2022-2024
State of New Mexico
Clean Water Act
§303(d)/§305(b)
Integrated Report

Appendix C

Response to Comments

Prepared by:
New Mexico Environment Department
Surface Water Quality Bureau
1190 St. Francis Drive
Santa Fe, New Mexico 87505
https://www.env.nm.gov/surface-water-quality/

RESPONSE TO COMMENTS

ON THE
2022-2024 STATE OF NEW MEXICO
CLEAN WATER ACT
§303(d)/§305(b)
INTEGRATED LIST OF ASSESSED SURFACE WATERS

February 4, 2022

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PLEASE NOTE:

Original letters and emails were converted to Microsoft Word. All submitted comments were converted to Calibri font with standard page margins for ease of collation. All original comment letters/emails are on file at the NMED-SWQB office in Santa Fe, NM.

SUMMARY OF CHANGES TO THE DRAFT 2022-2024 INTEGRATED LIST INCURRED AS A RESULT OF EPA APPROVAL ACTIONS AND SOLICITED PUBLIC COMMENTS

New Mexico Environment Department ("NMED") solicited public comments on the draft 2022-2024 Integrated List during a 45-day period (November 30, 2021 through January 14, 2022) and made the following changes during and after the public comment period:

1. The EPA approved the Bluewater Lake and Jemez River Watershed TMDLs in November 2021. As a result, the following changes occurred:
    a. **Bluewater Lake** – "Nutrients" moved to parameter IR Category 4A and the overall Assessment Unit (AU) IR category changed to 4A.
    b. **Vallecito Ck (Jemez Pueblo bnd to Div abv Ponderosa)** – "Dissolved Arsenic" moved to parameter IR Category 4A and the overall AU IR category changed to 4A.
    c. **Rio Guadalupe (Jemez River to confl with Rio Cebolla)** - "Specific Conductance" moved to parameter IR Category 4A and the overall AU IR category changed to 4A.
    d. **Jemez River (Zia Pueblo bnd to Jemez Pueblo bnd)** – "Temperature" moved to parameter IR Category 4A and the overall AU IR category changed to 4A.
    e. **Rito de los Indios (San Antonio Creek to headwaters)** – "Temperature" and "Turbidity" moved to parameter IR Category 4A.
    f. **Clear Creek (Rio de las Vacas to San Gregorio Lake)** – "Temperature" moved to parameter IR Category 4A and the overall AU IR category changed to 4A.
    g. For all the above AUs – replaced estimated ("est.") "TMDL DATE" with the TMDL EPA approval date.
2. **Rio Grande (Cochiti Reservoir to San Ildefonso bnd)** – Updated ("est.") "TMDL DATE" to 2027.
3. **Arroyo de la Delfe (Pajarito Canyon to Kieling Spring)** and **Arroyo de la Delfe (Above Kieling Spring to headwaters)** – Corrected spelling of "Kieling".
4. NMED assessed recent data provided by LANL via *Intellus NM*. The following changes resulted:
    a. **Los Alamos Canyon (NM-4 to DP Canyon)** – Added "Total recoverable selenium" (Wildlife Habitat Designated Use) as an impairment and removed "Total Mercury" (Wildlife Habitat Designated Use) as an impairment.
    b. **Mortandad Canyon (within LANL)** – Removed "Total Mercury" (Wildlife Habitat Designated Use) and "Polychlorinated Biphenyls (PCBs)" (Limited Aquatic Life Use) as impairments.
5. Amended the "WATER TYPE" to "STREAM, EPHEMERAL" for the following waterbodies due to recent Hydrology Protocol (HP) work and/or hydrograph data indicating ephemeral flow characteristics:
    a. **Fish Ladder Canyon (Canon del Valle to headwaters)**
    b. **Pajarito Canyon (Above Homestead Spring to LANL boundary)**
    c. **Pajarito Canyon (Twomile Cyn to 500m ds of A. de La Delfe)**
6. **Starmers Gulch (Pajarito Canyon to headwaters)** – This reach is described within 20.6.4.126 NMAC. Corrected the "WQS REF" field to 20.6.4.126 and amended the "WATER TYPE" to "STREAM, PERENNIAL" to be consistent with this reach's classification under 20.6.4.126 NMAC.
7. **Sandia Canyon (Sigma Canyon to NPDES outfall 001)** – "Polychlorinated Biphenyls (PCBs)" was listed as parameter IR Category 4B due to a data entry error and subsequently corrected to Category 5/5C.

COMMENT SET 1 – Buckman Direct Diversion Board via Environmental and Regulatory Compliance Consulting Services, Santa Fe, NM

Dear Ms. Zeigler:

The Buckman Direct Diversion Board (the Board) is the governing body for the Buckman Direct Diversion, a single diversion point on the Rio Grande that the City of Santa Fe, Santa Fe County, and their limited partner, Las Campanas, share to divert their San Juan-Chama and native Rio Grande water rights. Diverted water is treated and introduced into the regional water system. The government entities are represented on the Board.

The Buckman Direct Diversion (BDD) is on the Rio Grande, approximately 3 miles downstream of Otowi Bridge. The draft 2022-2024 State of New Mexico Clean Water Act (CWA) §303(d)/305(b) Integrated List of Assessed Surface Waters (Integrated List) includes assessment of the segment of the Rio Grande within which the BDD intake structure is located, and stream segments draining the Pajarito Plateau where Los Alamos National Laboratory (LANL) is located. Many of these latter waters flow to Los Alamos Canyon, and enter the Rio Grande at their confluence approximately three miles upstream of the BDD intake structure. The Board is therefore understandably concerned about water quality in the Rio Grande and in Los Alamos Canyon and its tributaries. The Board provides the following comments.

Segment 114 Rio Grande (Cochiti Reservoir to San Ildefonso boundary)

The Board notes that for Segment 114 waters listed as impaired none are as yet subject to a Total Maximum Daily Load (TMDL), a necessary first step to improving water quality, despite being listed as impaired for, in some cases, nearly twenty years. While acknowledging many TMDLs are estimated to be listed in 2021, NMED's list of TMDLs reviewed on January 4, 2022 at https://www.env.nm.gov/surface-water-quality/tmdl/ shows that none are in place for Segment 114. The Board recommends NMED update the "TMDL List" field to more accurately estimate when TMDLs will be adopted for this segment.

***NMED RESPONSE**:*

Thank you for your comment. The NMED Surface Water Quality Bureau ("SWQB") typically lists an estimated TMDL date as four years after the last SWQB water quality survey. For example, the last Upper Rio Grande (URG) water quality survey conducted by SWQB was in 2017-2018, so the anticipated TMDL date would be 2021. There are currently eight assessment units within water quality standards segment 20.6.4.114 with an estimated 2021 TMDL date. You correctly noted that additional URG TMDLs were not adopted in 2021; however, TMDLs for three of these eight assessment units are included in the 2022 URG TMDL document currently in staff review. The draft TMDL focuses on waterbodies in HUC 13020101; however, the Rio Grande (Cochiti Reservoir to San Ildefonso boundary) assessment unit is in HUC 13020201 and is not included in the draft document. NMED plans to address TMDL data needs for the Rio Grande (Cochiti Reservoir to San Ildefonso boundary) assessment unit during the 2023-2024 SWQB Middle Rio Grande water quality survey, with TMDLs to follow the data assessments. SWQB will update the estimated TMDL date for the Rio Grande (Cochiti Reservoir to San Ildefonso boundary) assessment unit to read 2027.

Segment 128 and Certain Unclassified Waters on the Pajarito Plateau

Many stream segments on the Pajarito Plateau where LANL is located are listed as impaired, in many cases by contaminants of LANL origin. As with Segment 114 waters, the Board notes that none are as yet subject to TMDLs (see above reference). The Board recommends NMED update the "TMDL List" field to more accurately estimate when TMDLs will be adopted for these segments. We also ask that NMED update the Board on the outcome of the tripartite (New Mexico Environment Department (NMED), the U.S. Department of Energy, Amigos Bravos) Stipulation to implement the Hydrology Protocol on Plateau streams, and how that implementation has affected the List of Impaired Waters and water quality protection in general.

***NMED RESPONSE**:*

Thank you for your comment. Except for the Sandia Canyon (within LANL below Sigma Canyon) assessment unit in Category 4B, all impaired waterbodies in Water Quality Standards Segment 20.6.4.128 are in Categories 5B or 5C. Only impairments in Category 5A include estimated TMDL dates, so no estimated TMDL date is provided for the waterbodies in Segment 20.6.4.128. These waterbodies are in Categories 5B and 5C because of the ongoing review of Water Quality Standards changes and permitting actions in the watershed. SWQB will update the waterbodies in Segment 20.6.4.128 to Category 5A as appropriate and include an estimated TMDL date (likely 2027) when those actions are resolved.

As a result of the 2015 Joint Stipulation Regarding Proposed Changes to 20.6.4.128 NMAC ("Stipulated Agreement"), NMED participated in 52 Hydrology Protocol surveys in Pajarito Plateau streams and canyons. The Stipulated Agreement required NMED, the U.S. Department of Energy, and Amigos Bravos to determine the appropriate level of water quality protections for segment 20.6.4.128 NMAC waters and directed NMED to petition the WQCC to propose agreed-upon changes no later than the next Triennial Review. NMED proposed an amendment to 20.6.4 NMAC during the Triennial Review hearing in July 2021, increasing the aquatic life protections for three stream segments to marginal warmwater. Those amendments are currently scheduled for WQCC deliberation March 1-3, 2022. In addition, several Hydrology Protocol surveys provided evidence of previously unidentified perennial stream reaches. Following the requirements of 20.6.4 NMAC and the 2020 Water Quality Management Plan and Continuing Planning Process, perennial stream reaches not described in classified sections 20.6.4.101-899 NMAC are afforded the protections of unclassified perennial waters in 20.6.4.99 NMAC. These stream reaches include Ancho Canyon (Rio Grande to Ancho Springs), Arroyo de la Delfe (Pajarito Canyon to Kieling Spring), Pajarito Canyon (500m downstream of and to Arroyo de la Delfe), Water Canyon (within LANL above NM 501), Pajarito Canyon (Starmers Gulch to Homestead Spring), and DP Canyon (100m downstream grade control to 400m upstream grade control). NMED created new assessment units for these waterbodies with a water quality standards reference of 20.6.4.99 NMAC. The Draft 2022-2024 Integrated List reflects these changes, with the new assessment units retaining the impairment status of the previous designation.

The Buckman Direct Diversion plays a unique role by deriving drinking water from the Rio Grande downstream of LANL, and delivering it safely and effectively to its regional customers. We appreciate that NMED recognizes this fact, and has worked over the years to provide special provisions and assessments for stream segments from the Pajarito Plateau and the Rio Grande at the BDD intake in State Standards.

***NMED RESPONSE**: Thank you for your comment.*

On behalf of the Board, I appreciate the opportunity to provide these comments, and look forward to your response.

Sincerely,

James P. Bearzi
Technical Consultant to the Buckman Direct Diversion Board
Environmental and Regulatory Compliance Consulting Services
505.699.2136
jamespbearzi@gmail.com

Addendum:

Dear Ms. Zeigler:

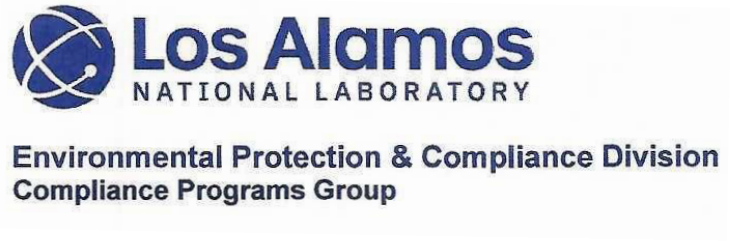
I note a potential typographical error in the Integrated List. The namesake for "Keiling Spring" spells her last name "Kieling." It is possible that the formal naming of the spring is in fact also a mistake, in which case the Integrated List correctly uses the place name spelling. If this is the case, I suggest contacting LANL, the DOE Oversight Bureau, and Martyne Kieling for guidance on how to proceed.

Thank you.

--
James P. Bearzi
Environmental and Regulatory Compliance Consulting Services
505.699.2136
jamespbearzi@gmail.com

***NMED RESPONSE**: Thank you for your comment. The typographical error contained within the Assessment Units "Arroyo de la Delfe (Pajarito Canyon to Kieling Spring)" and "Arroyo de la Delfe (Above Kieling Spring to headwaters)" has been corrected.*

COMMENT SET 2 – Los Alamos National Laboratory, Environmental Protection & Compliance Division, Compliance Programs Group, Los Alamos, NM



Los Alamos National Laboratory
PO Box 1663, K490
Los Alamos, NM 87545
505-667-0666

Symbol: EPC-DO: 22-023
LAUR: 22-20321
Locates: N/A
Date: JAN 14 2022

Ms. Meredith Zeigler
Assessment Coordinator
New Mexico Environment Department Surface Water Quality Bureau
P.O. Box 5469 Santa Fe, NM 87502

Subject: Triad National Security Comments to the Draft 2022-2024 State of New Mexico Clean Water Act§ 303(d)/305(b) Integrated List of Assessed Surface Waters

Dear Ms. Zeigler:

Triad National Security ("Triad") appreciates the opportunity to provide the following comments on the New Mexico Environment Department's {"NMED") draft 2022-2024 State of New Mexico Clean Water Act ("CWA") § 303(d)/305(b) Integrated List of Assessed Surface Waters ("Integrated List").

1. **The Classification of LANL Waters**

The draft Integrated List does not accurately reflect the classification of certain waters within lands managed by the U.S. Department of Energy ("DOE") within Los Alamos National Laboratory ("LANL"). Specifically, the following waters classified under 20.6.4.128 NMAC ("Section 128") are shown incorrectly in the Integrated List as unclassified under 20.6.4.99 NMAC ("Section 99"):

(1) NM-9000.A_154 (Ancho Canyon - Rio Grande to Ancho Springs);
(2) NM-128.A_36 (Arroyo de la Delfe - Pajarito Canyon to Kieling Spring);
(3) NM-128.A_036 (Pajarito Canyon - 500m ds of and to Arroyo de la Delfe);
(4) NM-128.A_12 (Water Canyon above NM 501);
(5) NM-128.A_37 (Pajarito Canyon - Starmers Gulch to Homestead Spring); and
(6) NM-128.A_24 (DP Canyon -100m dwnstm grade ctrl to 400m upstm grade ctrl).

The Water Quality Control Commission ("WQCC") previously classified all waters within LANL during the 2003 Triennial Review. The WQCC classified specific waters within LANL with perennial flow characteristics under 20.6.4.126 NMAC ("Section 126"), and classified all remaining waters within LANL with ephemeral and intermittent flow characteristics under Section 128. The WQCC has not amended its prior classification of LANL waters under Section 126 or Section 128 NMAC since the completion of the 2003 Triennial Review. Therefore, the above-listed waters should be identified in the Integrated Report as classified under Section 128, not unclassified under Section 99.

None of the previously classified waters within LANL should default to unclassified Section 99 based solely on NMED's administrative action, without a decision from WQCC. Only the Commission has the

authority to modify the state's water quality standards. NMSA 1978, § 74-6-3(E); see 20.6.4.7(C)(3) NMAC. Nor should new information developed pursuant to the October 9, 2015 Joint Stipulation Regarding Proposed Changes to 20.6.4.128 NMAC, entered into between Amigos Bravos, DOE, Los Alamos National Security LLC and NMED, ("2015 Joint Stipulation"), be used to move classified waters into an unclassified category by default. Furthermore, the new information developed pursuant to the 2015 Joint Stipulation consists of Level 1 Hydrology Protocol ("HP") evaluations, which only evaluated flow characteristics. HP Level 1 information, alone, provides an insufficient and inappropriate basis upon which to reclassify water segments. Rather, all reclassification decisions should be based upon the best available science and data and must be approved by the WQCC.

Declassification of waters within LANL to unclassified Section 99 would also conflict with NMED's 2007 Use Attainability Analysis ("UAA") and apply unattainable designated uses and uses that do not exist for those waters. NMED's 2007 UAA concluded that all waters classified in Section 128 NMAC following the 2003 Triennial Review, including each of the above-listed waters, have an existing and attainable designated useof secondary contact. Yet, by moving certain of these waters to Section 99, NMED would be assigning those waters a designated use of primary contact. NMED has provided no new information to justify changing that designated use to primary contact under Section 99.

***NMED RESPONSE**:*

Thank you for your comments. Due to the standards amendments in progress for these AUs, the Department will retain the classification of 20.6.4.128 NMAC and will update the standards reference for these AUs in accordance with state rule publication and EPA action.

2. LANL Waters Reclassified Under Section 99 Should be Assigned IR Category 5B

As discussed above, waters classified by the WQCC during the 2003 Triennial Review under Section 128 should not be moved to Section 99 based solely on NMED's administrative action. However, to the extent NMED does move the following waters from Section 128 to Section 99, those waters should be assigned IR Category 5B: (1) NM-9000.A_154 (Ancho Canyon - Rio Grande to Ancho Springs); (2) NM-128.A_36 (Arroyo de la Delfe- Pajarito Canyon to Kieling Spring); (3) NM-128.A_036 (Pajarito Canyon - 500m ds of and to Arroyo de la Delfe); (4) NM-128.A_12 (Water Canyon above NMN 501); (5) NM-128.A_37 (Pajarito Canyon - Starmers Gulch to Homestead Spring); and (6) NM-128.A_24 (DP Canyon -1 00m dwnstm grade ctrl to 400m upstm grade ctrl).

IR Category 5B is the appropriate category for Assessment Units ("AUs") that are impaired for one or more designated or existing uses and that require a review of the water quality standard. See Integrated List at

v. "AUs are listed in this category when it is possible that water quality standards are not being met because one of more current designated uses is inappropriate." *Id.* IR Category 5B is the appropriate category for all of the above-listed waters because each water was classified under Section 128 following the 2003 Triennial Review and was subject to NMED's 2007 UAA. The 2007 UAA concluded that all waters classified in Section 128 have an existing and attainable designated use of secondary contact. Yet, under Section 99, these waters would be assigned a designated use of primary contact. See 20.6.4.99 NMAC. Therefore, because the 2007 UAA reflects that "one of more current designated uses is inappropriate" for these waters if they are moved to Section 99, those waters should be assigned to IR Category 5B.

***NMED RESPONSE**:*

Thank you for your comment. Please see the response to Comment #1.

3. Impairments for Unclassified 20.6.4.99 NMAC Waters

The draft Integrated List inappropriately lists impairments for LANL waters moved to Section 99 that may not apply to those newly created AUs. During the 2003 Triennial Review, the WQCC classified all waters within LANL with ephemeral and intermittent flow characteristics under Section 128. Level 1 HP evaluations conducted on Section 128 waters demonstrate that portions of those waters may contain perennial flow characteristics, which NMED has alleged supports splitting certain Section 128 waters and moving portions of those waters to unclassified Section 99. The Integrated List, however, assigns impairments to these newly defined Section 99 waters based on data collected on the original Section 128 segments, which do not correspond to the new, shorter, AU segments. It is inappropriate to list impairments for newly created AUs under Section 99 without data specific to the newly defined boundaries of each of those reaches. NMED must explain why existing data supports the impairments listed for newly defined Section 99 waters. Data collected from sample locations downstream of waters classified by the WQCC under Section 128 during the 2003 Triennial Review may not be applicable to the newly defined reaches that NMED has moved to Section 99. As discussed above, NMED's newly defined Section 99 waters should be assigned to IR Category 5B to reflect that additional data specific to those reaches is needed.

NMED RESPONSE:

Thank you for your comment. The Department is retaining the standards reference of 20.6.4.128 NMAC for these AUs, pending state rule adoption and EPA action regarding the 2020 Triennial Review amendments. Retention of listings applies in cases of a split AU to prevent premature delistings prior to additional data collection and an assessment indicating that the new AU is fully supporting independent of the prior AU designation. Once data are collected within the newly defined boundaries, the new AUs will be reassessed and assigned to the appropriate IR category. NMED did not document any IR category changes within the Draft 2022-2024 Integrated List resulting from the splitting of these AUs.

4. Impairments for Los Alamos Canyon (NM-4 to DP Canyon)

The draft Integrated List impairment listing for Los Alamos Canyon (NM-4 to DP Canyon) should be amended to reflect recent surface water quality data collected by LANL.[1] First, LANL recommends that NMED list selenium as a cause of impairment for this AU. This recommendation is based upon the recent sampling data shown below:

Los Alamos Canyon (NM-4 to DP Canyon) NM-9000.A_006	
Sample Date	Selenium (total recoverable) ug/L
9/4/18	7
7/7/2019	6.52

[1] Surface water quality data at LANL is collected under a number of programs, studies, and environmental surveillance activities and is stored in LANL's Environmental Information Management System ("EIM"). The data is also publicly available through the Intellus database.

7/8/2019	6.34
8/7/2019	7.34
8/7/2019	5.8

Second, LANL recommends that NMED delist radium (226 + 228) and mercury as a cause of impairment for this AU.[2] This recommendation is based upon the recent sampling data shown below:

Los Alamos Canyon (NM-4 to DP Canyon) NM-9000.A_006		
Sample Date	Radium 226 + 228 (pCi/L)	Total Mercury (ug/L)
9/4/2018		0.159
7/8/2019	3.99	0.15
7/26/2019	7.19	0.493
7/26/2019		0.394
8/7/2019	6.32	<0.067
8/7/2019		0.285

NMED RESPONSE*:*

Los Alamos Canyon (NM-4 to DP Canyon) – Total recoverable selenium (Wildlife Habitat Designated Use)
NMED analyzed the dataset provided to NMED by LANL during the call for data in lieu of the informal datasets provided here. For CWA §303(d)/§305(b) assessments, water chemistry data collected within a seven-day period are considered duplicate samples except in cases where the data are from distinct hydrologic events, and the maximum value should be used in the assessment dataset. NMED removed duplicate datapoints for assessment. NMED documented three exceedances of the 5.0 ug/L Wildlife Habitat total recoverable selenium criterion. As a result, NMED added total recoverable selenium as a cause of non-support for Wildlife Habitat within this AU. No exceedances of the acute aquatic life use criterion occurred within the most recent three years of data, and chronic aquatic life use criteria do not apply to those AUs with a designated Limited Aquatic Life Use (20.6.4.128 NMAC).

Los Alamos Canyon (NM-4 to DP Canyon) – Radium 226+228 (Livestock Watering Designated Use)
NMED analyzed the dataset provided to NMED by LANL during the call for data in lieu of the informal datasets provided here. For CWA §303(d)/§305(b) assessments, water chemistry data collected within a seven-day period are considered duplicate samples except in cases where the data are from distinct hydrologic events, and the maximum value should be used in the assessment dataset. NMED removed duplicate datapoints for assessment; however, the radium (226+288) dataset lacked a minimum number of data points required for assessment. Therefore, NMED utilized all data from this AU within the most recent five years to acquire the minimum number of data points for assessment. There was one exceedance of the Livestock Watering use for radium 226+228. The Comprehensive Assessment and Listing Methodology (CALM) delisting criteria for this use states that "for any one pollutant, [there must be] no exceedance of the criterion" for delisting to occur. As a result, NMED retained the listing for

[2] NMED's Comprehensive Assessment and Listing Methodology ("CALM") generally provides that a pollutant should be delisted as a source of impairment where there has been no exceedance for a criterion for at least four consecutive samples.

radium (226 + 228) for this AU.

Los Alamos Canyon (NM-4 to DP Canyon) – Total Mercury (Wildlife Habitat Designated Use)
NMED analyzed the dataset provided to NMED by LANL during the call for data in lieu of the informal datasets provided here. For CWA §303(d)/§305(b) assessments, water chemistry data collected within a seven-day period are considered duplicate samples except in cases where the data are from distinct hydrologic events, and the maximum value should be used in the assessment dataset. NMED removed duplicate datapoints for assessment. NMED documented zero exceedances of the 0.77 ug/L Wildlife Habitat total mercury criterion. The CALM delisting criteria for this use states that "for any one pollutant, [there must be] no exceedance of the criterion" for delisting to occur. As a result, NMED removed total mercury as a cause of non-support for Wildlife Habitat within this AU.

NMED has amended the Draft 2022-2024 Integrated List entry for Los Alamos Canyon (NM-4 to DP Canyon) to reflect these changes and added a note to the 2022-2024 Assessment Rationale.

5. Mortandad Canyon (within LANL)

The draft Integrated List listing for Mortandad Canyon (within LANL) should also be amended to reflect recent surface water quality data collected by LANL. Specifically, LANL recommends that NMED delist mercury as a cause of impairment for this assessment unit. This recommendation is based upon the recent sampling data shown below:

Mortandad Canvon (within LANL) (NM-9000.A 042)	
Sample Date	Total Mercury (ug/L)
7/15/2018	<0.067
8/10/2018	<0.067
9/5/2018	<0.067
10/23/2018	<0.067
7/2/2019	0.074
7/26/2019	0.453
817/2019	<0.067
10/4/2019	0.126
6/27/21	<0.067
8/2/2021	<0.067
8/4/2021	<0.067
8/15/2021	<0.067

***NMED RESPONSE**:*

Mortandad Canyon (within LANL) – Total Mercury and PCBs – (Wildlife Habitat and Limited Aquatic Life Designated Uses)
NMED analyzed the dataset provided to NMED by LANL during the call for data in lieu of the informal datasets provided here. For CWA §303(d)/§305(b) assessments, water chemistry data collected within a seven-day period are considered duplicate samples except in cases where the data are from distinct hydrologic events, and the maximum value should be used in the assessment dataset. NMED removed duplicate datapoints for assessment. NMED documented zero exceedances of the 0.77 ug/L Wildlife

Habitat total mercury criterion. The CALM delisting criteria for this use states that "for any one pollutant, [there must be] no exceedance of the criterion" for delisting to occur. As a result, total mercury was removed as a cause of non-support for the Wildlife Habitat designated use within this AU. In addition, NMED documented five exceedances of the 0.014 ug/L Wildlife Habitat criterion for Polychlorinated Biphenyls (PCBs) and zero exceedances of the 2 ug/L Limited (Acute) Aquatic Life criterion for PCBs. The CALM delisting criteria for these uses state that "for any one pollutant, [there must be] no exceedance of the criterion" for delisting to occur. Therefore, NMED retained PCBs as a cause of non-support for Wildlife Habitat and removed PCBs as a cause of non-support for Limited Aquatic Life in this AU. NMED has amended the Draft 2022-2024 Integrated List entry for Mortandad Canyon (within LANL) to reflect these changes and added a note to the 2022-2024 Assessment Rationale.

6. Fish Ladder Canyon (Canon del Valle to headwaters)

NMED should also amend the draft Integrated List to reflect recent HP data for Fish Ladder Canyon (Canon del Valle to headwaters). The draft Integrated List currently identifies the "Water Type" as intermittent for Fish Ladder Canyon (Canon del Valle to headwaters). However, this reach was subject to Joint Level 1 HP evaluations conducted by NMED and LANL, as well as Level 2 HP evaluations conducted by LANL. The HP scores for Fish Ladder Canyon were 9 and 8.5, indicating that this reach has ephemeral flow characteristics. Based on those evaluations, NMED should revise the Integrated List to identify the "Water Type" as ephemeral for Fish Ladder Canyon (Canon del Valle to headwaters).

***NMED RESPONSE**:*

Agreed. Fish Ladder Canyon (Canon del Valle to headwaters) is classified under 20.6.4.128 NMAC, which specifies "ephemeral and intermittent portions of watercourses…" within LANL. Therefore, NMED has amended the "Water Type" in the Draft 2022-2024 Integrated List from "STREAM, INTERMITTENT" to "STREAM, EPHEMERAL" based on HP work that indicates this waterbody has ephemeral flow characteristics.

7. S-Site Canyon (Water Canyon to headwaters)

NMED should amend the draft Integrated List to reflect recent HP data for S-Site Canyon (Water Canyon to headwaters). The draft Integrated List currently identifies the "Water Type" as intermittent for S-Site Canyon (Water Canyon to headwaters). However, S-Site Canyon was subject to Joint Level 1 HP evaluations conducted by NMED and LANL, as well as Level 2 HP evaluations conducted by LANL. Those evaluations demonstrate that S-Site Canyon has ephemeral flow characteristics from its confluence with Water Canyon to alluvial well MSC16-06293. The HP scores for this reach are 8 and 9. The HP evaluations then demonstrate that S-Site Canyon has intermittent flow characteristics from alluvial well MSC16-06293 upstream to Martin Spring, with an HP score of 16. Therefore, LANL recommends that NMED split the current AU for S-Site Canyon (Water Canyon to headwaters) into two separate AUs: (1) S-Site Canyon from its confluence with Water Canyon to alluvial well MSC16-06293, with a "Water Type" identified as ephemeral; and (2) S-Site Canyon from alluvial well MSC16-06293 upstream to Martin Spring, with a "Water Type" identified as intermittent.

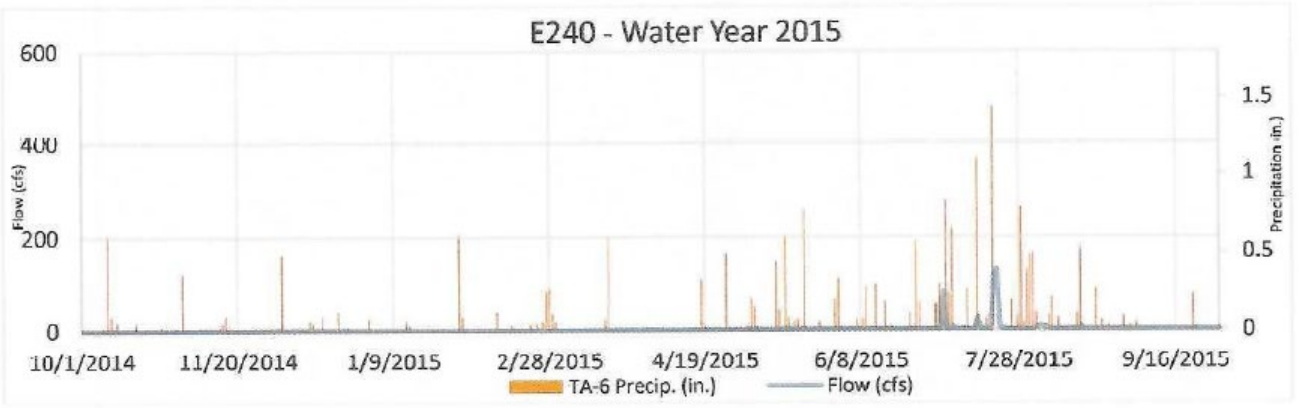
***NMED RESPONSE**:*

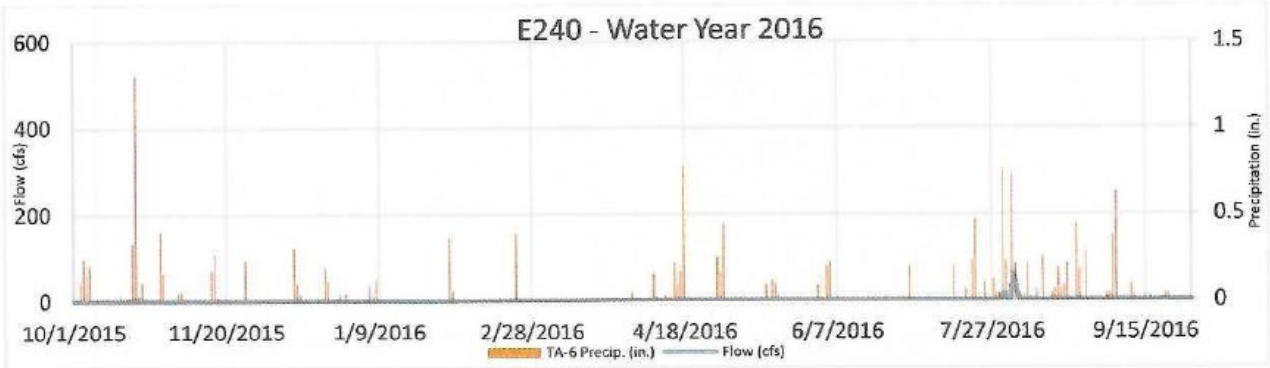
This is a matter pending before the Water Quality Control Commission, docketed as WQCC 20-51 (R). NMED will split the AU appropriately depending on the final Commission decision and subsequent EPA approval.

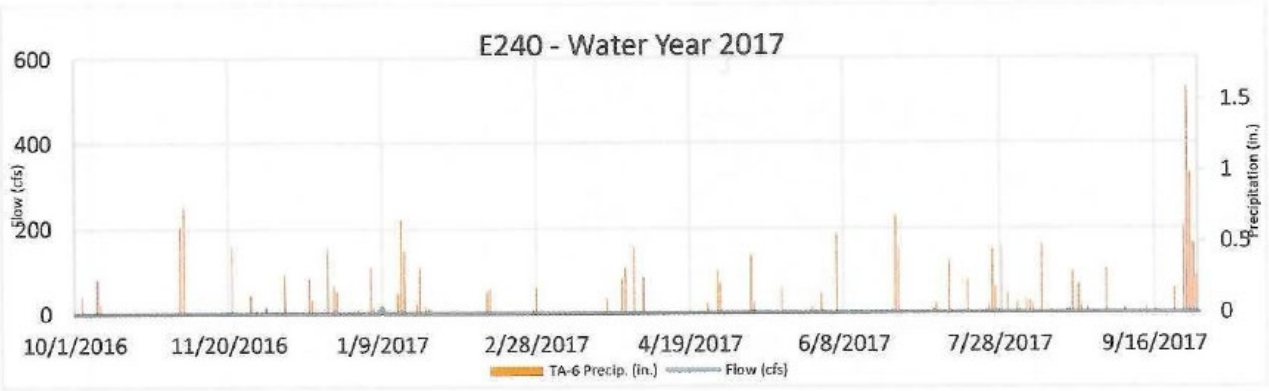
8. Pajarito Canyon (Above Homestead Spring to LANL boundary)

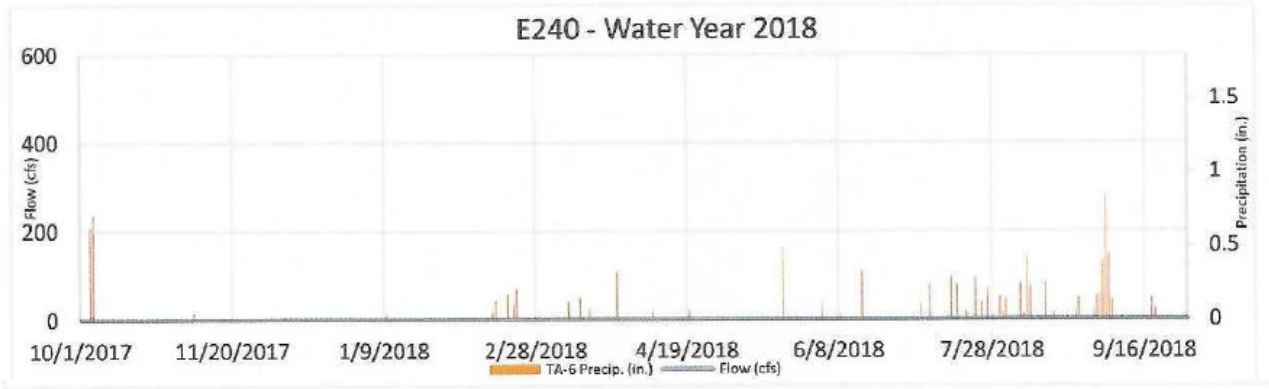
NMED should also amend the draft Integrated List to reflect recent HP data for Pajarito Canyon (Above Homestead Spring to LANL boundary). The draft Integrated List currently identifies the "Water Type" as intermittent for Pajarito Canyon (Above Homestead Spring to LANL boundary). Pajarito Canyon was subject to Joint Level 1 HP evaluations conducted by NMED and LANL, as well as Level 2 HP evaluations conducted by LANL. The HP score for this reach is 14, and the Level 2 HP evaluation found no evidence of intermittent conditions within this reach. In fact, flows from stream gage E240, located 0.8 miles above HP site between 2007 and 2019, indicate less than 8 percent days/year with flow. Based on these data, LANL recommends that NMED revise the Integrated List to identify the "Water Type" as ephemeral for Pajarito Canyon (Above Homestead Spring to LANL boundary).

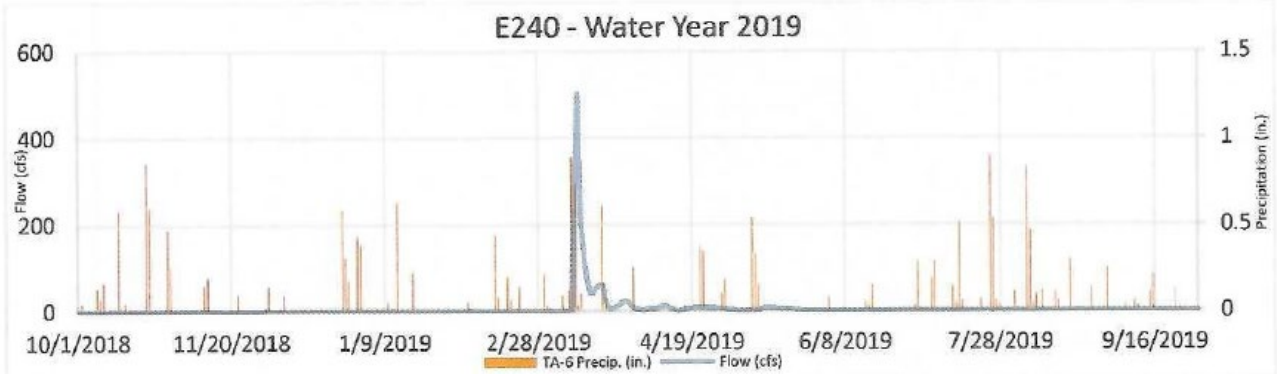
The hydrographs below from stream gage E240 indicate that flows are predominantly the direct result of precipitation, further supporting the conclusion that NMED should identify Pajarito Canyon (Above Homestead Spring to LANL boundary) as ephemeral in the Integrated List.











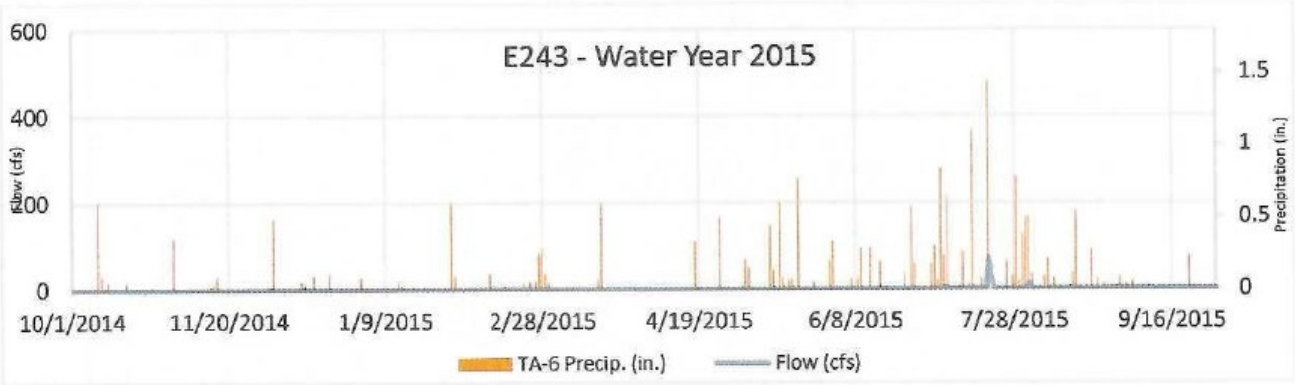
***NMED RESPONSE**:*

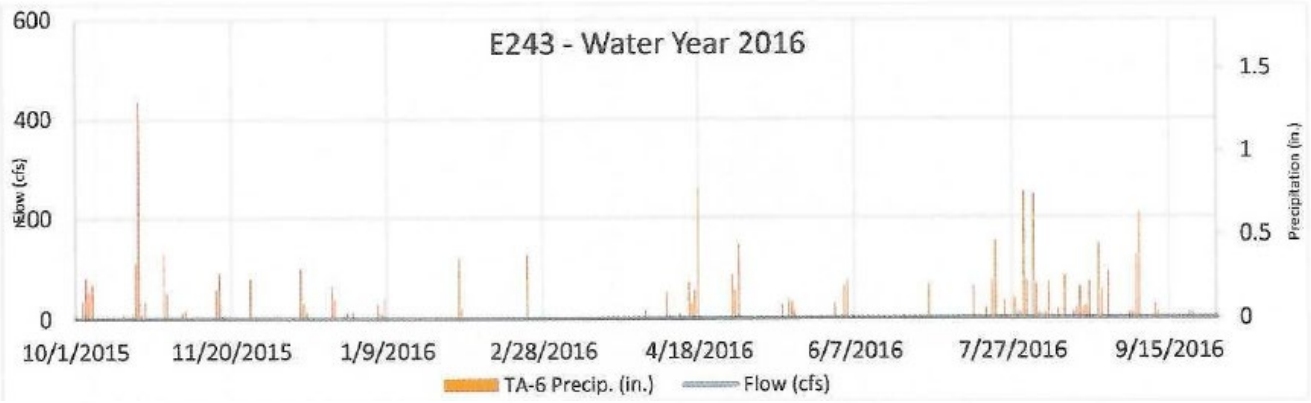
Agreed. Pajarito Canyon (Above Homestead Spring to LANL boundary) is classified under 20.6.4.128 NMAC, which specifies "ephemeral and intermittent portions of watercourses…" within LANL. Therefore, NMED has amended the "Water Type" in the Draft 2022-2024 Integrated List from "STREAM, INTERMITTENT" to "STREAM, EPHEMERAL" based on hydrograph data and HP work that indicate this waterbody has ephemeral flow characteristics.

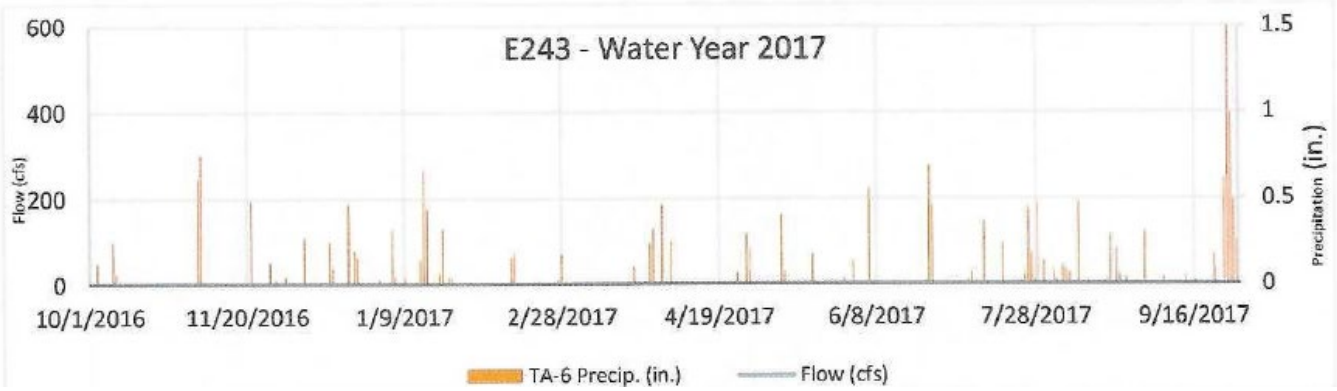
9. Pajarito Canyon (Twomile Cyn to 500m ds of A. de La Delfe)

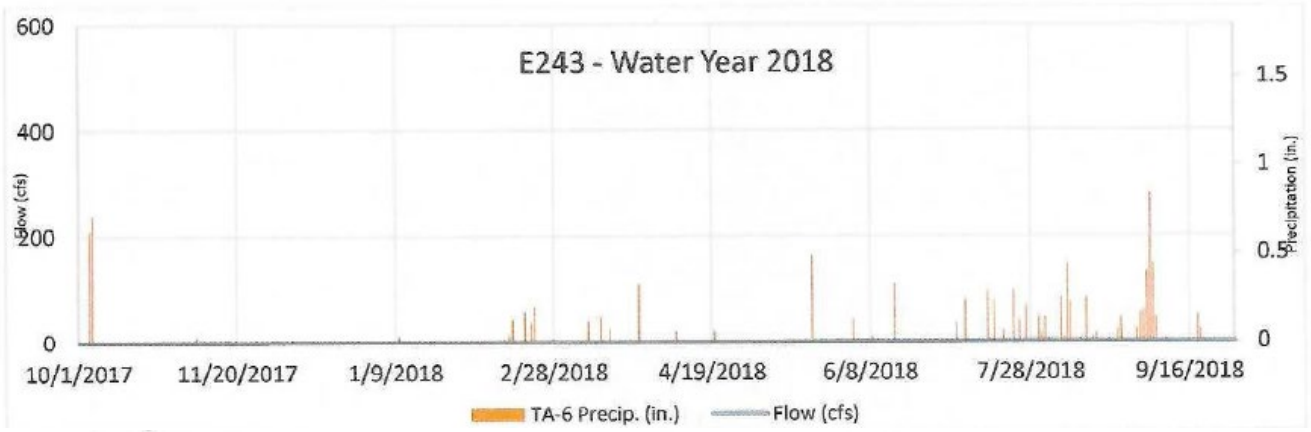
NMED should also amend the draft Integrated List to reflect recent HP data for Pajarito Canyon (Twomile Cyn to 500m ds of A. de La Delfe). The draft Integrated List currently identifies the "Water Type" as intermittent for this reach. Pajarito Canyon was subject to Joint Level 1 HP evaluations conducted by NMED and LANL, as well as Level 2

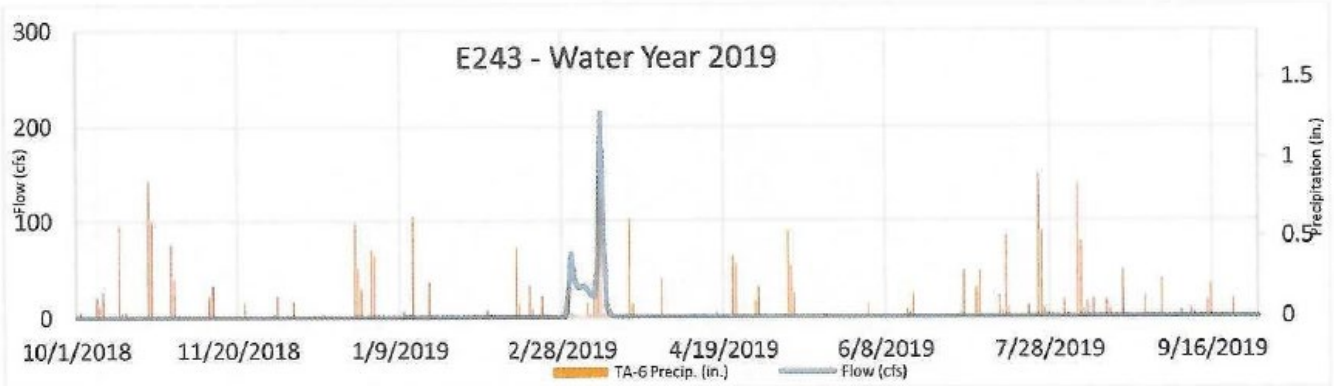
HP evaluations conducted by LANL. The HP score for this reach is 8. Furthermore, the hydrographs below from stream gage E243, which is located 0.2 miles above the confluence with Twomile Canyon, demonstrate that this reach has ephemeral flow conditions. Accordingly, LANL recommends that NMED revise the Integrated List to identify the "Water Type" as ephemeral for Pajarito Canyon (Twomile Cyn to 500m ds of A. de La Delfe).











***NMED RESPONSE**:*

Agreed. Pajarito Canyon (Twomile Cyn to 500m ds of A. de La Delfe) is classified under 20.6.4.128 NMAC, which specifies "ephemeral and intermittent portions of watercourses…" within LANL. Therefore, NMED has amended the "Water Type" in the Draft 2022-2024 Integrated List from "STREAM, INTERMITTENT" to "STREAM, EPHEMERAL" based on hydrograph data and HP work that indicates this waterbody has ephemeral flow characteristics.

10. Starmers Gulch (Pajarito Canyon to headwaters)

The draft Integrated Listed incorrectly identifies the "WQS_REF" for Starmers Gulch (Pajarito Canyon to headwaters) as 20.6.4.128. This reach is classified under Section 126, and therefore, NMED should revise the Integrated Listed to identify the "WQS_REF" for this reach as 20.6.4.126. The draft Integrated Listed also incorrectly identifies the "Water Type" for Starmers Gulch (Pajarito Canyon to headwaters) as intermittent. NMED should revise the Integrated List to identify the "Water Type" as perennial, consistent with this reaches' classification under 20.6.4.126 NMAC.

***NMED RESPONSE**:*

NMED carefully reviewed the description for 20.6.4.126 NMAC, and LANL is correct that this reach is specifically described within that water quality standards segment. NMED has updated the "WQS REF" and "WATER TYPE" fields in the Draft 2022-2024 Integrated List and updated the Assessment Rationale to reflect the correction.

11. Sandia Canyon (Sigma Canyon to NPDES outfall 001)

LANL prepared a TMDL Alternative IR Category 4B Demonstration for the entire reach of Sandia Canyon within lands managed by the DOE within LANL, including both the upper AU - Sandia Canyon (Sigma Canyon to NPDES outfall 001) - and the lower AU - Sandia Canyon (within LANL below Sigma Canyon). LANL's demonstration supports the listing of dissolved copper and total recoverable aluminum as causes of impairment for the upper AU - Sandia Canyon (Sigma Canyon to NPDES outfall 001). LANL's demonstration also supports the listing of adjusted gross alpha, total mercury, dissolved copper, and total recoverable aluminum as causes of impairment for the lower AU - Sandia Canyon (within LANL below Sigma Canyon). However, LANL's IR Category 4B Demonstration does not support the listing of Polychlorinated Biphenyls ("PCBs") as a cause of impairment for the upper AU. NMED should revise the Integrated List for this AU to reflect assignment of IR Category 5/5C for the listing of Polychlorinated Biphenyls ("PCBs") as a cause of impairment for Sandia Canyon (Sigma Canyon to NPDES outfall 001), consistent with NMED's 2020-2022 Integrated List.

***NMED RESPONSE**:*

Thank you for pointing out this data entry error. NMED updated the Draft 2022-2024 Integrated List to reflect the correct IR Category for PCBs in Sandia Canyon (Sigma Canyon to NPDES outfall 001) and updated the Assessment Rationale to reflect the correct IR Category.

12. Effluent Canyon (Mortandad Canyon to headwaters)

The draft Integrated List assigns Effluent Canyon (Mortandad Canyon to headwaters) to IR Category 3/3A. IR Category 3/3A includes waters for which there is "insufficient or no reliable monitored data and/or information to determine if any designated or existing use is attained." *See* Integrated List at iii. The assignment of Effluent Canyon (Mortandad Canyon to headwaters) to IR Category 3/3A is inconsistent with and in direct conflict with the positions taken by NMED during the 2020 Triennial Review. During the 2020 Triennial Review, NMED proposed to create a new classified standards section, 20.6.4.140 NMAC ("Section 140"), and to reclassify Effluent Canyon (Mortandad Canyon to headwaters) under that new section. NMED prepared an Existing Use Analysis for Effluent Canyon (among other waters) that NMED argued supported designated uses for Effluent Canyon of livestock watering, wildlife habitat, warmwater aquatic life and primary contact. It is incongruous, therefore, for NMED to assign Effluent Canyon to IR Category 3/3A.

LANL presented evidence during the 2020 Triennial Review that Effluent Canyon may not be capable of supporting a warmwater aquatic life use designation. While this segment meets the water quality criteria under its current classification, 20.6.4.128 NMAC, if the segment were moved to new Section 140, then LANL agrees that additional evaluation is appropriate and made that recommendation during the Triennial Review proceedings.

***NMED RESPONSE**:*

A Use Attainability Analysis ("UAA") is not an appropriate substitute for an assessable dataset, nor does conducting an UAA constitute an assessment under the requirements of CWA §303(d)/§305(b). AUs are listed in IR category 3 when sufficient data to support an attainment determination for any use are not available. IR Category 3 is further broken down into subcategories A-C. Category 3A indicates that "no data (n = 0) [are] available" to assess. The dataset provided to NMED by LANL during the 2022-2024 call for data did not include any data from

Effluent Canyon. In addition, NMED has not collected data for this AU. Therefore, no data are available for this waterbody and IR Category 3A is the appropriate classification. Furthermore, IR Category 3/3A is the appropriate classification for this assessment unit given that it is unknown whether the waterbody is attaining all (IR category 1) or some (IR category 2) of its designated or existing uses, or, alternatively, if it is impaired for its designated or existing uses (IR categories 4-5). NMED notes that its proposed amendment in the 2020 Triennial Review to create section 20.6.4.140 NMAC included a secondary contact designated recreational use, not primary contact as stated above.

Thank you for the opportunity to provide these comments to the draft Integrated List. Please contact Robert Gallegos at (505) 665-0450 or by email at rgallegos@lanl.gov if you have any questions regarding these comments.

***NMED RESPONSE**: Thank you for your comments.*

Sincerely,

TERRILL LEMKE
(Affiliate)

Digitally signed by TERRILL LEMKE (Affiliate)
Date: 2022.01.14 10:06:58 -07'00'

Steven L. Story
Group Leader

Attachment(s): None

Copy: Shelly Lemon, NMED/SWQB, Shelly.Lemon@state.nm.us
Kris Barrios, NMED/SWQB, Kristopher.Barrios@state.nm.us
Karen E. Armijo, NA-LA, Karen.Armijo@nnsa.doe.gov
Marcus Pinzel, NA-LA, marcus.pinzel@nnsa.doe.gov
Michael W. Hazen, Triad, ALDESHQSS, mhazen@lanl.gov
William R. Mairson, Triad, ALDESHQSS, wrmairson@lanl.gov
Jeanette T. Hyatt, Triad, EWP, jhyatt@lanl.gov
Jennifer E. Payne, Triad, EPC-00, jpayne@lanl.gov
Kristen A. Honing, Triad, EPC-00, khoning@lanl.gov
Steven L. Story, Triad, EPC-CP, story@lanl.gov
Sarah Holcomb, Triad, EPC-CP, sholcomb@lanl.gov
Faith Doty, Triad, EPC-CP, fdoty@lanl.gov
Robert M. Gallegos, Triad, EPC-CP, rgallegos@lanl.gov
epc-correspondence@lanl.gov
eshqss-dcrm@lanl.gov
gc-esh@lanl.gov

REFERENCES

New Mexico Environment Department/Surface Water Quality Bureau (NMED/SWQB). 2021. Procedures for Assessing Standards Attainment for the State of New Mexico CWA §303(d)/ §305(b) Integrated Report: Comprehensive Assessment and Listing Methodology (CALM). Santa Fe, NM. Available at: https://www.env.nm.gov/surface-water-quality/calm/.