## SUMMARY COMMENT & RESPONSE MEMO

**RE: Summary of Rulemaking Stakeholder Comments and IDWR Responses to the 1st Draft Rule in the matter of the IDAPA 37.03.05 and 37.03.06 Rulemaking**

**Date: August 9, 2022**

**Comments from Tammi Thatcher's Written Comment Letter Dated June 10, 2022, and IDWR Responses**

1. Comment: Ms. Thatcher commented that Rule 001.01 of the draft IDAPA 37.03.05 Safety of Dams ("DS") and Mine Tailings Impoundment Structures ("MT") Rules ("Draft DS-MT Rule"), omits "and Mine Tailings Impoundment Structures Rules" from the title. Refer to June 10 letter page 2.
    a. Response: Because IDWR will not combine the DS and MT rules at this time, no change was made.
2. Comment: Ms. Thatcher commented that the title for Rule 40 of the Draft DS-MT rule contains a misspelling of the word "impoundment." Refer to June 10 letter page 2.
    a. Response: Because IDWR will not combine the DS and MT rules at this time, no change was made.
3. Comment: Ms. Thatcher commented that "draft rule 37.03.05.055" of the Draft DS-MT Rule erroneously refers to Rule 51 in the rule Title. Refer to June 10 letter page 2.
    a. Response: Because IDWR will not combine the DS and MT rules at this time, no change was made.
4. Comment: Ms. Thatcher commented that Rule 40 should not be included in the Draft DS-MT Rule's Rule 65.01 as adherence to the bonding requirements set forth in Rule 40 should not be subject to a waiver. Refer to June 10 letter page 2.
    a. Response: Because IDWR will not combine the DS and MT rules at this time, no change was made.
5. Comment: Ms. Thatcher commented that the title of Rule 40 in the existing IDAPA 37.03.06 (Existing DS Rule) "Construction Plans, Drawings and Specifications (Rule 40)" was "left out of the draft rule" and there is no "requirement to meet the corresponding draft Rule 35." Refer to June 10 letter page 2.
    a. Response: Rule 40 of the Existing DS Rule is now Draft Rule 35 titled "Design Reports, Drawings, and Specifications." IDWR agrees Draft Rule 35 should be included in Draft Rule 65.01 and has added it accordingly. Refer to the 2nd Draft Rule for revised text.
6. Comment: Ms. Thatcher commented that inclusion of "reservoir" to the name change to Rule 50 in the Draft DS-MT Rule from "New Intermediate or Large Dams" to "New Dams and Reservoirs" "does not add clarity." Refer to June 10 letter page 2.
    a. Response: IDWR disagrees with this comment. The term "reservoir" is used approximately 39 times throughout the draft rule. The term reservoir is defined as a basin of water impounded by a dam in Draft Rule 10. The term "dam" and "reservoir" are often used

interchangeably. Including the "dam" and "reservoir" in the Draft Rule 50 title removes ambiguity that the rule might not apply in the event "reservoir" is used as a synonym for "dam." IDWR has elected to keep the draft Rule 50 title as is.

7. Comment: Ms. Thatcher commented, "[t]here is no requirement to meet the corresponding draft Rule 35, "Design Reports, Drawings and Specifications" in Draft Rule 65.01. Refer June 10 letter page. 2.

    a. Response: IDWR agrees with Ms. Thatcher's sentiment that to maintain consistency with the existing rules, citations to Draft Rule 35 should be added to Draft Rule 65.01. IDWR has made the change accordingly. Refer to the 2nd Draft Rule for revised text.

8. Comment: Ms. Thatcher commented that draft Rule 60, "Existing Dams and Existing Mine Tailings Impoundment Structures" in the Draft DS-MT Rule should be included as a reference in draft rule 65.01 as part of the list of rule chapters that are binding on the "construction of dams intended to store water in addition to tailings material." Refer to June 10 letter page 2.

    a. Response: IDWR agrees and has added references to Draft Rule 60 in Draft Rule 65.01. Refer to the 2nd Draft Rule for revised text.

9. Comment: Ms. Thatcher commented that combining the Existing DS Rule and the Existing MT Rule creates additional complexity. Refer to June 10 letter page 3. And again, on page 15 she also commented, "…meshing the two regulations together, (combining the regulations for dams with the regulations for mine tailings impoundment structures) has created so many opportunities for confusion that the draft regulation is not only confusing, it contains numerous errors."

    a. Response: In response to many comments opposing the combination of the DS and MT rules, IDWR will not combine the rules at this time. Also, IDWR agrees that mistakes in the first draft rule may have resulted in additional confusion amongst stakeholders. IDWR is committed to working with the rulemaking stakeholders to correct all errors and resultant confusion.

10. Comment: Ms. Thatcher commented that the Draft DS-MT Rule 65 "needs clarifying text to define "dams storing tailings and water." In her comment she notes that the Existing MT Rule has the phrase "[c]construction of dams intended to store water in excess of water being decanted in the tailing placement operation..." to add clarity. Refer to June 10 letter page 3.

    a. Response: IDWR has modified Draft Rule 65.01 to clarify what constitutes, "dams storing tailings and water." Refer to the 2nd Draft Rule for revised text.

11. Comment: Ms. Thatcher commented that the Rule 50.11 of the Draft DS-MT Rule replaces "release capability" from the old rules with "emergency spillway flow capacity." She noted the difference between the two terms and commented that the changed "draft rule subtitle is confusing." She commented that the change in terms "[e]ffectively reduces dam release capability requirement[s] for new dams." She commented the Draft DS-MT Rule "separates the table of Inflow Design Flood values from the release capacity requirement and contributes to a lack of clarity, as the table states the 'Inflow Design Flood' but is not clear at [sic] to whether that applies to the total release capacity or to only the spillway capacity." Refer to June 10 letter page 3.

a. Response: IDWR has revised the title of Draft Rule 50.11 from “Emergency Spillway Flow Capacity” to "Release Capacity." IDWR has also added language clarifying that the table establishes inflow design floods for a dam's combined release capacity. The Draft Rule 50.11 specifies that emergency spillways shall have a Q100 minimum inflow design flood regardless of the release capacity of other components of the dam. Such language provides for consistent and conservative design interpretation of this Rule, especially regarding smaller sized structures. Refer to the 2nd Draft Rule for revised text.

12. Comment: Ms. Thatcher commented that she "agrees" with the change from "downstream risk category" to "hazard classification" in the Draft DS-MT Rule. Refer to June 10 letter page 3.

    a. Response: IDWR notes that one objective of the current rulemaking is to revise the rules regarding the use of the term "hazard classification" and to remove references to "risk category" to comply with similar changes made to Idaho Code in 2016.

13. Comment: Ms. Thatcher commented that the Draft DS-MT Rule reduces minimum "inflow design flood" requirements (Refer to Propose Rule 50.11) from the existing rule requirements. In her comment, Ms. Thatcher prepared Table 1c summarizing "the reduced 'Inflow Design Flood' requirement between the Existing DS Rule and the Draft DS-MT Rule." Refer to June 10 letter page 4 – 5.

    a. Response: IDWR agrees that the Draft Rule adjusts some of the enumerated inflow design flood values to represent a range of probability. IDWR disagrees that the proposed revision reduces all "inflow design flood" (“IDF”) requirements. For example, the proposed rule results in an increase in the design requirement by removing Q50 as an accepted value (e.g., low hazard small dam). Specifically regarding IDWR’s removal of the 0.5 Probable Maximum Flood (“PMF”) IDF, IDWR has removed this value for its inherent ambiguity, recognizing that the engineering community does not uniformly interpret this design event or deploy common practices in calculating it. For example, one approach might be to calculate a PMF and then half it, whereas another approach might be to calculate a PMF based on a 50% probable maximum precipitation event. IDWR also notes that Table 1c depicts the lowest design value from the range of design values specified in the Draft DS-MT Rule. This is inappropriate because where the Draft DS-MT Rule specifies a range of design values, the lowest value will not always be used. Refer to IDWR’s response to comment #17.

14. Comment: Ms. Thatcher commented that where the Draft DS-MT Rule "states a range" of inflow design floods (refer to Proposed Role 50.11) the "draft rule would apparently be met by the lowest specified value and so no one should expect that the higher value would ever be enforced." Refer to June 10 letter page 5.

    a. Response: Refer to IDWR’s response to comment #17 which addresses a closely related comment.

15. Comment: Ms. Thatcher commented that the "IDWR must provide the technical justification for the reduced minimum 'Inflow Design Flood' design requirement for new structures in the [Draft DS-MT Rule]." Ms. Thatcher reiterated by stating "[t]here may be valid reasons for reduction of the [flood inflow] design criteria and the IDWR needs to communicate what those reasons are in this rulemaking effort." Refer to June 10 letter page 6. In a related comment on page 13 of her June 10

letter, Ms. Thatcher reiterates the “proposed draft” “reduces [inflow design flood] requirements for new dams.”

a. Response: Existing DS Rule 50.11, titled Release Capacity, specifies IDF values for various new dams depending on the dams "risk category" and "size." Draft DS-MT Rule 50.11, now titled Release Capacity, specifies (1) inflow design flood values for the "release capacity" for various new dams depending on the structure’s "hazard classification" and "size", and (2) a minimum emergency spillway capacity equal to the Q100 inflow design flood plus 2-feet of freeboard plus wave height. Although similar, these rules are not the same for the reasons described.

   IDWR disagrees that the new rule is inadequate. The Draft Rule maintains many of the IDF values from the existing rules (e.g., small significant hazard, intermediate significant hazard, small high hazard, and large high hazard dams).

   The Draft Rule introduces a range of IDFs for select hazard class and dam size types (e.g., intermediate significant hazard, intermediate high hazard, and large high hazard dams). The Draft Rule specifies a range of IDF values for some dam types in recognition that determination of the most appropriate IDF is specific to the structure being evaluated in terms of public safety and population at risk. Other site-specific considerations include the age, physical characteristics, and location of the dam relative to climate and topography, including the type and extent of downstream development.

   The Draft Rule decreases the IDF values for a few select hazard class and dam size types (e.g., large low hazard, large significant hazard, and intermediate high hazard dams). For low hazard dams, the Draft Rule specifies a Q100 IDF value for consistency and simplicity. For large significant hazard and intermediate high hazard dams, the Draft DS-MT Rule moves away from the 0.5 PMF standard for the reasons discussed in IDWR’s response to comment #13.

   Current dam engineering design practice relies on the use of the IDF deemed appropriate for the hazard potential and the overall size of the dam and reservoir. The IDF is the threshold flow above which any incremental increase in the water surface elevation of a flood wave resulting from a catastrophic dam failure will have minor additional influence on risk to population or property damage. The current state of engineering practice recognizes that there must be a site-specific evaluation of “incremental benefit” and “acceptable threat levels.” Otherwise, one could suggest that all dams irrespective of size and hazard class be designed to the PMF IDF. Such argument has never been recognized as practical nor has it been a common engineering practice.

   The PMF is generally reserved for the design of dams where no (zero) incremental consequence of failure is acceptable. Most examples of this type of structure apply to large size, high hazard dams. In the Draft Rule, the PMF applies only to new high-hazard large dams. Similarly, in the Existing DS Rule, the PMF applied only to high-risk large dams—emphasizing that risk is not synonymous with hazard. Additionally, the Draft Rule, just as in Idaho Code and the Existing DS Rule, authorizes the Director discretion to require or accept IDF values different from those set forth in the rule when compelling circumstances exist.

Finally, IDWR reiterates that a range of IDFs does not automatically imply that the "lowest specified value" in the range of values will be the default value and "no one should expect that [a] higher value would ever be enforced." The design engineer and IDWR will evaluate dams, their surrounding conditions, and downstream hazard potential on a case-by-case base to determine the governing IDF. All recommendations offered by the design engineer(s) must be supported by tangible evidence. For example, modeled analysis and results, applicable studies or reports, and other approved designs for dams having similar characteristics.

16. Comment: Ms. Thatcher commented that the wording between Draft Rules 50.11 and 55.07 in the Draft DS-MT Rule "should be made as consistent as possible to avoid confusion." Refer to June 10 letter page 6.

    a. Response: Because IDWR will not combine the DS and MT rules at this time, no responsive change was made to Draft Rule 55. IDWR also notes that it has expanded the draft definition for "IDF" (Draft Rule 10.25) to include terms for both the probability (%) and the corresponding discharge designation "Q" as an effort to reduce confusion and uncertainty. Refer to the 2nd Draft Rule for revised text.

17. Comment: Ms. Thatcher commented, "BY ALLOWING A RANGE OF 'INFLOW DESIGN FLOOD' DESIGN VALUES AND YET NOT PROVIDING CRITERIA FOR REQUIRING VALUES ABOVE THE MINIMUM, FAILS TO ESTABLISH A SCRUTIBLE GUIDELINE FOR THE SAFETY OF NEW DAMS." She also commented that a "range of acceptable 'Inflow Design Flood' Q values" "implies that only the minimum value would be enforceable for new designs or for upgrades to existing dams or mine tailing impoundment structures." Refer to June 10 letter page 6.

    a. Response: IDWR disagrees that a range of IDFs will result in the Director's approval of the "lowest specified value" in the range of values. IDWR further disagrees that the "lowest specified value" in a listed range of values will be the default value and "no one should expect that [a] higher value would ever be enforced." As previously noted in Response 15, the design engineer and IDWR will evaluate all regulated dams on a case-by-case basis to determine the most applicable IDF for a stated range of values. IDWR agrees more clarity will assist reader comprehension, and it has revised Draft Rule 50.11 to include the following sentence. "Where the table specifies an inflow design flood range, the governing inflow design flood shall be determined by the professional engineer in responsible charge of design and IDWR based on a site-specific review of the proposed dam, watershed conditions, and downstream hazard potential." Refer to the 2nd Draft Rule for revised text.

    In further response, IDWR notes Idaho Code identifies the engineer in responsible charge (i.e., design engineer) as the individual ultimately responsible—and potentially liable—for designing a safe dam or mine tailings impoundment structure and providing design considerations which employ industry standards of care to include recent knowledge and education and the application of newly developed technology. Water storage dams and mine tailings impoundment structures are unique given the huge variability imparted due to site location, size, borrow material, climate, topography, population at risk, age, operating instructions, and other potentially important variables. The adage "one size fits all" does not apply to most regulated dams and mine tailings impoundment structures. It follows that

discretion must be allowed the design engineer during design and the IDWR during design review and approval.

18. Comment: Ms. Thatcher commented, "DRAFT RULE NEEDS TO REVISIT HAZARD CLASSIFICATION, PARTICULARLY FOR LONG-LIVED CONTAMINATION POSED BY A MINE TAILINGS IMPOUNDMENT RELEASE." She also commented, “the poisoning and long-term contamination of land (sic) is to use the lowest design criteria for mine tailings impoundment structures.” She also commented, “IDWR should provide hazard criteria that address how long term the poisoning of the environment may be from a release from a mine tailings impoundment structure.” Refer to June 10 letter page 7.

    a. Response: Because IDWR will not combine the DS and MT rules at this time, no responsive change was made to Draft Rule 55.

19. Comment: Ms. Thatcher commented, "DRAFT RULE GIVES LOOPHOLE TO EXISTING MINE TAILINGS IMPOUNDEMNT STRUCTURES FOR TOXIC, TURBID, RADIOACTIVE, OR OTHERWISE HAZARDOUS DISCHARGES." Ms. Thatcher commented, changes in Draft Rule 37.03.05.55.07.d wording from "would not allow" to "approval for construction" between the Existing MT Rule and the Draft DS-MT Rule appear to have effectively "eliminated the requirement to not allow the [sic] impoundment structures that would release toxic, highly turbid, radioactive or otherwise hazardous flows." Refer to June 10 letter page 7.

    a. Response: Because IDWR will not combine the DS and MT rules at this time, no responsive change was made to Draft Rule 55.

20. Comment: Ms. Thatcher commented, "THE DRAFT RULE CREATES CONFUSION ABOUT MINE TAILINGS IMPOUNDMENT DESIGN REQUIREMENTS." Refer to June 10 letter pages 7-8.

    a. Response: Because IDWR will not combine the DS and MT rules at this time, no responsive change was made to the Draft Rule.

21. Comment: Ms. Thatcher commented, "IDWR RULES NEEDS TO DEFINE ITS JARGON, SUCH AS WHAT Q100 MEANS." She also commented, that in referring to various inflow design flood types "IDWR should also acknowledge that estimates of the PMF and Q100, etc. also differ depending on when and how the values were estimated." Refer to June 10 letter page 8.

    a. Response: IDWR has modified Rule 010.25, Inflow Design Flood (IDF) of the Draft DS-MT Rule to define various referenced flood types including the Q100, Q500, and PMF.

22. Comment: Ms. Thatcher commented, "PROBABLE MAXIMUM FLOOD ESTIMATES TEND TO CHANGE OVER TIME, THE RULE OR RULEMAKING EFFORT NEEDS TO PROVIDE GUIDANCE ON SELECTION OF PMP." She also commented that similar concerns exist for 50 year, 100 year, and 500 year inflow design floods. Refer to June 10 letter page 8.

    a. Response: Idaho Code, Section 42-715, the Draft Rule, and IDWR policy places the "the work of construction, enlargement, repair, alteration or removal of a dam, reservoir or mine tailings impoundment structure" under the "responsible charge of a professional engineer." IDWR is careful to avoid potential conflicts of interest that exist or appear to exist if IDWR staff took an active role in designing dams and mine tailings impoundment structures.

    Draft Rule 50establishes that the rules governing design are intended for a "broad range of circumstances" and "engineers should not consider them as restrictions to the use of other

sound engineering design principles." The spirit of the rules in the past has been to avoid being overly prescriptive while maintaining industry recommended technical requirements. IDWR believes the Draft Rule continues in the spirit of past rules in this regard and is hesitant to further prescribe technical requirements such as a detailed prescription of how to calculate a specific inflow design flood.

The PMF is often defined as the maximum runoff generated from the Probable Maximum Precipitation (PMP). Estimates of maximum(s) can vary to some degree based on the model used and the individual performing the analysis. This fact supports IDWR's decision to offer a range of IDFs for design purposes instead of more prescriptive rules that could ignore important watershed factors that might otherwise not have been considered for the dam and site conditions.

23. Comment: Ms. Thatcher commented, "THE DRAFT RULE REDUCES DESIGN REQUIREMENTS, REDUCING SAFETY OF EXISTING DAMS AND MINE TAILINGS IMPOUNDMENT STRUCTURES." She further commented, Rule 55.01.a in the Existing DS Rule was not included in the Draft Rule and this change is a "large reduction in safety which the IDWR must explain and justify." Refer to June 10 letter page 10.

    a. Response: Rule 55.01.a of the Existing DS Rule was not included in the Draft Rule, however, Rule 60.01 in the Draft Rule allows the director to require all "analyses required by Rule 35" including release capability and seismic design analyses. IDWR has determined that some circumstances may justify lesser requirements related to release capability and seismic analysis for certain existing dams and proposes leaving this requirement to the discretion of the Director as to how and when it shall be applied.

24. Comment: Ms. Thatcher commented, "THE DRAFT RULE REDUCES DESIGN REQUIREMENTS, REDUCING SAFETY STANDARDS AND PROVIDES LESS CLARITY CONCERNING THE DESIGN STANDARDS FOR MODIFICATION OF EXISTING DAMS AND MINE TAILINGS IMPOUNDMENT STRUCTURES." She further commented, removal of Rule 55.01.a from the Existing DS Rule "greatly reduces dam and [mine tailings impoundment structure] release capability requirements of existing dams and [mine tailings impoundments structures]." Refer to June 10 letter page 10.

    a. Response: Refer to IDWR's response to the similar comment No. 23.

25. Comment: Ms. Thatcher commented that Rule 60.01.h of the Draft Rule incorrectly references Rules 55.01.a and 55.01.g. Refer to June 10 letter Page 10.

    a. Response: IDWR has updated Rule 60.01.h of the Draft Rule to correctly reference Rules 60.01.a and 60.01.d. Refer to the 2nd Draft Rule for revised text.

26. Comment: Ms. Thatcher commented that Rule 60.01.h of the Draft Rule still references Rule 55.01.a of the Existing DS Rule "even though the draft rule deleted Rule 55.01(a) in the draft rule 60." Refer to June 10 letter page 10.

    a. Response: See response to comment No. 25.

27. Comment: Ms. Thatcher commented, "THE DRAFT RULE DOES NOT ADDRESS THE LONGSTANDING ISSUE OF DAMS (OR MINE TAILINGS IMPOUNDMENT STRUCTURES) THAT DO NOT MEET THE REQUIREMENTS FOR EXISTING DAMS OR STRUCTURES." Refer to June 10 letter pages 10-11.

a. Response: The actions IDWR is authorized to take with dams or mine tailings impoundment structures "that do not meet the requirements for existing dams or structures" is described in Idaho Code and IDWR policy and not in rule. IDWR inspects all regulated dams on a recurring interval to ensure their safe ongoing operation. Following inspections, IDWR Dam Safety Engineers prepare Inspection Reports describing design, operation, maintenance, and repair recommendations. Deficiencies that must be addressed to ensure the on-going safe operation of existing dams are prioritized. Enforcement action may proceed if certain identified safety deficiencies are left uncorrected by the owner.

   Following inspection, upon determining that a "dam or reservoir is safe to impound water or the mine tailings impoundment structure is safe to impound mine tailings slurry," IDWR issues a "Certificate of Approval and Storage Authorization" (Certificate). Refer to Idaho Code, Section 42-1719. If IDWR determines a dam is not safe to impound water it may "revoke any certificate of approval whenever [it] determines that the dam, reservoir or mine tailings impoundment structure constitutes a danger to life and property." *Id*. IDWR may also amend existing Certificates when it "deems such action necessary to safeguard life and property... ." *Id*. Before a Certificate is revoked, the "director shall hold a hearing" in accordance with I.C. Section 42-1701A(1) and (2). *Id*. Interested parties can attend the hearing and "present their views and objections" to the proposed action. *Id*. Any party aggrieved by the issuance of a final order related to the hearing may seek judicial review in a district court. *Id*.

28. Comment: Ms. Thatcher commented, "IDWR needs to provide some criteria for how draft rule 37.03.05.060.01(c)(ii) would be applied." Refer to June 10 letter page 11.

    a. Response: IDWR anticipates Draft Rule 60.01.c.ii will be met by technical analyses conducted by the design engineer and with review by IDWR before approving the design for construction. The only criterion that IDWR is authorized to consider, to the extent required, is the protection of public safety (Idaho Code, Section 42-1710). Acceptable analyses and reports contain site-specific failure postulations and sensitivity analyses that don't lend themselves to broad prescriptive criteria or to be used in rule as example(s) of criteria that would be applied. As a result, IDWR does not propose adding criteria to the rule, in recognition that "one size does not fit all."

29. Comment: Ms. Thatcher commented, "THE RULES LACK A PROCESS FOR ADDRESSING NEW INFORMATION CONCERNING INADEQUACY OF PREVIOUSLY RELIED UPON CALCULATIONS." Refer to June 10 letter page 12.

    a. Response: A process to handle the described concern is not needed in rule because it is already set forth in Idaho Code in sufficient detail for IDWR to implement. Refer to IDWR's response to comment #27 for a general description of the process.

30. Comment: Ms. Thatcher commented "THE DRAFT RULE REDUCES THE SEISMIC DESIGN LOADS TO BE EVALUATED." She also commented, "[i]n the draft rule, it appears that the seismic loads may be reduced by choosing a reduced return interval that is not specified." Refer to June 10 letter page 12

    a. Response: IDWR disagrees that Draft Rule 60.01.d reduces the "seismic design loads." Both Draft Rule 60.01.d and the corresponding existing rule use the same language, "evaluation

shall use the maximum ground motion/acceleration generated by the maximum credible earthquake." However, Draft Rule 60.01.d specifies that dam owners and design engineers can consult the USGS hazard maps to determine maximum ground motion/accelerations to use in designing or evaluating their dam or mine tailings impoundment structure. In some instances, the maximum ground motion from a probabilistic seismic event of given interval may exceed ground motion(s) that result from a deterministic analysis.

31. Comment: Ms. Thatcher commented, "THE DRAFT [RULE] WORSENS THE PROBLEM OF OPEN-ENDED COMPLIANCE PERIODS." She also commented, "…draft rule 37.03.05.060.01 items (f) and (g) allow a completely unspecified, undetermined, [sic] and effectively remove any compliance period from the regulation of existing dams and mine tailings impoundment structures." She further commented, "[w]hy is the new proposed rule making it more difficult for the IDWR to promote timely completion of needed safety structural modifications or improvements"? Refer to June 10 letter pages 12.

    a. Response: IDWR removed the fixed ten-year compliance period due to possible interpretation/litigation that would recognize ten years as the minimum default period before IDWR can take corrective enforcement proceedings, even in situations where life and property may be immediately threatened. In addition, one size does not fit all circumstances and seldom is a single fixed period appropriate for all dams and their accompanying facts. As result, IDWR revised the rule to leave the compliance period discretionary so that the Director can establish a fixed period appropriate for the specific set of facts. This change is consistent with Idaho Code.

32. Comment: Ms. Thatcher commented, "…draft rule [37.03.06.60.01.f and h] says 'dam' and not 'dams and mine tailings impoundment structures' as generally used throughout rule 60. Refer to June 10 letter page 12

    a. Response: Because IDWR will not combine the DS and MT rules at this time, no responsive change was made to Draft Rule 60.

33. Comment: Ms. Thatcher commented, "IDWR should make tracking the status of dam (and mine tailings impoundment structures) inspection recommendations and the completion of those recommendations and any deficiencies easier for the citizens to see. Refer to June 10 letter page 13.

    a. Response: IDWR agrees that transparency in all its businesses including the Dam Safety Program is of critical importance and it is committed to improving transparency. Presently, all but a very limited scope of dam safety related information and data is available to public review upon request. IDWR disagrees this comment should be addressed through the draft rule and this rulemaking process, but rather through an evaluation of its program practices and, if appropriate, modification of some existing policy. IDWR is willing to meet with Ms. Thatcher or others to identify and implement reasonable practices to improve transparency while maintaining necessary levels of security commensurate with the sensitivity of the materials.

34. Comment: Ms. Thatcher commented, "DRAFT RULE 'INFLOW DESIGN FLOW' REQUIREMENTS FOR EXISTING LARGE, HIGH HAZARD DAMS IS INADEQUATE, SEE MACKAY DAM." She also commented that the Draft Rule "eliminates all design criteria for the 'Inflow Design Flood' for existing dams and mine tailings impoundment structures with no explanation whatsoever." She also commented,

"...rule 055.01(a) of the current rules was deleted from the draft rules and this eliminates all requirements for the release capacity of existing dams and mine tailings impoundment structures." Ms. Thatcher further commented, "[t]he current rule requires that for large, high-risk dams, the required design criteria for the dam's release capability was required to be the Probable Maximum Flood." "The draft rule (Rule 60) only requires existing dams to meet the Q100, 100-year flood, no matter the size or hazard of the dam [see Draft 060.01(a)]." "This is a very large reduction in safety which the IDWR must explain and justify. Refer to June 10 letter page 13 - 14.

a. Response: Refer to IDWR's response to the similar comment No. 23.

35. Comment: Ms. Thatcher's June 10 comment letter has numerous facts, discussions, and comments specific to the Mackay Dam located in the Big Lost River Basin in central Idaho and the effect of changes between the Existing DS Rule and the Draft Rule on the Mackay Dam and Reservoir. Refer to June 10 letter pages 6, 9, 10, 11, 13, 14, and 15.

    a. Response: Although Ms. Thatcher's comment related to the Mackay Dam are insightful, IDWR will not respond to her Mackay Dam specific comments and discussions in this forum because they are outside the scope of this rulemaking which applies generally to all dams and not to individual dams, proposed or existing.

**Comments from Lorna Jorgensen's Written Comment Letter on Behalf of Ada County Dated June 16, 2022, and IDWR Responses**

36. Comment: Ada County asked if Draft Rule 001.02.b can be amended to add explanation detailing consideration of coordinated design and review between the state and federal regulators such as FERC.

    a. Response: Idaho Code, Section 42-1710 states, "It is the intent of the legislature by this act to provide the regulation of construction, maintenance and operation of all dams, reservoirs and mine tailing impoundment structures exclusively by the state to the extend required for the protection of public safety." In some instances, IDWR coordinates dam safety inspections and design review of new and existing dams with the Federal Energy Regulation Commission (FERC) and other federal agencies. In addition, many of the large dams in Idaho are owned by Federal agencies. IDWR maintains a cordial and efficient working relationship with federal agencies that are defined through IDWR practices and policies and not through statute or rule. Placing such policy in the rule could prove unwieldy and may result in less cooperation.

37. Comment: Ada County asked if the Emergency Action Plan (EAP) required in draft rules 010.16 and 045 is different from FERC-required emergency action plans.

    a. Response: No, IDWR does not consider there to be a substantive difference between an EAP required as a condition of the FERC Power License or a state-based EAP requirement that is consistent with the rule. IDWR has and will continue to accept FERC EAPs that meet state requirements as sufficient.

38. Comment: Ada County asked, if "engineers are utilized from out of state firms to comply with FERC requirements, are they required to get licensure from the Idaho Board of Licensure"? Also, "[a]re FERC engineers required to be licensed in Idaho.

a. Response: All Engineers in Responsible Charge for a dam must be licensed in Idaho. FERC engineers don't typically need to be licensed in Idaho because they are only reviewing designs and placing conditions on designs not actually conducting the design.

39. Comment: Ada County asked, if "a potential failure mode study has been prepared for FERC by an out of state engineer, does it meet the requirements for potential failure mode"?

    a. Response: Yes. See previous comment #39.

40. Comment: Ada County expressed concern that the rules "do not require any collaboration between the state and federal agencies so depending on the individuals involved, the owners and operators could be placed in a very difficult position."

    a. Response: FERC does not own dams, unlike some other federal agencies, but they are authorized to regulate dams through their power licenses. Although FERC and IDWR have distinct and separate authorities, it is important to note that each jurisdictions' dam safety objectives are generally similar.

       FERC requirements are often more rigorous than state regulation, especially due to the potential inclusion of other federal agencies via the authority of the power license. However, there are times that the state and FERC do not agree on issues. In these instances, the dam owner must comply with the more rigorous requirements of either FERC or IDWR. When reviewing dam designs, IDWR requires the dam owner to submit duplicate copies of all FERC documents. After review of the FERC materials, IDWR may ask FERC to include comments or requirements from the State, which they often oblige.

**Comments from Alan Prouty's Written Comment Letter on Behalf of J.R. Simplot Co. Dated June 16, 2022, and IDWR Responses**

41. Comment: Simplot "recommends that the Department not combine [IDAPA 37.03.05 and IDAPA 37.03.06 into a single rule." Simplot commented that "there are sufficient significant differences between tailings impoundments and other types of impoundments (dams) that it is best to not combine them in a common set of regulations."

    a. Response: IDWR received several comments asking it to reconsider combining the Existing DS Rule and Existing MT Rule. Reasons put forth for not combining the rules included: (1) technical differences between mine tailings impoundment structures (MTIS) and other dams, (2) difficulty in finding consensus with a diverse combined stakeholder group, and (3) merging the rules creates uncertainty in the mining community.

       Combining the rule achieves the objectives of the Governor's Zero-Based Rulemaking Initiative. It reduces redundancy, it cleans up inconsistencies with Idaho Code (e.g., risk categorization), and it reduces regulatory burden by simplifying individual rule complexity and reducing the overall number of rules.

       IDWR views MTIS as a subset of engineering design and construction requirements that also routinely apply to water storage embankment dams. IDWR does not view MTIS as a separate and distinct structure class. Both types are artificial barriers used to store

physical contents. It is worth noting that both dams and MTIS are authorized and described by the same statutes, Idaho Code, Sections 42-1710 to 1721.

The most notable differences between regulating dams that impound water and dams that impound tailings and water are the types of stored content, the required surety (bond), and the extended period over which construction of the facility occurs. Despite these differences however, there exist many more similarities between these structures than differences. Similarities include (1) legal authority, (2) key structural features and their definitions, (3) technical design plans, specifications, and report requirements, (4) emergency action planning requirements, (5) most typical design considerations, (5) most typical construction methods, and (6) similar operation and maintenance requirements. In design consideration alone, the need for adequate foundation support, material properties, slope stability, seismic and hydrologic parameters, failure consequences (hazard classification), monitoring, and enforcement procedures are nearly identical for both type of embankments.

In the first Draft DS-MT Rule, the following rules applied to both dams and MTIS: Rules 000 Legal Authority (19 words), 001 Title and Scope (211 words), 002 Administrative Appeals (39 words), 010 Definitions (1,613 words), 015 Authority to Represent (39 words), 020 Dam Size Classification (148 words), 025 Hazard Classification (254 words), 030 Forms (19 words), 035 Design Reports, Drawings and Specifications (1,536 words), 045 Emergency Action and Operation Plans (204 words), 060 Existing Dams and Mine Tailings and Impoundment Structures (993 words), and 065 Dams Storing Tailings and Water (123 words). Whereas only Rule 050 New Dams and Reservoirs (2,151 words) applies exclusively to new dams and only Rules 040 Mine Tailings Impoundment Structures Bonding (472 words) and 055 New Mine Tailings Impoundment Structures (1,851 words) apply exclusively to MTIS.

By word count, 54% of the words (i.e., 5,198 words) apply to both dams and MTIS, 22% of the words (i.e., 2,151 words) apply only to dams, and 24% of the words (i.e., 2,323 words) apply only to MTIS.

IDWR gave considerable thought to combining the rule both at the outset of the rulemaking and after receiving related written and oral comments opposing the combination of the rules in the first draft rule. Although IDWR thinks a combined rule has 12merit, it will not move forward with a combined rule during the current negotiated rulemaking. Instead, IDWR has prepared two separate draft rules, a MT Draft Rule and a second draft DS Rule, which it plans to publish as proposed rules during the current negotiations.

**Comments from Benjamin Davenport's Written Comment Letter on Behalf of the Idaho Mining Association Dated June 17, 2022, and IDWR Responses**

42. Comment: The Idaho Mining Association (IMA) commented that it has "taken the position that [IDAPA 37.03.05 and IDAPA 37.03.06] should remain separate." The IMA commented that the differences between mine tailings and other impoundments "are vast," and the "design,

construction, maintenance, abandonment and financial assurance requirements, and the contents held behind these dams are distinct."

a. Response: Refer to IDWR's response to related comment No. 41.

**Comments from Will Tiedemann on Behalf of the Idaho Conservation League and Fred Coriell on behalf of Save the South Fork Salmon, Inc. as submitted in their Written Comment Letter Dated June 17, 2022, and IDWR Responses**

43. Comment: The Idaho Conservation League (ICL) and the Save the South Fork Salmon, Inc. (SSFS) jointly requested that "IDWR prepare a public document summarizing the technical and material changes of the proposed rule compared to the two existing rules." They further requested that "[w]here technical or material changes to the existing rules are reflected in the proposed rule, the document should provide justification for such changes."

    a. Response: IDWR has prepared several documents responsive to this comment, which it has posted to its Mine Tailings Impoundment Structures and Dam Safety Rulemaking website (link). Responsive documents include the Preliminary Draft Rule (Strawman v1.0); a summary document titled Comparison of Existing IDAPA 37.03.05 and Existing IDAPA 37.03.06 Rules dated May 3, 2022, which compares the existing rules section by section; a summary comparison spreadsheet titled IDAPA 37.03.05 and 37.03.06 Rule Comparison Matrix dated May 23, 2022; and copies of all IDWR drafting work products prepared in development of the Strawman v1.0.

    In addition to the documents, IDWR is willing to host additional negotiation meetings where stakeholders can ask specific questions pertaining to "technical and material changes of the proposed rule compared to the two existing rules." Beyond these described resources, IDWR is at a loss for what additional materials are needed to carry out the rulemaking. Further, IDWR believes it has met and exceeded its statutory obligations in this rulemaking.

44. Comment: The ICL and SSFS observed that the Existing MT Rule required a Certificate of Approval recertification every two years (refer to existing 37.03.05.10.13), while the proposed rule "no longer carries [a two-year recertification] requirement and [recertification] appears to be valid indefinitely." The ICL and SSFS go on to ask IDWR, how the benefits of the previous two-year recertification process will still be met under the new rule.

    a. Response: IDWR notes that the two-year recertification requirement was only included in the Existing MT Rule and not in the Existing DS Rule. Certificates of Approval are issued following an inspection. Idaho Code, Section 42-1717 requires "all dams or mine tailings impoundment structures regulated by the department shall be inspected at least once every five (5) years… ." IDWR dam safety policy has been to inspect high hazard dams more frequently than five years.

45. Comment: Regarding new Rule 55, formerly IDAPA 37.03.05.45, the ICL and SSFS comment, that proposed rule [55].01.f and g, changes instrumenting embankments or foundations from a requirement (i.e., "will") to discretionary (i.e., "may"). They ask IDWR for "supporting justification" for the change.

a. Response: Some regulated dams and mine tailings impoundment structures are not deserving of unique instrumentation. When issuing a Certificate, IDWR may include specific conditions requiring instrumentation and monitoring to help assure the continued safe operation of the dam or mine tailings impoundment structure.

46. Comment: Regarding new Rule 55, formerly IDAPA 37.03.05.45, the ICL and SSFS comment, that proposed rule [55].02.a, changes the regulatory requirements for sizing the top width of the embankment. They ask IDWR for "supporting justification" for the change.

    a. Response: Because IDWR will not combine the DS and MT rules at this time, no responsive change was made to Draft Rule. Further, the draft MT Rule does not change the current requirement.

47. Comment: Regarding new Rule 60, formerly IDAPA 37.03.06.55, the ICL and SSFS comment, that proposed rule 50.01, no longer requires "dams classified as large, significant, or high risk to comply the requirements previously set forth in IDAPA 37.03.06.50.11. They ask IDWR for "supporting justification" for the change.

    a. Response: The term “risk” is used incorrectly in the existing rules. A 2016 legislative revision to Idaho Code replaced the word “risk” with “hazard”. Consequently, IDWR is proposing with the new rules to examine the consequence of failure (i.e., hazard) in relationship to the corresponding risk that each structure may pose to downstream life and property. To do so correctly, IDWR must examine a range of flood scenarios before recommending to the design engineer the most appropriate value on which to base their design. For further discussion see IDWR response to Ms. Thatcher’s comment #23.

48. Comment: Regarding Draft Rule 60.01.g, formerly existing DS Rule 55.01.g, the ICL and SSFS comment, that the proposed rule replaces a ten-year fixed period to complete "requisite studies and any required hydraulic or seismic modifications" with "no specific time limits or period," but with the revised authority for IDWR to set a "compliance schedule." They ask IDWR for "supporting justification" for the change.

    a. Response: See IDWR response to Ms. Thatcher’s comment #31

49. Comment: Regarding Draft Rule 65.01, formerly existing DS Rule 65.01, the ICL and SSFS comment that the requirements for the construction of dams "intended or likely" to store 50 acre-feet or more of water in excess of the water contained in the tailings materials has been modified by removing "or likely" from the proposed DS-MT Rule 65.01. They ask IDWR for supporting justification for the change.

    a. Response: The inclusion of a speculative term such as “likely” may offer a contrary interpretation of a design that has been prepared by a professional engineer and approved by IDWR for the intended volume (i.e., storage). Therefore, IDWR has removed the term “likely” as judging it both unnecessary and potentially confusing.

50. Comment: The ICL and SSFS comment that they "support and incorporate by reference the questions and comments submitted by Tami Thatcher on June 10, 2022."

    a. Response: Please review IDWR response to Ms. Thatcher’s comments, numbers 1-35