U.S. Department of Energy and Triad National Security

WQCC No. 20-51(R)

July 13, 2021

Summary of Technical Testimony of
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Topic 1. Climate Change (Definition and Objective)

LANL Recommends that the WQCC reject 20.6.4.6(C) & (D) NMAC and 20.6.4.7(C)(4) NMAC re: Climate Change

- LANL shares the NMED's concerns that climate change could have significant implications on surface waters and hydrologic regimes throughout New Mexico.
- However, climate change is not a pollutant, criteria, use, or hydrology.
- The Standards may require future modifications due to climate change, but the Standards cannot address climate change.
- NMED has not provided enough detail in its testimony to understand what additional changes to 20.6.4 NMAC, not yet proposed, would have to be adopted to meet the new Standards objective.
- LANL recommends that the WQCC not adopt the objective in 20.6.4.6(C) & (D) NMAC or the definition in 20.6.4.7(C)(4) NMAC re: Climate Change
- For these reasons, LANL recommends that WQCC also reject Amigos Bravos's proposed amendments regarding the Climate Change objective.

Topic 2. Definitions

LANL Recommends the WQCC Reject the Proposed Definitions for Baseflow and Effluent Dominated

- LANL recommends that the WQCC not adopt the definitions of “baseflow” in section 20.6.4.7(B)(1) NMAC and “effluent dominated” in section 20.6.4.7(E)(2) NMAC.
- If the effluent dominated definition is adopted, LANL recommends the WQCC delete the last sentence: “Waters that are effluent dominated are of significant value by providing aquatic life and wildlife habitat.”
- The DOE and LANL have a zero discharge goal. LANL has diligently pursued and will continue to pursue outfall reductions to achieve zero discharge where feasible.
- If the WQCC adopts a definition of “effluent dominated”, LANL requests that the WQCC expressly state that currently permitted discharges in effluent dominated waters are not required to continue in perpetuity to avoid conflict with LANL’s zero discharge goal.

Topic 5. Review and Amendment of the WQS (Existing Use and Use Attainability Analysis)

NMED Proposed Amendments to 20.6.4.10 NMAC and 20.6.4.15 NMAC

Review of Standards; Need for Additional Studies 20.6.4.10 NMAC

- LANL proposes additional amendments to 20.6.4.10(B) NMAC
- LANL recommended deleting proposed 20.6.4.10(C) NMAC, but as revised in NMED Ex. 110, LANL has no objections
- LANL supports NMED's proposed new 20.6.4.10(D) NMAC

Use Attainability Analysis 20.6.4.15 NMAC

- LANL proposes additional amendments to 20.6.4.15(A) NMAC
- LANL proposed amendments to 20.6.4.15(D) NMAC, but as revised in NMED Ex. 110, LANL has no objections

LANL Has Two Concerns About NMED's Proposals for 20.6.4.10 NMAC and 20.6.4.15 NMAC

- NMED proposes to declassify classified waters based solely on Hydrology Protocol I flow information without involving the WQCC
  - NMED's approach is based on a flowchart in the WPMP/CPP that is not a binding rule (LANL Ex. 70 at II-8)
  - Declassification changes uses and criteria without WQCC decision
  - Declassification results in lower aquatic life protection and may require a UAA to reinstate uses already approved by the WQCC and EPA
- NMED's Existing Use Analysis "Demonstration" documents (NMED Exs. 56, 73, and 124) do not rely on a clear process and used non-representative data
  - NMED acknowledged that it had no E.coli data for LANL waters (NMED Ex. 56)
  - NMED used non-representative data in Exs. 73 and 124

The WQS Need a Process to Modify Designated Uses

- The Standards do not include a clear process to evaluate existing uses and amend designated uses
- LANL's proposed amendments to 20.6.4.10(B) NMAC and 20.6.4.15(A) NMAC are designed to establish a clear, transparent collaborative process for evaluating and modifying existing uses
- The process should not be established on an ad hoc basis
- LANL urges the WQCC to adopt a process to evaluate existing uses and amend designated uses in this Triennial Review
- The 2015 Joint Stipulation could serve as a model—with some refinement—it promoted information sharing & collaboration

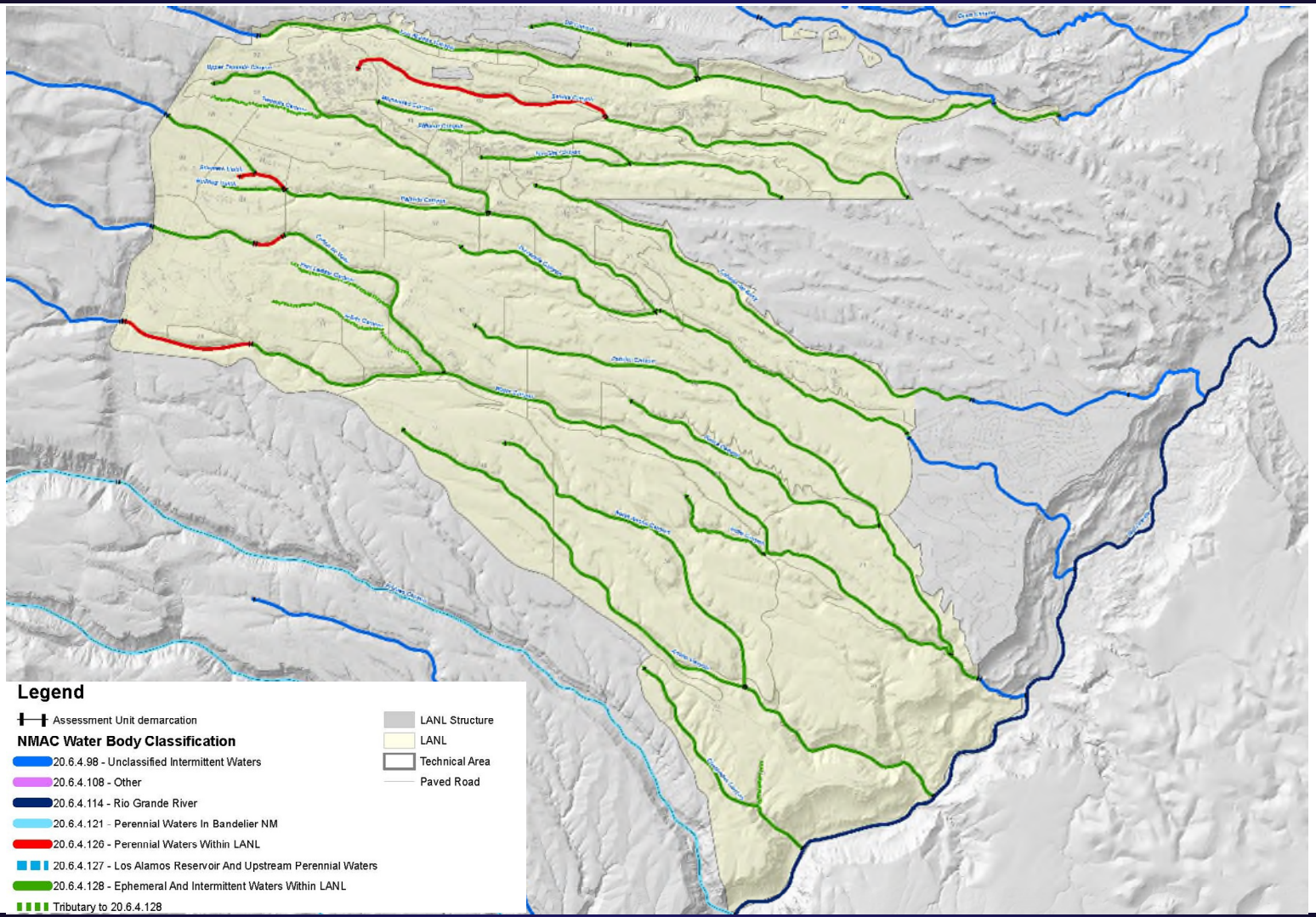
NMED's Proposed New 20.6.4.10(B) NMAC Is Unclear

- Unlike the federal provision, 40 CFR 131.10(i), NMED's new 20.6.4.10(B) NMAC proposal mixes uses and water quality
- NMED's proposal would require "supporting evidence" but that term is not defined or explained
- If "supporting evidence" shows presence of an existing use, "the designated use *shall* be amended accordingly"
  - The process for amendment is not stated
  - The decisionmaker is not stated
- LANL's proposal—that the WQCC adopt a process—would address these issues

NMED's Amendments to 20.6.4.15(A) NMAC Fall Short

- LANL supports NMED's proposed changes to headings to better match the content of 20.6.4.15 NMAC
- Specifically, LANL supports the heading in 20.6.4.15(A) NMAC: "Regulatory requirements for a use attainability analysis."
- This section should include all foundational requirements related to use attainability analyses
- LANL's proposal would do that
- LANL urges the WQCC to adopt LANL's proposed amendments to 20.6.4.15(A) NMAC for completeness and clarity

2007 & Current Classification of LANL Waters - 20.6.4.126 NMAC and 20.6.4.128 NMAC

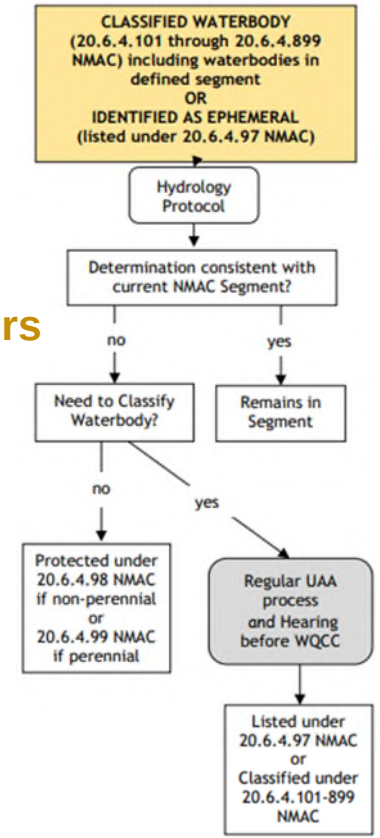


Process Created to Review Protections of all LANL 20.6.4.128 NMAC Waters – Joint Stipulated Agreement

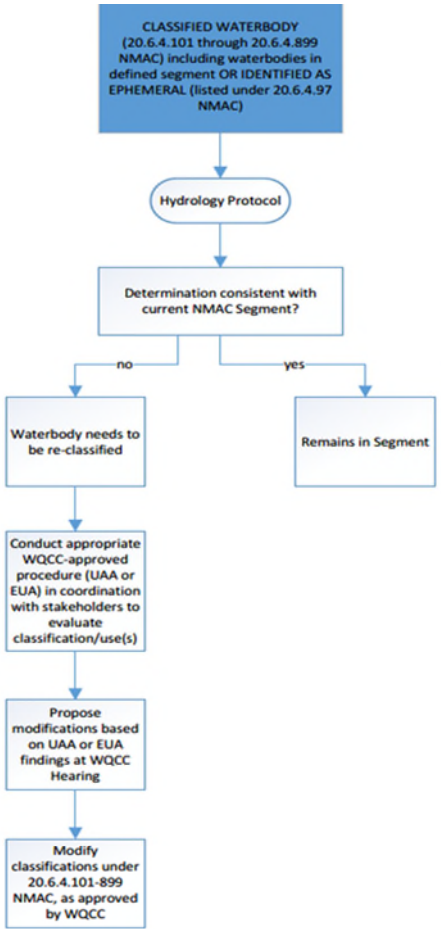
- Established in October 2015 during the last Triennial Review
- Parties (DOE, Amigos Bravos, NMED and LANL) agree to meet, confer and share new information including any significant chemical, physical, or biological changes (LANL Ex. 29, NMMED Ex. 72, ¶4)
- Provides framework to review the status of Section 128 waters
  - Collect and analyze new information
  - Bring agreements for more protective uses to WQCC
- The parties agreed to “endeavor to reach agreement regarding the appropriate level of water quality protections afforded to Segment [Section] 128” waters. (LANL Ex. 29, NMMED Ex. 72, ¶6)
- NMED agreed to petition the WQCC to propose changes agreed upon by the parties and the parties retained the right to independently propose changes to 20.6.4.128 NMAC. (LANL Ex. 29, NMMED Ex. 72, ¶ ¶ 6, 7)

The Process to Evaluate Classified Waters for Additional Protection is Critical

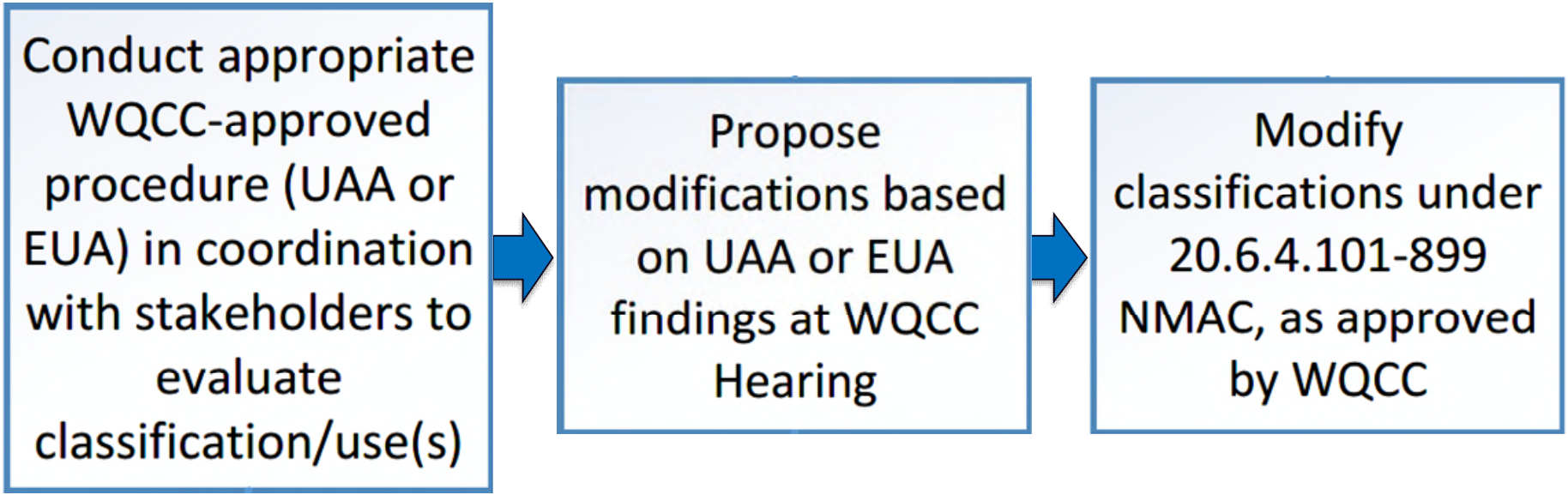
LANL Ex. 70 at II-8: Figure II-1 Flowchart: WQMP/CPP Automatically declassifies Classified waters



LANL Ex. 78: Proposed process would avoid declassification & Maintain higher ALU protection



LANL's Recommended Process for Water Reclassification



Existing Use Analysis Process

LANL has proposed that the Commission adopt a process with the following steps:

1. Establish Existing Use Analysis Work Plan
2. Compile existing data and collect new information to fill critical data gaps, including data to:
   - Evaluate the actual use of the water
   - Assess existing water quality
3. Conduct Existing Use Analysis using procedures consistent with the CALM use attainment assessment procedures
4. Petition the Commission to modify designated use(s) if warranted by the findings of the study
5. If approved by the Commission, submit revised uses to EPA for approval

SURREBUTTAL
Topic 5. Review and Amendment of the WQS (Existing Use and Use Attainability Analysis)

NMED Rebuttal is Contradictory Regarding Whether Classified Waters Can Be Automatically Unclassified

NMED is contradictory whether classified waters are automatically declassified or a WQCC decision is required

- Lemon, NMED Ex. 106 at 4-5 states that waters currently classified as Section 128 waters are unclassified 20.6.4.99 NMAC without WQCC action
- Fullam, NMED Ex. 109 at 52 states that “to amend any water quality standard, a demonstration is required for the Commission and EPA to base their decision”
- Fullam, NMED Ex. 109 at 38 states that a designated use may be amended and if there is an established Section 20.6.4.NMAC with the appropriate designated uses in the area, “the water may be listed in that classified section of 20.6.4.NMAC”
- Yet, in reliance solely on the WQMP/CPP, NMED asserts that certain classified LANL waters are unclassified (Fullam, NMED Ex. 109 at 62)

NMED Rebuttal is Contradictory, Demonstrating the Need for a WQCC-Adopted Process

NMED is contradictory as to whether there is a process to evaluate whether a use is existing and whether one is needed

- Fullam, NMED Ex. 109 at 52 states that “to amend any water quality standard, a demonstration is required for the Commission and EPA to base their decision”
- Fullam, NMED Ex. 109 at 75, line 22: NMED’s procedural framework is provided in the State’s WQMP/CPP
- Fullam, NMED Ex. 109 at 72, line 22: NMED disputes that a “‘process’ specific to determining existing uses, like a UAA, is appropriate.”
- Fullam, NMED Ex. 109 at 73, line 4: NMED disagrees that a “prescriptive process” to determine existing uses to amend designated uses is needed
- Fullam, NMED Ex. 109 at 62: Regarding currently classified 20.6.4.128 NMAC waters, NMED considers them unclassified perennial and “has updated the appropriate classification in the Department’s Surface Water Quality Information Database” without WQCC action

NMED's Proposed Approach Is Not Logical

NMED asserts that classified waters are unclassified 20.6.4.98 or 20.6.4.99 NMAC (Lemon, NMED Ex. 106 at 4-5; WQMP/CPP flowchart)

- Under the 2015 Joint Stipulation, the WQCC's directions were to evaluate Section 128 waters to identify where additional protections are warranted
- Additional protections by extending reaches of Section 126 (perennial), as appropriate, was always considered an option
- NMED even proposed this approach in its Original Petition
- NMED's approach omits the WQCC as decisionmaker; relies solely on HP
- NMED's approach will require a UAA for every improvement in flow regime

LANL's proposal is logical, efficient, and better assures steady progress

- Classified waters should not be automatically unclassified based on HP
- LANL's approach is consistent with one NMED -described process
- The WQMP/CPP flowchart is not a binding rule
- A WQCC-approved EUA/designated use process would provide certainty

Topic 7. LANL Waters (Sections 126, 128 and 140)

Recommendations Regarding LANL Waters

LANL recommends that the Commission increase protection of the following stream reaches by expanding the boundaries of 20.6.4.126 NMAC perennial waters to include:

- Pajarito Canyon from 0.5 miles below Arroyo de la Delfe upstream to Homestead Spring;
- Arroyo de la Delfe from Pajarito Canyon to Kieling Spring

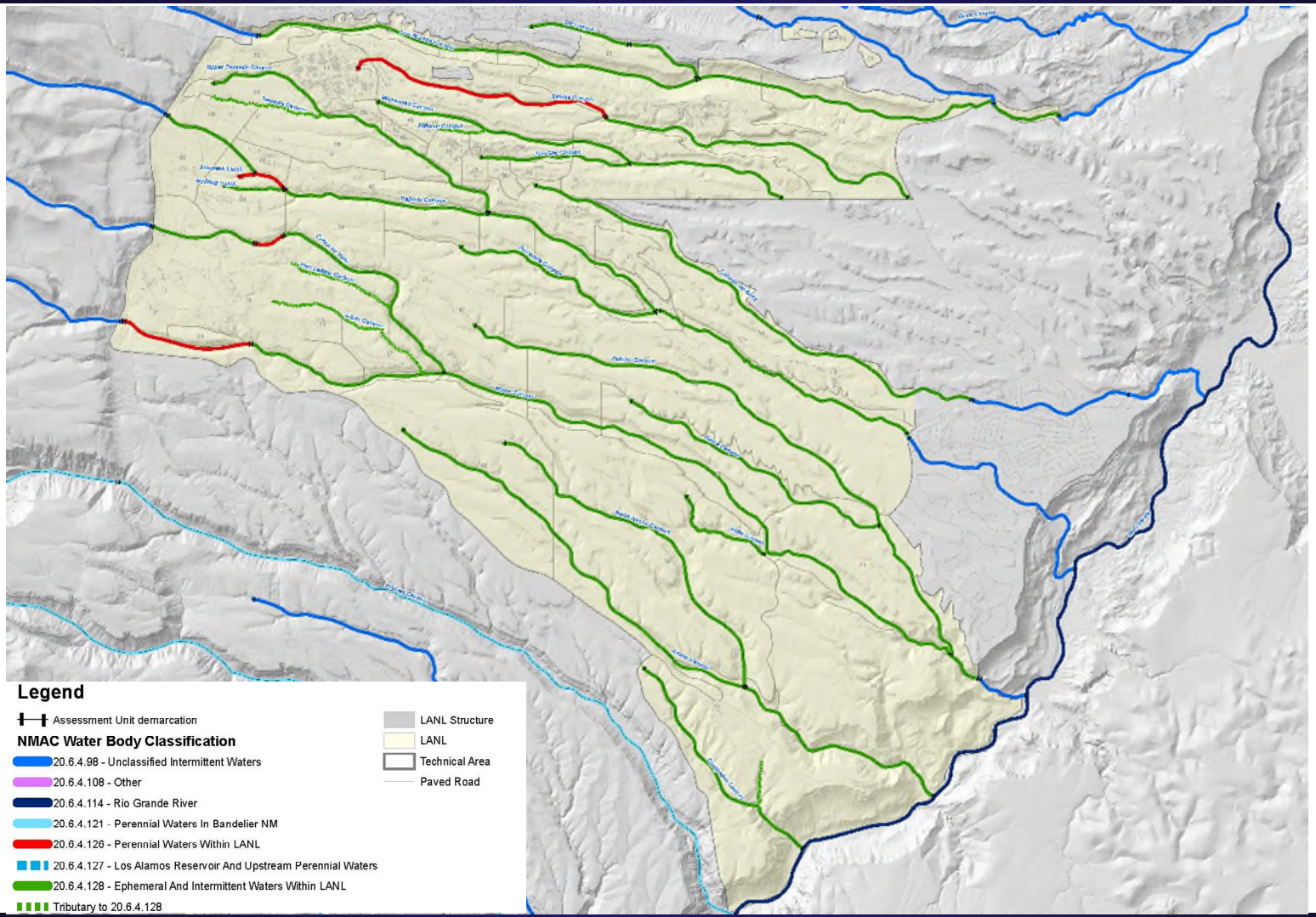
LANL also recommends that the Commission establish a new regulatory section 20.6.4.140 NMAC to include the following intermittent waters:

- Twomile Canyon from LANL stream gage E244 upstream to its confluence with upper Twomile Canyon;
- S-Site Canyon from alluvial groundwater well MSC 16-06293 upstream to Martin Spring

LANL also proposes to amend 20.6.4.126 NMAC to provide greater flexibility for future similar designated use changes to provide greater protection to classified Section 128 waters, where warranted by adding “including but not limited to”

Effluent Canyon may qualify for Section 140, but further study is needed

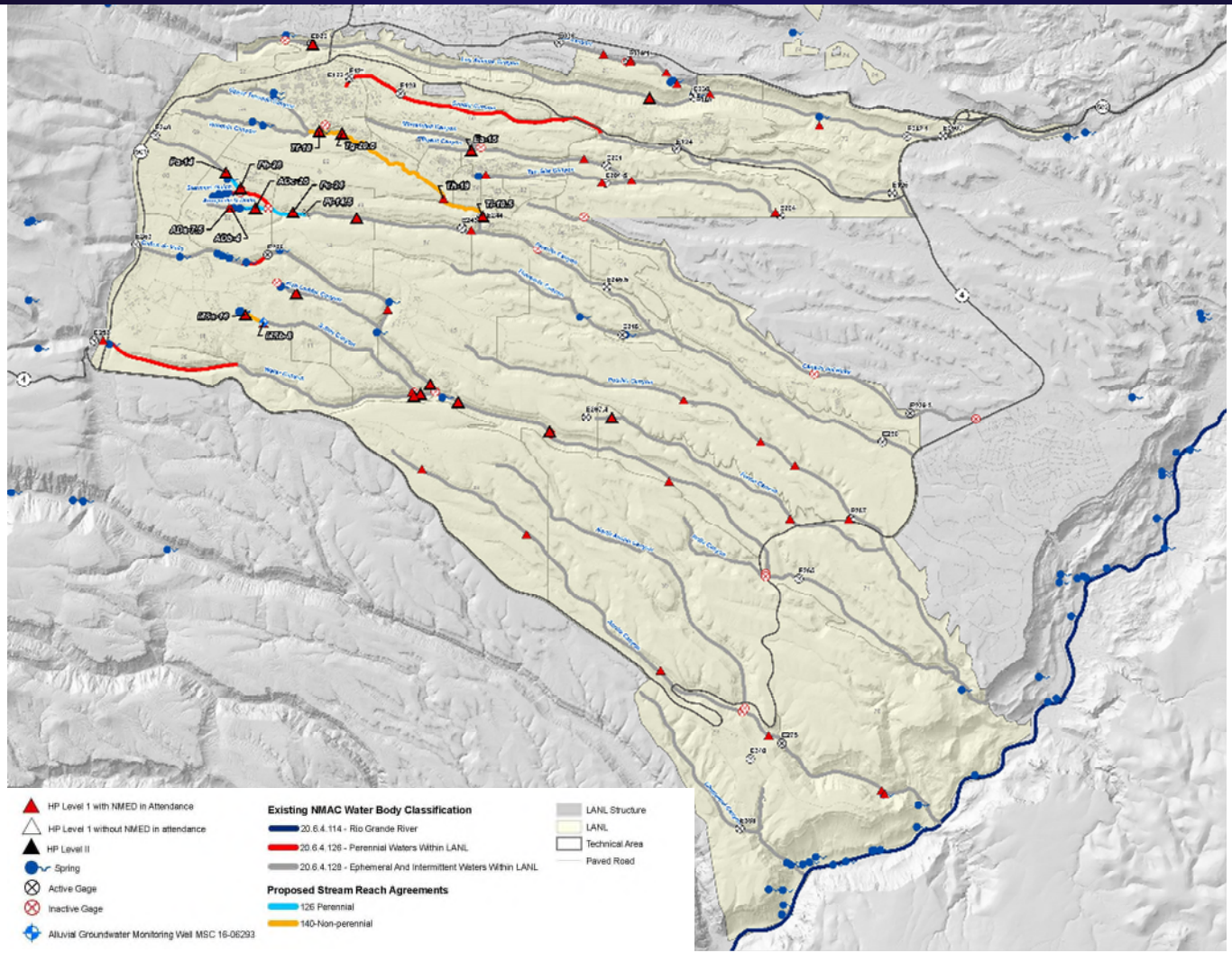
Current Status of LANL Classified Waters - 20.6.4.126 NMAC and 20.6.4.128 NMAC



Joint Stipulated Agreement Process Created to Review Protections of all LANL 20.6.4.128 NMAC Waters

- Established in October 2015 during the last Triennial Review
- Parties (DOE, Amigos Bravos, NMED and LANL) agreed to meet, confer and share information
- Provides framework to review the status of Section 128 waters
  - Collect and analyze new information
  - Bring agreements for more protective uses to WQCC
- Promotes reaching agreement on appropriate increased protections for LANL Section 20.6.4.128 NMAC waters
- Since the Joint Stipulated Agreement
  - 117 Level I Hydrology Protocols Completed and Evaluated
    - Collaboration with NMED, Amigos Bravos, DOE and LANL
  - 32 Level II Hydrology Protocols completed to collect additional information and support stream classification and use determination
  - Data Sources incorporated: precipitation, stream gage, level I and level II HP assessments, surface water monitoring and macroinvertebrate sampling and identification

Work Completed Under the Joint Stipulation

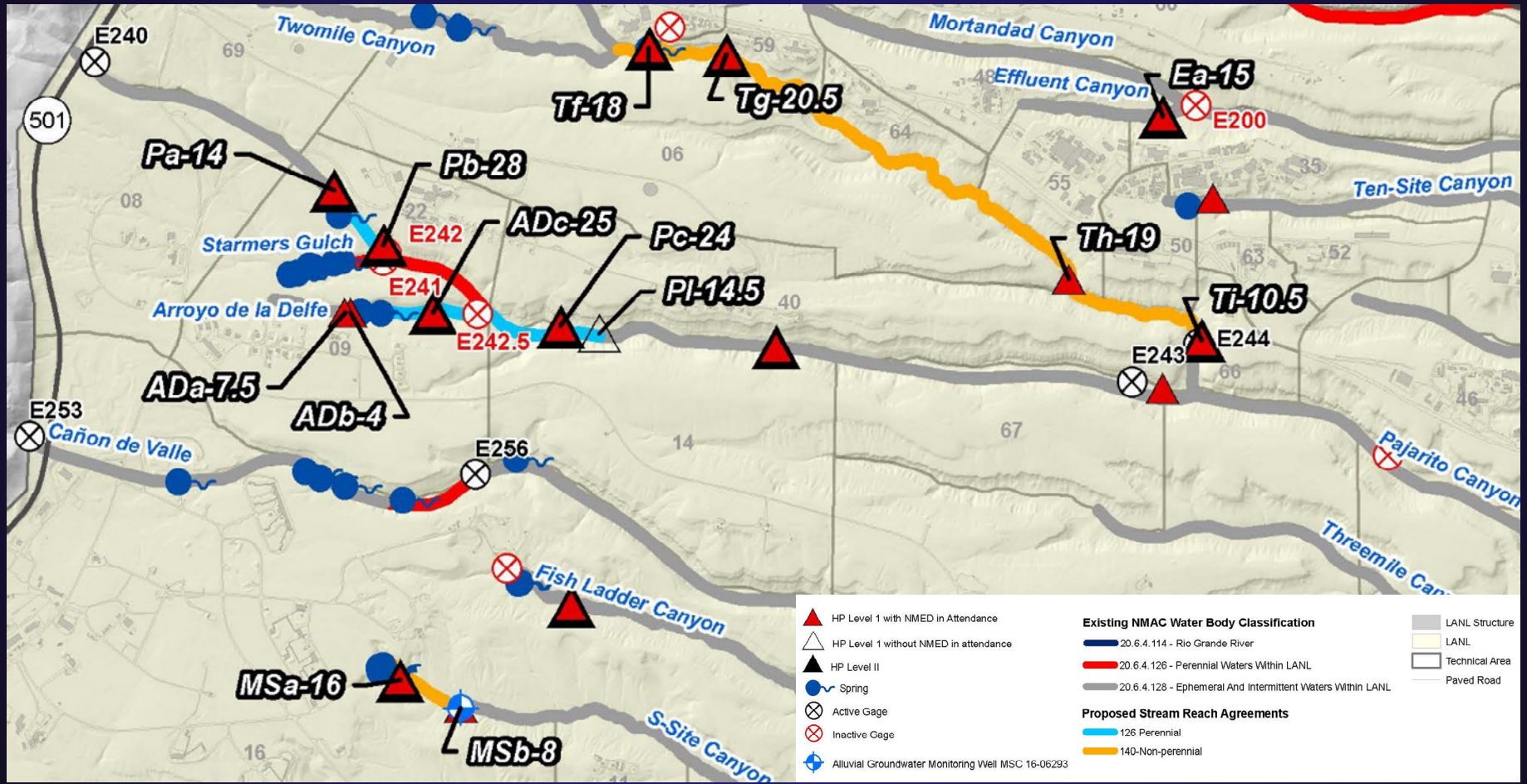


Summary of Distances (miles) for Current and Proposed LANL Stream Classification

Current Stream Classification Summary	
Perennial (20.6.4.126 NMAC)	4.8 Miles
Intermittent /Ephemeral (20.6.4.128 NMAC)	75.2 Miles

LANL Proposed Stream Classification Summary	
Perennial (20.6.4.126 NMAC)	5.8 Miles Total 4.8 Miles (Existing) + 1.0 Miles (New)
Intermittent (20.6.4.140 NMAC)	2.0 Miles
Intermittent/Ephemeral (20.6.4.128 NMAC)	72.2 Miles

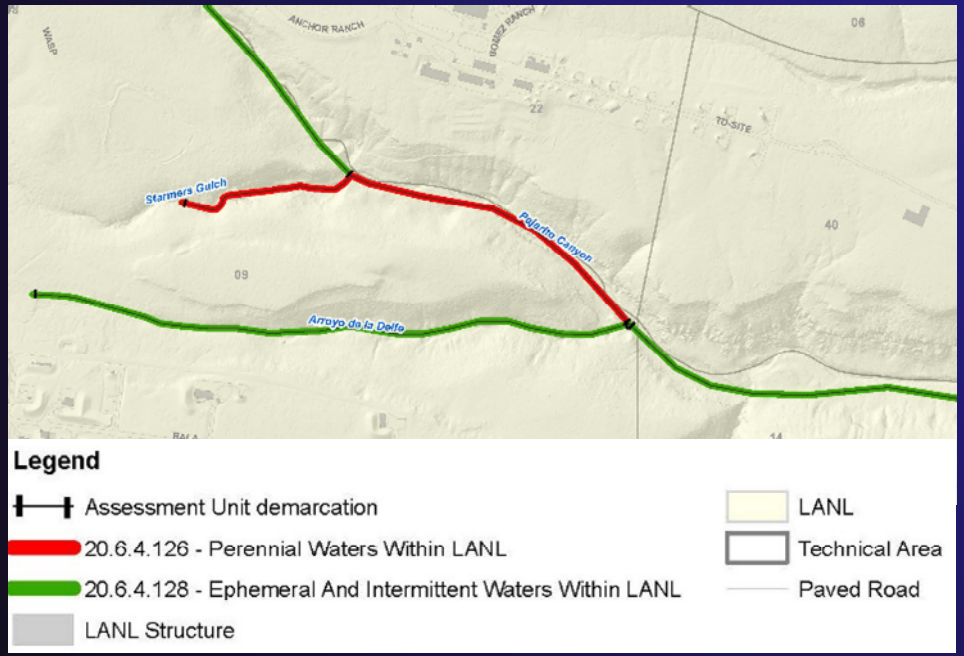
Identification of Proposed Section 126 and 140 Reaches



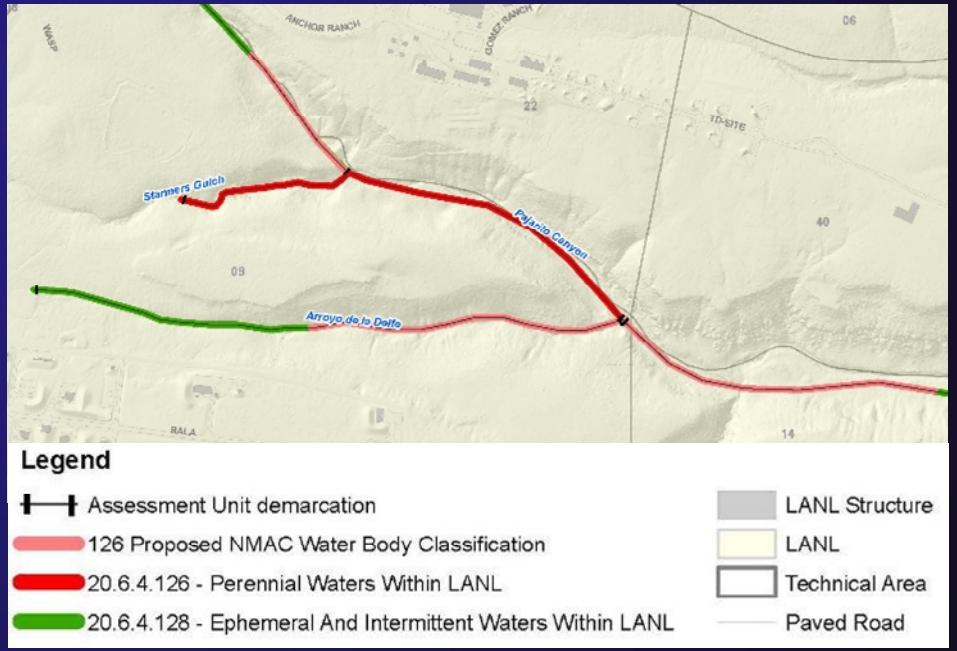
Increased Protections by Extending 126 Waters

- NMED purports to default classified 128 waters to 20.6.4.99 – **less** protective aquatic life use (note: aquatic life presence supported by data collected under the Joint Stipulated Agreement process)
- Joint Stipulated Agreement seeks to **increase** protections
- For recreational use, WQCC has already determined secondary contact protective (note: no new evidence supports primary contact)

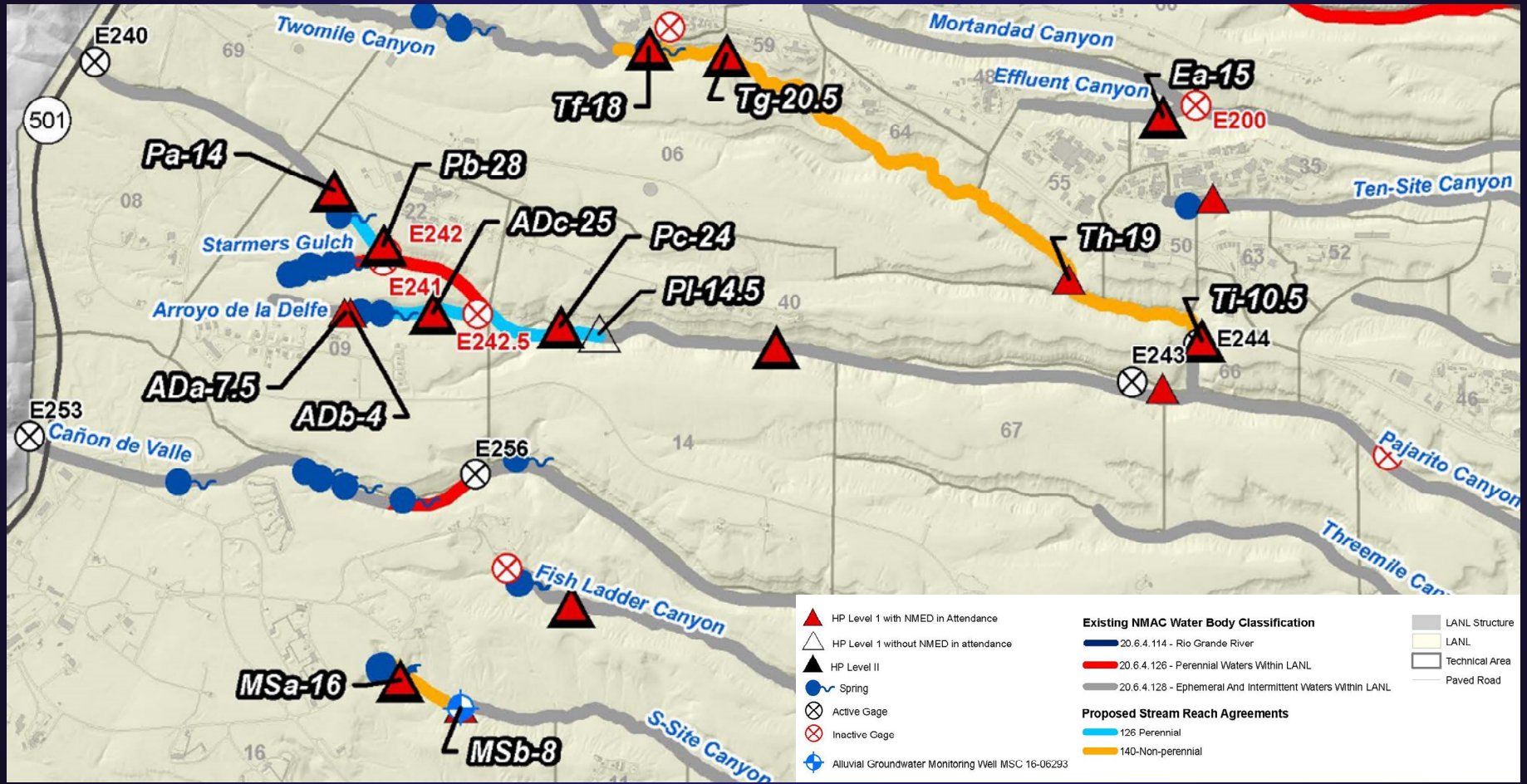
Current NMAC Water Body Classification



Proposed NMAC Water Body Classification



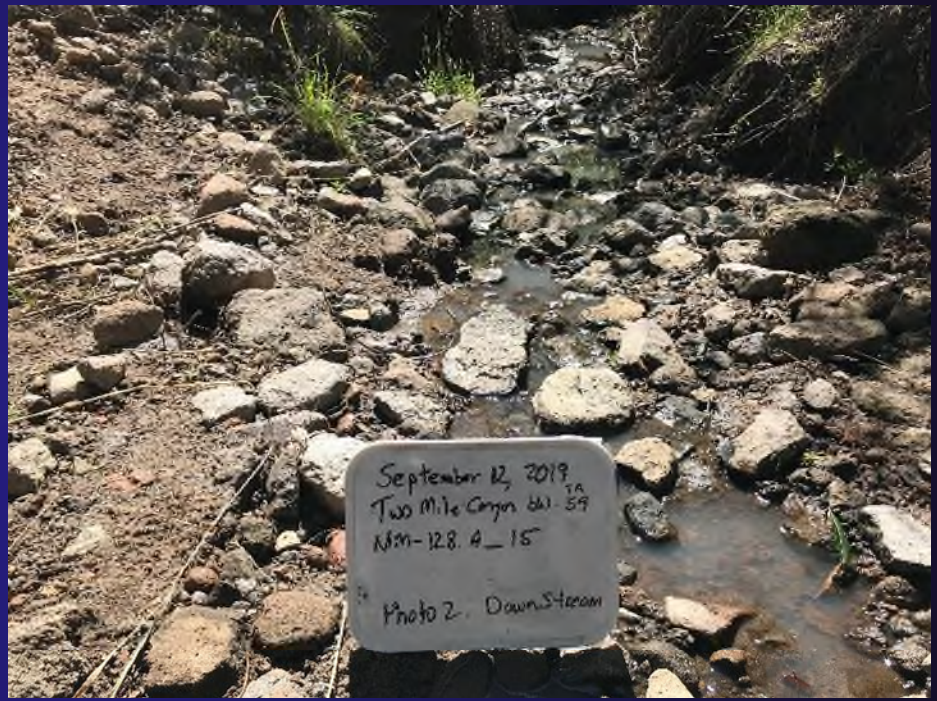
Identification of Proposed Section 126 and 140 Reaches



Proposed 20.6.4.126 NMAC - Pajarito Canyon below Homestead Spring

Photograph from Exhibit #37

Proposed 20.6.4.140 NMAC – Twomile Canyon



Photographs from Exhibit #37

HP Level 2: Additional Supporting Information

Twomile Canyon at Gage E244 end of proposed Section 140 Reach
(picture from LANL Exhibit 42)

Recommendations Regarding LANL Waters

LANL recommends that the Commission increase protection of the following stream reaches by expanding the boundaries of 20.6.4.126 NMAC perennial waters to include:

- Pajarito Canyon from 0.5 miles below Arroyo de la Delfe upstream to Homestead Spring;
- Arroyo de la Delfe from Pajarito Canyon to Kieling Spring

LANL also recommends that the Commission establish a new regulatory section 20.6.4.140 NMAC to include the following intermittent waters:

- Twomile Canyon from LANL stream gage E244 upstream to its confluence with upper Twomile Canyon;
- S-Site Canyon from alluvial groundwater well MSC 16-06293 upstream to Martin Spring

LANL also proposes to amend 20.6.4.126 NMAC to provide greater flexibility for future similar designated use changes to provide greater protection to classified Section 128 waters, where warranted by adding “including but not limited to”

Effluent Canyon may qualify for Section 140, but further study is needed

SUR-REBUTTAL
Topic 7. LANL Waters
(Sections 126, 128 and 140)

All LANL Waters are Classified

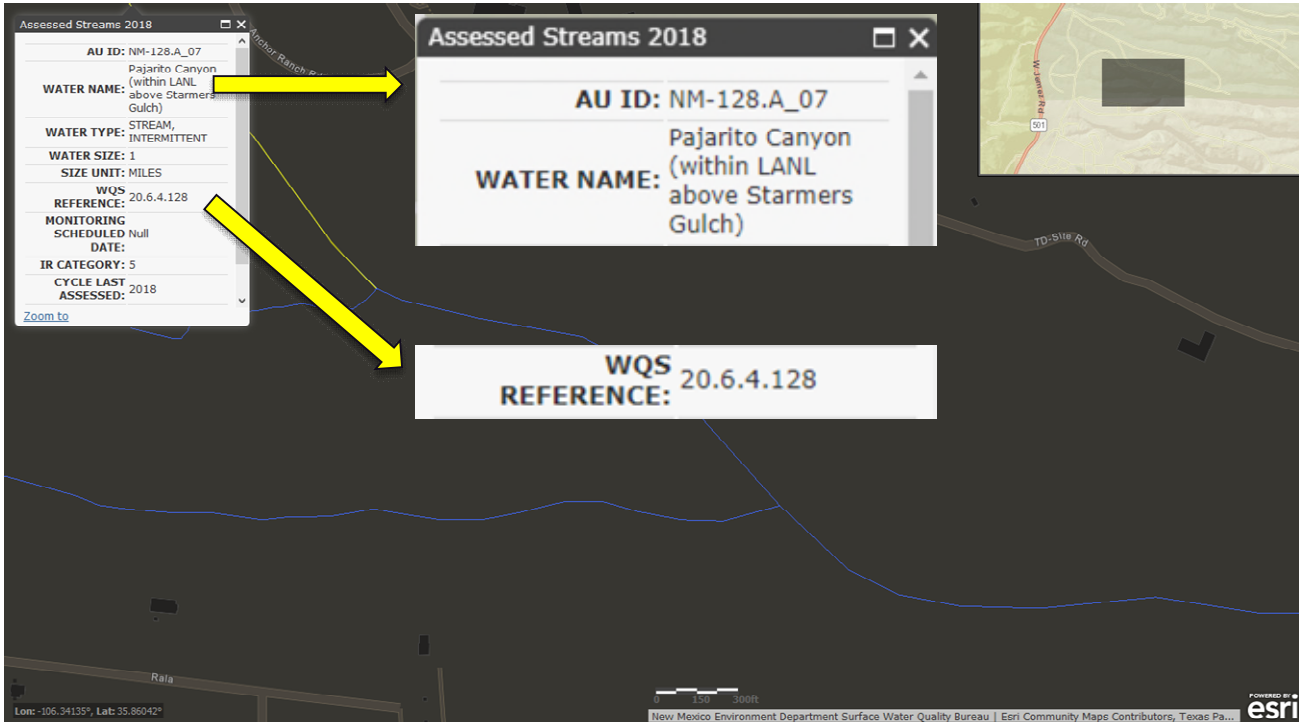
NMED disputes that all LANL waters are classified and asserts certain Section 128 water are unclassified (Lemon, NMED Ex. 106 at 4-5; Fullam, NMED Ex. 109 at 56)

- 2007 UAA and map (LANL Ex. 18, Attachment 2)
- The combination of 20.6.4.126 and NMAC 20.6.4.128 NMAC cover all LANL waters
- 2015 rebuttal testimony and Affidavit of Michael Saladen (LANL Exs. 25 & 30)
- NMED acknowledges testimony during the 2003 Triennial confirming that all waters were intended to be classified: 4 portions as perennial and all other waters as intermittent or ephemeral (Fullam, NMED Ex. 109 at 57)
- NMED acknowledges that it originally proposed an amendment to include 3 more perennial waters in Section 126 (Fullam, NMED Ex. 109 at 57 & 58)
- NMED asserts that with respect to LANL “unclassified perennial waters”, NMED already “has updated the appropriate classification in the Department’s Surface Water Quality Information Database (“SQUID”)” (Fullam, NMED Ex. 109 at 62), but this is incorrect

NMED SQUID Database Reflects Existing Classification

- **The NMED database shows that the portions of Parajito Canyon that Ms. Fullam alleges are “unclassified” were classified under Section 128**

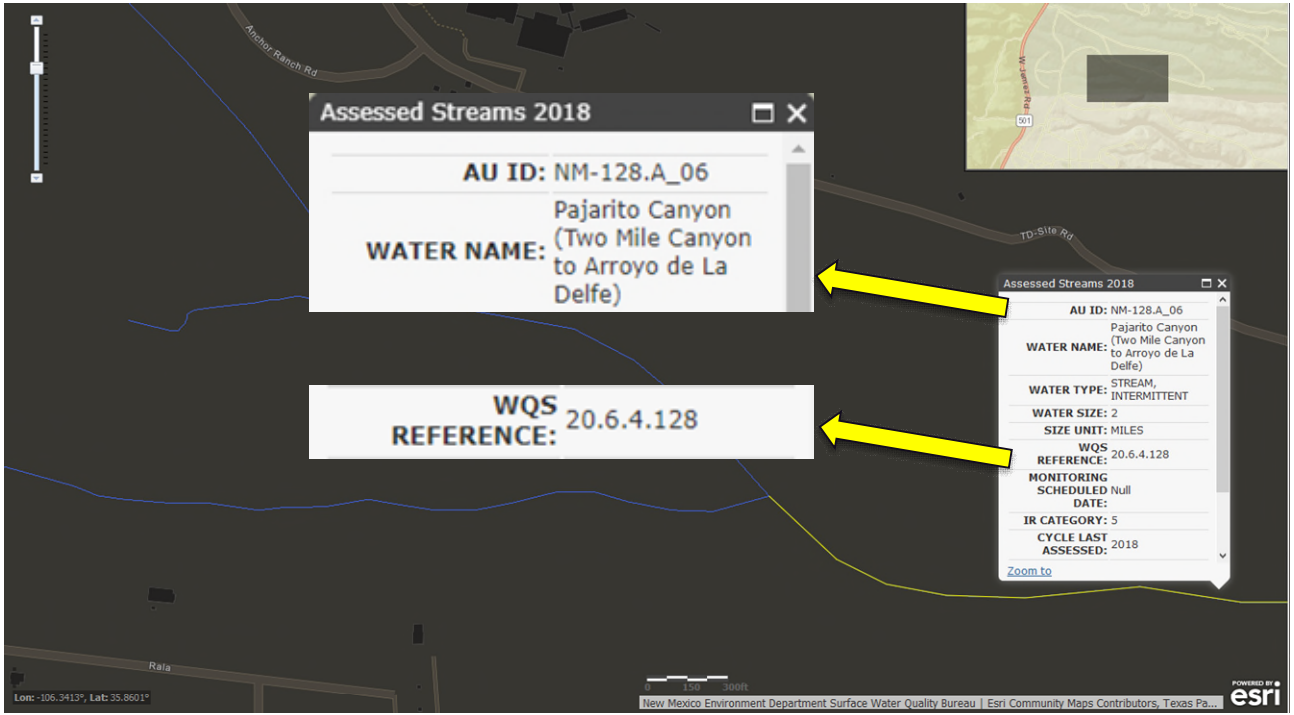
Starmers Gulch upstream to Homestead Spring:



NMED SQUID Database Reflects Existing Classification

- **The NMED database shows that the portions of Parajito Canyon that Ms. Fullam alleges are “unclassified” were classified under Section 128**

0.5 miles below Arroyo de La Delfe to Confluence with Arroyo de La Delfe:



Increasing Protections to 20.6.4.128 LANL Waters Was the Purpose of the 2015 Joint Stipulation Agreement

NMED says that an amendment to add Section 126 protection was “outside the scope of the 2015 Joint Stipulation” (Fullam, NMED Ex. 109 at 59)

- The Section 128 segments that LANL proposes to classify as Section 126 waters are currently classified under 20.6.4.128 NMAC
- The purpose was to determine the appropriate level of protection for Section 128 waters

NMED says that there is “no mechanism to assert the designated uses for these [proposed] perennial waters, other than treatment as an unclassified perennial water in 20.6.4.99 NMAC” (Fullam, NMED Ex. 109 at 62, line 2)

- This ignores the Triennial Review process and the WQCC’s role in setting Standards and designated uses
- NMED’s position is contradicted by NMED’s creation of 20.6.4.140 NMAC & NMED testimony permitting designated use amendment by listing water in an existing classified section of 20.6.4 NMAC (Fullam, NMED Ex. 109 at 38, line 13)

LANL Recommends the WQCC Amend 20.6.4.126 NMAC

- LANL's proposal is consistent with NMED's testimony stating that a designated use may be amended by listing a water in an existing classified section within the applicable geographic location (Fullam, NMED Ex. 109 at 38, line 13)
- LANL proposes to list the following sections in 20.6.4.126 NMAC:
  - Pajarito Canyon from 0.5 miles below Arroyo de la Delfe upstream to Homestead Spring; and
  - Arroyo de la Delfe from Pajarito Canyon to Kieling Spring
- LANL also proposes to amend 20.6.4.126 NMAC to provide greater flexibility for future similar designated use changes to provide greater protection to classified Section 128 waters, where warranted by adding "including but not limited to"

LANL Recommends the WQCC Amend 20.6.4.128 NMAC

- LANL recommends the WQCC delete “specifically” from 20.6.4.128 NMAC and NMED states it “finds no reasoning” to remove “specifically” (Fullam, NMED Ex. 109 at 70, line 5)
  - 20.6.4.128 NMAC does currently include and classify all LANL waters other than Section 126 waters
  - Under the JSA the parties identified certain classified Section 128 waters to have perennial flow characteristics and meet all 20.6.4.126 NMAC criteria
  - Deleting “specifically” would clarify that Section 128 would no longer be the “catch-all” classification as more data is gathered, more protections are included, and further refinements are made
- LANL supports NMED’s proposal to create a new 20.6.4.140 NMAC classification for intermittent LANL waters to include:
  - Twomile Canyon from LANL stream gage E244 upstream to its confluence with upper Twomile Canyon; and
  - S-Site Canyon from alluvial groundwater well MSC 16-06293 upstream to Martin Spring