses, to set site-specific criteria sufficient to protect those uses, and to focus limited State and Federal resources on reviewing standards for priority water quality limited segments. These changes are designed to enable States to better use water quality standards as a pragmatic tool in improving water quality where necessary to protect water uses. For these reasons the Agency judges this not to be a major Regulation under Executive Order 12291.

This notice was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291. Any comments from OMB to EPA and any EPA response to those comments are available for public inspection through contracting the person listed at the beginning of this notice.

Under the Regulatory Flexibility Act, 5 U.S.C. Section 601 et seq., EPA must prepare a Regulatory Flexibility Analysis for all proposed regulations that have a significant impact on a substantial number of small entities. EPA has determined that, for reasons discussed above, this Rule does not have significant adverse impact on small entities.

The information collection provisions in this rule have been approved by OMB under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, and have been assigned control number 2040–0049.

List of Subjects

40 CFR Part 35

Water pollution control.

40 CFR Part 120

Water pollution control.

40 CFR Part 131

Water pollution control, Intergovernmental relations, Administrative practices and procedures, Reporting and record keeping.

Dated: November 2, 1983.

William D. Ruckelshaus,

Administrator.

PART 35—STATE AND LOCAL ASSISTANCE

§ 35.1550 [Removed]

1. Section 35.1550 is removed.

PART 120—WATER QUALITY STANDARDS

§§ 120.1–120.3 [Removed]

2. Sections 120.1 through 120.3 are removed.

§§ 120.27 and 120.43 [Removed]

3. Sections 120.27 and 120.43 are removed.

4. Part 131 is added as set forth below:

4A. Subparts A, B, and C are added as follows:

PART 131—WATER QUALITY STANDARDS

Subpart A—General Provisions

Sec.

Subpart B—Establishment of Water Quality Standards

Subpart C—Procedures for Review and Revision of Water Quality Standards

Sec.

Authority: Clean Water Act, P.L. 92–500, as amended: 33 U.S.C. 1251 *et seq.*

Subpart A—General Provisions

§ 131.1 Scope.

This part describes the requirements and procedures for developing, reviewing, revising and approving water quality standards by the States as authorized by Section 303(c) of the Clean Water Act. The reporting or recordkeeping (information) provisions in this rule were approved by the Office of Management and Budget under 3504(b) of the Paperwork Reduction Act of 1980, U.S.C. 3501 *et seq.* (approval number 2040–0049).

§ 131.2 Purpose.

A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (the Act). "Serve the purposes of the Act" (as defined in Sections 101(a)(2) and 303(c) of the Act) means that water quality standards should, wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water and take into consideration their use and value of public water supplies, propagation of fish, shellfish, and wildlife, recreation in and on the water and agricultural, industrial, and other purposes including navigation.

Such standards serve the dual purposes of establishing the water

quality goals for a specific water body and serve as the regulatory basis for the establishment of water-quality-based treatment controls and strategies beyond the technology-based levels of treatment required by sections 301(b) and 306 of the Act.

§ 131.3 Definitions.

(a) *The Act* means the Clean Water Act (Public Law 92–500, as amended, (33 U.S.C. 1251 *et seq.*)).

(b) *Criteria* are elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use.

(c) *Section 304(a) criteria* are developed by EPA under authority of Section 304(a) of the Act based on the latest scientific information on the relationship that the effect of a constituent concentration has on particular aquatic species and/or human health. This information is issued periodically to the States as guidance for use in developing criteria.

(d) *Toxic pollutants* are those pollutants listed by the Administrator under Section 307(a) of the Act.

(e) *Existing uses* are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.

(f) *Designated uses* are those uses specified in water quality standards for each water body or segment whether or not they are being attained.

(g) *Use Attainability Analysis* is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in § 131.10(g).

(h) *Water quality limited segment* means any segment where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of the technology-bases effluent limitations required by Sections 301(b) and 306 of the Act.

(i) *Water quality standards* are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.

(j) *States* include: the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, and the Commonwealth of the Northern Mariana Islands.

§ 131.4 State authority.

States are responsible for reviewing, establishing and revising water quality standards. Under Section 510 of the Act, States may develop water quality standards more stringent than required by this regulation.

§ 131.5 EPA authority.

Under Section 303(c) of the Act, EPA is to review and to approve or disapprove State-adopted water quality standards. The review involves a determination of: (a) Whether the State has adopted water uses which are consistent with the requirements of the Clean Water Act; (b) whether the state has adopted criteria that protect the designated water uses; (c) whether the State has followed its legal procedures for revising or adopting standards; (d) whether the State standards which do not include the uses specified in Section 101(a)(2) of the Act are based upon appropriate technical and scientific data and analyses, and (e) whether the State submission meets the requirements included in Section 131.6 of this part. If EPA determines that State water quality standards are consistent with the factors listed in (a)—(e) of this subsection, EPA approves the standards. EPA must disapprove the State water quality standards and promulgate Federal standards under Section 303(c)(4) of the Act, if State adopted standards are not consistent with the factors listed in (a)—(e) of this subsection. EPA may also promulgate a new or revised standard where necessary to meet the requirements of the Act.

§ 131.6 Minimum requirements for water quality standards submission.

The following elements must be included in each State's water quality standards submitted to EPA for review:

(a) Use designations consistent with the provisions of Sections 101(a)(2) and 303(c)(2) of the Act.

(b) Methods used and analyses conducted to support water quality standards revisions.

(c) Water quality criteria sufficient to protect the designated uses.

(d) An antidegradation policy consistent with § 131.12.

(e) Certification by the State Attorney General or other appropriate legal authority within the State that the water quality standards were duly adopted pursuant to State law.

(f) General information which will aid the Agency in determining the adequacy of the scientific basis of the standards which do not include the uses specified in Section 101(a)(2) of the Act as well as information on general policies applicable to State standards which may affect their application and implementation.

Subpart B—Establishment of Water Quality Standards

§ 131.10 Designation of uses.

(a) Each State must specify appropriate water uses to be achieved and protected. The classification of the waters of the State must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation. In no case shall a State adopt waste transport or waste assimilation as a designated use for any waters of the United States.

(b) In designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters.

(c) States may adopt sub-categories of a use and set the appropriate criteria to reflect varying needs of such sub-categories of uses, for instance, to differentiate between cold water and warm water fisheries.

(d) At a minimum, uses are deemed attainable if they can be achieved by the imposition of effluent limits required under Sections 301(b) and 306 of the Act and cost-effective and reasonable best management practices for nonpoint source control.

(e) Prior to adding or removing any use, or establishing sub-categories of a use, the State shall provide notice and an opportunity for a public hearing under § 131.20(b) of this regulation.

(f) States may adopt seasonal uses as an alternative to reclassifying a water body or segment thereof to uses requiring less stringent water quality criteria. If seasonal uses are adopted, water quality criteria should be adjusted to reflect the seasonal uses, however, such criteria shall not preclude the attainment and maintenance of a more protective use in another season.

(g) States may remove a designated use which is *not* an existing use, as defined in § 131.3, or establish sub-categories of a use if the State can

demonstrate that attaining the designated use is not feasible because:

(1) Naturally occurring pollutant concentrations prevent the attainment of the use; or

(2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or

(3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

(4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

(5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

(6) Controls more stringent than those required by Sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

(h) States may not remove designated uses if:

(1) They are existing uses, as defined in Section 131.3, unless a use requiring more stringent criteria is added; or

(2) Such uses will be attained by implementing effluent limits required under Sections 301(b) and 306 of the Act and by implementing cost-effective and reasonable best management practices for nonpoint source control.

(i) Where existing water quality standards specify designated uses less than those which are presently being attained, the State shall revise its standards to reflect the uses actually being attained.

(j) A State must conduct a use attainability analysis as described in § 131.3(g) whenever:

(1) The State designates or has designated uses that do not include the uses specified in Section 101(a)(2) of the Act, or

(2) The State wishes to remove a designated use that is specified in Section 101(a)(2) of the Act or to adopt subcategories of uses specified in Section 101(a)(2) of the Act which require less stringent criteria.

(k) A State is not required to conduct a use attainability analysis under this Regulation whenever designating uses which include those specified in Section 101(a)(2) of the Act.

§ 131.11 Criteria.

(a) Inclusion of pollutants:

(1) States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use.

(2) Toxic Pollutants—States must review water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely affecting water quality or the attainment of the designated water use or where the levels of toxic pollutants are at a level to warrant concern and must adopt criteria for such toxic pollutants applicable to the water body sufficient to protect the designated use. Where a State adopts narrative criteria for toxic pollutants to protect designated uses, the State must provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria. Such information may be included as part of the standards or may be included in documents generated by the State in response to the Water Quality Planning and Management Regulations (40 CFR Part 35).

(b) Form of criteria: In establishing criteria, States should:

(1) Establish numerical values based on:

(i) 304(a) Guidance; or

(ii) 304(a) Guidance modified to reflect site-specific conditions; or

(iii) other scientifically defensible methods;

(2) establish narrative criteria or criteria based upon biomonitoring methods where numerical criteria cannot be established or to supplement numerical criteria.

§ 131.12 Antidegradation policy.

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

(3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

§ 131.13 General policies.

States may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances. Such policies are subject to EPA review and approval.

Subpart C—Procedures for Review and Revision of Water Quality Standards

§ 131.20 State review and revision of water quality standards.

(a) State Review: The State shall from time to time, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. Any water body segment with water quality standards that do not include the uses specified in Section 101(a)(2) of the Act shall be re-examined every three years to determine if any new information has become available. If such new information indicates that the uses specified in Section 101(a)(2) of the Act are attainable, the State shall revise its

standards accordingly. Procedures States establish for identifying and reviewing water bodies for review should be incorporated into their Continuing Planning Process.

(b) *Public Participation:* The State shall hold a public hearing for the purpose of reviewing water quality standards, in accordance with provisions of State law, EPA's water quality management regulation (40 CFR 130.3(b)(6)) and public participation regulation (40 CFR Part 25). The proposed water quality standards revision and supporting analyses shall be made available to the public prior to the hearing.

(c) *Submittal to EPA:* The State shall submit the results of the review, any supporting analysis for the use attainability analysis, the methodologies used for site-specific criteria development, any general policies applicable to water quality standards and any revisions of the standards to the Regional Administrator for review and approval, within 30 days of the final State action to adopt and certify the revised standard, or if no revisions are made as a result of the review, within 30 days of the completion of the review.

§ 131.21 EPA review and approval of water quality standards.

(a) After the State submits its officially adopted revisions, the Regional Administrator shall either:

(1) notify the State within 60 days that the revisions are approved, or

(2) notify the State within 90 days that the revisions are disapproved. Such notification of disapproval shall specify the changes needed to assure compliance with the requirements of the Act and this regulation, and shall explain why the State standard is not in compliance with such requirements. Any new or revised State standard must be accompanied by some type of supporting analysis.

(b) The Regional Administrator's approval or disapproval of a State water quality standard shall be based on the requirements of the Act as described in §§ 131.5, and 131.6.

(c) A State water quality standard remains in effect, even though disapproved by EPA, until the State revises it or EPA promulgates a rule that supersedes the State water quality standard.

(d) EPA shall, at least annually, publish in the Federal Register a notice of approvals under this section.

§ 131.22 EPA promulgation of water quality standards.

(a) If the State does not adopt the changes specified by the Regional Administrator within 90 days after notification of the Regional Administrator's disapproval, the Administrator shall promptly propose and promulgate such standard.

(b) The Administrator may also propose and promulgate a regulation, applicable to one or more States, setting forth a new or revised standard upon determining such a standard is necessary to meet the requirements of the Act.

(c) In promulgating water quality standards, the Administrator is subject to the same policies, procedures, analyses, and public participation requirements established for States in these regulations.

§§ 120.12 and 120.34 [Redesignated as §§ 131.31 and 131.33]

4B. Sections 120.12 and 120.34 are redesignated as §§ 131.31 and 131.33 respectively and constitute Subpart D, of new Part 131. The heading of new § 131.31 is revised to read "§ 131.31 Arizona". The table of contents for new Subpart D is set forth below:

Subpart D—Federally Promulgated Water Quality Standards

131.31 Arizona
131.33 Mississippi.

Authority: Clean Water Act, Pub. L. 92–500, as amended; 33 U.S.C. 1251 *et seq.*

5. The heading for Part 120 is removed and reserved.

[Note.—Appendix A will not appear in the CFR.]

Appendix A—Response to Public Comments

The public comments and statements submitted to EPA on the proposed Water Quality Standards Regulation before the close of the comment period are summarized in a separate publication, "Summary of Public Comments on the Proposed Water Quality Standards Regulation," March 11, 1983. Limited numbers of the Summary are available from David K. Sabock at the address listed under **FOR FURTHER INFORMATION CONTACT.**

This appendix describes EPA's response to the recommendations for changes in the proposed Regulation. Similar recommendations have been grouped together. Major additions and deletions made in the Rule in response to public comments are described in greater detail in the Preamble. Subjects discussed in the Preamble, along with EPA's rationale for accepting or rejecting the public's suggestions include: commitment to the goals of the Clean Water Act, changes in uses (including comments on benefit-cost assessments), criteria, the antidegradation policy, general policies, and State review.

Definitions

Several commenters asked what waters were included in the Standards program. We changed the term "navigable waters" to "waters of the United States" in the Regulation to avoid confusion. The CWA defines "navigable waters" as "waters of the United States," a broader class of waters than considered "navigable" under some other statutes.

A number of recommendations were made to improve the series of definitions relating to uses. The terms "uses" and "attain" were removed from the list of definitions as being unnecessary to define. A definition of "Use Attainability Analysis" was added as a means of providing a common basis for understanding this analysis. This definition is derived from the language of the existing Regulation. The recommendation that the definition of "water quality limited segment" be moved from the Preamble of the proposed Rule to the definition section of the final Rule was accepted. The definition is important to understanding certain provisions of the Rule and is, therefore, logically part of the Rule.

Several suggestions were offered regarding the definition of "criteria" which resulted in the addition of "or narrative statement" after "concentration or level" and the deletion of the final sentence to remove the erroneous implication that only numerical values may be established. However, we rejected the suggestion that we include in the definition of criteria a statement that criteria are purely scientific determinations and do not consider the availability of treatment technology or the costs or economic impact of such treatment requirements, because to do so would be misleading. Section 304(a) criteria developed by EPA are purely scientific determinations, published as guidance for the State's use. They are not enforceable. Criteria adopted as part of State water quality standards are set taking into consideration the protection of a particular designated use, and thus may indirectly reflect a judgment as to the availability of treatment technologies needed to attain that use and the associated economic impacts. Such criteria, adopted as part of a State standard, are enforceable.

State Review of Water Quality Standards

There was considerable public comment on the subject of *State Review*

of Water Quality Standards, primarily directed to the apparent lack of EPA's commitment to the goals and philosophy of the Clean Water Act and the substitution of a review of standards for a limited number of priority water bodies in lieu of a Statewide review of standards at least once every 3 years. These concerns were addressed in detail in the Preamble and will only be briefly discussed here.

Because of the overwhelming support for the Section 101(a)(2) goals of the Act, EPA added a requirement that any stream segment with uses not specified in Section 101(a)(2) of the Act be re-examined every 3 years by the State to determine if new information has become available. If such new information indicates that the uses specified in Section 101(a)(2) are attainable, the State shall revise its standards accordingly. This provision in effect established a mandatory requirement to "upgrade" water quality standards as a balance to the provisions allowing the "downgrading" of standards. This policy also removes problems dealing with equity considerations among competing dischargers. Dischargers on a stream with an unduly "low" designated use should not be given an advantage over dischargers on streams whose designated uses and criteria were properly set to reflect attainable uses.

We have retained the statutory 3-year review requirement. The proposed regulation was intended to implement that requirement, but subsequent statements on priority water bodies in that subsection of the proposal and discussions in the Preamble and *Water Quality Standards Handbook* tended to confuse the issue. Many commenters thought EPA was attempting to delete or minimize that requirement. This is not EPA's intention.

EPA has changed the language in part 131.20 to emphasize the statutory nature of the 3-year review of all State standards. However, EPA continues to believe that the concept of focusing limited State resources on specific water bodies is an appropriate management technique to ensure that the most critical environmental problems are adequately addressed. The Preamble discusses this in more detail.

In addition, many commenters erroneously assumed that EPA was proposing a rigid system for determining priority water bodies. EPA has no rigid priority system in mind other than assuming the States will address known problems first. Rather, EPA views setting priorities as a basic management tool and a necessary step for States to make the best use of limited resources. Priority lists are viewed as flexible working documents, not as mandatory lists. Public involvement in developing these lists is encouraged.

Although there were suggestions that EPA define for States the processes that should be used in establishing the list of priority water bodies, the Act does not require such guidance and EPA does not believe it is appropriate to do so. However, whatever procedures States establish should be incorporated into the States Continuing Planning Process document and be made known to the public-at-large.

Antidegradation Policy

EPA's proposal, which would have limited the antidegradation policy to the maintenance of existing uses, plus three alternative policy statements described in the preamble to the proposal notice, generated extensive public comment. EPA's response is described in the Preamble to this final rule and includes a response to both the substantive and philosophical comments offered. Public comments overwhelmingly supported retention of the existing policy and EPA did so in the final rule.

EPA's response to several comments dealing with the antidegradation policy, which were not discussed in the Preamble are discussed below.

Option three contained in the Agency's proposal would have allowed the possibility of exceptions to maintaining existing uses. This option was either criticized for being illegal or was supported because it provided additional flexibility for economic growth. The latter commenters believed that allowances should be made for carefully defined exceptions to the absolute requirement that uses attained must be maintained. EPA rejects this contention as being totally inconsistent with the spirit and intent of both the Clean Water Act and the underlying philosophy of the antidegradation policy. Moreover, although the Agency specifically asked for examples of where the existing antidegradation policy had precluded growth, no examples were provided. Therefore, wholly apart from technical legal concerns, there appears to be no justification for adopting Option 3.

Most critics of the proposed antidegradation policy objected to removing the public's ability to affect decisions on high quality waters and outstanding national resource waters. In attempting to explain how the proposed antidegradation policy would be implemented, the Preamble to the proposed rule stated that no public participation would be necessary in certain instances because no change was being made in a State's water quality standard. Although that statement was technically accurate, it left the mistaken impression that all public participation was removed from the discussions on high quality waters and that is not correct. A NPDES permit would have to be issued or a 208 plan amended for any deterioration in water quality to be "allowed". Both actions require notice and an opportunity for public comment. However, EPA retained the existing policy so this issue is moot. Other changes in the policy affecting ONRW are discussed in the Preamble.

Designation of Uses

The question of whether there is a hierarchy of uses generated much discussion. Many indicated there is no hierarchy of uses since none of the uses mentioned in Section 303(c) of the Clean Air Water Act are ranked or were put into any order of priority. However, others believed that fish, wildlife and recreation or potable water supply clearly have precedence. The short answer is that Congress, in setting the goals in Section 101(a)(2), established that, where attainable, water quality "shall provide for the protection of fish, shellfish, wildlife and recreation in and on the water. . .". Therefore, EPA has revised the proposed regulation to better emphasize the uses specified in the Section 101(a)(2) goals of the Act. Under the final regulation, wherever States have set or set uses for a water body which do not include all of the uses specified in Section 101(a)(2) of the Act, they must conduct a use attainability analysis to demonstrate that these uses are not attainable. Of course, if they are not attainable, the State must select one or more of the other uses included in 303(c)(2). While the States need only conduct a use attainability analysis once, every three years States will have to review the basis of prior decisions to designate uses a water body which do not include uses specified in Section 101(a)(2) of the Act to determine if there is any information which would warrant a change in the standards. This change responds positively to the criticism that the proposed regulation settled for the status quo and did not adequately support the improvement of water quality.

The provision in the proposal allowing States to designate subcategories of aquatic use (Section 131.10(b)) has been changed slightly in the final rule (Section 131.10(c)) in response to suggestions made by various commenters. EPA is attempting to convey the concept that some use classifications included in the Act and

in State standards are so broad that they do not adequately describe to the public the actual use to be protected. The final rule provides that a State may, because of physical, chemical, biological, and economic factors, wish to adopt sub-categories of a use and set criteria appropriate to protect a particular use sub-category. The alteration of the language from the proposal to the final rule specifically follows suggestions that uses other than aquatic life protection should be covered, and that factors other than economics should be considered, in designating particular sub-categories of uses.

Many of the comments on setting sub-categories of uses levels of aquatic protection, and seasonal uses were similar, focusing primarily on the availability of guidance and the adequacy of information on how to establish levels of protection or seasonal uses. Guidance is available in the *Water Quality Standards Handbook* on what considerations are involved in determining levels of protection and seasonal uses to designating appropriate uses for a water body. The availability of information will vary depending on the site involved. EPA intends to continually improve the scientific and technical basis of the guidance and to revise such guidance from time to time. Moreover, EPA will not approve standards unless they are based on sound scientific and technical analysis. Establishing sub-categories of uses and seasonal uses are optional considerations on the part of the State.

Several commenters suggested that EPA establish a minimum level of protection. EPA believes it provides the basic scientific information on various levels of protection with the water quality criteria recommendations under Section 304(a) of the Act. However, for EPA to mandate certain levels of aquatic life protection within a use would override the primary authority of the State to adopt use classifications and supporting criteria through public hearings. EPA does not believe as being valid the concern expressed by the public that when establishing various levels of protection that the most sensitive species will not be protected. The degree of protection may vary depending upon what life stage of the most sensitive species the public wishes to protect. For example, water quality criteria necessary to protect spawning of aquatic life generally requires more stringent water quality criteria than does protection of the species during other stages of its life cycle. If spawning is not part of a designated use for a specific water body, then less stringent criteria levels may be established and they will be adequate to protect the use fully.

The public also was concerned that uses or sub-categories of uses would not be based on original habitat conditions. It has never been the intention of the water quality standards program to bring all waters to a pristine condition or necessarily to set standards based on original habitat conditions. In the first instance, some waters are naturally of "poor" quality, and in the second, man has changed the environment and there are instances where an attempt to correct or control some sources of pollution either simply cannot be effected or would cause more environmental damage to correct than to leave in place.

In response to comments that the provision on seasonal uses was too loose, we revised the wording to clarify that the criteria may not be adjusted in a way that precludes a more protective use in another season.

A basic policy of the standards program throughout its history has been that the designation of a water body for the purposes of waste transport or waste assimilation is unacceptable. At the public's suggestion, an explicit statement of this policy has been added to § 131.10(a). The objective is to prevent water bodies from being used as open sewers. Thus, this "no waste transport" policy does not mean that wastes cannot be conveyed by barge or boat; such activity is encompassed by the navigation use designation.

Use Attainability Analysis

Because of the wide range of comments on the use attainability analysis, EPA revised the regulation to better define when such an analysis is appropriate. The changes were described in the Preamble.

EPA also reworded the proposed concept of the use attainability analysis to include, where appropriate, an analysis of the economic impacts of attaining a use consistent with or more stringent than the Section 101(a)(2) goals of the Act. EPA agrees with the comments that attainability and affordability are integral components of the same analyses. This is consistent with the previous regulation, which provided that, in determining attainability, States were to consider economic factors (§ 35.1550(c)(1)).

In the proposed Rule, EPA recommended conducting a benefit-cost assessment in determining whether the benefits of attaining a use bear a reasonable relationship to the costs. That concept has been removed from the final Rule. As explained in the preamble, the Agency was persuaded by the arguments that there are inherent conceptual and procedural difficulties in *balancing* the benefits of achieving the Section 101(a)(2) goals versus the costs. The final regulation avoids these problems while still recognizing the relevance of economic factors in determining attainability. The Agency has retained the concept that economic analysis be judged on substantial and widespread economic and social impact.

Defining Attainable Uses

Several recommendations were made to delete references to Section 301(c) from the definition of the minimum baseline technology defining when a use is considered attainable and cannot be modified or removed. They also suggested making 301(c) waivers subject to the requirements of proposed § 131.13(c). The Agency believes that it is appropriate to use all applicable sections of the Act in defining the minimum technology based requirements of the Act; section 301(c) is one such section. In addition, Section 301(c) prescribes the eligibility requirements for a Section 301 waiver. Therefore, EPA has not made the suggested changes relating to Section 301(c).

Others pointed out that the proposed rule did not, but should, allow a mix of point and nonpoint source controls in determining whether a use is attainable. It was not EPA's intent to prevent that type of analysis, and the final regulation has been clarified by combining the two paragraphs on point and nonpoint source controls with the word "and" in § 131.10(h)

Other comments on nonpoint sources focused on the use of the terminology "cost effective and reasonable best management practices." EPA used the term "cost effective and reasonable best management practices" to cover the development of nonpoint source controls with Section 205(j) funding. We believe generally that nonpoint source controls developed as part of a State's water quality management plan are cost effective and reasonable. If a designated use can be attained through such BMPs; it would be inconsistent to allow a change in the use. Some comments also expressed concern that the Agency was forcing a mandatory regulatory program for nonpoint source controls through the Water Quality Standards Regulation. The Agency does not believe that the wording will impose any new requirements for the development of regulatory programs for nonpoint source controls; rather, the regulation simply

takes into account those programs which exist in ascertaining the minimum requirements. States are still free to review and revise their non-point source requirements in accordance with 208, 303(e), and 205(j).

One commenter recommended that the Agency include in the section on use attainability a discussion of the relationship between best management practices and water quality standards similar to that in *U.S. EPA, State and Areawide Memorandum,* Number 32, Nov. 14, 1978. EPA has included that memorandum in the chapter on "Water Body Survey and Assessments for Conducting Use Attainability Analyses" in the *Water Quality Standards Handbook.*

Changes in Uses

EPA received substantial comment on § 131.10(h)(1)–(6) and (i)(1)–(6) of the proposed regulation, which deal with the circumstances under which changes may (or may not) be made in designated uses. These sections have been revised; the changes are discussed in Section A of the Preamble.

Criteria

We accepted the comment that the added test of criteria being "compatible with" protecting a designated use might raise the possibility of unnecessary debate over what is compatible with protecting a designated use. The sentence was revised to read "States must adopt water quality criteria that protect a designated use." In response to several comments, EPA also added language to clarify that criteria must be based on sound scientific rational and must contain sufficient parameters or constituents to protect the designated use. Some commenters apparently believe that the Agency continues to have a policy of "presumptive applicability" applied to the Federal water quality criteria or that the proposed Regulation recreated that policy. That policy existed from July 10, 1978 to Nov. 28, 1980, when it was rescinded. No such policy now exists nor is intended in the final rule. While States are free to draw on EPA's 304(a) criteria as support for State criteria, they are equally free to use any other criteria for which they have sound scientific support.

Comments received from the public clearly indicated concern that the proposed rule did not appear to provide sufficient emphasis on the control of toxic pollutants. The proposed paragraph on toxic pollutants was therefore strengthened to provide that States "must" review water quality data and information on dischargers to identify where toxic pollutants may be adversely affecting the attainment of designated water uses and "must" adopt criteria to ensure the protection of the designated uses. Furthermore, where States adopt narrative statements for toxic pollutants, EPA is requiring that States submit along with their standards submission information identifying the method by which the State intends to regulate point source discharges of toxic pollutants based on the narrative provisions. For example, States may require biological monitoring of dischargers' effluents such that a particular tolerance or LC_{50} value is not exceeded. EPA made these changes because it agrees that more emphasis needs to be placed on the control of toxic dischargers. Information on implementing methods will ensure that EPA and State have a common understanding of what the narrative criteria really mean, and will facilitate permit writing on water quality limited streams.

The regulation provides several ways of establishing water quality criteria, including criteria development based on site-specific characteristics. EPA's field tests of the proposed guidance supporting the concept of developing site-specific criteria, the comments received during the public review, and the review conducted by the Agency's Science Advisory Board identified difficulties with the proposed guidance. The final guidance has been carefully revised to reflect the concerns and comments received to ensure that the mechanisms used to develop site-specific criteria are scientifically credible. Research will also continue on improved techniques, and as validated they will be made available to the States.

General Policies

While many commenters supported including the General Policies provision (Section 131.13) in the framework of the Regulation, others recommended deleting the General Policies section from the Regulation and including it in guidance documents. Since much of the language in that proposed part was in fact guidance, EPA decided to delete paragraphs (b)–(d). Only the first part of the section which recognizes that States do adopt policies that impact on the implementation and application of water quality standards and that such policies, if adopted, are subject to EPA review and approval was retained.

EPA believes that it is important for the public to understand that while the adoption of these policies is optional, if adopted they are subject to EPA review and approval. EPA will continue to include a discussion of mixing zones, low flows, variance and other general program policies in a guidance document, as has been done since 1975. Detailed guidance on these optional policies is included in the *Water Quality Standards Handbook.*

Resource Capabilities

The issue of resources was of concern to many. While some States over the years have collected the scientific and technical information to set appropriate water quality standards, others have done significantly less data collection. EPA recognizes that use attainability analyses and site specific criteria studies may require some States to program more resources for setting their water quality standards than in the past. However, the use attainability analyses apply only to water quality limited segments—segments where standards will not be attained even with implementation of technology-based controls of the Act, where the State wishes to justify uses less than "fishable/swimmable". Moreover, nothing in the guidance or in the requirement for conducting use attainability analyses suggests that every analysis be similar in scope and detail or that they must be intrinsically expensive and difficult. EPA expects quite the opposite to be true; the analyses only need to be sufficiently detailed to support the specific standards decision in question. Consequently, when attempting to establish appropriate aquatic protection uses it will, for example, be relatively simple to demonstrate to EPA that certain aquatic life forms will be unable to exist in an area because of physical factors regardless of the level of water quality attained, i.e., no level of water quality will induce fish to spawn in areas where the bottom strata are not what the particular species requires for spawning. In other instances, given the environmental problems, number of people involved, the cost of pollution control to municipalities and industries, and the political aspects of the situation, the use attainability analyses may be quite costly. Because resources are and will likely continue to be a problem, EPA recommends that States set priorities for conducting these analyses. The Agency also believes that it is appropriate for States to enlist the cooperation and resources of dischargers in conducting these analyses. EPA continues to believe that there is considerable expertise and data available from various State agencies that can be tapped to assist in establishing attainable standards. This

expertise does, of course, vary from State to State but that situation exists under any regulation EPA may promulgate.

In addition to the technical concerns on the development of site-specific criteria addressed earlier in both the Preamble and this Appendix, the public expressed concern with the cost of the procedures and the availability of State personnel to conduct and manage such procedures. Because it is a new concept in terms of application in a regulation, the Preamble to the proposed rule discussed the procedures in detail. This conveyed the impression that site-specific criteria development would be the basic method of setting water quality criteria. EPA believes the States will continue to base most of their standards on EPA developed Section 304(a) criteria because of the resource question and because of the fact that site-specific criteria will not be necessary in most water bodies. The Final Rule allows States to develop site-specific criteria; it does not require them to do so. As with use attainability analyses, States should set priorities and enlist the assistance of dischargers in conducting site specific criteria. EPA will be providing training seminars for State personnel in applying site-specific criteria development procedures. EPA is also developing simpler and improved techniques.

State/Federal Roles

There were a number of diverse comments on the sections of the proposed rule dealing with "State Review and Revision of Water Quality Standards", "EPA Review and Approval of Water Quality Standards" and "EPA Promulgation of Water Quality Standards".

Several comments on § 131.20 of the proposed regulation "State Review and Revision of Water Quality Standards", requested specific mechanisms be included in the regulation on how States should generate data and information, how to involve local government and industry in the data collection and decision making, how permittees could request a review of inappropriate water quality standards and how the public participates in the water quality standards revision process. All of these comments were evaluated but few changes were made other than those in § 131.20 which were described earlier. States are responsible, within the guidelines of Section 303(c) of the Act and the Water Quality Standards Regulation, for setting water quality standards. EPA does not believe it is appropriate to specify particular administrative mechanisms States must use in that process. Ensuring such administrative uniformity would be disruptive to the States without yielding any significant environmental benefit.

There was also a recommendation to include in the rule the policy statement that was in the preamble to the proposal on the relationship of Section 24 of the "Municipal Waste Water Treatment Construction Grant Amendments of 1981" (Pub. L. 97–117, December 29, 1981, 33 U.S.C. 1313(a)), to water quality standards reviews. The Agency chose not to do so because, for the purposes of Section 24, water quality standards reviews are synonymous with the water quality standards reviews under Section 303(c) of the Act and the one final rule.

A number of letters and statements expressed concern that the various EPA Regional Offices will interpret the regulation differently. It is recognized that with 10 Regional Offices responsible for the review and approval of State water quality standards, there is potential for inconsistencies between Regions on recommended data and analyses. Of course, since water quality problems in different regions may vary considerably, the regions must also be able to respond to those problems in ways that make the most sense under the particular circumstances. However, it is believed that EPA's guidance and Headquarters evaluations of the Regional Offices will, to the extent possible, minimize inconsistencies in the interpretation of the Regulation by our Regional Offices.

There were suggestions that EPA change the rule to read that the State water quality standards go into effect only after EPA approval. Standards are adopted by States under State law. Consistent with the Clean Water Act, EPA's policy has always been that a State standard goes into effect when adopted by the State and remains in effect, even if disapproved, until the State revises its standards or EPA promulgates a Federal standard. This interpretation is necessary because otherwise there would be no standard at all until Federal action was completed. A State rescinds its prior standard whenever it adopts a revised standard. In addition, EPA approval of a standard should not be interpreted as superseding the State's right to amend its own laws. By the same token, if EPA promulgates a Federal standard, the State is obliged to apply that standard in its pollution control programs or until the State adopts a State standard identical to or more stringent than the Federal standards.

EPA proposed to publish a notice of approvals of State water quality standards in the Federal Register at least annually. One letter requested that EPA publish the notice of approvals at the time the Agency take action. EPA believes that this action is unnecessary since publication of these notices (or any delay in publishing them) in no way affects the legal standing of the standards or the status of EPA's approval action. When a State adopts a standard, it publishes a notice under State law. This should be sufficient to ensure that the regulated community is informed of any changes in State water quality standards. EPA's annual publication will serve as a convenient check.

A number of respondents recommended that in promulgating State standards, EPA move expeditiously to avoid excessive delays. EPA's approach in disapproving State standards is to work with the State to assist the State in revising its standard to meet the Act's requirements. Only as a last resort will EPA promulgate Federal standards. In working with a State to revise its standard, EPA will try to do so within the timeframe of the Act. However, this may not always be possible depending on State administrative and/or legislative procedures. However, we intend to try harder to eliminate unnecessary delay.

In response to a number of questions raised, the final rule clearly states that in promulgating State standards, the Administrator will be subject to the same public participation policies and procedures established for States.

Interstate/International Water Quality Standards Issues

In the Preamble to the proposed water quality standards regulation, EPA discussed its role in interstate and international water quality standards issues. There were those that believed that EPA should include in the regulation specific procedures for resolving interstate/international conflicts and require States to adopt standards that meet treaty requirements. Since these issues have been associated with the standards program since its inception and have been adequately resolved previously without the need for regulatory language, EPA sees no need to include such language in the Final Rule.

When interstate/international conflicts arise, EPA will play a stronger role in the standards process in addition to the ordinary review and approval procedures described in the regulation. First, if an interstate conflict occurs between States in the same EPA region, the EPA Regional Administrator is in a

position to help resolve the dispute through the ability to review and approve each State's standards and by participating in the standards development process.

Interstate and interregional organizations can also play a positive role in this situation. Second, if the issue involves more than one EPA region and the EPA regions are unable to resolve the issues, then the EPA Administrator can be requested to render a judgment. While it is theroretically possible that two States might have incompatible standards, both of which meet the requirements of the Act and this regulation, such as situation is likely to be rare. If it occurs, EPA will assist the States in resolving the inconsistency. The exact procedures will depend upon the specific circumstances. Therefore, we do not believe it is appropriate to include specific procedures in the Water Quality Standards Regulation to resolve interstate conflicts.

Any specific treaty requirements have the force of law. Therefore, State water quality standards will have to meet any treaty requirements.

Finally, in response to commenters' suggestions, we have made some editorial and format changes to clarify the regulation. In addition, the substantive changes made to demonstrate the Agency's commitment to the goals of the Act should also help clarify the regulation.

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BILLING CODE 6560-50-M

Photo 1
Rio Hondo at RWWTP Outfall 06.07.2021

Photo 2
Rio Hondo upstream of RWWTP 06.07.2021

Photo 3
Rio Hondo upstream of RWWTP-2 06.07.2021

Photo 4
Rio Hondo upstream of RWWTP-3 06.07.2021

EXHIBIT
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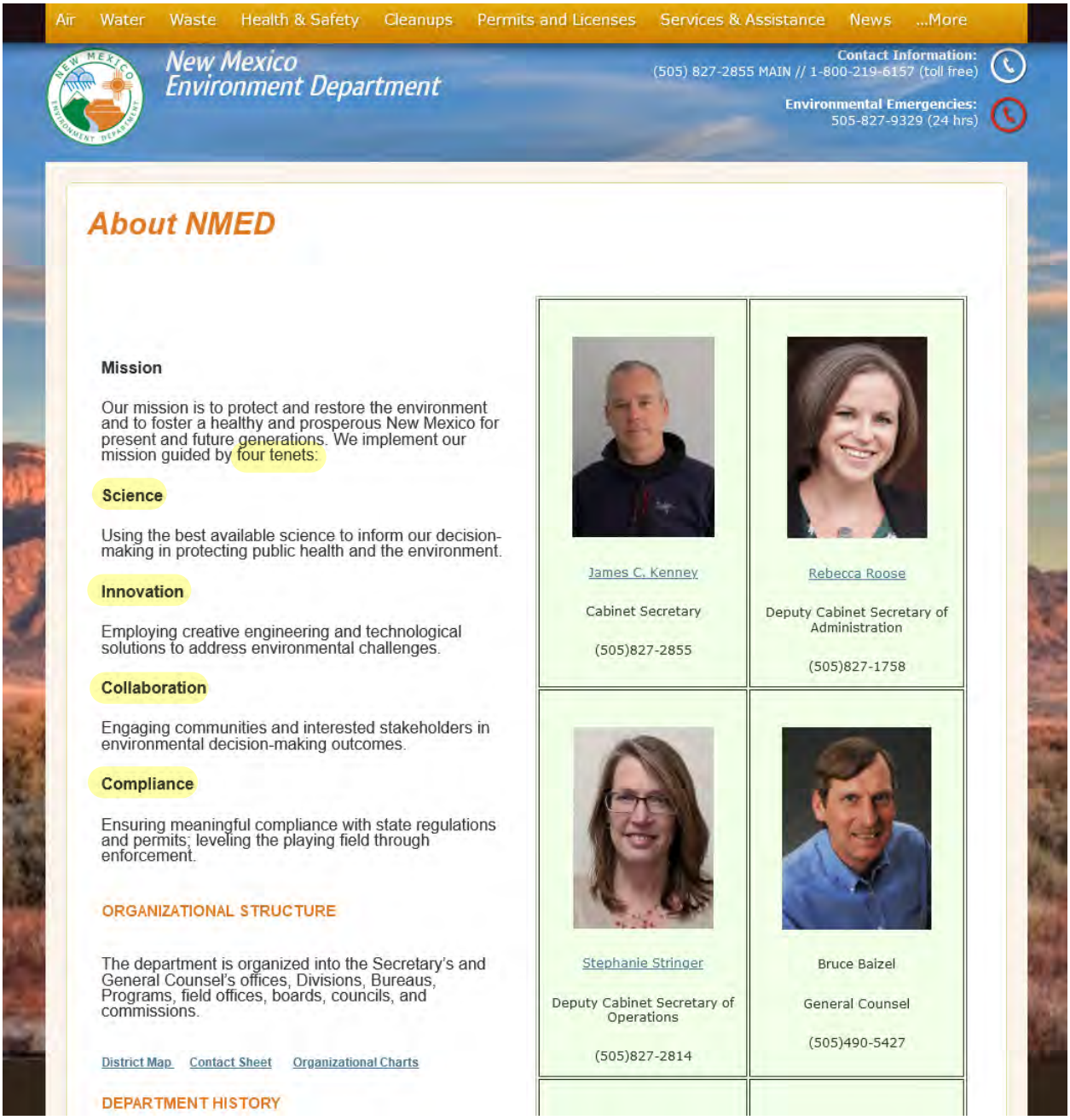
SJWC 3-I

Photo 5
Rio Hondo downstream of RWWTP-2 06.07.2021

Photo 6
Rio Hondo downstream of RWWTP 06.07.2021

Photo 7
RWWTP Outfall 06.07.2021



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