#### Appendix E 2021 Revisions Rational Document

#### Introduction:

The purpose of this rationale document is to fully explain the decisions made to amend specific components of the Ute Mountain Ute Tribe's <u>Water Quality Standards For</u> <u>Surface Waters of the Ute Mountain Ute Indian Reservation, January 20, 2011</u>. This rational document is intended to tier from the 2011 rational document, reflecting changes from the triennial review process since that time. General information concerning the Ute Mountain Ute Tribal Water Quality Standards and response to Public Comments from the 2011 public hearing process may be found in the 2011 Rational Document.

The 2021 Rationale Document is a working document and is meant to be an accompanying document to the Ute Mountain Ute Tribe's <u>Water Quality Standards For</u> <u>Surface Waters of the Ute Mountain Ute Indian Reservation, 2021 Revision.</u> This text will be updated and re-posted as public comments are received and addressed.

The format of this document will consist of:

- 1. Description of Revisions to the Standards
- 2. Distribution List
- 3. Description of Public Review and Comment Procedures
- 4. Response to Public Comments

## 1. **Description of Revisions to the Standards**

Overview: In November of 2002, the Ute Mountain Ute Tribal Council adopted <u>Water</u> <u>Quality Standards For Surface Waters of the Ute Mountain Ute Indian Reservation,</u> <u>August 30, 2002</u>. These standards in their August 2002 form therefore became *Tribal Law*. Pursuant to the federal Clean Water Act, a triennial review of the standards should be undertaken (every three years) to determine the applicability of the standards and their effectiveness in protecting public health and the environment; including technical soundness, new criteria and implementation issues. Triennial review revisions were incorporated and adopted by Tribal Council in <u>Water Quality Standards For Surface</u> <u>Waters of the Ute Mountain Ute Indian Reservation, January, 2011</u> and these proposed revisions in 2021 shall accomplish that objective by incorporating updates from triennial reviews since 2011.

Contact Information for the 2021 Triennial Review:

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#### Section 1. Purpose and Authority

The *Authority* paragraphs listing waters over which the Tribe has the authority to assert its jurisdiction was amended to better reflect that the Tribe is establishing water quality standards to comprehensively protect all water resources on the Reservation including groundwater and ephemeral and intermittent water resources.

#### Section 3. Definitions

The definition of *Tribal Waters* has been revised and updated to align with the Tribes intent to comprehensively jurisdictionally protect all water resources on the Reservation including groundwater and all types of surface waters including ephemeral, intermittent and isolated water resources.

## Section 5. Narrative Water Quality Criteria

Groundwater is added alongside surface water requiring groundwater to be free from harmful concentrations of pollutants

#### Section 6. Narrative Biological Criterion and Sediments

Language modifications in this section are intended to protect aquatic life and riparian habitat from negative effects of hydrologic alteration and from the introduction and accumulation of contaminated sediment.

## Section 7. Mixing Zones and Dilution Policy

Clarified mixing zone application process.

#### Section 7.1 Compliance Schedule Authorization Process

Added this section, a policy for implementing National Pollutant Discharge Elimination (NPDES) permits on a case-by-case basis.

## Section 10. Variances from Water Quality Criteria

Added requirements for variance applications.

#### Section 12. Designated Uses, Criteria, and Variances for Stream Segments

Changes to Designated Uses:

Table 12.1 and 12.2 identify the types of criteria and uses for Tribal Waters. The table was amended to include "narrative" criteria as applicable to numerous waters that were previously identified as only having numeric criteria. Narrative and numeric water quality criteria are applicable to tribal waters.

## Changes to 2011 Criteria and Additional Criteria:

Revised criteria for parameters which EPA has published new or updated Clean Water Act Section 307(a) priority pollutant criteria are found in Table 12.7 of our standards and new or revised section 304(a) criteria are found in Section 12. These have been proposed for adoption after reviewing criteria revised by EPA to reflect new research data and/or assessment techniques.

Aluminum criteria have been revised to the latest EPA recommendations (Final 2018 Aquatic Life Ambient Water Quality Criteria for Aluminum EPA 822-F-18-003) which take the bio-availability of aluminum to aquatic organisms into account. pH, total hardness and Dissolved Organic Carbon (DOC) impact aluminums bio-availability and therefore toxicity, to organisms, and are accounted for in the new criteria calculations.

Ammonia criteria have been updated to the latest EPA recommendations (Aquatic Life Ambient Water Quality Criteria for Ammonia- Freshwater, 2013, EPA 820-F-13-013). The updated criteria are based on the latest toxicity studies and are more stringent than the previously recommended 1999 criteria.

Cadmium criteria have been updated to the latest EPA recommendations (Aquatic Life Ambient Water Quality Criteria Update for Cadmium- 2016, EPA 822-F-16-003). New toxicity studies were used to derive revised criteria more protective of aquatic life.

Copper criteria have been updated to the latest EPA recommendations (Aquatic Life Ambient Freshwater Water Quality Criteria- Copper 2007 Revision EPA-822-F-001). The update criteria take bioavailability of copper to aquatic life into account and employ the Biotic Ligand Model (BLM) to calculate modulated criteria based on ten input parameters; temperature, pH, dissolved organic carbon, calcium, magnesium, sodium, potassium, sulfate, chloride and alkalinity.

Selenium criteria have been updated to the latest EPA recommendations (Aquatic Life Ambient Water Quality Criteria- Selenium in Freshwater 2016, EPA-822-F-16-005). The updated criteria reflect the latest scientific knowledge accounting for selenium's bio-accumulative properties and toxicity to aquatic life primarily based on organisms consuming selenium contaminated food rather than being exposed only to dissolved selenium concentrations in water.

Radionuclide criteria for Gross Alpha, Gross Beta and combined radium 226/228 have been adopted in Section 12.8 to protect for traditional and ceremonial uses, recognizing the potential impacts to human health and the environment in the region from radium, vanadium and uranium mining and energy development.

# 2. **Distribution List**

Note: This list will be updated for each distribution request following the opening of the public comment period.

CO:	Jennifer Opila Colorado Dept. of Public Health and Environment Water Quality Control Division 4300 Cherry Creek Drive South Denver, CO 80246-1530 Jennifer.opila@state.co.us
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	Patrick Antonio Principal Hydrologist Navajo Nation EPA P.O. Box 339 Window Rock, AZ 86515 patrickantonio@navajo-nsn.gov

Jicarilla Apache Tribe:

Cordelle TeCube Environmental Protection Director Jicarilla Apache Nation P.O. Box 507 Dulce, NM 87528 <u>cltecube@yahoo.com</u>

Southern Ute Tribe:

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#### **Government Agencies (Federal)**

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National Park Service:	Tova Spector
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Bureau of Land Management, CO:	Ray O'Neil
	Monument/NCA Manager
	Bureau of Land Management
	Anasazi Heritage Center
	27501 Highway 184
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Bureau of Land Management, UT:	Tina Marian Planning and Environmental Coordinator Bureau of Land Management Monticello Field Office 365 North Main Street PO Box 7 Monticello, UT 84535 <u>tmarian@blm.gov</u>
National Forest Service, CO:	Derek Padilla District Ranger Mancos/Dolores District USDA Forest Service PO Box 210 Dolores, Colorado 81323 dpadilla@fs.fed.us
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Indian Health Service:	CAPT Stephen Navarro, Regional Liaison Phone: 602-364-5252 Location: Phoenix, AZ <u>Stephen.Navarro@ihs.gov</u>

<u>Government Agencies (Local)</u> Montezuma County, CO:	Shak Powers, County Administrator Montezuma County Courthouse 109 West Main Street, Room 302 Cortez, CO 81321
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San Juan County, NM:	Mike Stark County Manager San Juan County, NM 100 S. Oliver Drive Aztec, NM 87410 <u>mstark@sjcounty.net</u>
City of Cortez, CO:	Drew Sanders City Manager 210 E. Main Street Cortez, CO 81321 <u>City.manager@cityofcortez.com</u>
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## 3. **Description of Public Review and Comment Procedures**

The public comment period is 11/04/2021 to 01/10/2022 and a public hearing will be held 12/20/2021 in Towaoc, Colorado virtually from 3 - 5 pm via Zoom:

Join Zoom Meeting https://us02web.zoom.us/j/87425828914?pwd=TnNyWWhCNStkaGZEc1FNQnpxSlQwQT09 Meeting ID: 874 2582 8914 Passcode: 682615 One tap mobile +16699009128,,87425828914#,,,,\*682615# US (San Jose)

+12532158782,,87425828914#,,,,\*682615# US (Tacoma)

# Dial by your location

+1 669 900 9128 US (San Jose) +1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston) +1 646 558 8656 US (New York) +1 301 715 8592 US (Washington DC) +1 312 626 6799 US (Chicago) Meeting ID: 874 2582 8914 Passcode: 682615 Find your local number: https://us02web.zoom.us/u/kbu6Cxhtm4

The 2021 revision of the standards and supporting documents can be viewed online at our website:

#### www.utemountainuteenvironmental.org

Click on "water" from the navigation panel on the left side of the page, then on "2021 Revised Water Quality Standards"

All comments, along with requests for additional information should be directed to: Colin Larrick Water Quality Program Manager Ute Mountain Ute Tribe Environmental Programs Department (970) 739-3741 clarrick@utemountain.org

#### 4. **Response to Public Comments**

This document will be revised with responses to Public Comments following the end of the public comment period and will be posted on our website.