



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
LAND USE PLANNING COMMISSION
22 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0022

AMANDA E. BEAL
COMMISSIONER

STACIE R. BEYER
EXECUTIVE DIRECTOR

JANET T. MILLS
GOVERNOR

Memorandum

To: LUPC Commissioners
From: Tim Carr, Senior Planner
Stacie Beyer, Executive Director
Billie Theriault, Regional Supervisor
Date: February 2, 2024
Re: Application for Zone Change, ZP779A, Wolfden Mt. Chase LLC, Pickett Mountain
Metallic Mineral Mine, T6 R6 WELS

Introduction

At the Commission's February 14 regular business meeting, the Commission will discuss matters relating to the Application for Zone Change, ZP779A, filed by Wolfden Mt. Chase LLC (Wolfden or Applicant). The first matter for discussion is the request for delay submitted by Wolfden in a letter dated January 19, 2024 (Attachment B). In that letter, Wolfden requests that the Commission delay final deliberations and action on ZP779A. Wolfden also asks that the Commission hold an additional deliberative session on its application. If, after considering Wolfden's requests, the Commission decides to proceed with its final deliberation and action on the application, the staff is prepared to present its recommended decision document.

Administrative History

On January 18, 2023, Wolfden Mt. Chase LLC filed an application with the Commission to rezone 374 acres in T6 R6 WELS from a General Management to a Planned Development (D-PD) subdistrict. The proposed D-PD subdistrict would allow for the development and operation of the Pickett Mountain metallic mineral mine. On February 24, 2023, the Commission accepted the application as complete for processing.

The application is subject to and is being reviewed under the Commission's Chapter 12 rules (Mining and Level C Mineral Exploration Activities). 01-672 C.M.R. Chapter 12, effective May 27, 2013. Chapter 12 requires the Commission to hold a public hearing prior to a final decision on the application. The public hearing was held on October 16, 17, and 18 in Millinocket and on October 23 in Bangor.

Pursuant to § 5.10(B) of the Commission’s Chapter 5 rules, Rules for the Conduct of Public Hearings, the hearing record remained open for public comment by interested persons for ten days (through November 2, 2023) following the final hearing session, and for a subsequent seven days (through November 9, 2023) for the filing of rebuttal comments. The record of the hearing is now closed.

Wolfden Mt. Chase LLC’s Request to Delay and Intervenor Replies

In the letter dated January 19, 2024 (Attachment B), Wolfden requests that the Commission delay final action on ZP779A until the Legislature confirms the Franklin and Oxford County nominees to the Commission. Wolfden also asks that the Commission hold an additional deliberative session on the application after the Franklin and Oxford nominees are confirmed but before the Commission considers a staff-prepared draft decision document. Wolfden argues that delaying final action and having a second deliberative session is needed to maintain the independence and integrity of the Commission and allow all relevant Counties an opportunity to participate in the deliberation and decision. In the letter, Wolfden raises concerns about the recent Legislative committee proceedings relating to the nominations of Tom Dubois (Franklin County) and Lee Smith (Oxford County) to the Commission. Wolfden contends that the Joint Standing Committee on Agriculture, Conservation and Forestry’s conduct during the nomination hearing violated the separation of powers mandated by article III, sections 1 and 2 of the Maine Constitution.

In a letter dated January 25, 2024 (Attachment C), Intervenor 2, the Houlton Band of Maliseet Indians, Penobscot Nation, Natural Resources Council of Maine, Conservation Law Foundation, and Maine Audubon, replied to Wolfden’s request. Intervenor 2 asks that the Commission deny Wolfden’s request to indefinitely delay a decision on ZP779A. Intervenor 2 contends that there is no merit to Wolfden’s argument that the Legislature violated the separation of powers by exercising its statutory obligation to confirm or reject nominees. Intervenor 2 argues that the Commission should not insert itself in the legislative confirmation process by indefinitely delaying action on Wolfden’s application until new Commissioners are confirmed.

In a letter dated January 29, 2024 (Attachment D), Intervenor 1, H.C. Haynes, also responded to Wolfden’s January 19 letter. Intervenor 1 supports Wolfden’s requests for a delay and another deliberation on ZP779A. In the letter, Intervenor 1 states that Franklin and Oxford Counties should be represented during the deciding vote on the application and that a deliberation session with participation by all Commission members would allow for a more complete discussion of the deliberation material and provide clearer direction on a recommended decision. Intervenor 1 does not see the request to delay the proceeding until the Franklin and Oxford County seats are confirmed as an “indefinite” delay, but rather a short delay that would not prejudice any party and allow for a fairer process.

Discussion

As to Wolfden’s separation of powers arguments, article III, section 1 of the Maine Constitution divides government “into 3 distinct departments, the legislative, executive and judicial.” Article III, section 2 of the Maine Constitution then establishes Maine’s heightened separation of powers: “No person or persons belonging to one of these departments, shall exercise any of the powers properly belonging to either of the others, except in the cases herein expressly directed or permitted.”

Wolfden contends that delay is necessary to counteract what it characterizes as “inappropriate [legislative] interference” in the Commission’s rezoning proceedings for ZP779A. Although

Commissioners may have concerns about the recent legislative proceedings, the Commission is not empowered to judge the propriety of legislative committee nomination hearings, nor is it authorized to determine whether a legislative committee has complied with legislative rules. Holding a public hearing on nominations to the Commission and voting on such nominations are the exclusive province of the Legislature. 3 M.R.S. §§ 155-158; 12 M.R.S. § 683-A(2).

The Commission's role is to fulfill its specified statutory duties, including reviewing and issuing decisions on requests for permits, certifications, and applications for zoning changes. As stated in the Commission's Comprehensive Land Use Plan (CLUP), the Commission exercises "its authority fairly, responsibly, and with consideration to the interests of landowners, within the framework provided by its legal mandate." CLUP, p. 29. The CLUP recognizes a need for the Commission to consider proposed rezonings in a timely and equitable manner. CLUP p. 128. And, the Commission's Use Regulation statutes—namely, 12 M.R.S. § 685-A(7-A)(B)(4)—require the Commission to act on a request to adopt and amend land use standards, such as Wolfden's application, within 90 days of the closure of the public hearing. This statutory deadline will expire on February 19, 2024.

"Notwithstanding any law to the contrary, a vacancy on an elected or appointed body does not in itself impair the authority of the remaining members to act unless a statute, charter or ordinance expressly prohibits the body from acting during the period of any vacancy and does not in itself affect the validity of any action no matter when taken. 1 M.R.S. § 71(3). No statute or Commission rule expressly prohibits the Commission from acting during a period of vacancy. Instead, according to the Commission's Use Regulation statute, a quorum of the Commission for the transaction of business is five members. 12 M.R.S. § 684. Additionally, the Use Regulation statutes provide:

Whenever the commission is required or empowered to conduct a hearing pursuant to any provision of law, the hearing may be held and conducted by the commission or by any member of the commission or by any qualified employee or representative of the commission as the commission chair may determine. If the hearing is conducted by a *single commissioner or qualified employee or representative*, the commissioner, employee or representative shall report the findings of fact and conclusions to the commission together with a transcript of the hearing and all exhibits. The findings of fact and conclusions become a part of the record. The commission is not bound by the findings or conclusions when acting upon the record, but shall take action, issue orders and make decisions as if it had held and conducted the hearing itself. 12 M.R.S. § 684 (emphasis added).

With the statutory provisions for vacancy, a quorum, and conducting a hearing, the Legislature has expressly contemplated that the Commission will proceed with its business even though Commission members may need to be absent from a meeting or hearing, which is often the case. It is not unusual for at least one Commissioner to have a conflict requiring an absence. As long as there is a quorum for a business meeting or at least one representative at a hearing, the Commission can and does conduct its business.

The Commission has been reviewing the Wolfden petition for over a year, held an extended public hearing, and has deliberated on the application. Having nine seated Commissioners would provide an opportunity for all relevant Counties to be heard and improve the chances that the Commission will have the required five members in support of a motion for an action to be taken. However, delaying the vote beyond the February meeting would not comply with the statutory requirement for the Commission to act on rezoning applications within 90 days of the close of the record. Because the

Applicant has requested the delay, it has waived its right to object should the Commission fail to issue a decision within the 90-day statutory timeframe. Nevertheless, delaying the final action is not required for the Commission to make an equitable decision in this matter. The Commission routinely conducts its business with fewer than nine members present and voting, and an extended delay may not be considered timely by other interested persons and parties in this matter. Regarding a second deliberation, as requested by Wolfden, staff notes that the Commission deliberated on this matter at its December 13, 2023 meeting. In addition, the Commission will have time to deliberate, as needed, before a vote on the final action. The staff is not convinced that another separate deliberation would be helpful.

Due to the sensitive and precedent-setting nature of the request made by the Applicant, the Chair requested that the matter be referred to the full Commission for a decision. Staff recommends that the Commission rule on the request to delay final action before considering further action on the application. In summary, a ruling is needed on whether to delay final deliberations and action until and hold an additional deliberative session on ZP779A after the Legislature confirms the Franklin and Oxford County nominees to the Land Use Planning Commission.

Commission Final Action

Should the Commission vote to move forward on final action at the February meeting, the staff will present its recommended decision document (Attachment E). In accordance with the CLUP policies pertaining to mineral resources, the Commission has conducted a rezoning procedure that broadly considered impacts and benefits, competing uses, and public values. Beyond the limited topics addressed in the public hearing, the record addresses and staff have analyzed an extensive range of relevant impacts and benefits. The draft decision document focuses on the key topics relevant to the recommended decision.

Review Criteria

The statutory decision-making criteria for zone change applications are found in 12 M.R.S. § 685(A)(8-A) and state that a land use district boundary may not be adopted or amended unless there is substantial evidence that:

- A. The proposed land use district is consistent with the standards for district boundaries in effect at the time, the comprehensive land use plan and the purpose, intent and provisions of this chapter; and
- B. The proposed land use district has no undue adverse impact on existing uses or resources or a new district designation is more appropriate for the protection and management of existing uses and resources within the affected area.

Analysis

Staff have reviewed the record for Wolfden's rezoning application and considered the arguments, testimony, and evidence submitted by the parties, interested persons, and members of the public. The staff has also incorporated in its analysis guidance provided by Commissioners during the deliberative session on December 13, 2023, regarding the weighing of factors and evidence in this matter. The full analysis is contained in the attached decision document. Primarily based on giving the most weight to draft findings that the project does not represent environmentally responsible mining (Finding 221); that there are overriding, conflicting public values that require protection,

particularly the high-value water resources surrounding and downgradient of the Project Area (Finding 222); and that the Project will have an undue adverse impact on water resources (Finding 108); staff recommends findings that the application is not consistent with the Comprehensive Land Use Plan nor Ch. 206-A. Specifically, in light of the draft findings, the project is not consistent with the purpose and scope provided by statute as it would not represent “sound planning, zoning and development” and would not be consistent with the Commission’s statutory charge to “support ... Maine's natural resource-based economy and strong environmental protections;” prevent “commercial and industrial uses detrimental to the long-term health, use and value of” the areas within the Commission’s jurisdiction; “prevent the despoliation, pollution and detrimental uses of the water in these areas; and ... conserve ecological and natural values.”

Staff Recommendation

As detailed in the draft decision document, staff recommends that the Commission deny the application submitted by Wolfden Mt. Chase LLC to rezone a portion of its property to a Planned Development subdistrict for the purpose of developing the Pickett Mountain metallic mineral mine.

Attachments:

Attachment A: Location Map

Attachment B: Letter from Wolfden Mt. Chase, dated January 19, 2024

Attachment C: Letter from Intervenor 2, dated January 25, 2024

Attachment D: Letter from Intervenor 1, dated January 29, 2024

Attachment E: Staff’s Recommended Decision Document

Attachment A

Location Map

Fig. 1-1 from ZP 779A Application for Zone Change

LAND USE PLANNING COMMISSION APPLICATION FOR ZONE CHANGE
PICKETT MOUNTAIN METALLIC MINE, T6 R6 WELS, PENOBSCOT COUNTY

January 2023

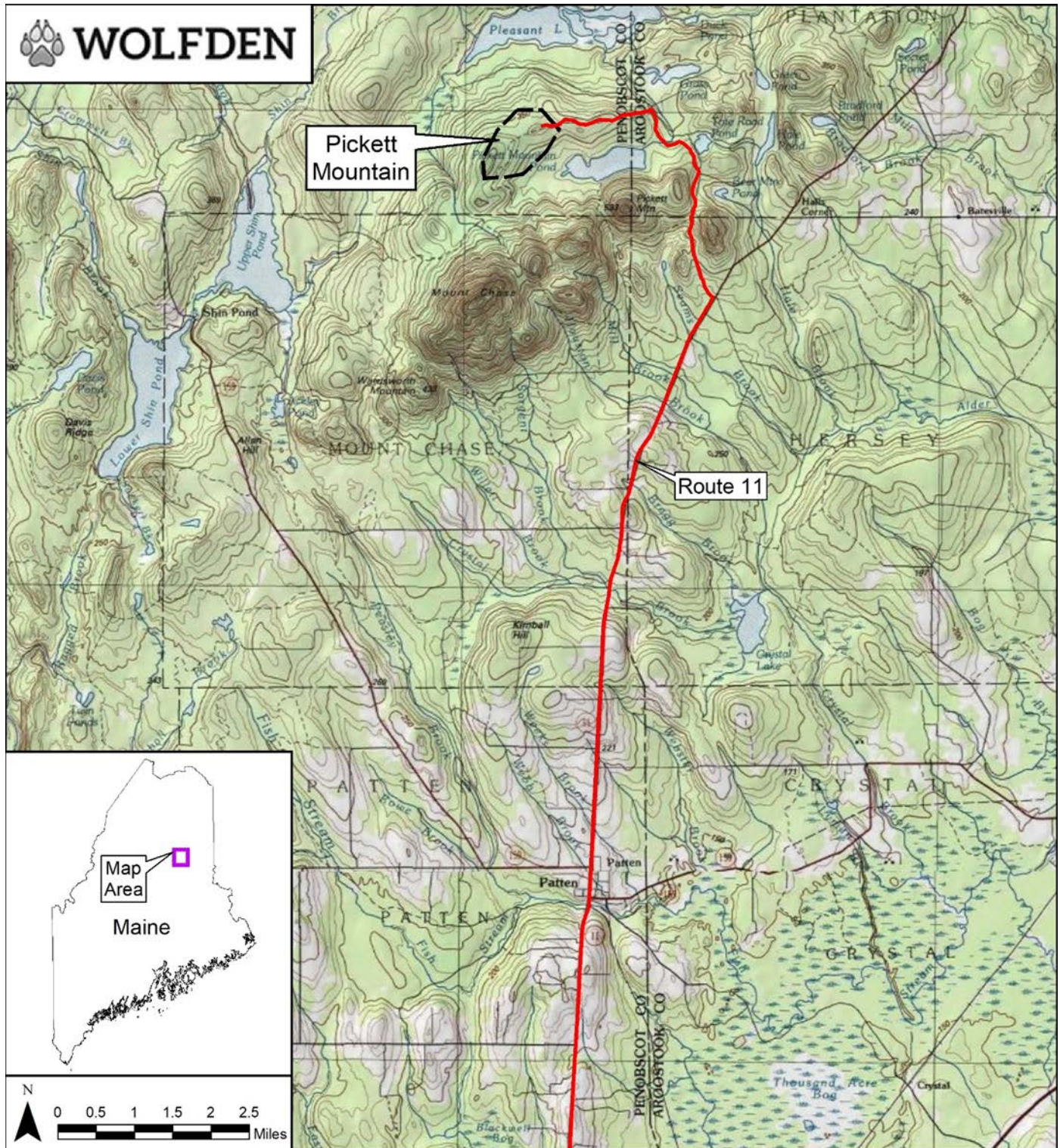


Figure 1-1: Project Location and Access



Attachment B

Letter from Wolfden Mt. Chase LLC

January 19, 2024

JULIET T. BROWNE
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Verrill Dana, LLP
One Portland Square
Portland, ME 04101-4054
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January 19, 2024

Via E-Mail

Stacie R. Beyer, Executive Director
Land Use Planning Commission
22 State House Station
Augusta, Maine 04333-0022

Re: Wolfden Rezoning Petition, ZP 779A, Wolfden Mt. Chase LLC, Pickett Mountain
Metallic Mineral Mine, T6 R6 WELS

Dear Ms. Beyer:

On behalf of the Applicant, Wolfden Mt. Chase, please find our request to delay final deliberations and action on the rezoning petition (the “Petition”) until such time as the Franklin County nominee for the Land Use Planning Commission (the “Commission”) is confirmed and Commissioner Smith of Oxford County is either confirmed for a second term or her replacement is confirmed.¹ This action is required to maintain the independence and integrity of the Commission and allow all relevant Counties to participate in the deliberations and ultimate decision.

We are deeply troubled by the inappropriate Legislative Committee action to reject the Franklin County nominee because they did not want him to participate in this proceeding, and the role Intervenor 2 played in that outcome. To protect the integrity of the Commission process, we believe the Commission should hold an additional deliberative session and take final action on the Petition after the Franklin County and Oxford County nominees are confirmed. This would ensure that all Commissioners are able to participate in deliberations, including nominees from both Franklin and Oxford counties, as well as the Presiding Officer, who was not able to attend the first deliberative session. This application is the first mining project proposed under Maine’s new mining law, and the first application to be reviewed pursuant to the Commission’s Chapter 12 rules, which are inextricably connected to Maine Department of Environmental Protection’s Chapter 200 mining rules. The process Maine uses for evaluating this project will

¹ Prior to expiration of her term on November 4, 2023, Oxford County reappointed Commissioner Smith to serve a second term. Her confirmation hearing is scheduled for January 22, 2024. Intervenors objected to Mr. Dubois’ participation on the basis he was not present for the public hearing. It is not clear whether they will make the same argument in Ms. Smith’s confirmation hearing, as she was not able to be present for the hearing, or whether the Committee will reject her nomination because she was not present for the hearing.

set a precedent for any future mining proposal. It is critical that the process be beyond reproach, and that each of the counties in the Commission's jurisdiction be afforded a voice in the decision. Additionally, because no action (either for or against the proposal) can be taken except upon an affirmative vote of at least five Commissioners, it is important that all nine Commissioners be able to participate to ensure that requirement can be met. 12 M.R.S. § 684.

By way of background, Thomas Dubois was appointed by the Franklin County Commissioners in August, 2023 to serve as a Commissioner. The qualifications for county appointments include (i) expertise in commerce and industry, fisheries and wildlife, forestry or conservation issues as they relate to the Commission's jurisdiction, and (ii) residence or work in the Commission's jurisdiction. 12 M.R.S. § 683-A(2). There is no dispute that Mr. Dubois is qualified to serve. Moreover, he was ready to begin his service in early September last year, following expiration of Mr. Gilmore's term in August 2023.² He met with you at that time, was asked to begin to review the record, and since then has been reviewing the record in this proceeding.³ Although he could have been confirmed prior to the public hearing on the Wolfden petition, his confirmation hearing did not occur until January 8, 2024.⁴

Under applicable legislative rules, the Joint Committee on Agriculture, Forestry and Conservation (the "Committee") should have limited public testimony on Mr. Dubois's nomination to his qualifications. Joint Rules 131st Maine Legislature, Rule 504 ("At the hearing, the committee shall take written or oral testimony *limited* to relevant comments and questions regarding the *qualifications* of the nominee") (emphasis added). Instead, the Committee took testimony on and asked questions of the nominee about his views on the Petition and mining generally, going so far as to ask the nominee his view of the pros and cons of rezoning the Pickett Mountain Mine and requesting that he share his "personal feelings around mining, or mining in that location or mining on the national level."⁵ Intervenor 2 representatives each testified in opposition to his nomination. Their testimony focused on concerns with the Wolfden project and the belief that Mr. Dubois should be recused from participating in this proceeding. In its testimony before the Committee CLF argued that only Commissioners present for the hearing should be allowed to participate.⁶ In fact, there is no requirement that a Commissioner be present at a public hearing to participate in the decision as long as she or he reviews the record. CLF also suggested that all the remaining eight Commissioners were present for the public hearing.⁷ Indeed, Commissioner Ellsworth was present for only a portion of the hearing; Commissioner Smith was not present for any portion of the hearing; and Commissioner Billings was not present but reportedly watched the hearing live as it was broadcast. We appreciate that you corrected CLF's blatant misrepresentation.

Despite broad consensus by the public, the Committee, and even Intervenor 2 representatives that Mr. Dubois was qualified to serve, the Committee voted along party lines to

² See video recording of the Mr. Dubois' January 8, 2024 confirmation hearing ("Confirmation Hearing") at 9:41-9:43:50. The video recording is accessible here:

<https://legislature.maine.gov/Audio/#214?event=89956&startDate=2024-01-08T09:30:00-05:00>.

³ Confirmation Hearing at 9:50-9:52:54.

⁴ Confirmation Hearing at 9:57:29-9:58:30.

⁵ Confirmation Hearing at 9:56:00-9:57:00.

⁶ Confirmation Hearing at 10:44:00-10:47.

⁷ Confirmation Hearing at 10:47:00-10:48:00.

deny his appointment because they did not believe he should participate in this proceeding. The Committee's action is a violation of the separation of powers mandated by the Maine Constitution, which provides that the legislative, executive, and judicial powers are to be kept separate. Me. Cons., art. III, §§ 1, 2. As the Law Court has stated, "[t]he constitutionally mandated separation of powers forbids precipitous injunctive interference with the legitimate ongoing executive function." *Bar Harbor Banking & Trust Co. v. Alexander*, 411 A2d 74, 77 (Me. 1980) (concluding that a temporary restraining order issued to restrain a state agency from holding a hearing pursuant to a state statute violated separation of powers principles because such "interference with apparently legitimate executive department activity not only disrupts the administrative process but also encourages the circumvention of statutorily authorized [administrative activities]"). Administrative agencies of the executive branch are "accord[ed] . . . the deference to which a co-equal branch of our state government is entitled." *New England Outdoor Center v. Comm'r of Inland Fisheries and Wildlife*, 2000 ME 66, ¶ 10, 748 A.2d 1009 (quoting *Kuvaja v. Bethel Sav. Bank*, 495 A.2d 804, 806 (Me. 1985)). The Legislature has the right, within bounds, to determine the qualifications of persons appointed to hold administrative office, however, it cannot act arbitrarily. *In re Maine Clean Fuels, Inc.*, 310 A.2d 737, 750-51 (Me. 1973) (concluding that the composition of an administrative board was proper where commissioners were selected based on statutorily defined qualifications). The Committee's action here, which is the direct result of Intervenor 2's lobbying efforts, constitutes an inappropriate interference with a pending quasi-judicial proceeding in violation of the separation of powers.⁸

Finally, while there may be no legal prohibition on intervenors lobbying against the confirmation of a nominee, those efforts were intended to influence a specific project and, absent the relief requested here, will interfere with a pending quasi-judicial proceeding. We would expect an intervenor to raise a recusal argument in the context of the proceeding. Instead, it was used in the political arena to prevent a person qualified to serve on the Commission from doing so and from participating in this proceeding. Maintaining the integrity of the Commission process and ensuring that representatives from each of the relevant counties has a voice can only be achieved by scheduling a second deliberative session and taking final action on the Petition after the Franklin County and Oxford County nominees are confirmed.

Thank you for consideration of this request.

Sincerely,



Juliet T. Browne

⁸ This is not the first time Intervenor 2 resorted to legislative action to impact the course of this proceeding. When the Presiding Officer denied their request to hold a public comment session in Bangor, Second Procedural Order at 7, Intervenor 2 lobbied legislators to sign a petition requesting a public comment session in Bangor, which was then granted. Letter from Legislators to LUPC dated Sept. 14, 2023; Notice of Public Hearing dated Sept 22, 2023. Five of the seven Committee members who voted against Mr. Dubois' nomination also signed the petition requesting an additional public comment session in Bangor.

January 19, 2024

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cc: Service List (via email only)
Jeremy Ouellette (via email only)

Attachment C

Letter from Intervenor 2

January 25, 2024

**STATE OF MAINE
LAND USE PLANNING COMMISSION**

IN RE: PICKETT MOUNTAIN MINE REZONING APPLICATION

Applicant: Wolfden Mt. Chase LLC

Location: T6R6 WELS

Commission Application Number: ZP 779A

**INTERVENOR 2 AND MAINE AUDUBON'S RESPONSE TO WOLFDEN'S REQUEST
TO DELAY THE COMMISSION'S VOTE ON ITS APPLICATION**

Submitted by

**HOULTON BAND OF MALISEET INDIANS, PENOBSCOT NATION, NATURAL
RESOURCES COUNCIL OF MAINE, CONSERVATION LAW FOUNDATION, AND
MAINE AUDUBON**

The LUPC should deny Wolfden's request to indefinitely delay a decision on its rezoning application. Wolfden's legal argument for delay is meritless—the Legislature did not and cannot violate the separation of powers by exercising its statutory obligation to confirm or reject two nominees to the LUPC—and the actions of the Legislative Committee and the Intervenor 2 groups and Tribes with respect to the confirmation hearings have been legitimate and appropriate. Furthermore, Wolfden's claim that "integrity" requires indeterminate delay until two Commissioners can be confirmed rings hollow because Wolfden never sought to delay the public hearing on its rezoning application or the December 2023 deliberation meeting despite knowing that one of the Commission seats was and would likely remain vacant through those events. The Commission should not insert itself into the legislative confirmation process by indefinitely delaying action on Wolfden's application until new Commissioners are confirmed.

Wolfden provides no valid reason for the LUPC to abandon its current schedule and violate its own rules, which require it to act on Wolfden's application by February 19, 2024—90 days after the "final closure of the hearing." LUPC Rule 4.05(E)(4)(b).¹ Wolfden argues that indefinite delay is warranted because the Legislative Committee violated the separation of powers by questioning Franklin County's nominee, Mr. Thomas Dubois, about recusal from this proceeding, and by ultimately voting not to recommend his confirmation.

Wolfden's separation of powers argument is incorrect. Maine's Constitution provides that no one belonging to one branch of the tripartite government "shall exercise any of the powers properly belonging to either of the others." Me. Const. art. III, §§ 1, 2. But the power to confirm nominees to the LUPC lies squarely with the Legislature. 12 M.R.S. § 683-A. The Legislature's exercise of that legislative power here did not usurp any power belonging to the LUPC, which is an executive agency, or in any way prevent the LUPC from freely acting on Wolfden's rezoning application or exercising any of its other statutory duties. Suffice it to say, it is *not* one of

¹ "Final closure of the hearing" occurred on November 21, 2023, when the parties submitted their post-hearing briefs. See Fourth Procedural Order, at 5 ("Post-Hearing Briefing/Closure of Record for the Parties: November 21, 2023"); LUPC Rule 5.10(E).

LUPC’s statutory duties to determine who the Legislature should, or should not, confirm to be LUPC Commissioners.

Wolfden does not cite *any* case decided since Maine became a state in 1820 in which the Law Court held that the Legislature violated separation of powers by exercising its statutory obligation to confirm or reject a nominee to an agency, a court, or any other state body. Moreover, the primary case Wolfden cites does not support its argument. In *Bar Harbor*, the Court held that it was improper for a court to block an administrative agency from holding a lawful public hearing. *Bar Harbor Banking & Tr. Co. v. Alexander*, 411 A.2d 74, 78 (Me. 1980). But here, the Legislature has not blocked the Commission from carrying out any of its statutory duties. There was no separation of powers violation.²

In fact, Wolfden’s request turns the separation of powers principle on its head by asking an executive agency (LUPC) to adjudicate legal complaints concerning, and to take actions designed to impede or control, the legislative process. Wolfden asks the LUPC: (1) to serve as a judicial arbiter of Wolfden’s claim that the Legislative Committee violated its operating rules and unlawfully declined to confirm Mr. Dubois; and (2) to suspend the Commission’s performance of its own statutory duties as a means of coercing the Legislature to effectuate Wolfden’s desired outcome. While the Legislature has not stepped outside its constitutionally authorized role, Wolfden invites the LUPC to do just that.

Further, while Wolfden complains that representatives of the Intervenor 2 groups and Tribes should not have participated in the confirmation hearings and asked for Mr. Dubois to recuse himself from this proceeding,³ there is nothing wrong with representatives of Intervenor 2—like any other member of the public—expressing their organization’s or Tribe’s views or concerns to Maine’s citizen Legislature about any bill or nomination.

Finally, although Wolfden now insists that all activity on its application must halt until the Franklin and Oxford County nominees are confirmed, this request rings hollow given that Wolfden did not ask the Commission to delay the public hearing on its application despite being made aware, well in advance, that it was unlikely the vacant Franklin County seat would be filled before the hearing.⁴ Likewise, Wolfden did not ask the LUPC to delay its December 13, 2023,

² Wolfden’s other case citations likewise provide no support for its claim. In *New England Outdoor Center v. Commissioner of Inland Fisheries and Wildlife*, 748 A.2d 1009 (Me. 2000), the Court held simply that certain discretionary agency actions are not subject to judicial review—a holding with no apparent relevance here. In *In re Maine Clean Fuels, Inc.*, 310 A.2d 736, 750-51 (Me. 1973), the Court held that the statutory criteria for membership on an administrative board were not arbitrary—another inapplicable holding.

³ See Confirmation Hearing of Thomas Dubois at 10:29:00-11:00:50 (Jan. 8, 2024), available at <https://legislature.maine.gov/audio/#214?event=89956&startDate=2024-01-08T09:30:00-07:00>. Wolfden wrongly asserts that the Conservation Law Foundation’s representative made a “blatant misrepresentation” during the confirmation hearing. CLF’s representative stated, in response to a committee member question, that it was his “understanding” that all sitting Commissioners were present, in-person or remotely, for the hearing on Wolfden’s rezoning application. See *id.* at 10:47:00-10:48:15. While his understanding was incorrect, this mistake was immaterial, as the LUPC’s Executive Director provided the Committee with a clarification before the Committee voted on the nomination.

⁴ On September 12, 2023, the LUPC’s Senior Planner emailed the Service List stating that it was “unlikely” that the Franklin County seat would be filled before the hearing, as the nominee still needed to go through a confirmation

deliberation session, even though the Franklin County seat remained vacant, nor did Wolfden withdraw its application to wait for all LUPC vacancies to be filled. Rather, Wolfden raised no concern over vacancies until the eve of a final vote, after Commissioners had already raised probing questions during the deliberations. Wolfden's current position cannot be reconciled with its prior silence, or with the LUPC requirement that the Commission act on Wolfden's application by February 19, 2024. LUPC Rule 4.05(E)(4)(b).

For all of these reasons, Intervenor 2 respectfully requests that the LUPC deny Wolfden's request to delay this proceeding, and instead proceed in the normal course regarding its rezoning application.

Dated: January 25, 2024

Respectfully Submitted,



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of Maliseet Indians, and Natural Resources
Council of Maine*

process, which the Legislature had not yet scheduled. While Wolfden now claims that this confirmation could have happened sooner, the Legislature was out of session over the summer and early fall, and was not scheduled to return until December 2023, further illustrating that confirmation was not likely before the hearing.

Attachment D

Letter from Intervenor 1

January 29, 2024

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
LAND USE PLANNING COMMISSION

IN THE MATTER OF ZONING)
PETITION ZP 779A)
WOLFDEN MT. CHASE, LLC)
APPLICATION FOR ZONE CHANGE,)
PICKETT MOUNTAIN MINE)
T6 R6 WELS,)
PENOBSCOT COUNTY, MAINE)

Full Commission Attendance:

Intervenor 1 believes that it is important that for a project of this magnitude, both Franklin and Oxford counties be represented at deliberations and for a deciding vote on the Pickett Project. It has been the argument by Intervenor 2 since the proceedings started that more than just the local voices should be heard as this project could affect Maine as a whole. We believe this argument justifies having all commissioners present for deliberations and a final decision, including the presiding officer as well as the Franklin County and Oxford County nominees. In addition, a second deliberation with participation by all commissioners would allow a more complete discussion of the deliberation material prepared by staff and provide clearer direction on a recommended decision.

Intervenor 2's Argument Against the Applicants Request is Incorrect:

It is the role of the Legislature to review and confirm (or not confirm) nominees, but they are required to do so on the basis of the nominee's qualifications. That is not what occurred during the confirmation hearings for Mr. Thomas Dubois and Ms. Lee Smith. Instead, Intervenor 2

testified on the specifics of the Pickett Project and sought to prevent a qualified nominee from serving solely because they did not want him to participate in a decision on this project. As a result, the Legislature has directly interfered with a pending proceeding by withholding their approval of two nominees who were indisputably qualified to serve. The Constitution does not sanction such a result.

While Intervenor 2 correctly notes that the power to confirm LUPC nominees lies squarely with the Legislature, that power is not absolute. Where, as here, the Legislature has refused to confirm two nominees for no other reason than the impact of their confirmation on this proceeding, that goes beyond their power and the effect here may well be to prevent the Commission from carrying out its statutory duties. We also disagree with Intervenor 2's characterization of Wolfden's request as one requesting the Commission take action to determine that the Legislative Committee violated its rules and unlawfully declined to confirm Mr. Dubois, or that it is a means of "coercing" the Legislature to effectuate a desired outcome. To the contrary, the request is simply to postpone a decision until such time as both Franklin and Oxford counties have confirmed nominees so that any further deliberations and decisions are made with all commissioners in attendance. We do not view that as an indefinite delay as suggested by Intervenor 2, but rather a short delay with a second deliberative session. Finally, a short delay will not prejudice any party but will allow for a fairer process.

Deliberation Ignored Local Voices:

Being a life-long resident of Millinocket and northeastern Maine, it was both a surprise and disheartening to those who have been long time residents in the area of the project, where there is clear and overwhelming support for the project, that strong local support was never considered or

even mentioned by the Commissioners during the December 8th deliberation. It is a mandate of the LUPC to give greater consideration to the local area most affected by the Project, and this clearly did not occur during the rather limited December 8th deliberation.

During Deliberation, Commissioners Ignored Staff Recommendation for Process and Consideration:

To assist the Commissioners deliberation, the staff had prepared and published a comprehensive discussion guide to lead them through the six major topics of the hearing. The staff highlights the points that weighed in favor or against an approval, and in each of the six categories, the most important factors all weighed in favor of a rezoning. Instead of allowing the staff to lead the Commissioners through this discussion methodically, those clearly against the project steered the conversation away from the guide and Chapter 12 rezoning criteria and focused on non-rezoning criteria such as financial feasibility to construct the entire project and their opinions that the project simply could not be built without environmental harm, all DEP Chapter 200 issues, and left little time for a thorough discussion of each of the categories.

In addition to interjecting non rezoning issues, some Commissioners openly stated that they did not trust the DEP to make accurate assessment of the environmental risks. This sets a terrible precedent of undermining another regulator in the State, and ironically the one who has set the highest standard of environmental protection in the country when it comes to mining and has significant expertise and staff resources to ensure a complete analysis of the data.

Intervenor 1 believes that another deliberation, without a time limit, and with all Commissioners in attendance, that follows the staff's proposed deliberation guide is appropriate and necessary.

Dated: January 29, 2024



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Attachment E

ZP 779A Staff's Recommended Decision
Document



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
LAND USE PLANNING COMMISSION
22 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0022

AMANDA E. BEAL
COMMISSIONER

STACIE R. BEYER
EXECUTIVE DIRECTOR

COMMISSION DECISION
IN THE MATTER OF

Wolfden Mt. Chase LLC

Findings of Fact and Decision

AMENDMENT A TO ZONING PETITION 779

The Maine Land Use Planning Commission (LUPC or Commission), at a regular business meeting held February 14, 2024, after reviewing the rezoning application, supporting materials provided, and testimony given by Wolfden Mt. Chase LLC (Wolfden or Applicant) for Amendment A to Zoning Petition ZP779 (Application); materials submitted and testimony given by intervenors and the public; public comments; agency and consultant review comments; and other related materials on file pursuant to 12 M.R.S. Sections 681 *et seq.* and the Commission's Land Use Standards and Rules, finds the following facts:

- Applicant and Landowner:* Wolfden Mt. Chase LLC
Attn: Mr. Jeremy Ouellette, Vice President of Project Development
20 Main Street
Patten, Maine 04765
- Complete for Processing Date:* February 24, 2023
- Location:* T6 R6 WELS, Penobscot County, Maine
Maine Revenue Service (MRS) Map PE009, Plan 01, Lot 2; 7,135 acres
- Current Zoning:* General Management Subdistrict (M-GN), 350 acres
Shoreland Protection Subdistrict (P-SL2), 24 acres
- Proposed Zoning:* Planned Development Subdistrict (D-PD), 374 acres (Project Area)
- Dates of Public Hearing:* October 16 – 18, 2023 in Millinocket
October 23, 2023 in Bangor
- Date Public Hearing Record Closed:* November 21, 2023
- Waterbodies and Flowing Waters:* Pickett Mountain Pond, Pleasant Lake, Mud Lake, and the West Branch Mattawamkeag River are entirely or partially within the parcel owned by Wolfden but outside of the area proposed for rezoning. Huntley Duck Pond, Grass Pond, Tote Road Pond,

Bear Mountain Pond, Hale Pond, Green Pond, and the eastern shoreline of Upper Shin Pond, are located outside of Wolfden's parcel but within 3 miles of the Project Area.

Project Summary

9. Wolfden proposes to rezone 374 acres from General Management (M-GN) and Shoreland Protection (P-SL2) subdistricts to a Planned Development (D-PD) subdistrict to allow for developing and operating a metallic mineral mine for zinc, lead, copper, silver, and gold on its property in T6 R6 WELS (Project). The mine would extract approximately 1,300 tons per day of ore, which would be transported offsite for beneficiation and tailings storage. The location of the ore processing and storage facilities is not provided in the Application, and Wolfden indicated that a final determination for siting of this infrastructure would be made later in the development of the Project should the Commission approve the requested rezoning. The Project includes aboveground infrastructure, requiring 129 acres of cleared area, as well as underground tunnels, excavations, and infrastructure. Of the total cleared area, approximately 31 acres is proposed for development of impervious mine facilities. Mined ore and waste rock would be brought to the surface and temporarily stored on impermeable lined pads with leachate and stormwater collection systems directing water to a pre-treatment storage pond and then to a treatment plant utilizing various filtration methods, primarily reverse osmosis. Mine water would be collected in a series of sumps, pumped to the surface pre-treatment storage pond, and then pumped to the treatment plant. Treated water would be stored in a post-treatment pond for testing and, if it meets water quality standards, discharged to the site through spray irrigation/ snowmaking systems or returned to the mine for use in excavation.
10. Aboveground infrastructure would include an office building, emergency services, security, electrical infrastructure, an equipment maintenance/ repair shop, equipment storage, fuel and explosive storage, mine ore handling, a cemented backfill plant, and water treatment/ discharge systems. Underground development would include a portal and ramp to access the ore deposit and act as a haulage route, lateral tunnels to connect the ramp to the ore deposit, a vertical shaft, and ventilation shafts. The ramp, tunnels, and shafts would be used to provide ventilation and exhaust, distribute electricity, compressed air, and process water, dewater the mine, and provide mine escape routes. Additional underground infrastructure would include mine safety refuge stations, water collection sumps and pumping stations, electrical distribution substations, material storage areas, washroom facilities, temporary rock storage areas, ore crushing and sorting areas, and explosives storage.
11. Wolfden proposes to install a new electrical transmission line to provide power for the Project. Versant Power, a regulated electric transmission and distribution utility, provided planning for the route which would run 8.8 miles along Route 11 from an electrical substation located near Patten and then extend 4.4 miles along a gravel access road that intersects with Route 11, across lots owned by H. C. Haynes, Inc, and/or by Lakeville Shores, Inc., to a substation at the Project area. Generators for backup electrical supply would be installed next to the substation. To provide a portion of the Project's power needs, Wolfden also proposes a 47-acre solar energy facility within the Project Area.
12. Wolfden forecasts a 10-15 year Project life, including construction, operations, and reclamation/ remediation phases. During operations, Wolfden proposes to use cemented rock fill to backfill voids created during mining. A proposed concrete batch plant would use reject water from the

water treatment plant in mixing cement with waste rock and material brought from off-site to produce the backfill. Reclamation would involve removal of all above- and below-ground infrastructure except for any needed for environmental monitoring, grading to restore original contouring, the addition of overburden and topsoil, and revegetation. The duration of post-closure ground and surface water monitoring would be determined during permitting based on the requirements of the Department of Environmental Protection's Chapter 200, *Metallic Mineral Exploration, Advanced Exploration and Mining* rules, 06-096 C.M.R. Ch. 200, last revised December 28, 2017, (Chapter 200).

Administrative History

13. On January 27, 2020, Wolfden initially submitted ZP779 for the Pickett Mountain Mine project. ZP779 proposed to rezone 600 acres (per a revised application submitted September 1, 2021) on the parcel in T6 R6 WELS to a D-PD subdistrict to allow for developing a metallic mineral mine, concentrator (beneficiation) facility, and tailings management facility. Wolfden withdrew ZP779 on October 13, 2021.
14. On January 18, 2023, Wolfden submitted a new application for zone change for the Pickett Mountain Mine project, ZP 779A, with a modified proposal (see Finding 9). The Executive Director had deemed the application to be a project of "substantial public interest," pursuant to Commission rule, Chapter 4, *Rules of Practice*, 01-672 C.M.R. Ch. 4 (November 1, 2021 revision¹; Chapter 4), § 4.04(B)(4). LUPC staff accepted the application as "complete for processing" on February 24, 2023.
15. In early May 2023, LUPC staff requested review comments from state agencies and contracted reviewers and sought consultation with the Penobscot Nation, Houlton Band of Maliseet Indians, the Mikmaq Nation, and the Passamaquoddy of Pleasant Point and Indian Township.
16. On June 7, 2023, the LUPC posted initial notice of the required public hearing, including information on filing petitions to intervene, in the Bangor Daily News and the Houlton Pioneer Times, and through the State GovDelivery email notification system.
17. Pursuant to the Commission Chapter 5 rule regarding public hearings, *Rules for the Conduct of Public Hearings*, 01-672 C.M.R. Ch. 5 (November 1, 2021 revision; Chapter 5) § 5.03(A), two petitions to intervene were timely filed, one from H. C. Haynes, Inc., in support of the Application (Intervenor 1), and one from the Penobscot Nation, Houlton Band of Maliseet Indians, Natural Resources Council of Maine, and the Conservation Law Foundation in opposition (Intervenor 2). These requests were granted by the Presiding Officer in the First Procedural Order, issued on July 18, 2023.
18. The first prehearing conference was held July 28, 2023, in Bangor, Maine, with representatives of the Applicant and Intervenor groups participating in person and remotely. During the conference, the topics for the public hearing were discussed, and in the Second Procedural Order, issued on August 25, 2023, the Presiding Officer determined the topics to be addressed at the public

¹ Chapter 4 was last revised August 11, 2023. Wolfden's Application for Zone change was complete for processing prior to the August 11, 2023 rule change; therefore, the Application was evaluated under the November 1, 2021 revision.

hearing. The Second Procedural Order designated financial practicability; water and fish resources/aquatic habitats; wildlife resources/habitats; natural character; historical and cultural resources/relevant tribal impacts; and socioeconomics as the hearing topics. The Second Procedural Order also addressed a request received on July 18, 2023, from Maine Audubon, a conservation non-profit, requesting interested person status pursuant to 01-672 C.M.R. Ch. 5 § 5.03(B). The Second Procedural Order granted the request for interested person status, and consolidated Maine Audubon with Intervenor 2 pursuant to Ch. 5 § 5.03(A)(1).

19. The LUPC provided additional notices of the public hearing on September 20, 2023, in the legal section of the Houlton Pioneer Times; on September 22, 2023, in the legal section of the Bangor Daily News and through the State GovDelivery system; and on September 27, 2023, in the legal sections of the Houlton Pioneer Times and Bangor Daily News.
20. On October 16 through 18, 2023, the Commission held hearing sessions at Stearns Jr./Sr. High School in Millinocket, including technical sessions, at which the Applicant and Intervenor presented testimony and evidence subject to cross examination, and public sessions, at which members of the public submitted testimony. An additional session of public testimony was held October 23, 2023 at the Cross Insurance Center in Bangor. Ten days after the Bangor hearing, on November 2, 2023, the record closed to public comments, and one week after that, on November 9, 2023, the record closed to rebuttal comments. The Applicant and Intervenor submitted post-hearing briefs on November 21, 2023, at which point the record was closed.
21. At its regular business meeting on December 13, 2023, at Jeff's Catering in Brewer, the Commission held a deliberation session on ZP 779A.

Existing Site Conditions, Surrounding Resources, and Uses

22. *Project Area:* The Project Area generally consists of forested upland that has been logged in the past decade and is in various stages of vegetative regrowth.
 - a. *Roads.* The Project Area includes existing land management roads used for past timber harvesting. These roads connect to a network of land management roads on Wolfden's property outside of the Project Area and on the surrounding parcels.
 - b. *Existing Development.* There is no existing development in the Project Area other than land management roads.
 - c. *Soils and Slope.* Desktop and field surveys conducted by Wolfden's consultants indicate that the Project Area contains soils that are generally suitable for development and soils with limited suitability. Soil limitations include shallow bedrock conditions and areas with a seasonal high-water table. Slopes in the Project Area range from 2.5% to 13%. A divide runs approximately southwest to northeast through the Project Area, separating drainage to Pickett Mountain Pond on the easterly side, from drainage to Pleasant Lake on the westerly side.

- d. *Wetlands*. There are several large, forested wetland inclusions in the Project Area and many smaller wetlands throughout. During surveys conducted on behalf of Wolfden, seven vernal pools and two potential vernal pools were identified.
 - e. *Water Features*. The Project Area contains ephemeral, intermittent, and perennial streams.
 - f. *Special Natural Areas and Significant Wildlife Habitat*. No special natural areas or rare botanical features have been observed in the Project Area. Desktop analysis by a Wolfden contracted botanist indicated “low to very low potential to support rare or exemplary botanical resources” based on a review of the available ecological site data, landscape position, and past disturbances from forestry operations. The Maine Natural Areas Program (MNAP) indicated that there are no rare botanical features mapped for the Project Area. The Maine Department of Inland Fisheries and Wildlife (MDIFW) identified no significant wildlife habitat within the Project Area. Critical Habitat for Canada lynx and Atlantic salmon overlaps with the Project Area, and there is the potential for the Project Area to host listed bat species.
 - g. *Cultural and Historical Features*. Phase 0 archaeological surveys of the Project Area conducted on behalf of Wolfden in 2020 and 2022 indicated 5 areas that are sensitive for the presence of Native American archaeological sites. These are generally sites containing a type of rock outcropping used in making stone tools, along with one potential habitation site. According to Wolfden, the Project Area is not considered sensitive for the presence of Euroamerican archaeological resources, and the Project Area outside of the identified archaeologically sensitive areas is considered to be unlikely to contain Native American archaeological sites.
 - h. *Aquifers*. The Project Area does not contain a high yield sand and gravel aquifer, nor a high yield bedrock aquifer.
23. *Surrounding Waterbodies and Flowing Waters*: Pickett Mountain Pond, Pleasant Lake, Mud Lake, and the West Branch Mattawamkeag River are entirely or partially within the parcel owned by Wolfden but outside of the area proposed for rezoning. The eastern shoreline of Upper Shin Pond, Huntley Duck Pond, Grass Pond, Tote Road Pond, Bear Mountain Pond, Hale Pond, and Green Pond are located outside of Wolfden’s parcel but within 3 miles of the Project Area. Pleasant Lake, Mud Lake, and Grass Pond are designated Heritage Fish Waters by the MDIFW. There is an unmaintained boat launch on the south shore of Pleasant Lake that, based on anecdotal evidence and communications with the nearest camp resident, as provided by Wolfden, is used an estimated ten times per month with a maximum of two to three uses per day at peak times.
24. *Additional Surrounding Resources and Uses*:
- a. *Public Lands*. There are no public lands within 3 miles of the Project Area.
 - b. *Commercial Operations and Timber Harvesting*. Wolfden’s land surrounding the Project Area is generally forested upland which is currently leased for timber harvesting. Wolfden proposes that this land will remain a resource for lumber and wood fiber production. Land abutting Wolfden’s parcel is now or formerly owned by Aroostook Timberlands, LLC;

Cassidy Timberlands, LLC; Gardner Land Company, Inc.; H. C. Haynes, Inc.; and Lakeville Shores, Inc., and is managed for timber production. Other than commercial forestry activities, there are no businesses within 3 miles of the Project Area.

- c. *Recreational Uses.* There are no snowmobile or All-Terrain Vehicle (ATV) trails within the Project Area. Wolfden's property outside of the Project Area currently contains ATV and snowmobile trails that connect to trails on adjacent parcels. Under Wolfden's proposal, the property outside of the Project Area would remain open for recreational uses such as ATV riding, snowmobiling, hunting, and fishing. The surrounding parcels are also currently open to those recreational uses. Wolfden estimated the level of use for the ATV trails on the property as 500 trail riders per month from spring to fall and 700 trail riders per month for snowmobiles in the winter. There are no public campsites within 3 miles of the Project Area. A summit trail to Mount Chase, a small mountain, (elevation 2,440 feet), located near the Project Area, is approximately 2 miles south of the Project Area.
- d. *Residential Uses.* There are six seasonal camps around Pleasant Lake approximately 1 mile to the north of the Project Area. Two of these residences are located near the southern shore of the lake, and four are located along the northern shoreline. There are no residences associated with Pickett Mountain Pond. There are approximately 20 residences located along the eastern shore of Upper Shin Pond, approximately three miles from the Project Area.
- e. *Aquifers and Water Supplies.* A medium yield sand and gravel aquifer has been mapped along the north shore of Pleasant Lake, approximately 1.5 miles from the Project Area. All six seasonal residences around Pleasant Lake likely have private water supplies. There are no other known private or public water supplies within a 3-mile radius of the Project Area.

Rules of Practice

Notice of Filing Requirements for Applications

Criteria

- 25. Notice of filing as provided in Chapter 4, Sections 4.04(B)(3)(a)(2) and (3), is required for applications for zone changes, such as this one. Chapter 4, § 4.04(B)(3)(a)(1). According to Chapter 4, § 4.04(B)(3)(a)(2), a notice of filing for zone change applications must be provided to any person who has requested to be notified of the proposal, all persons owning or leasing land within 1000 feet of the proposal, and the county if the proposed project site is in an unorganized township.
- 26. Pursuant to Chapter 4, § 4.04(B)(4)(b) and (c), Projects of Substantial Public Interest must meet additional requirements for notice, including providing notices by certified mail, providing notice to the legislators whose districts encompass the project area, and publishing notice in the legal section of an appropriate newspaper at least 25 days and at least seven days before filing the application.
- 27. The provisions of Chapter 4, § 4.04(A)(3)(b) also allow the Commission to require additional notice in any other manner it deems appropriate.

Commission Analysis

28. Wolfden provided notice of filing by certified mail to the Penobscot County Commissioners and to the legislators [State Representatives Donald Ardell (District 6) and Kathy Javner (District 29), and State Senator Harold “Trey” Stewart (District 2)], whose districts encompass the project area on January 11, 2023. Although all land within 1,000 feet of the project area is owned by Wolfden and not leased to any other parties, as a courtesy Wolfden provided notice of filing by certified mail to 12 nearby landowners and lessees on January 11, 2023. Wolfden published a notice of filing in the legal section of the Houlton Pioneer Times on December 21, 2022, in the legal section of the Bangor Daily News on December 22, 2022, and in the legal sections of both papers on January 11, 2023.
29. LUPC staff provided notice of filing on January 19, 2023, by updating the periodic list of applications received to include ZP 779A, and on January 20, 2023, by publishing a project specific webpage dedicated to the Application, issuing a press release, and sending email notice of the rezoning application over the State GovDelivery system to the subscribers of the Wolfden Pickett Mountain Mine LUPC topic list. On February 24, 2023, LUPC staff provided notice of the Application’s acceptance as ‘complete for processing’ by issuing a press release, including sending it by email to the subscribers of the Wolfden Pickett Mountain Mine LUPC topic list.

Commission Finding

30. Based on the evidence in the record and the above analysis, the Commission finds that Wolfden’s application for zone change was properly noticed consistent with the applicable sections of Chapter 4, §§ 4.04(B)(3)(a)(1) and (2); and 4.04(B)(4)(b) and (c).

Notice Requirements for Public Hearings

Criteria

31. 12 M.R.S. § 685-A(7-A)(B) states that adoption and amendment of district boundaries and land use maps are rule-making procedures subject to the requirements of 5 M.R.S., Chapter 375, Subchapter II, except for the specifically listed provisions in that section of the statute.
32. 12 M.R.S. § 685-A(7-A)(B) also states that the commission shall give notice of hearings to amend district boundaries, by mail, to appropriate state and federal agencies and the owners of directly affected and abutting properties. If the number of owners of directly affected and abutting properties is more than 50, notice may instead be by publication conforming to the requirements for newspaper publication of hearings under 5 M.R.S., Chapter 375, Subchapter IV.
33. Pursuant to *Mining and Level C Mineral Exploration Activities*, 01-672 C.M.R. Ch. 12 (May 27, 2013 revision; Chapter 12), Section 4(A), the Commission must hold at least one public hearing that is in accordance with Chapter 5 of the Commission's Rules, on a petition for a D-PD subdistrict designation for the purpose of metallic mineral mining.
34. Chapter 4, § 4.04(B)(5)(a) and (b) require that notice of hearings be provided at least 30 days prior to the hearing by regular postal mail to the applicant; persons owning or leasing land within 1,000 feet of the proposed project; the County, if the propose project site is in an unorganized

township; the legislators whose districts encompass the project; intervenors; persons who have made timely requests to be notified of a specific hearing or project; persons who have filed a written request to be notified of all hearings; appropriate State and federal agencies; and by publication in the legal notices section of a newspaper of general circulation in the area affected by the application.

Commission Analysis

35. The Commission published an initial notice of public hearing to set a deadline for intervenor requests. The notice was published in the Houlton Pioneer Times and the Bangor Daily News, sent electronically via the State GovDelivery system, and via postal mail to all required persons on June 7, 2023. The Commission provided further notice of the public hearing on the following dates: on September 15, 2023 by mail, email, and the State GovDelivery system; on September 20, 2023 by publication in the legal section of the Houlton Pioneer Times; on September 22, 2023 by publication in the legal section of the Bangor Daily News and the State GovDelivery system; and on September 27, 2023 in the legal sections of the Houlton Pioneer Times and Bangor Daily News.

Commission Finding

36. Based on the evidence in the record and the above analysis, the Commission finds that the public hearing for ZP 779A was properly noticed consistent with the applicable sections of Chapter 4, §§ 4.04(B)(5)(a) and (b) and 12 M.R.S. § 685-A(7-A)(B).

Title, Right, or Interest

Criteria

37. 12 M.R.S. § 685-B(2)(D) requires that the application forms for approval, as provided by the Commission, must be completed and signed by the applicant and must be accompanied by evidence of sufficient right, title, or interest in all of the property that is proposed for development or use.
38. Under Chapter 4, § 4.05(A)(3) and unless otherwise provided by law, the Commission will not accept an application as complete for processing unless and until the applicant demonstrates, to the Commission's satisfaction, legally enforceable title, right or interest in all the property proposed for development or use sufficient to evaluate the proposed development and use of the property, including closure and post closure care, where required.

Commission Analysis

39. The area proposed for rezoning is located wholly within a lot (Maine Revenue Service Map PE009, Plan 01, Lot 2) owned by the Applicant. Wolfden submitted in Attachment 3-A of the Application a signed deed from Sylvan Timberlands, LLC, dated November 13, 2017, and recorded in Book 14672, Page 27, at the Penobscot County Registry of Deeds. This deed grants Wolfden legal ownership of Plan 01 Lots #2 and #7 in T6 R6 WELS, Penobscot County, Maine.

40. In addition to development of the rezone area, Wolfden proposes to use and upgrade roads crossing lands owned by H. C. Haynes, Inc. (Moro Plantation, MRS Map ARP09, Plan 01, Lot 1) or Lakeville Shores, Inc. (Moro Plantation, MRS Map ARP09, Plan 01, Lot 3; Hersey Plan 03, Lot 1) and to install utility lines in the rights-of-way of these roads. The Applicant submitted an *Easement Deed* recorded in Penobscot County Registry of Deeds, Book 6000, Pages 29 – 34, in which H.C. Haynes, Inc. and Lakeville Shores, Inc. grant the Applicant an uninterrupted easement corridor across these lands from State Route 11 to the Applicant’s lot. The easement is a perpetual easement and grants Wolfden the following rights, among others: the right to use the roads for all purposes of ingress and egress, including for transportation of ore, minerals, related supplies, and materials for mine development; the right to construct, upgrade, maintain, and repair the roads and associated bridges, culverts, grades, and ditches; the right to flow water onto the Grantors’ lands; and the right to erect, construct, maintain, repair, rebuild, and operate electrical and telecommunication lines under, on, and above the easement strip.

Commission Finding

41. Based on the recorded deeds and easements, the Commission finds that the Applicant has demonstrated, to the Commission’s satisfaction, legally enforceable title, right, or interest in all the property proposed for rezoning, development, or use in accordance with 12 M.R.S. § 685-B(2)(D) and Chapter 4, § 4.05(A)(3).

Review Criteria, Analysis, and Commission Findings

Introduction

A land use district boundary may not be adopted or amended unless there is substantial evidence that the proposed land use district is consistent with the standards for district boundaries in effect at the time, the comprehensive land use plan and the purpose, intent and provisions of Chapter 206-A, and there is substantial evidence that the proposed land use district has no undue adverse impact on existing uses or resources or a new district designation is more appropriate for the protection and management of existing uses and resources within the affected area. 12 M.R.S. § 685-A(8-A) of the Commission’s statute; and restated in Chapter 10 § 10.08(A) of the Commission’s *Land Use Districts and Standards*, 01-672 C.M.R. Ch. 10 (December 30, 2022 revision; Chapter 10) and in Chapter 12 § 4(B)(1) and (2).

42. The Commission conducted a broad review of ZP 779A, including consideration of the following factors under the applicable consistency and no undue adverse impact standards: financial practicability and technical feasibility; regional economic viability, Maine’s natural resource-based economy, and local, regional, and state socioeconomics; transportation and traffic; recreation and recreational resources; the potential for future reclamation and beneficial use of the Project Area; public services, utilities, and existing infrastructure; impacts on forest resources, historic and cultural resources, wildlife and plant habitats, wetlands, scenic resources, natural character, water resources, and air quality; noise and blasting; public health, safety, and general welfare; soil suitability; solid waste and sewage disposal; and the Project’s development plan. This decision document does not detail evidence, analysis, and findings on every factor. Instead, the analysis below presents those factors the Commission found most relevant and weighed against one another in making its decision on ZP 779A.

No Undue Adverse Impact – Water Resources

Criteria

43. 12 M.R.S. § 685-A(8-A)(B); Chapter 10, § 10.08(A)(2); and Chapter 12 § 4(B)(1)(b) require that a land use district boundary may not be adopted or amended unless there is substantial evidence that the proposed land use district boundary has no undue adverse impact on existing uses and resources.
44. Chapter 12, § 4(B)(2)(a) states that when reviewing a petition to change a subdistrict to the D-PD subdistrict for the purposes of metallic mineral mining and applying the statutory criteria, the Commission shall consider the following factors: ... “[p]ositive and negative impacts upon the areas within and adjacent to the Commission’s jurisdiction resulting from the change in use and development of the area. Such impacts may include, but are not limited to, impacts to regional economic viability, Maine’s natural resource-based economy, local residents and property owners, ecological and natural values, recreation, and public health, safety, and general welfare...”
45. Chapter 12, § 4(B)(3)(d) states that when reviewing a petition to change a subdistrict to the D-PD subdistrict for the purposes of metallic mineral mining and applying the statutory criteria for approval, the Commission shall consider the following potential impacts:... “[p]otential impacts to existing uses and natural resources including, but not limited to: forest resources; historic sites; wildlife and plant habitats; scenic resources; water resources; and recreation resources.”
46. Chapter 12, § 4(B)(3) also states that when “determining whether any adverse impact associated with the proposed rezoning is an undue adverse impact on existing uses or resources, the Commission shall consider the potential for a metallic mineral mining...permittee to avoid, minimize, or mitigate to the extent permitted by law, a potentially adverse impact so that the resulting impact is not an undue adverse impact.”

Existing Water Resources and Potential Impacts

47. Wolfden has developed a conceptual plan for the Pickett Mountain Mine that avoids direct, physical alteration of water bodies and wetlands. Under the proposed plan, new mine infrastructure would be sited at least 75 feet away from delineated wetlands, streams, and vernal pools. The most significant concerns raised by Intervenor 2, interested persons, and the public, relate to the potential impacts metallic mineral mining could have on groundwater and surface water quality and quantity and associated adverse impacts to water bodies, wetlands, and the aquatic organisms that depend on those resources (collectively water resources).
48. According to Wolfden, the Project is not located near a high-yield aquifer. A medium-yield sand and gravel aquifer is mapped along the north shore of Pleasant Lake (approximately 1.5 miles from the Project Area). Ex. 2.1, Application, Fig. 10-4, p. 10.24, PDF p. 309.² Wolfden states that

² Throughout this document, record evidence is referred to by its exhibit (Ex.) number and an abbreviated title. The exhibit number reflects the location of the evidence in both the paper and digital project records. The list of exhibits is included in Attachment A to this document. When an exhibit’s internal pagination differs from the digital PDF file

there are no public water supplies within three miles of the Project. Seasonal residences identified in the area are likely to have private water supplies, potentially sourced by groundwater wells. The closest seasonal residence is approximately 1 mile from the Project Area. Ex. 2.1, Application, pp. 10.2 and 16.6, PDF pp. 287 and 731.

49. A wetland and watercourse delineation of the Project Area was completed in June 2022. Twenty-nine wetlands, twenty-seven watercourses, eight vernal pools, and two potential vernal pools were identified during the survey. Ex. 2.1, Application, Attachment 6-A, PDF pp. 103-251. Based on maps provided by Wolfden, ten lakes (Upper Shin Pond, Pleasant Lake, Mud Lake, Huntley Pond, Duck Pond, Pickett Mountain Pond, Grass Pond, Tote Road Pond, Bear Mountain Pond, Hale Pond, and Green Pond) are located within 3 miles of the Project Area. Ex. 2.1, Application, Figure 10-1, p. 10.21, PDF p. 306. The Project Area is east and south of the West Branch of the Mattawamkeag River, which flows to Pleasant Lake, Mud Lake, Duck Pond, Rockabema Lake, and other downstream resources along the river. The Mattawamkeag River proper forms from the confluence of its East and West branches in Haynesville, approximately 30 miles southeast of the Project, then flows just over 50 miles southwest to the Penobscot River. Ex. 2.1, Application, Attachment 25-A, p.3, PDF p. 1069.

Potential for Adverse Water Quality Impacts

50. There was substantial testimony during the public hearing on how acid rock drainage (ARD) is generated and the potential for ARD from the proposed Pickett Mountain Mine, including the testimony of Dr. Jim Finley on behalf of Wolfden and Dr. Ann Maest on behalf of Intervenor 2. Mining mineralized rock exposes the surface of sulfide minerals to air and creates the potential for acid generation. ARD occurs from oxidation and dissolution of sulfide-bearing minerals and may generate low pH contact water. The record shows that ARD can be generated in a mine from exposed mine walls, water contact with ore and waste rock in surface storage areas, and dust washing off infrastructure and vehicles. The record also shows that acid can dissolve minerals and leach metals from rock surfaces.
51. Wolfden conducted tests analyzing rock samples from the Project Area in order to assess the potential for ARD and summarized the results as follows:

The Research Productivity Council Report (Ex. 2.1, Application, Attachment 10-B, PDF pp. 400-405) details the results of analyzed rock samples from the Project Area and an assessment of the potential for existing rock to influence acid rock drainage from Project operations. Generally, non-mineralized rock outside of the Pickett Mountain mineral deposit (i.e., rock excavated during development) is non-acid generating and carries some neutralizing potential. Each sample collected greater than approximately 100 feet away from the mineral deposit had “Non-Acid Generating” results. Most of the infrastructure and mine development is planned in this area further than 100 feet from the mineral deposit for geotechnical considerations, and this will significantly reduce the potential for acid rock drainage in contact waters. Three of the samples closest to the mineral deposit (bearing some sulfide minerals) were found to be potentially acid rock drainage producing, as expected. Ex. 2.1, Application, p. 10.4, PDF p. 289.

52. Dr. Ann S. Maest, Vice President of Buka Environmental in Telluride, Colorado, testified on behalf of Intervenor 2. Dr. Maest is an aqueous geochemist with over 35 years of research and professional experience and expertise in the environmental effects of hard rock mining. Ex. 10.41, Maest Pre-filed Testimony, p. 1. Dr. Maest testified that:
- a. Pickett Mountain is a member of the Kuroko-type volcanogenic massive sulfide (VMS) deposit, which has higher acid mine drainage potential than other types of VMS deposits. Ex. 10.41, Maest Pre-filed Testimony, p. 2.
 - b. “Wolfden fails to mention all potential sources of ARD, stating that ‘[w]ithin the Project Area, the potential sources of acid rock drainage are limited to mineralize [sic] rock from underground being temporarily stored on the surface.’ (Ex. 2.1, Application at 289). “This statement ignores leaching of the walls of the underground workings as a source of acid drainage.” Ex. 10.41, Maest Pre-filed Testimony, p. 7.
 - c. The haul road between the mine site and the tailings facility is also a potential contaminant pathway related to dust from the road and possible spills from the ore trucks. Ex. 10.41, Maest Pre-filed Testimony, p. 31.

53. According to the Environmental Protection Agency:

Heavy metals can be leached from rocks that come in contact with the acid, a process that may be substantially enhanced by bacterial action. The resulting fluids may be highly toxic and, when mixed with groundwater, surface water and soil, may have harmful effects on humans, animals and plants. Ex. 10.39, Levit Pre-filed Testimony, p. 10 (quoting Abandoned Mine Drainage, U.S. Env’t Protection Agency).

54. If not controlled and treated adequately, highly toxic low pH ARD and associated heavy metals (ARD/ML) could discharge to groundwater, which flows to and forms the base flow of nearby surface water bodies. On the surface, ARD/ML could contaminate stormwater, which discharges into downgradient wetlands and surface water bodies. In addition to ARD/ML, potential indirect impacts on water quality from mining operations, as with any industrial site, could occur from leaks and spills of hazardous materials and erosion and sedimentation from disturbed soils.

Potential for Adverse Water Quantity Impacts

55. Figure 10.1 of the Application, Existing Groundwater and Surface Water Divide, prepared by WSP and dated October 25, 2022, shows that a divide in surface and groundwater occurs along a ridgeline that divides the Project Area. Ex. 2.1, Application, p. 10.21, PDF p. 306. The divide separates groundwater and surface water flow to Pickett Mountain Pond and to Pleasant Lake. Infiltration of precipitation and movement of shallow groundwater supports nearby wetlands and the baseflow of intermittent and perennial streams. Ex. 2.1, Application, p. 10.5, PDF p. 290. The collection of surface contact waters and mine water for treatment and the eventual discharge of that water could alter the natural hydrology of the watersheds supporting downgradient wetland and surface water resources.

Potential for Adverse Impacts on Fisheries and Aquatic Habitats

56. In a review memo dated September 11, 2020, the Maine Department of Inland Fisheries and Wildlife (MDIFW) provided information on the area fisheries and aquatic habitats, as well as their concerns about the potential for adverse impacts to those resources, stating:

The proposed project site is located in the Rockabema Lake subwatershed (HUC 12)... The watershed ... is considered important for brook trout...

MDIFW Regional Fisheries Biologist Kevin Dunham indicates that Pickett Mountain Pond contains white sucker, fine-scale dace, red-belly dace, fallfish, creek chub, golden shiner, common shiner, red-breasted sunfish, black-nose dace, and pearl dace, and would make a great place to harvest bait fish.

Pleasant Lake, Mud Lake, and Grass Pond are all designated as Heritage Fish Waters. Maine Heritage Fish Waters are native and wild brook trout lakes and ponds which represent unique, valuable, and irreplaceable ecological and angling resources. MDIFW recognizes the unrivaled historic and economic importance of Maine's wild and native brook trout resource and focuses on the conservation and protection of this uniquely valuable resource. MDIFW's primary intent for managing wild brook trout in lakes and ponds is the protection and conservation of these self-sustaining fisheries...

MDIFW regional fisheries staff consider Pleasant Lake and Mud Lake to be some of the best brook trout and landlock salmon waters available in the Region. Kevin Dunham notes, "Though the initial survey of the lakes in 1953 describes them as being shallow and having warm water throughout, it does go on to say, 'trout and salmon seek the cool water of spring holes...'. Pleasant Lake has an adequate amount of cool-water spring holes to support an excellent trout and salmon fishery. Subsequent fishery surveys, the most recent conducted in June 2019, found extraordinary growth of one-year old wild brook trout averaging 9.1", most of which probably took place in a cooler tributary stream. Additionally, while the lake does not stratify and temperatures remain homogenous throughout the water column, dissolved oxygen levels also remain ideal from top to bottom. Multiple age-classes of brook trout were captured during recent surveys as well, indicating year to year holdover is taking place at Pleasant and Mud Lakes." Anecdotal evidence suggests moderate angling pressure in these waters and the fisheries resources are protected and managed through specialized regulations. "The landlocked salmon fishery is not as robust as the trout fishery, but past surveys have sampled multiple age-classes in the 7-17" size ranges. While the lakes are somewhat limiting in cold-water refugia they do support healthy populations of salmonids (and other fish including smelt) and it is vitally important to protect the tributaries as well as the lakes since they contain an abundance of spawning and rearing habitat.

During the September 3, 2020 site visit, MDIFW noted that intermittent and perennial streams and freshwater wetlands in the area are likely supplied by water from shallow features that flow through the overburden and less likely from bedrock sources. MDIFW expressed concern with the potential for these natural resources to be adversely affected... The concern is with a potential dewatering and/or change in water chemistry, temperature, etc. of these natural resources that are important habitats by themselves as well as through

their contributions to the larger resources described above. MDIFW September Memo, Ex. 2.1, Application, Attachment 26-B, p. 2-3, PDF pp. 1158-1159.

57. Dan Kusnierz, Water Resources Program Manager for the Penobscot Nation's Department of Natural Resources, with over 30 years of experience in water quality management, particularly in the Penobscot River watershed, testified on behalf of Intervenor 2. In his pre-filed testimony, he quoted a Pennsylvania state report describing the effect of acid and heavy metal pollution associated with ARD/ML on brook trout:

Adult brook trout can tolerate a pH range of 5.0 to 9.5 and remain relatively healthy. However, even at the high and low ends of this pH tolerance level, fish become stressed...

Another problem is gill damage and a decrease in sodium in the fish's blood. Fish eggs and fry (young fish) are also affected. The young born for an entire year can die. This leaves only older, more resistant fish left in a community. Eventually, without the fry, the community will be void of fish. Often, however, the pH of AMD [acid mine drainage] is so low that the entire community is wiped out.

Metal toxicity caused by AMD is another common stream killer. Aluminum, iron and manganese enter our waters from abandoned mines. These metals are toxic to the brook trout and other aquatic life. Small amounts of these metals can stress fish or even cause death, especially in young, developing fish. Ex. 10.37, Kusnierz Pre-filed Testimony, p. 17 (quoting *The Basics of Water Pollution in Pennsylvania*, Pennsylvania Angler & Boater, Jan/Feb. 2001 at 35, 37, 40).

58. The Maine Department of Environmental Protection (MDEP) outlined potential impacts to other aquatic resources in their review memorandum dated July 5, 2023:

For this proposed project, potential impacts of concern to aquatic resources include erosion/sedimentation, nutrient enrichment, contamination of surface and groundwater from roads (e.g., road salt, petroleum, etc.), stormwater and mine water, and impacts to vegetative communities caused by spray irrigation (water level changes, conversion of community type, introduction of invasive species, erosion/gullyng)... Ex. 6.13, MDEP Review Comments, p. 8.

Proposed Water Management and Treatment Approach

59. To minimize impacts on water resources, Wolfden proposes to capture, treat, and discharge mine water and contact water using methods they contend would maintain existing downgradient hydrology and water quality. In the proposed design, mineralized rock (ore, low-grade ore, and waste rock) would be stored on lined pads. Water, including precipitation and snowmelt, that contacts mineralized rock would be collected in a pre-treatment water storage pond. Mine water would also be collected and stored in the pre-treatment pond. Preliminary sizing for the collection system and pre-treatment pond is based on a technical memorandum written by Mark Peters, P.E., Wood PLC Engineering. Mr. Peters is a Maine-licensed professional engineer with 40 years of civil engineering design experience.

60. In the memorandum, Precipitation Runoff Collection Areas- Mine Only Option, revised August 25, 2022, Mr. Peters explained that the “[p]reliminary sizing of the Pre-Treatment Water Storage Pond” provided in the memorandum was “based on the calculated runoff volume from a 500-year design storm event and mine dewatering, as well as typical monthly runoff volumes for treatment....” Ex. 2.1, Application, Attachment 10-C, p. 1, PDF p. 407. In his pre-filed testimony, Mr. Peters stated that:

A stormwater analysis was conducted for the purpose of determining the estimated volume of precipitation runoff and mine dewatering to be collected, stored and treated. ... The stormwater analysis was conducted by developing a stormwater model using commercially available computer software based upon the United States Department of Agriculture Technical Release 20 (TR-20) methodology. The TR-20 method is a standard engineering method used to evaluate runoff conditions and develop appropriate stormwater controls and management systems. Ex. 10.23, Peters Pre-filed Testimony, p. 4-5.

Mr. Peters also testified that stormwater runoff from supporting facilities, non-contact water, would be managed with appropriate stormwater best management practices in accordance with the Maine Stormwater Best Management Practices Manual and 06-096 C.M.R. Chapter 500: Stormwater. Ex. 10.23, Peters Pre-filed Testimony, p. 4.

61. Wolfden proposes to feed water from the pre-treatment storage pond to a water treatment plant consisting of ultrafiltration (UF) to remove particles and reverse osmosis membranes (RO) to remove the remaining chemical constituents down to background levels prior to its return to the natural environment. Wolfden contends that the use of RO technology is well-established and used across multiple industries. In support of its proposal, Wolfden submitted the “Water Treatment Scoping Study,” prepared by Mine Water Service (MWS) and submitted to Wolfden on October 25, 2022, (WTS Study), Ex. 2.1, Application, Attachment 10-D, PDF pp. 441-475.

62. The WTS Study details the types of water treatment that would be employed for the Project, plant process, basis of plant sizing, mass and water balances, and treatment efficacy based on computer modeling as well as the relevant experience of the authors. MWS concluded that:

First, membrane filtration utilizing ultrafiltration (UF), which removes particles down to 0.1 micron in size, is a pretreatment stage to remove suspended solids. Second, reverse osmosis (RO) membranes which remove constituents down to atomic radii in size. Through this combination of proven membrane filtration techniques, water quality to meet regulatory requirements can be achieved. RO can effectively remove all contaminants from water, except for some dissolved gases (such as carbon dioxide and oxygen, which are nonhazardous normal constituents of water) and can produce pure water containing only water molecules. Ex. 2.1, Application, Attachment 10-D, p. 3, PDF p. 444.

63. In support of their conclusion, MWS conducted modeling studies. They modeled UF RO systems utilizing four different commercially available software packages, contending that the modeling provides sufficient accuracy for their evaluation based on a Texas Water Development Board report. The report, titled “Report 1148321310 Part II. Performance Evaluation of Reverse Osmosis Membrane Computer Models,” published in 2014, concluded, “[i]n summary, the overall accuracy and precision demonstrated by the computer models evaluated as part of this

study were within a reasonable level of expectation considering the limited amount of the start-up data available.” Ex. 2.1, Application, Attachment 10-D, p. 13, PDF p. 454.

64. While variations in water quality are expected due to variations in site-specific mineral deposits, based on the MWS’s experience with multiple polymetallic massive sulfide mining operations, they found that water quality data from the Half Mile Mine, owned by Trevali Mining Corporation and located West of Miramichi, New Brunswick, Canada, is similar to other mine-only operations and provides an appropriate comparison to water quality data expected from Pickett Mountain for their modeling studies. MWS reported that “[a]ll chemicals are applied to the influent side of the UF and RO system and therefore report to the wastewater side of the process. In all cases, the reagents [used in the treatment process] do not represent a hazard for downstream use of wastewater in the Pickett Mountain operations.” MWS also reported that all wastewater generated from the RO plant (brine) can be used for cement production for backfill. Ex. 2.1, Application, Attachment 10-D, pp. 11 and 23, PDF pp. 452 and 464.
65. After treatment, Wolfden proposes to discharge treated and tested water in water recharge areas (WRA) positioned upgradient of both wetlands and streams at the Project Area. They contend that a combination of spray irrigation and snowmaking use for discharging treated water would allow for the replenishment of shallow or perched groundwater, providing suitable conditions for maintaining wetland and stream hydrology. Based on typical application rates for similar projects, Wolfden estimated that approximately 22 acres would be needed for the discharge of treated water. They contend that 60 acres are available within the proposed Project Area and show 22 acres of WRAs on the Conceptual Site Plan. Ex. 2.1, Application, p. 10.8, PDF p. 293.
66. Wolfden retained Sevee & Maher Engineers (SME), a hydrogeologic and environmental engineering firm in business for 38 years, to develop conceptual methods for returning water to the on-site environment. SME evaluated four disposal methods: drip irrigation, infiltration galleries, spray irrigation, and snowmaking in their Water Management at the Pickett Mountain Mine Site Technical Memorandum, dated December 19, 2022. SME found that:
- Based on our analyses of the four alternatives, a combination of spray irrigation and snowmaking combined with water storage, is the preferred alternative for the Project. Both are proven technologies for the disposition of treated wastewater in New England. It is expected that this combination of technologies will readily manage the disposition of the 43.8 MGY of treated water.
- The spray irrigation/snowmaking alternative allows for the flexible disposition of treated water to maintain the hydroperiod of the nearby wetland. Furthermore, application rates can be tailored to mimic natural, long-term precipitation patterns. Ex. 2.1, Application, Attachment 10-E, p. 4, PDF p. 480.
- SME concluded that “[t]he combination of pre-treatment and post-treatment water storage, coupled with spray irrigation and snowmaking, will adequately handle the disposition of treated water at the Project site.” Ex. 2.1, Application, Attachment 10-E, p. 5, PDF p. 481.
67. In additional support of its conclusion that the project would not adversely impact local and regional hydrology, Wolfden stated that water would be collected, treated, and discharged according to precipitation patterns. Since more precipitation generally occurs in the spring and

fall, more water would be collected, treated, and discharged in the spring and fall. Ex. 2.1, Application, p. 10.6, PDF p. 291. In addition, according to Wolfden, Pickett Mountain Pond outlet flows eventually to Mud Lake, and the combined watershed of Pleasant Pond, Mud Lake, and Pickett Mountain Pond has a drainage area of approximately 10,485 acres. The precipitation runoff collection area of the project where water would be collected, treated, and returned within the watershed is 28.4 acres w. Wolfden notes that this area is approximately 1.4% of the total Pickett Mountain Pond watershed and approximately 0.3% of the combined watershed and conclude that “[i]n general, the Project area occupies a very small area compared to the size of the watersheds.” Ex. 2.1, Application, pp. 10.5-10.6, PDF pp. 290-291.

68. Wolfden proposes using contracted portable toilets (Porta Potties) to dispose of human sewage generated from underground mine operations. Wastewater generated by employees using the surface facilities would be discharged to a licensed subsurface wastewater disposal system. In addition, Wolfden states that an erosion prevention and sediment control plan would be developed for controlling soil erosion and sedimentation during and after construction. Ex. 2.1, Application, p. 10.9, PDF p. 294.
69. Wolfden concludes, “[n]o adverse impacts to hydrology and water quality are anticipated from the management of the Project’s wastewater.” Ex. 2.1, Application PDF p. 294. They further conclude that “[t]he Project’s water treatment approach will return clean, treated water to the environment using WRAs. The siting and release of water from these WRAs is designed to maintain current hydrology to wetlands, streams, [potential vernal pools], and vernal pools. At the completion of the mining project, the site will be reclaimed removing all buildings and structures. As a result of these actions, the Project does not anticipate any adverse impacts to these resources.” Ex. 2.1, Application, p. 10.10, PDF p. 295.

MDEP Review Comments

70. In response to their review of the Application, the MDEP July Memo states in part:

In preparing these comments, the Department has attempted to (a) provide observations based on its experience and expertise that may assist the LUPC in its review, (b) identify any obvious issues with the proposed project that, if not addressed, would automatically preclude the Department from permitting the project under the Maine Metallic Mineral Mining Act (Mining Act), and (c) note additional information the Department would require before it could accept an application for the proposed project as complete for processing... Ex. 6.13, MDEP Review Comments, p. 1.

As noted appropriately throughout the [Application], it is also important to recognize that far more information would be required as part of any permit application filed pursuant to the Mining Act and the Department's accompanying rules, 06-096 CMR ch. 200, Metallic Mineral Exploration, Advanced Exploration and Mining (Chapter 200). This is inherent in the difference between a zoning petition and a metallic mineral mining permit application... *Id.* p. 2.

The [Application] does not propose Beneficiation or other ore processing on-site, nor does it propose a specific off-site location for such. Any application to the Department for a mining permit under Chapter 200 must include a Mining Operation Plan to include processing of the

metallic mineral ore and disposal of associated reactive mine waste. Processing and waste disposal may be proposed for an off-site location(s). If the off-site location(s) is within the state of Maine, the application must provide sufficient evidence that the processing and disposal activities will meet the Chapter 200 standards. Regardless of location, the plan must also include a Transportation Plan, including transport of lean ore, ore concentrate, or metallic product, as well as proposals to prevent leaks, fugitive dust, and contingency in the event of a transportation accident.

[The Application] presents limited mine waste characterization (Final Report: Static Acid Rock Drainage (ARD) Testing, April 16, 2021). While the testing did use material from the site, no information is presented showing the location of the samples and the extent to which they are representative of the likely waste, rock, lean ore, and other rock materials requiring disposal on the site. ... *Id.* p. 4.

The surface water streams on the project site are classified as Class A waterbodies pursuant to 38 M.R.S. § 464... *Id.* p. 6.

[Wolfden] has indicated the shallow ground water and surrounding wetlands will be recharged by way of treated wastewater being disposed of on-site via spray irrigation and snowmaking activities covering 15-29 acres. The Department has taken a long-standing position that wetlands that are hydraulically connected to a surface waterbody take on the same classification as the surface waterbody. For this project, any discharge to a wetland must meet the Class A criteria cited above. Given that streams are expression of ground water, the characteristics of the Class A surface water bodies must not be adversely impacted by changes in the characteristics of the ground water as a result of the disposal of treated wastewater via spray irrigation or snowmaking. And lastly, as previously stated in the Department of Environmental Protection's January 28, 2021, memorandum to the Land Use Planning Commission, effluent discharged to wetlands or groundwater that reaches surface waters must be characterized as natural and may not alter the flow or the habitat of the surface waters. See 38 M.R.S. §§ 465(1 & 2), 465-A... *Id.* p. 7.

The [Application] presents information regarding mine water treatment using the water chemistry obtained from a mine in generally similar deposits in New Brunswick (Water Treatment Scoping Study, Attachment 10-D). However, no information is presented demonstrating chemical similarity between this water and potential mine water at this site. It is expected that these waters would be generally similar, and the proposed treatment methods are known to be effective in general in systems designed, operated, and maintained correctly, but final approval by the Department will require analysis of waters from the site and generated from leaching tests and other means more accurately simulating conditions that could obtain at the site of the proposed development...*Id.* p. 8.

Chapter 200, Subchapter 5 (20)(C)(2) requires that stormwater management practices meet the standards of 06-096 C.M.R. ch. 500. While significantly more information would be needed for a complete review, the Department generally finds that the concept plan and preliminary calculations presented in the [Application] can be reviewed under Chapter 500 and could meet the applicable standards. *Id.* p. 10.

MDIFW Review Comments

71. In its review memorandum dated June 27, 2023, MDIFW commented in part:

MDIFW has previously noted potential concerns related to State listed bats and their critical habitats; intermittent and perennial streams; lakes and ponds; fisheries and other aquatic resources; freshwater wetlands; Inland Waterfowl and Wading Bird Habitats; vernal pools; and other known and potential resources of concern. The September 11, 2020, correspondence (attached) provides information on fisheries, aquatic, and wetland resources in the area. These resources, as well as the surface water and groundwater resources that supply them, are significant concerns for the agency and will be the subject of further review and recommendations in any future regulatory proceedings. Ex. 6.12, MDIFW Review Comments, p. 1.

Application materials indicate that mined ore and waste rock will be temporarily stockpiled on impermeable, lined storage pads with leachate and storm water collection and treatment, including settling and reverse osmosis, prior to surface discharge through spray irrigation and wastewater snowmaking. Spray irrigation/snowmaking discharges are proposed to be located within water recharge areas to provide approximately equivalent pre and post construction water budgets to offset lost surface flows to aquatic and wetland resources from adjacent areas altered by development. MDIFW will be interested in more detailed analyses of this proposal as designs are further developed, to ensure that distributed water is free of contaminants from mine activities and that any adverse impacts to surface water and groundwater resources, fisheries, wildlife, and their critical habitats, are avoided, minimized, and, if appropriate, adequately mitigated.

MDIFW's preliminary desktop reviews and record searches identify known resources, but site surveys are often necessary to identify other important resources that have not yet been investigated but may be present in an area. Locating a project in or in proximity to certain habitats can result in adverse impacts to those habitats and the species that utilize them and, in those situations, MDIFW will likely recommend increased siting and design considerations, operational measures, monitoring practices, and/or other efforts in attempt to avoid, minimize, and possibly mitigate for such impacts. Resource surveys, project siting, facility design/layout, and operational practices are all very important steps in this process. MDIFW provides recommendations based on known and reported resource information but, it is the applicant's ultimate responsibility to ensure that its activities do not result in substantial detrimental impacts to resources. *Id.* p. 2.

Based on review of the materials provided, MDIFW offers no objection at this time to Wolfden Mt. Chase LLC's request to rezone 374 acres in T6R6 WELS from a General Management (M-GN) Subdistrict to a Planned Development (D-PD) Subdistrict. MDIFW anticipates that any future application materials will include compelling information on measures to avoid or minimize adverse impacts to important natural resources ... Further, we anticipate that any regulatory proceedings will include opportunities for MDIFW to review and provide recommendations for the protection of important fisheries, wildlife, and critical aquatic, wetland, riparian, and terrestrial habitats, and that such recommendations will be appropriately considered in regulatory actions. *Id.* p. 2.

Summary of Intervenor 2 Testimony

72. Intervenor 2 contends that Wolfden has failed to demonstrate that the Project would avoid significant adverse impacts and that its proposed technical approaches to minimize or mitigate those impacts are reasonably feasible. Ex. 10.41, Maest Pre-filed Testimony, p. 1.

Dr. Maest argued in her testimony that the Project has a high potential for adverse water quality impacts. Specifically, she contended that:

- The Pickett Mountain deposit has inherently high acid generation and contaminate leaching potential.
- Ore and potential future sources of economically viable ore are close to high-quality fisheries and water resources.
- Nearby surface water resources have very little capacity to counteract the effects of acid mine drainage. Ex. 11.42, Maest, Pickett Mountain Deposit, Maine: Geochemical Issues, slide 25.

73. Dr. Maest further contended that Wolfden has provided insufficient evidence to support the effectiveness of proposed prevention and mitigation measures, testifying that:

- More work should have been done already to understand the water quality that could be generated from the proposed mining, including from the walls of the underground mine.
- The water treatment study has so many shortcomings and has not demonstrated the ability of the treatment system to meet Maine's strict discharge requirements.
- The water balance presents no basis for the dewatering rate and does not consider uncaptured mine water or climate change. Ex. 11.42, Maest, Pickett Mountain Deposit, Maine: Geochemical Issues, slide 25.

Also, regarding insufficient evidence, she argued that: “[t]he effects of using brine in the backfill for the Pickett Mountain mine need to be evaluated to determine if contaminant leaching could adversely affect downgradient groundwater and surface water quality over time.” Ex. 10.41, Maest Pre-filed Testimony, p. 25.

74. Importantly, Dr. Maest testified that:

- You can only treat what you can capture.
- Dewatering would not capture all the mine-influenced water.
- Based on a published study, 93% of operating copper mines in the US failed to capture and control mine wastewater and this failure resulted in adverse water quality impacts. Ex. 11.42, Maest, Pickett Mountain Deposit, Maine: Geochemical Issues, slide 25.

Applicant's Response to Intervenor 2 and Public Testimony

75. Although Wolfden disagrees with Intervenor 2's characterization of the potential for ARD/ML impacts at the Project, it does not dispute that this potential exists, or that the mine would be close to ground and surface waters. Wolfden also does not dispute that the mine would have high-quality fisheries and water resources in the vicinity, declining to cross-examine Intervenor 2 witness Mr. Kusnierz, who spoke specifically to those facts. Wolfden additionally provided no evidence or testimony regarding the lack of buffering capacity of the downgradient surface waters.
76. Wolfden contends that effective prevention and mitigation measures are available to ensure no undue adverse impacts to water resources. Dr. Jim Finley provided testimony and evidence in support of Wolfden's position. Dr. Finley is a Principal Geochemist with Stantec Consulting Services, Inc., and holds a Doctor of Philosophy in Geology from the University of Wyoming with an emphasis in geochemistry. He has been a Professional Geologist since 1996, with 27 years of experience in the hard-rock mining industry. Ex. 10.26, Finley Pre-filed Testimony, p. 1. Dr. Finley concluded in his pre-filed testimony that "the Pickett Mountain Project can be implemented and would achieve the performance standards outlined in Chapter 200 through implementation of a thorough geochemical characterization program that begins with background work, continues into and through active mining, and evolves as the understanding of the rock geochemistry improves with time." *Id.*, pp. 6-7.

Specifically, Wolfden provided the following in response to Intervenor 2's contentions:

- The type of information that Intervenor 2 has requested is more appropriate for the MDEP's permitting phase, not for the rezoning phase. Ex. 11.70 Transcript, Oct. 16 Tech. Session, p. 15.
- A thorough geochemical characterization program would be implemented throughout the life of the mine, including an Acid Rock Drainage/ Metal Leaching geochemical characterization, an Acid Base Accounting analysis, and humidity cell tests or field-scale bin tests to provide time dependent information about potential geochemical reactions, and a mineralogical analysis. Ex. 10.26, Finley Pre-filed Testimony, pp. 2-4
- All the mine-influenced water would be captured. "Because water flows downhill, as long as the depression in the groundwater system exists, groundwater will flow into the mine workings." Ex. 10.26, Finley Pre-filed Testimony, p. 5
- The HydroCAD stormwater runoff calculations used in the potential 500-year climate change precipitation of 9.3 inches show, using the same pond size, a foot of freeboard (the distance between the high waterline and the top of the pond berm). Ex. 11.70, Transcript, Oct. 16 Tech. Session, pp. 197-198
- A two-pass RO system would meet water quality requirements, and the system is modular to allow additional passes to improve quality. Ex. 11.19, Danyliw and Thoen, Water Treatment Plant Design and Performance, slide 6.
- It is important for the Commission to consider the depth and breadth of the Chapter 200 review process. Ex. 11.70, Transcript, Oct.16 Tech. Session, p. 16.

- Wolfden agrees that the water resources surrounding the Project Area are important resources but commented that it is important to place these resources into context, as they are not unique to the Project Area. Almost all the surface waters in LUPC jurisdiction are Class A or AA. Wolfden further noted that the referenced Heritage Fish Waters are three of more than 585 lakes and ponds meeting that definition. Ex. 12.6, Wolfden Rebuttal Comments, p. 4.

Value of Surrounding Water Resources - Surface Water Quality

77. All the surface water resources in the area surrounding and downgradient of the Project Area have high water quality. According to unrebutted testimony by Mr. Kusnierz, “Nearly all streams surrounding the proposed mine area are Class A [the second highest water classification]...Class A streams require dissolved oxygen levels to be protective of all life stages of salmonid species...” Ex. 10.37, Kusnierz Pre-filed Testimony, p. 7.
78. David Courtemanch, Ph.D., retired Division of Environmental Assessment Director at the MDEP and formerly responsible for the development of Maine’s water classification program, commented that:

The water quality and aquatic life values of the Penobscot watershed, and especially the Mattawamkeag and East Branch Penobscot subwatersheds cannot be understated. The Class A designation for this area’s waters by the Maine Legislature was done with considerable deliberation identifying their high quality and the unique values as wild brook trout habitat (including designation as State Heritage waters) and as Critical Habitat for Atlantic salmon, values unique to both Maine and the U.S. State, federal, and private investment in the millions of dollars has gone into the restoration of this watershed and the restoration of Atlantic salmon. This investment should not be put at risk.

Recently (2019), the Maine Legislature elevated the water quality standards for these waters by identifying sustenance fishing as a new designated use, recognizing that more stringent standards are required to assure the high quality necessary for both tribal and nontribal persons taking benefit of this designation (MRS Title 38 §467.7.D(2)). To place a mining operation in the headwaters of this system presents a considerable and perpetual risk to these resources. Ex. 7.310, Courtemanch comments, p. 2.

79. In addition, portions of the Penobscot River, Mattawamkeag River, West Branch Mattawamkeag, and East Branch Penobscot are listed as “outstanding river segments.” 38 M.R.S. § 480-P(10), (12). The Commission zones segments of these rivers in the unorganized territories as Recreational Protection subdistricts due to being identified as meriting special protection in the Governor’s Executive Order on Maine Rivers Policy, issued July 6, 1982, based on the 1982 Maine Rivers Study of the Department of Conservation.

Value of Surrounding Water Resources - Fisheries

80. According to testimony by Mr. Kusnierz:

Maine is by far the most important state for wild brook trout in the eastern U.S. It is the only state with extensive, intact, self-reproducing brook trout populations in lakes and ponds among the 17 states comprising the eastern brook trout's native range from Maine to Georgia. MDIFW states that, 'Maine is the last true stronghold for stream dwelling populations of wild brook trout, supporting more than twice the number of intact subwatersheds as the other 16 states in the eastern range combined.'...The cream of the crop of Maine's brook trout ponds are the State Heritage Fish Waters, which are ponds containing either brook trout or arctic char 'that have never been stocked according to any reliable records authorized for adoption by Resolve 2005, chapter 172, as amended, and waters identified as eastern brook trout waters and arctic char waters that according to reliable records have not been stocked for at least 25 years.' Ex. 10.37, Kusnierz Pre-filed Testimony, p. 14.

81. As previously noted, there are three State Heritage Fish Waters in the vicinity of the proposed Project: Pleasant Lake, Mud Lake, and Grass Pond. Also, as stated previously, MDIFW recognizes these waters as unique, valuable, and irreplaceable ecological and angling resources. Finding 56.

82. Mr. Kusnierz further testified that:

The designated critical habitat for Atlantic salmon includes the Penobscot River watershed, which in turn includes the West Branch Mattawamkeag River and its tributary waters. Since those designations, millions of dollars and thousands of hours have been invested by the Penobscot Nation, state and federal agencies, and a number of public and private interests to restore Atlantic salmon across its critical habitat... [o]f special importance for salmon are the high-quality headwater streams like those of the West Branch Mattawamkeag that are in the vicinity of Wolfden's proposed mine. These streams provide cool water refugia for Atlantic salmon and are increasingly rare... While at present the critical habitat area in the West Branch Mattawamkeag is largely inaccessible to Atlantic salmon because of the presence of dams downstream, the Penobscot Nation takes a long-term view of the situation - preserving and improving the water quality of the waters in the Penobscot River watershed is critical to the effort to eventually restore Atlantic salmon's historic access to all of its native habitat. Ex. 10.37, Kusnierz Pre-filed Testimony, pp. 11-12.

The enormous amount of resources in terms of dollars and hours to restore Atlantic salmon populations in the Penobscot River watershed reflect the fact that this habitat represents the best chance for the recovery of the species. To allow a metallic mineral mine to be developed so close to the headwaters of the West Branch Mattawamkeag River would unnecessarily put all those efforts at risk. 10.37, Kusnierz Pre-filed Testimony, pp. 13-14.

The Penobscot River is still the largest Atlantic salmon run remaining in the U.S., with 1,000-1,500 adult salmon annually, compared to 75,000-100,000 adult salmon historically. 10.37, Kusnierz Pre-filed Testimony, p. 5.

83. The Atlantic Salmon Federation (ASF) commented that:

... [R]estoration of fish passage to allow Atlantic salmon and other sea-run fish, particularly alewife and blueback herring, unobstructed access to historic habitat in the Mattawamkeag River watershed is a high priority for our organization. ASF is currently working with several contractors, the Maine Department of Marine Resource (DMR), NOAA Fisheries, and the US Fish and Wildlife Service to complete installation of a fishway that will provide sea-run fish access to Baskahegan Lake in Danforth beginning next year. In early October we hired a contractor to assess 19 potential fish passage barriers in the Penobscot watershed to prioritize and plan for restoration projects at these barriers. Eleven of the 19 sites are in the Mattawamkeag watershed...our intent is to work with partners to restore fish passage...to the headwaters of the West Branch Mattawamkeag River around the proposed mine. Ex. 7.332, Atlantic Salmon Federation comments, p. 1.

Value of Surrounding Water Resources - Cultural Resources

84. Regarding the cultural significance of the water resources near the proposed Project, Mr. Kusnierz testified that:

The Penobscot River and its watershed have sustained the Penobscot Nation's people for thousands of years. The Penobscot are a riverine people, with their culture rooted in their relationship with the river, which is the source of life that provides for the citizens' needs. The river is a source of wild food, including fish, wildlife, medicine, and connection. ... The Penobscot consider the Penobscot River a living relative with rights. The Penobscot River is a tribal citizen based on a Tribal Resolution enacted on June 1, 2019. Ex. 10.37, Kusnierz Pre-filed Testimony, p. 4. ... Fish, including salmon, continue to be an important cultural sustenance food source. ... Atlantic salmon and brook trout are more than just a sustenance food for Penobscot- salmon in particular, are a critical aspect of the culture. Salmon are embedded in Penobscot culture and traditional beliefs. *Id.* p. 5. ...[P]reventing additional toxic contaminants, such as those from acid mine drainage, from entering the food chain is critical for restoring and protecting sustenance fishing practices. *Id.* p. 8.

85. Mr. Kusnierz also testified that “fish and seafood comprise forty-five percent of Wabanaki citizens’ [which includes members of the Penobscot Nation] diets” and “consumption of fish from these waters for sustenance is a treaty-reserve right...AMD could kill off those fisheries entirely and completely ruin these the watershed and culturally significant species that are so important to the Penobscot Nation and the state of Maine.” Ex. 10.37, Kusnierz Pre-filed Testimony pp. 11, 18.

86. Isaac St. John, the Tribal Historic Preservation Officer for the Houlton Band of Maliseet Indians, also testified on the cultural significance of the water resources surrounding the proposed Project. Mr. St. John testified that:

...[The] Maliseet refer to themselves as *Wolastoqiyik*, meaning ‘people of the beautiful river.’ The Maliseet are riverine people traditionally obtaining numerous resources from the rivers...The Maliseet have numerous accounts of using the waterways surrounding the mine area as a mode to get to various places in what is now Maine and New Brunswick... the Maliseet currently use the waterways surrounding the project area for canoeing, swimming,

hunting and fishing... The Maliseet, as a riverine people, need to harvest fish and other aquatic-dependent resources in order to continue our traditions and cultural practices. Ex. 10.43, St. John Pre-filed Testimony, pp. 2-5.

Commission Analysis on the Value of Existing Water Resources

87. Based on the record evidence as described above, including evidence of high-water quality, particularly given the sustenance fishing use designation; significant fisheries, notably State Heritage Fish Waters and Atlantic Salmon Critical Habitat with multi-entity investment into its restoration; and importance of the rivers as cultural resources, the Commission finds the water resources surrounding and downgradient of the Project Area are of high quality and have a high public value that requires protection. In making this determination, the Commission finds particularly credible the MDIFW designation of the surrounding waters as Maine Heritage Fish Waters, establishing that these are waters that contain “unique, valuable, and irreplaceable ecological and angling resources;” as well as the testimony from Mr. St. John and Mr. Kusnierz, establishing the importance of the Penobscot River watershed to tribal culture and practices.

As discussed above, Wolfden did note that many of the waters within the Commission's jurisdiction are rated at Class A or AA levels but did not convincingly explain why this fact should lead the Commission to determine the waters in question are of lesser value, or that potential risks to the waters should be subject to less scrutiny. That the jurisdiction of the Commission contains a great many of the State's highest quality and least polluted waters does not suggest that the Commission should be less concerned with the risk of degradation of these waters. Similarly, the fact that the Maine Heritage Fish Waters are three of more than 585 lakes and ponds meeting that definition, does not suffice to rebut the importance and value of that designation. This definition is provided by statute, 12 M.R.S. § 12461, and, as noted by MDIFW, indicates that the waters in question contain “unique, valuable, and irreplaceable ecological and angling resources.” The legislative purpose of these statutes is to identify for preservation and protection high value water resources. 38 M.R.S. § 346; 12 M.R.S. § 12461. It would be contrary to this purpose to conclude that signs of improving progress toward these goals should lead the Commission to discount the value of these resources. In addition, as noted above, representatives of the tribal nations and other commenters provided testimony and evidence regarding the importance of these surrounding water resources in particular to important aquatic resources such as the Atlantic salmon and to tribal practices and culture that rely on these resources. The Commission finds it significant that Wolfden made no attempt to rebut this testimony or dispute the critical importance of the existing water resources to aquatic wildlife and existing tribal practices. Accordingly, the Commission reiterates its finding that the water resources surrounding and downgradient of the Project Area are of high quality and have a high public value that requires protection.

Commission Analysis on the Extent of Evidence Required

88. As stated above, Intervenor 2 argues that Wolfden has not provided sufficient evidence to support a finding of no undue adverse impact on water resources. Dr. Maest testified that, in her opinion, Wolfden has conducted an insufficient number of geochemical tests to address the variability in rock types in the proposed Project Area, and the data provided is not representative of the ore body. She contends that the Water Treatment Scoping Study is poor, and the Commission cannot rely on the results. She also commented that key parameters are missing in the input data, water

sampling details are not provided to support the inputs, and the model compares results to background water quality samples from local surface waters, not local groundwater. She also argued that there is no site-specific data to support the water balance provided in the application, and it does not consider bypass water and climate change.

89. Wolfden argued that they have submitted sufficient evidence for the rezoning phase of the project. Further, all the additional data collection and evidence that Intervenor 2 suggests should be in the zone change application would be gathered and prepared as part of the permitting phase of the project under the MDEP's Chapter 200 rules. Wolfden's witnesses provided additional testimony on the effectiveness of the UF/RO system, how the mine would be internally draining, not bypassing any mine-influenced water, and how the conceptual design would respond over time considering climate change.

90. The Commission finds that it is unreasonable to require the same amount of data for the zoning phase of a project, where a new land use zone is placed on a map, as for the permitting phase intended to authorize new mining activities. The Commission's Chapter 12 Rules and the basis statement adopted with the latest version of those rules provide helpful guidance in this regard. Chapter 12 states, in terms of the submission requirements for a proposed metallic mineral mine zone change:

[A] description of general measures that may be undertaken to assure that mining in the specified location will not have undue adverse impacts on existing uses and resources and measures that a permittee may take to avoid, minimize or mitigate any adverse impacts of existing uses and features. Chapter 12 § 4(C)(1)(m).

91. The Basis Statement and Summary of Comments for Proposed Amendments to Chapter 12, dated April 8, 2013, states:

The decisions that the Commission is making on the types of information needed during rezoning are aimed at determining what resources are going to be impacted by a mine and if those impacts pose a risk that is too great to allow rezoning to go forward...The Commission has not in general asked for highly technical information that will be required by DEP as part of their more technical site review. Ex. 11.40, LUPC Chapter 12 Basis Statement, pp. 28-29.

92. Key in the zoning phase for a metallic mineral mine is whether there is evidence showing the potential for ARD/ML generation in the record and, importantly, whether there are measures available to effectively prevent or mitigate potential adverse impacts to downgradient water resources.

93. Wolfden has provided evidence on what resources could be impacted by a mine at Pickett Mountain and the risk the operation could pose to those resources. In addition, Wolfden has provided a description of general measures that may be undertaken at that mine to prevent undue adverse impacts on water resources.

94. Although the Commission recognizes that highly technical information is more appropriate for the permitting stage of a project, the Applicant still holds the burden of demonstrating by substantial evidence that the proposal would not have an undue adverse impact on water resources, among others. While Wolfden has presented evidence describing general measures that

might be undertaken to prevent undue adverse impacts to water resources, the record also clearly reveals that the nature of the mining operation and deposit to be extracted would result in a risk to the surrounding water resources. A relevant analysis of whether the Applicant has met its burden of proof, specifically regarding impacts on water resources, follows below.

Commission Analysis on Avoidance and Mitigation of Potential Undue Adverse Impacts

95. The question is whether the evidence in the record demonstrates the potential for a mine at Pickett Mountain to avoid, minimize, or mitigate adverse impacts on water resources and whether potential impacts on those resources pose a risk that is too great to allow rezoning to go forward. This consideration must be made at the landscape level of analysis established in the Chapter 12 rules for the zoning stage of the project.
96. Dr. Maest argued that the Pickett Mountain Mine would be the type of mine that is highly likely to exceed water quality standards. She argues that the proposed mine has a high potential to generate ARD/ML and is close to high-quality water resources. Additionally, Dr. Maest testified that the surface waters in the area have a low buffering capacity and therefore would be unable to effectively mitigate acid mine discharges. She testified specifically that the mine walls would potentially generate acid mine drainage throughout the mine operation, in addition to the first flush of sulfates, acidity, and metals as the mine refills and returns to pre-mining conditions. Ex. 11.73, Transcript, Oct. 17 Tech. Session, p. 395. Seasonally fluctuating water levels after mining would expose mine walls, which she concluded “is the perfect setup for acid-mine drainage formation.” Ex. 11.73, Transcript, Oct. 17 Tech. Session, p. 396.
97. Regarding the potential to avoid, minimize, and mitigate ARD/ML and to achieve the level of water quality protection needed, Dr. Maest argued that it is extremely difficult to capture all the mine-influenced water and to dispose of brine from RO water treatment systems. Dr. Maest stated, “[c]aptured water can be treated and returned to the environment in a cleaner condition, but uncaptured mine influenced water will contaminate downgradient water resources and lead to undue adverse impacts to water resources.” Ex. 10.41, Maest Pre-filed Testimony, p. 27. She also argued that “Wolfden proposes to use the brine to make cemented rock fill for backfilling the underground mine, but no information is provided on how the brine’s composition might affect the backfill chemistry and leaching.” Ex. 10.41, Maest Pre-filed Testimony, p. 25.
98. Dr. Maest provided a research study to show that, contrary to predictions made during mine permitting and development processes, most existing mines have caused water quality exceedances, and a primary basis for those failures is failed mitigation measures. The report, Comparison of Predicted and Actual Water Quality at Hardrock Mines, written by J.R. Kuipers and A.S. Maest (the Kuipers and Maest study) concluded that “[o]verall, for the 13 mines with close proximity to surface water and high acid drainage or contaminant leaching potential, 12 (92%) have had some impact to surface water as a result of mining activity;” “[m]itigation frequently fails to perform according to plan;” and “[i]mprovements are needed in the prediction of appropriate mitigation measures.” Ex. 10.42, Maest Pre-filed Testimony, Attachment 13, pp, ES-11, ES-15, PDF pp. 188, 192.
99. Dr. Maest further testified, “Wolfden has not demonstrated that its primary mitigation measure – water treatment- will be able to ensure that the mine’s discharges will meet Maine’s requirements.” Ex. 10.41, Maest Pre-filed Testimony, p.17. She stated that ultrafiltration and

reverse osmosis "...are generally reliable and effective methods for treatment of mine-influenced water, including for the treatment of acid mine drainage." Ex. 10.41, Maest Pre-filed Testimony, p. 18. However, she argues that Wolfden has provided no example of a comparable mine that accomplishes the levels required at this site.

100. Witnesses testifying on behalf of Wolfden provided a list of measures that can be used to avoid, minimize, and mitigate ARD/ML. In particular, there was testimony that not all rock in the mine walls would be acid generating, mine workings would be placed in areas with lower potential for ARD/ML, the potential for ARD/ML during the first flush can be determined with proper geochemical characterization, ARD/ML during the first flush can be minimized by including neutralizing rock or compounds in mine backfill, and mining would occur below the seasonally fluctuating water table. Ex. 10.26, Finley Pre-filed Testimony, pp. 2-6; Ex. 11.76, Transcript, Oct. 18 Tech. Session, pp. 545-553, 586-591. Dr. Finley specifically testified that all the mine-influenced water would be captured. "Because water flows downhill, as long as the depression in the groundwater system exists, groundwater will flow into the mine workings." Ex. 10.26, Finley Pre-filed Testimony, p. 5. Regarding the concern about the disposal of brine, Wolfden showed that the amount of brine expected is substantially less than the amount Dr. Maest considered in her testimony. Wolfden's conclusion is based on a secondary water treatment separating solids from, and reducing the amount of, the liquid brine discharged. In addition, during cross-examination, Brian Danyliw, owner and principal of Mine Water Services, Inc., with 40 years of water treatment, mining, and mineral processing experience (Ex. 10.24, Danyliw and Thoen Pre-filed Testimony, p. 1, PDF p.1), answered questions regarding the potential for brine mixed with cemented backfill to impact acid generation or metal leaching, stating:

...[T]here's no scientific or chemical --chemistry reason to believe that addition of brine as water for make down of cement would have any impact on acid generation...The chemistry doesn't support it...with regard to metals... My experience with a number of other backfilling operations indicates to me that that would not be an issue, but specific testing would be carried out... Ex. 11.70, Transcript, Oct. 16 Tech. Session, pp. 239-240.

101. Dr. Finley testified that most of the mines studied for performance, particularly regarding impacts on water resources, pre-date technological advances in the industry. Hearing Transcript, Oct 16 Tech Session, pp. 145-146. In addition, Mr. Peters testified on recent innovations in liner materials and leak detection systems for storage pads. Ex. 11.70, Transcript, Oct. 16 Tech. Session, pp. 198-199.
102. Dr. Finley further testified that, in his opinion, there is not a high risk of water quality impacts from the Pickett Mountain Mine. He stated that Mr. Don Dudek, Wolfden's Vice President for Exploration and registered Professional Geologist with 40 years of experience, has a clear understanding of what the geology is at the site and has seen zones without sulfide oxidation, and that Wolfden intends to put the mine workings in zones with less potential for acid generation. In his testimony on redirect, Dr. Finley emphasized the importance of geochemical characterizations before, during, and after mining and made a specific point that most existing mines do not reflect modern-era geochemical characterization guidelines. He concluded that "[b]ased on the available information, I believe that conditions are sufficiently favorable that they can manage this mine development in such a way to limit, minimize the potential for acid rock drainage" Ex. 11.70, Transcript, Oct. 16 Tech. Session, p. 130.

Commission Analysis on Undue Adverse Impacts

103. After considering the value of the water resources to the State and determining them to be of high value, the Commission must consider all the evidence regarding potential impacts to those resources. Ultimately, The Nature Conservancy summarizes the Commission's analysis well by stating that "[m]etal mining is inherently risky and any accident or failure that results in water contamination will have drastic and lasting impacts far beyond the mine area." Ex. 7.334, The Nature Conservancy comments, p. 2. Key to the Commission's analysis of no undue adverse impact are the following factors:
- Wolfden has not provided an example of a similar mine that has been able to meet the stringent water quality standards established in the MDEP's Chapter 200 and waste discharge licensing rules.
 - The history of mining, particularly past violations of water quality standards and resulting water quality impacts.
 - The expert testimony of Dr. Maest, particularly regarding the high likelihood of the project contaminating water resources, the challenges around capturing all mine-influenced waters, the low capacity of surrounding water bodies to buffer even minor amounts of acid discharge, and the failure of mitigation measures to address ARD/ML in the vast majority of existing and historically operating mines.
104. The LUPC staff and Commissioners requested multiple times during their review that Wolfden provide an example of a mine that can meet the current water treatment standards applicable to the Pickett Mountain Mine project. Those requests were echoed by the Maine Geological Services' comments submitted to the LUPC in October 2020. Wolfden was not able to provide a credible example. During the Applicant's Redirect portion of the public hearing, after years of being requested for the information, Wolfden offered the names of mines they considered good examples. However, no supporting evidence was provided to allow for the evaluation of their claim. The Commission remains skeptical that it is possible to capture all contact water, treat it to background levels, and then discharge that water to match the existing natural hydrology, considering the complexity and cost of the treatment system and the complexity of natural hydrologic systems. The evidence presented by Wolfden has not been sufficient to overcome this skepticism as it remains based on general plan designs lacking specific details, that would utilize technologies that are unproven at the level of performance necessary to protect water resources at this site, and Wolfden has been unable to provide a credible example of a mine able to perform at that level.
105. There is a significant amount of evidence in the record around the poor performance of the mining industry and the resulting impacts on water resources. One study in the record, *Alaska Metal Mines, The Track Record of Impacts to Land and Water from the Failure to Capture and Treat Mine Pollution*, March 2020, written by Bonnie Gestring and published by Earthworks, reviewed five major operating metal mines in Alaska based on state and federal documents, news reports, and the federal National Response Center database. The report compiles the track record of spills and failure to capture and treat wastewater and air pollution at all five mines. The report found 1) five out of five mines have experienced at least one major spill or other accidental release of hazardous materials, 2) four out of five mines failed to capture or control contaminated

mine water, resulting in water quality violations that “often occurred over an extended period,” 3) four out of five mines have been identified as out of compliance with federal laws to protect clean air or water in the last three years, and 4) four out of five mines had Environmental Impact Study (EIS) processes that underestimated water quality impacts. Ex. 7.344, Reddy November 2 comments, PDF pp. 131-151. The same author wrote a report on U.S. copper mines, *U.S. Operating Copper Mines: Failure to Capture and Treat Wastewater*, published in May 2019 by Earthworks. That report concludes, “...14 out of 15 (93%) failed to capture and control wastewater, resulting in significant water quality impacts.” Ex. 10.42, Maest Pre-Field Testimony Attachment 7, p. 1, PDF p. 84.

106. Dr. Maest testified that mines with proximity to ground and surface water and moderate to high potential for ARD/ML were more likely to exceed water quality standards, that it is extremely difficult to capture all the mine-influenced water resulting in bypass, and that failure of planned and implemented mitigation measures was one of the primary causes of exceedances. Wolfden disputes Dr. Maest’s conclusions, contending that Maine’s relatively new Chapter 200 rules are stringent and would ensure water quality is protected, and that most studies report on older mines that did not use modern-era geochemical characterizations that would improve mining operations. Dr. Maest, in her testimony, argued that the Eagle Mine in Michigan provides a more recent example. She testified that the Eagle Mine is like the Pickett Mountain deposit and is operated by a well-established mining company. Further, she concluded that the results for the Eagle Mine demonstrate that a modern mine owned and operated by an experienced mining company can also have water quality challenges. Ex. 10.41, Maest Pre-filed Testimony, pp. 17-18. Dr. Maest additionally noted that the operating mine failures raised by Intervenor 2 violated current, presumably less stringent, standards in other states, suggesting that meeting the demanding requirements of Chapter 200 would be even more difficult.
107. Although Dr. Finley provided testimony on the capture of mine water, availability of mitigation measures, and advanced geochemical characterizations that provide more information on where and when ARD/ML would occur, neither he nor any other witness provided testimony to overcome the compelling evidence provided by studies such as the Kuipers and Maest study showing that a primary basis for mine failures is failed mitigation measures nor were they able to affirmatively demonstrate that a mine at Pickett Mountain could overcome those failures. Having more information on potential ARD/ML generation would certainly be beneficial; however, there isn’t substantial evidence in the record to indicate that geochemical characterizations alone are sufficient to ensure proper implementation of mitigation measures or how the Applicant would be able to surpass the litany of historic examples substantiating the mining industry’s inability to capture and treat mine-influenced water adequately. For example, Wolfden did not address specific employee training and monitoring measures that could overcome the risk of human error and unanticipated events that are inherent in the mining industry.

Commission Finding

108. The Commission finds that the evidence submitted by Intervenor 2 and interested parties regarding the value of the surrounding water resources and risk to those water and water-related resources posed by the Project, particularly the testimony of Mr. Kusnierz and Dr. Maest, is credible and compelling. For that reason, the Commission has given that evidence more weight than the evidence presented by Wolfden detailing potential mitigation measures. In doing so, the Commission finds the proposed rezoning would have an undue adverse impact on water

resources, fisheries, and aquatic life because there is credible evidence in the record that shows a significant risk of adverse impacts to these resources from acid rock drainage and potential spills of hazardous materials, and the risk is too great given the high value of those resources. Although a large-scale mining activity can bring significant economic benefits to the region and state, the evidence, in this case, shows that the water resources and their associated ecological, scientific, recreational, and cultural values constitute overriding, conflicting public values that require protection. Based on the Commission's weighing of the record evidence, the Applicant has not met its burden of proof, and the Commission finds there is substantial evidence that the Project would have an undue adverse impact on existing water resources and the use of those resources.

No Undue Adverse Impact – Socioeconomics

Criteria

109. 12 M.R.S. § 685-A(8-A)(B); Chapter 10, § 10.08(A)(2); and Chapter 12, § 4(B)(1)(b) require that a land use district boundary may not be adopted or amended unless there is substantial evidence that the proposed land use district boundary has no undue adverse impact on existing uses and resources.
110. Chapter 12, § 4(B)(2)(a) states that when reviewing a petition to change a subdistrict to the D-PD Subdistrict for the purposes of metallic mineral mining and applying the statutory criteria, the Commission shall consider the following factors: ... “[p]ositive and negative impacts upon the areas within and adjacent to the Commission's jurisdiction resulting from the change in use and development of the area. Such impacts may include, but are not limited to, impacts to regional economic viability, Maine's natural resource-based economy, local residents and property owners, ecological and natural values, recreation, and public health, safety, and general welfare...”
111. Chapter 12, § 4(B)(3)(a) states that when reviewing a petition to change a subdistrict to the D-PD subdistrict for the purposes of metallic mineral mining and applying the statutory criteria for approval, the Commission shall consider the following potential impacts:... “Potential short and long term socioeconomic impacts, both positive and negative, upon the immediate area and communities likely to be affected by the proposed activities and resulting from the construction, operation and closure of the proposed activity.”
112. Chapter 12, § 4(B)(3) also states that when “determining whether any adverse impact associated with the proposed rezoning is an undue adverse impact on existing uses or resources, the Commission shall consider the potential for a metallic mineral mining...permittee to avoid, minimize, or mitigate to the extent permitted by law, a potentially adverse impact so that the resulting impact is not an undue adverse impact.”

Evidence in the Record

113. Wolfden hired Michael LeVert of Stepwise Data Research to conduct an economic assessment (EA) of the Project as part of the Application. Mr. LeVert has 20 years of experience providing economic analyses to businesses, non-profits, and governments in Maine and served as the Maine State Economist from 2007 to 2011. The LUPC contracted with Dr. Rachel Bouvier to review the

EA. Dr. Bouvier is Associate Professor and Chair of Economics at the University of Southern Maine, and, through her consulting firm, provides economic analyses specializing in environmental and natural resource issues. Dr. Bouvier provided the LUPC with a memo describing the results of her review, and Mr. LeVert provided a response memo.

114. Wolfden provided testimony on local socioeconomics from Terry Thurston-Hill. Ms. Thurston-Hill has extensive direct experience with the outdoor recreation economy of the region having been a co-owner and operator of Shin Pond Village for 38 years and also having served in leadership roles in local snowmobile and ATV clubs. During that time, she has worked with, or served on, various community and regional economic development groups including the Katahdin Tourism Partnership and the Katahdin and Houlton Chambers of Commerce. She has also served on the board of directors of Friends of Katahdin Woods and Waters.
115. Intervenor 1 provided testimony relevant to socioeconomics from Joel Fitzpatrick, RPh, of Patten, ME. Mr. Fitzpatrick is a licensed pharmacist who has lived in Patten for 27 years where he owned and operated the Patten Drug Co., currently operates Katahdin Brew Works and works as a part-time pharmacist for Katahdin Valley Health Care. Mr. Fitzpatrick is currently a member of the Patten Planning Board.
116. In his pre-filed Testimony, Stu Levit, a staff scientist with the Center for Science in Public Participation with 20 years of experience advising on the impacts of mining and experience as a Land Reclamation Specialist with the Montana Abandoned Mine Reclamation Bureau, provided an analysis of Wolfden's plans to hire its employees from the local labor market. In its opening statement and closing brief, Intervenor 2 provided further analysis of Wolfden's socioeconomic claims.
117. Members of the public, the state legislature, and representatives of various nonprofit organizations provided written comment and public testimony pertaining to the socioeconomic effects of the Project.

Existing Socioeconomic Conditions

118. The EA provides a socioeconomic characterization of the region based on data from a range of local, regional, state, and national sources, including the U.S. Census Bureau's American Community Survey for 2016-2020 and results from the 2020 Decennial Census. The data indicate that the Project lies in a sparsely populated region of Maine with a declining and aging population. The population has dropped steadily in the Houlton and Millinocket Labor Market Areas (LMAs: regions defined by the U.S. Department of Labor) as layoffs and closures in the forest products industry caused residents to relocate. Since 1990, the population of the two LMAs has decreased by nearly 20% while it has increased in the rest of the state by more than 11%. Ex. 2.1, Application, Attachment 10-A, pp. 3-4, PDF pp. 318-319. According to the EA, there are over 6,900 vacant housing units in the Houlton and Millinocket LMAs combined, representing a vacancy rate above the state average. *Id.* pp. 14-15, 31, PDF pp. 329-330, 346. Mr. Fitzpatrick testified to his personal experience of the region's mill and factory closures and population decline since he moved to Patten in 1996, citing two mills in Millinocket, a starch factory in Island Falls, a plywood mill in Patten, and a drop in Patten's population from about 1200 people in 1996 to about 880 in 2020. Ex. 10.34, Fitzpatrick Pre-filed Testimony, p. 3. Mr. Fitzpatrick also testified that the Patten area experienced population growth during the COVID-19 pandemic

but expressed doubt that the new residents would remain in the area long-term. Ex. 11.76, Transcript, Oct. 18 Tech. Session, pp. 540-541.

119. The EA indicates that wages in the region are typically 20%-30% below the state average (although they may be as much as 35% below the state average in some years) and that poverty rates in the region exceed the state average, particularly among children. The percentage of jobs in manufacturing now trails the state average, and in 2021 unemployment exceeded the state average by 2% in the Houlton LMA and 3% in the Millinocket LMA. Labor force participation was 63.0% statewide from 2016-2020 but only 52.6% in the Houlton LMA and 49.4% in the Millinocket LMA. These statistics reflect the advanced age of the population and limited job opportunities. Consistent with the decline of manufacturing, employment opportunities in the area now follow seasonal fluctuations that typify tourism and the recreational economy. Employment remains relatively high in the region through the winter months compared to elsewhere in Maine, likely reflecting the region's popularity as a destination for snowmobiling and other winter recreation (see Finding 122). Ex. 2.1, Application, Attachment 10-A, pp. 5, 8, 11, PDF pp. 320, 323, 326.
120. Across all industries, the number of businesses in the region has declined in the past two decades while it has grown statewide. Compared to the rest of Maine, in 2021 the region had a higher concentration of businesses in agriculture, forestry, fishing, and hunting; transportation and warehousing; and public administration, and a lower concentration in wholesale trade. This reflects the occupational mix of the region in which people are more likely to work in farming and forestry, outdoor recreation, accommodation and food services, healthcare and social support, retail trade, and educational and protective services. The EA estimates that for the occupations most relevant to mining – construction, installation, production, transportation, and material moving – there are about 22,000 workers in Aroostook and Penobscot Counties and about 2,800 within the Houlton LMA and Millinocket LMAs. Ex. 2.1, Application, Attachment 10-A, pp. 7, 9, PDF pp. 322, 324.
121. In particular, from 2001 to 2021, the number of businesses producing goods declined by 17% in the Houlton LMA and by 20% in the Millinocket LMA compared to a 12% increase statewide. In 2021, there were 124 goods-producing businesses - including natural resource extraction, construction, and manufacturing - in the Houlton LMA and 43 in the Millinocket LMA, employing about 1,000 and 200 workers respectively. The EA estimates that in the industries most important to the Project's supply chain, in 2021 there were about 4,250 workers in construction, 2,700 in wholesale trade, and 310 in utilities in Aroostook and Penobscot Counties combined, and about 300 workers in construction, 115 in wholesale trade, and 75 in utilities in the two LMAs combined. Ex. 2.1, Application, Attachment 10-A, p. 7, 9, PDF 322, 324.
122. The area around the Project is part of the "Maine Highlands" region designated by the Maine Office of Tourism. According to the EA, tourism is a significant contributor to the regional economy but its growth in the region lags behind growth statewide. In 2021, visitor spending in the Maine Highlands supported about 9,400 jobs, \$296 million in earning, and \$75 million in tax revenue. Although Maine's tourism economy has grown substantially with restaurant and lodging sales rising 78.3% statewide from 2010 to 2021, growth was much lower in the region, ranging from 29.4% in Patten to 36.7% in Houlton and 40.1% in Millinocket over the same time period. Snowmobiling and ATV use provide significant tourism revenue. The Maine Highlands is the most visited tourism region in Maine for resident snowmobilers and the second most popular with

nonresidents. A study of ATV use in Maine from 2003-2004 indicated that the Maine Highlands was the most popular region for ATV riders. Ex. 2.1, Application, Attachment 10-A, pp. 12-13, pp. 327-328. Ms. Thurston-Hill testified that although outdoor recreation in the area has historically centered on hunting and fishing, the past decade has seen a significant shift toward a focus on snowmobile and ATV riding (motorized recreation) with hunting and fishing declining. Ex. 10.32, Thurston-Hill Pre-filed Testimony, p. 3.

123. Ms. Thurston-Hill also described her experience of observing young people move out of the region due to lack of employment opportunities. She noted the current limited economic opportunities in the region including few jobs and low wages and stated that she knows of 20-25 young people in her area who travel outside of the state for work but would prefer to work locally and be home with their families. Ex. 11.73, Transcript, Oct. 17 Tech. Session, p. 294. Mr. Fitzpatrick testified that his three adult children have said they would not return to the northern Penobscot area due to lack of job opportunities. Ex.10.34, Fitzpatrick Pre-filed Testimony, p. 3. This pattern was also reflected in public comment from the Southern Aroostook Development Corporation (SADC) and from local individuals who testified to the region's economic decline and stated that the Project would create new jobs, strengthen the regional economy, and enable young people who would otherwise leave the region for work, to remain closer to home (e.g., Ex. 7.48, SADC comments, p. 1).

Potential for Positive Socioeconomic Impacts

124. Wolfden has stated its intent is to source as much labor as possible and the majority of its materials from the region and the state during the permitting and construction phases of the Project,. Ex. 2.1, Application, pp. 2.6, 10.17, PDF pp. 26, 302). During the operations phase of the project, Wolfden projects hiring for 272 positions, inclusive of positions at the mine (233 jobs) and the concentrator and tailings management facility (39 jobs). Of these positions, 236 would be Wolfden employees (197 at the mine site and 39 at the concentrator and tailings management facility). The other 36 positions would be contractors working at the mine site. Ex. 2.3, Wolfden Response to LUPC, p. 3. However, during the start-up of operations, “[a]n experienced mining contractor will initiate underground mine production while training local workers” with the goal of transitioning the work force for mining-specific activities (primarily underground) to Maine-based employees. Ex. 2.4, Wolfden Response to Reviews, p. 4. During redirect questioning, Jeremy Ouellette, Wolfden's Vice President for Project Development, reiterated this point. Ex. 11.76, Transcript, Oct. 18 Tech. Session, p. 553.
125. During the operations phase of the Project, Wolfden projects hiring 230 of its 236 employees and all 36 of its contractors from the region, about 98% (266/272) of the total workforce at the mine and the concentrator and tailings management facility. Ex. 2.3, Wolfden Response to LUPC, p. 3, Table 1 (describing mine contractors as “local contractors”); Ex. 2.1, Application pp. 10.16-10.17 and Attachment 10-A, pp. 21-22; PDF 291-292, 336-337. “The Project plans to hire 230 workers from the local economic region within about an hour from the site.” Ex. 2.1, Application, Attachment 10-A, p. 32, PDF p. 347. These jobs include underground equipment operators, mechanics, and laborers; mill operators; supervisors and managers; and security guards among other positions. Many of the daily project operators would work 10.5 hour day- or nightshifts on a 7 days-on/ 7 days-off rotational schedule. Wolfden projects paying its on-site employees, on average, about \$64,000/year, approximately 33% more than the current average annual wage in

the economic region. Administrative employees are projected to be paid \$73,000/year on average. Ex. 2.1, Application, p. 10.16 and Attachment 10-A, pp. 21-22, PDF pp. 301, 336-337.

126. To ensure that spending on labor flows to the regional economy, Wolfden proposes to implement a regional training program to develop a local labor base with the skills needed for working underground. In his pre-filed Testimony, Mr. Ouellette cited past experience as part of a team that established a workforce training program and described initiating conversations about a training program with Region II and Region III vocational schools, Eastern Maine Community College, and Northern Maine Community College. The model is a program used in New Brunswick focused on ensuring that existing local skillsets are trained for underground work. Ex. 10.20, Ouellette Pre-filed Testimony, p. 2, 17-18. Wolfden estimates that 174 of its 236 direct employees (excluding contractors) during operations will be underground workers. Ex. 2.1, Application, Attachment 10-A, p. 22, PDF p. 337. The Southern Aroostook Development Corporation wrote that “[m]uch of the available workforce in northern Maine already has relatable and transferrable skills that would suit this type of industry [mining], such as mechanical, heavy equipment operations, electrical, earthworks, etc.” Ex. 7.48, SADC comments, p. 1. Wolfden proposes marketing the training program through the partnering schools, local development commissions, social media, job fairs, and community engagement strategies. Ex. 2.1, Application p. 10.17, PDF p.302.
127. The EA contained an analysis of the Project’s impact to the regional economy based on a standard model for economic impact analyses, the Regional Input-Output Modeling System (RIMS II) developed by the U.S. Bureau of Economic Analysis. RIMS II models spending relationships among more than 450 industries as well as the spending patterns of households, in this case estimating the total change in economic activity across all industries in the region resulting from Wolfden’s spending on the Project. This total economic impact is broken down into business sales, jobs, and earnings. Because the smallest geographies supported by the RIMS II model are counties, Mr. LeVert estimated the economic impact for Aroostook and Penobscot Counties combined, reasoning that these counties encompass the two labor markets most likely to be impacted by the Project. Ex. 2.1, Application, Attachment 10-A, p. 17, PDF p. 332.
128. The data for the economic impact analysis came from A-Z Mining Professionals Limited (AMPL; authors of Wolfden’s Preliminary Economic Assessment; see Finding 165) accounting of the Project’s expected revenue and expenses for the mine and concentrator/ tailings facility and from Wolfden’s estimates of spending on materials and labor within the region. The analysis modeled the economic impact from the proposed mine in combination with putative ore processing and tailings management facilities assumed to be located within the region and based on a 14 year project life. Wolfden projects spending \$622 million throughout the life of the Project, including \$340 million on materials and labor within the region. Ex. 2.1, Application, Attachment 10-A, p. 17, PDF p. 332.
129. In her review of the EA, Dr. Bouvier wrote: “[t]his type of economic impact analysis is widely used and is an appropriate choice” and “[g]iven the model that Stepwise Data Research used, the use of those counties [Aroostook and Penobscot] as the reference area is justified...”. Ex. 6.14, Bouvier EA Review, p. 3.
130. The RIMS II model estimated that Wolfden’s direct spending within the region would result in an overall economic impact of \$715 million in business sales, \$248 million in total earnings, and

roughly 324 full- and part-time jobs each year for the 14 years of the project (inclusive of the Project's direct hires). The analysis further estimated that the total earnings in the region would support roughly \$4.3 million in state sales tax revenues, \$4.3 million in local property tax revenues, and \$5.3 million in state income tax revenues, in addition to any taxes that Wolfden itself would pay. Ex. 2.1, Application, Attachment 10-A, pp. 25-28, PDF pp. 340-343. Mr. LeVert also modeled +/- 20% changes in Wolfden's spending projections, finding that a 20% increase would result in 5,450 job-years and a 20% decrease would result in 3,630 job years, with total regional spending ranging from \$498 million to \$746.5 million under the two scenarios. Ex. 2.1, Application, Attachment 10-A, pp. 28-29, PDF pp. 343-344. This analysis estimates the Project's regional economic impact and does not include economic benefits to the rest of the state, nor does it include the \$25 million that Wolfden budgeted for contingency spending.

131. The EA includes a qualitative analysis of the effect of the Project on tourism to the region, which Mr. LeVert summarized in his pre-filed Testimony:

Given that all of the region's major tourist attractions are located a considerable distance from the project (more than one hour away by car), that the Project's footprint will be less than one square mile, that – to my knowledge – the area to be rezoned does not have any snowmobile or ATV trails, and the region is not a “gateway-community” to Mount Katahdin, a reasonable conclusion is that the Project will have little to no adverse impact on the region's tourism industry. Ex. 10.31, LeVert Pre-filed Testimony, p. 7; Ex. 2.1, Application, Attachment 10-A, pp. 30-31, PDF pp. 345-346.

132. The EA also includes a qualitative analysis of the impact of the Project on housing, first describing the housing in the region and then drawing conclusions about the effects of Wolfden's hiring plans on the availability of housing. The EA notes that the declining population and the relatively lower incomes in the region constrain the demand for new and/or higher-end housing and that the aging population of the region will further affect demand. The EA describes the supply of housing in the region as predominantly single-family homes, which are relatively older and less expensive than in other regions with house prices and rents that are lower than the statewide average and a housing vacancy rate that is above the state average, particularly in the Houlton LMA (32%) and the Millinocket LMA (41%). There are over 6,900 vacant housing units in the two labor market areas. The EA concludes that:

As long as the Project is able to successfully hire from the local population of commuters, there will not be a substantial increase in demand for housing. To the extent that some workers will prefer to rent or buy a home closer to the Project instead of commute, the high vacancy rate in the region will likely be able to absorb a modest impact on demand with little effect on overall pricing fundamentals. Ex. 2.1, Application, Attachment 10-A, pp. 32, PDF p. 347.

133. The EA also noted that Wolfden's planned training and support programs, including programs on financial planning and management and programs assisting employees in finding another job within the mining industry could provide economic benefits beyond the Project's timeline as employees from the region would have skills transferable to other high-paying mining projects.

134. In her review of the EA, Dr. Bouvier agreed with Wolfden's assertion that "the project *as presented* would have a significant positive economic impact on a relatively depressed area." She expressed concern, however, that the assessment "presents the 'best case scenario,' without paying due attention to uncertainties in the analysis which may diminish positive economic impacts." Ex. 6.14, Bouvier EA Review, p. 7, emphasis in original.
135. The nearby towns of Stacyville, Patten, and Sherman, as well as Moro Plantation, voted in favor of resolutions supporting the Project. In Mount Chase, the votes were evenly split for and against. The Town of Hersey adopted an ordinance "allow[ing] a mining project, or any related mine infrastructure, to be located in the Town of Hersey provided that the project satisfies all regulatory requirements and standards of Chapter 200." Ex. 10.20, Ouellette Pre-filed Testimony, p. 15-16. The majority of public commenters from the economic region, including several state legislators representing the region, were in favor of rezoning the Project Area, as shown by the Applicant's map of the hometowns of individuals submitting public comment or testifying at the Hearing. Ex. 12.6, Wolfden Rebuttal Comments, pp. 22-23.

Potential for Diminished or Adverse Socioeconomic Impacts

136. Intervenor 2 argues that Wolfden overestimated the Project's socioeconomic benefits while ignoring its potential socioeconomic harms by failing to account for the negative effects of potential pollution, including water pollution, or other adverse events. Ex. 12.10 Intervenor 2 Post-Hearing Brief, p. 12, PDF p. 18. As described above (Finding 134), Dr. Bouvier thought the EA described the "best case scenario." The EA itself noted that:

...[T]he analysis assumes that no unforeseen environmental damage occurs as a result of the Project...[i]f environmental damage did occur that exceeded the level that could be mitigated by the reclamation fund or other means, negative economic impacts could occur that could offset the positive impacts. Ex. 2.1, Application, Attachment 10-A, pp. 29, PDF p. 344.

The EA also noted that "the assessment of little-to-no negative tourism impact assumes, importantly, that the Project does not harm the environmental quality of the larger region." Ex. 2.1, Application, Attachment 10-A, pp. 31, PDF p. 346. A letter signed by 51 Maine Guides stated that:

To keep our businesses thriving, we are heavily reliant upon scenic habitats and wildlife encounters that characterize Maine's North Woods and attract customers. The proposed mine could degrade the quality of the places we have counted on for decades to take guests and could negatively affect numerous recreational opportunities in the area....[g]uides use the rivers and ponds in this watershed frequently....[r]unoff from a mine would drain to waterways that are important to guiding businesses....[g]uiding is more than just a job for us; it is a way of life that is part of Maine's culture and supports local communities. Ex. 7.85, Multiple Maine Guides comment, p. 1.

A letter from the Maine Wilderness Guides Organization expressed similar concerns Ex. 7.93, Maine Wilderness Guides Organization, p. 1. Mr. Kusnierz testified to the economic importance of brook trout to the state and to tribal guides. Ex. 11.76, Transcript, Oct. 18 Tech. Session, p. 526.

137. Both Intervenor 2 and Dr. Bouvier pointed out that Wolfden does not specify how it will achieve the objective of nearly 100% local hiring. Intervenor 2 and Dr. Bouvier expressed skepticism that Wolfden would be able to hire such a high percentage of positions from the local population. Mr. Levit noted that Wolfden's employment figures include jobs associated with the ore processing and tailings management facilities which are not part of the Project. Ex.10.39, Levit Pre-filed Testimony, p.28; Ex. 6.14, Bouvier EA Review, p. 5-7. In her review of the Assessment, Dr. Bouvier wrote:

Wolfden assumes...that 100 percent of the labor in the operational phase will be from the local area. Notably, there is no clear justification of the percentage of jobs reasonably expected to be local, or a comparison of the skills needed in each job to a profile of the labor market in the area..." Ex. 6.14, Bouvier EA Review, p. 5.

Similarly, the EA states that Wolfden "plans to hire 230 workers from the local economic region within about an hour from the site" but that "it is uncertain at this point in the planning process if the Project will be able to do so...". The EA also states that "the primary constraint to hiring local employees will be the skills of workers in the labor market." Ex. 2.1, Application, Attachment 10-A, pp. 28, PDF p. 343. In response to Dr. Bouvier's review comments, Mr. LeVert wrote: "[w]e agree with Ms. Bouvier's overarching statement that the bulk of the economic benefits claimed by the analysis hinges on whether their [Wolfden's] local hiring efforts are successful." Ex. 2.4, Wolfden Response to LUPC, Attachment B, p. 1, PDF p. 30. Mr. Levit pointed out that there is no binding commitment on Wolfden to hire locally. Ex.10.39, Levit Pre-filed Testimony, p.28.

138. Intervenor 2 expressed skepticism about Wolfden's commitment to developing a training program in conjunction with local community colleges and presented an analysis of Wolfden's budget allocation from the Preliminary Economic Assessment (PEA) showing that \$10,000 had been allocated annually for training and that the money allocated to salaries and overhead did not include salaries for trainers. Ex. 12.10, Intervenor 2 Post-Hearing Brief, pp. 14-15, PDF pp. 20-21. Intervenor 2 also pointed out that in the Preliminary Economic Assessment (PEA) and elsewhere, Wolfden stated its intention to use contracted underground workers for 2-3 years before shifting to local labor. Ex. 2.1, Application, Attachment 14-A, p.135, PDF p. 651; Ex. 11.70, Transcript, Oct. 16 Tech. Session, p. 253.
139. Intervenor 2 also reasoned that Wolfden's planned 7-days-on/7-days-off work schedule is conducive to a remote work force commuting in and out on a weekly basis such that it would be quite practicable for Canadian workers experienced in Canada's nearby mines, for example, to hold mining jobs at Pickett Mountain. Ex. 10.39, Levit Pre-filed Testimony, p.28. Intervenor 2 further argued that if a major mining company were to acquire Wolfden at a later stage in the process, it would not be bound by Wolfden's stated intent to train and hire locally, and moreover, such a company would already have experienced employees available. Intervenor 2 wrote that "[t]he LUPC is being asked to take it on good faith alone in granting the rezoning application that some unnamed major mining company will satisfy Wolfden's promises to build a state-of-the-art mine that will employ hundreds of local people." Ex. 12.10, Intervenor 2 Post-Hearing Brief, p. 7, PDF p. 13.
140. Dr. Bouvier pointed out that one assumption of the economic impact analysis in the EA is the lack of constraints on the supply of key components for the Project, such as labor. Violation of

this assumption could reduce the economic effects. Using labor as an example, Dr. Bouvier writes:

Wolfden explicitly assumes that all labor during certain phases of the project will come from the local labor market. Given the dearth of job opportunities in the area being studied, this may not be an inappropriate assumption. However, whether the necessary skills exist in the area or not is an open question, one which highlights the importance of Wolfden's proposed training program. If the training program is not successful, or if Wolfden cannot find adequate local labor to fill those positions, then labor must be imported from other areas. This will in turn result in a decrease in the direct local positive impacts that Wolfden predicts, and potentially an increase in relative factor prices in the region. Ex. 6.14. Bouvier EA Review, p. 4.

Mr. LeVert included a similar caveat in the EA:

The primary constraint to hiring local employees will be the skills of workers in the labor market. If qualified laborers are lacking in the economic region, the Project will have to import labor from elsewhere. Unless workers permanently relocate to the region, this would reduce the economic benefit to the Pickett region. Ex. 2.1, Application, Attachment 10-A, p. 28, PDF p. 343.

141. The EA also notes that:

The inputs to the economic model are wholly dependent on A-Z Mining Professionals Inc. estimates of spending and Wolfden's projections for the level of spending to occur within the economic region. If less spending occurs than projected, or if a higher portion of spending goes to businesses or workers outside of the region, the economic impact will be less than the estimates contained in this report. Ex. 2.1, Application, Attachment 10-A, p. 28. PDF p. 343.

142. Dr. Bouvier further pointed out that "Wolfden explicitly assumes that impacts on the local housing market will be minimal precisely because all labor will come from the local market. Such an assumption will not hold if labor needs to be imported from other areas." Ex. 6.14. Bouvier EA Review, p. 6.

With regard to the analysis of the Project's impact on housing, the EA stated:

This assessment is dependent on the Project's ability to hire local workers once the mine is operational. If the Project is unable to hire from the local region and instead imports workers from outside of the region, the likelihood that this change in demand for housing pushes housing prices (likely rents) higher will increase. Ex. 2.1, Application, Attachment 10-A, p. 32, PDF p. 347.

143. Dr. Bouvier identified additional assumptions of the economic modeling in the EA:

- the jobs created are net new jobs filled by previously unemployed individuals rather than a shift in existing jobs as current job holders respond to new opportunities;

- the taxes and other economic activity described in the results are net new taxes and activity rather than shifts in existing taxes and economic activity;
- no changes in technology, production processes, external demand, or factor prices over the duration of the project; and
- that the upper bounds of the ranges of Wolfden's local consumption percentages were used in modeling the indirect and induced economic effects, rather than the midpoint.

Dr. Bouvier wrote, “[t]he results therefore should be viewed with a healthy dose of skepticism, especially for an industry as volatile as the metallic mining industry.” Ex. 6.14. Bouvier EA Review, p. 5.

144. The LUPC received public comment on the effects of metal pollution on human health. Dr. Bruce Taylor, a physician and Fellow of the American Academy of Pediatrics from Sweden, ME who completed a fellowship on the role of metals in disease and has treated and cared for patients with abnormal levels of metals such as lead, arsenic, mercury, and cadmium, wrote that the baseline evaluation of the health of the regional population in the EA was not reflective of the risk factors posed by the Project and that there was no attempt to evaluate cumulative risk or synergistic effects of metallic release and exposure over the life of the project. Ex. 7.346, B. Taylor comments, pp. 1-6. In his comment, Dr. Taylor made the following points:

- Metals, including lead, arsenic, and cadmium, mentioned throughout this application are toxic, especially to the developing fetus, children, and the elderly.
- Small particulate matter is produced in all stages of mining including removal of overburden, extraction, crushing, storage and transportation.
- This particulate matter can carry metals and other toxics, such as sulfides or diesel engine emissions and can enter the respiratory system where it can cause or exacerbate respiratory disease such as asthma and can enter the blood and be carried to organs.
- Exposure to particulate matter has also been linked to premature and low gestational weight birth as well as increased incidence of birth defects and autism.
- Transportation of mining products such as ore, waste, tailings, or filter cakes has been found to disseminate particulate matter and toxic metals over a wide area.
- Accumulation of and further dispersion, by traffic and wind, of particulate matter and metals over the life of the mine presents further risk by cumulative effect.
- In a humid and high precipitation climate like Maine, the likelihood of toxics entering the surface and ground water outside of the mining area is great.
- Data was not provided for factors linked to metal and particulate exposure such as premature deliveries, low gestational weight births, respiratory diseases such as asthma, and neurodevelopmental effects such as autism.

In her Pre-filed Testimony, Dr. Maest identified the same contaminant pathways that Dr. Taylor identified. Ex. 10.41, Maest Pre-filed Testimony, p. 31.

Response to the Potential for Diminished or Adverse Socioeconomic Impacts

145. In his pre-filed testimony, Mr. LeVert presented the RIMS II model results from an analysis of the economic effect of spending on the mine alone, excluding spending on the concentrator and tailings management facility. For the region, he found that the total projected output from mine-only spending would be \$509 million; total projected earnings would be \$175 million; and the total projected job-years would be 3,140. These projections are about 70% of the projections when the concentrator and tailings management facility is included in the analysis. He concluded that “spending on only the portion of the project in the LUPC jurisdiction will also result in a significant economic and fiscal contribution to the region.” Ex. 10.31, LeVert Pre-filed Testimony, p. 8.
146. In a response to Dr. Bouvier’s review, Mr. LeVert wrote:

With several minor exceptions, we agree with most of Ms. Bouvier’s comments and find her critique to be either a fair critique of economic impact models in general, and not of our methodology or process specifically, or a preference for a sharper emphasis on certain assumptions or caveats inherent in the economic modeling. Ex. 2.4, Wolfden Response to Reviews, Attachment B, p. 1, PDF p. 30.
147. In that same response, Mr. LeVert clarified that the RIMS II economic impact analysis he performed was based on 77% of Wolfden’s projected compensation spending going to local labor, rather than 100%. Ex. 2.4, Wolfden Response to Reviews, Attachment B, p. 2, PDF p. 31.
148. Mr. LeVert also pointed out that the Project would expand the size of the region’s economy for the life of the project because metallic mineral mining does not currently exist in the area. He distinguished between economic impact analyses on industries that already exist in a region, the results of which are more accurately described as “supporting” a certain number of jobs, and economic impact analyses on new industries, the results of which may indicate a real expansion of a region’s economy. Ex. 2.4, Wolfden Response to Reviews, Attachment B, p. 2, PDF p. 31.
149. Mr. LeVert defended the approach of comparing Wolfden’s projected wages for its employees to the region’s average wages rather than to current wages of comparable positions, writing:

...[T]his is the appropriate comparison because the economic impact of the project is being evaluated on its effect on the entire region, not just on a specific industry or occupation. In other words, whether the project will have higher wages in a specific industry (e.g., mining or construction) or in a specific occupation (e.g., as Ms. Bouvier suggest [sic], supervisory occupations) is less important than the project’s impact is [sic] on the overall health of the region’s economy. Ex. 2.4, Wolfden Response to Reviews, Attachment B, p. 2, PDF p. 32.
150. Mr. LeVert agreed with Dr. Bouvier’s assessment that the Project’s long timeline adds uncertainty to the economic impact results because the analytical model used (RIMS II) is based on current inter-industry relationships and spending. He wrote, “[w]ere these economic relationships to change significantly over the project’s 14-year lifespan, the results of the economic model would also change.” Ex. 2.4, Wolfden Response to Reviews, Attachment B, p. 3, PDF p. 32. Mr. LeVert pointed out that for projecting future economic activity, there is no good alternative to using a model based on the current economy. He did note that when the U.S.

Bureau of Economic Analysis releases new RIMS II multipliers, about every two years, these often change only slightly. However, he agreed with the “overarching point that projecting an economic impact fourteen years out does come with the added uncertainty that fundamental changes in the structure of the economy may happen within that time period.” Ex. 2.4, Wolfden Response to Reviews, Attachment B, p. 3, PDF p. 32.

151. Mr. LeVert also clarified that he did not intend the analysis using the upper bound of the local consumption percentage, and presented in Appendix I of the EA, to be used for assessing the range of economic impact from local consumption. He pointed to Table 28 in the EA which provides the results of adjusting Wolfden’s estimates of local spending by +/- 20% and wrote that the “intent in presenting this range in the body of the report was to be transparent about the assumptions around local consumption (which represent Wolfden’s best guess, at this point in time, but will certainly be higher or lower if the project were to proceed) and provide readers with a lower bound for the economic impact to use if they choose.” Ex. 2.4, Wolfden Response to Reviews, Attachment B, p. 3-4, PDF pp. 32-33.

152. Mr. LeVert agreed with Dr. Bouvier’s point that the impact of the Project on the local housing market will depend on the availability of local labor. However, he noted two additional points:

First, if imported laborers were to settle in the area and rent or buy housing, that would likely increase the positive economic impact detailed in the socio-economic analysis. In fact, one of the state’s top economic priorities is to attract new people from away to the state’s labor force.

Second, the region currently has high housing vacancy rates. At the time of the writing of the socio-economic report, the U.S. Census Bureau estimated that 33% and 41% of the housing stock in the Houlton and Millinocket Labor Market Areas were vacant, respectively. It is our view that the housing market could likely absorb a significant amount of new people moving to the area before leading to meaningful changes in the availability or price of housing. Ex. 2.4, Wolfden Response to Reviews, Attachment B, p. 4, PDF p. 33.

153. In response to the point that Wolfden’s training programs do not yet exist, Mr. Ouellette testified that given the long lead time associated with permitting, construction would begin four to five years at the earliest from a favorable rezoning decision and itself take one to two years. He noted that Wolfden has met with educational institutions in the area regarding these training programs as well as attended numerous regional meetings on economic development. Ex. 10.20, Ouellette Pre-filed Testimony, Exhibit E, p. 1, PDF p. 46.

154. Wolfden made a number of points responding to criticisms of its ability and commitment to hiring local labor:

- the 7-day on/7-day off schedule is conducive to hiring more widely from the region;
- although Project life is limited, employees will have the training and experience to obtain other jobs in the mining industry;
- stating that it would hire local contractors from Maine for the comprehensive baseline studies and mine construction and related service activities before; and

- explaining that using outside contractors for three years to get the project up and running is typical in the mining industry and allows potential local hires to complete a training program during that period.

Ex. 11.70. Transcript, Oct. 16, Tech. Session, pp. 58, 253; Ex 11.76. Transcript, Oct. 18 Tech. Session, p. 553.

Commission Analysis on Socioeconomic Impacts

155. Based on the socioeconomic evidence presented above, particularly the EA by Mr. LeVert and comment and testimony from individuals living in the area, the Commission finds that the region around the Project would benefit from new economic opportunities and jobs that pay above the average wage. The Commission appreciates that the Project, during its life, would expand the regional economy as metallic mineral mining is an industry that does not currently exist in the area. This finding is not contradicted by any witness, public comment, or other evidence in the record.
156. However, based on the evidence presented above, the Commission is skeptical that the socioeconomic benefits to the region would be as large as claimed. The Commission found credible Dr. Bouvier's assessment that the EA "presents the best case scenario," and Intervenor 2's assessment that Wolfden overestimates the Project's socioeconomic benefits.

The Commission finds significant Dr. Bouvier's and Mr. LeVert's agreement that the bulk of the economic benefits claimed by Wolfden hinges on whether local hiring is successful. The Commission is doubtful the Project will obtain nearly 100% of its employees from the region during the operations phase. While Mr. LeVert's economic modeling assumed that 77% of Wolfden's projected compensation spending would be on local labor, other statements in the EA and elsewhere in the record (Finding 125) reflect claims to hire a large percentage of workers from the local region. For example, in Tables 17 and 18 of the EA, 230 out of 236 Wolfden employees (97%) are projected to be local hires. Ex. 2.1, Application, Attachment 10-A, pp. 21-22, PDF pp. 336-337. While the Commission appreciates Wolfden's stated commitments to hiring locally and sponsoring training programs, Wolfden did not specify how it would achieve such a large percentage of local hiring, nor can local hires be guaranteed in the event a major mining company, presumably one that has numerous trained employees on its roster, acquires Wolfden prior to operations. Further, as both Dr. Bouvier and Mr. LeVert stated, a significant constraint in hiring local employees could be the existing skills sets in the labor market, yet no analysis was presented comparing the skills needed in each Project job to a profile of the skills in the area's labor market beyond general statements to that effect. The EA stated that at this point in the planning process, it was still uncertain if Wolfden would be able to hire 230 workers locally. Additionally, there is the potential for the concentrator and tailings management facility, and the jobs associated with it, to be located outside of the region, possibly in Canada closer to the location where ore concentrate will be trucked for smelting (see Exhibit 2.1, Application, Attachment 21-A, p. 1-2, PDF p. 851-852).

The Commission recognizes that there is no good alternative to making economic projections based on a model of the current economy. However, given the assumptions and limitations of such models, the Commission agrees with Dr. Bouvier's assessment that their results "should be

viewed with a healthy dose of skepticism, especially for an industry as volatile as the metallic mining industry.” The Commission is concerned that factors such as inflation, volatility in metal pricing, and technological changes could reduce the projected economic benefits given the time horizon of the Project and the model assumptions of lack of supply constraints and long-term stability in economic structure. Another important factor in considering the magnitude of the Project’s overall socioeconomic benefit to the region and State is the relatively short life span of the Project. While the Applicant stated that, despite the short life-span of the Project, the region could experience long-term benefits as employees hired locally will gain training experience to obtain other jobs in the mining industry, there is no evidence that mining jobs will be available in the region after the conclusion of the Project. Accordingly, employees seeking the benefit of skills received during the short life-span of the Project would likely need to leave the region in order to realize those benefits. Wolfden produced no evidence indicating that the skills obtained by individuals in the local work-force hired as mine employees would be transferrable to other high-wage jobs expected in the area.

Commission Finding

157. The Commission finds that while the socioeconomic impacts of the project are likely to be positive, they are also likely to be less than those predicted by Wolfden and insufficient to outweigh the risks from pollution, especially to the area’s water resources. The Commission sees potential socioeconomic benefits accrued from the Project as short-term and subject to volatility, whereas potential pollution from the Project could persist for hundreds of years, based the record of the mining industry when mining VMS deposits (Findings 52 and 193). Given the history of the mining industry; the lack of an example of a similar mine that meets environmental regulations; research showing that mines frequently fail to meet water quality standards, negatively impacting surface water (Finding 98); and the value and sensitivity of the water resources in the area (Findings 72 and 87), the Commission disagrees with Wolfden’s statement that choosing between the local economy and the environment is a false narrative. Ex. 12.9, Wolfden Post-hearing Brief, p. 9. Instead, consideration of the Project requires weighing the predicted socioeconomic impacts against the risk presented to the environment. As described above in Finding 108, the risk to water resources of extraordinary high-value is substantial, and Wolfden has failed to demonstrate that it can effectively mitigate this risk. Accordingly, in light of the Commission’s conclusion that any positive socioeconomic benefits from the Project are likely to be diminished by the short-term nature of the Project and difficulty in reaching Wolfden’s stated goals of local hiring, the Commission concludes that the adverse impact to existing resources posed by the Project would be undue.

Consistency with the D-PD Subdistrict

Criteria

158. Title 12 § 685-A(1) states that “[t]he commission may delineate and designate planned subdistricts and establish standards unique to each to efficiently balance the benefits of development and resource protection.”
159. Title 12 § 685-A(8-A)(A) and the Commission’s Chapter 10 Rules, Section 10.08(A)(1) require that a land use district boundary may not be adopted or amended unless there is substantial

evidence that “[t]he proposed land use district is consistent with the standards for district boundaries in effect at the time...”

160. Chapter 10, § 10.21,H. Planned Development Subdistrict (D-PD) establishes the purpose and description of the D-PD subdistrict. The purpose of the P-PD subdistrict is to allow for large, well-planned development that can be shown to be of high quality and not detrimental to other values established by the Commission’s *Comprehensive Land Use Plan for Areas within the Jurisdiction of the Maine Land Use Regulation Commission*, revised 2010, (CLUP). For a D-PD subdistrict, the Commission must conclude that the proposal is dependent on a particular natural feature or location that is available at the proposed site, the location of the site is the best reasonably available for the proposed use, and that the goals and policies of the CLUP are served. The D-PD subdistrict description allows for commercial and industrial uses, specifically including metallic mineral mining activities. However, the description generally requires that all development, except for access roads and utility lines, be at least 400 feet from any property line, and that development be reasonably self-contained and self-sufficient. To the extent practicable, development proposals for D-PD subdistricts must provide for their own water and sewer, road maintenance, fire protection, solid waste disposal, and police security.
161. Chapter 10, § 10.21,H(2) requires all development, other than access roads and utility lines, must be at least 400 feet from any property line. Upon a showing of good cause, the Commission may, at its discretion, increase or decrease that setback.
162. According to Chapter 12, § 12.3, the size of a D-PD subdistrict for a metallic mineral mine must be limited to an area necessary to reasonably conduct authorized mining and to adequately buffer those activities from surrounding resources or uses, but in no event less than 50 contiguous acres.

Key Goals and Policies of the CLUP

163. *Goal Pertaining to Mineral Resources:* The CLUP goal pertaining to mineral resources includes a policy that states the Commission should “[p]ermit major metallic mining developments only in areas zoned for planned development, and provide a rezoning procedure for this purpose which broadly considers impacts and benefits, competing uses and public values.” CLUP p. 15.
164. *Rezoning Areas for Development:* The CLUP also states that “[t]he Commission has also consistently maintained that intensive uses, including recreation-based, commercial and industrial uses, are best located near compatible, developed areas.” CLUP p. 61.

Location of the D-PD Subdistrict (dependent on a particular natural feature and the best reasonably available site)

165. Wolfden provided a property deed indicating that it owns the parcel within which the proposed D-PD subdistrict would be located. Wolfden indicated that the Project location is dictated by unique geologic conditions that resulted in the formation of a mineral deposit of economic value and the project must be located where the resource is found. Ex. 2.1, Application, p. 9.2, PDF 271. Further, the location is driven by the documented presence of a viable, in-situ source of metallic ore, which precludes the selection of an alternative location. Ex. 2.1, Application, p. 2.10, PDF p. 30. The *Preliminary Economic Assessment Pickett Mountain Project*, prepared by A-Z Mining Professionals Limited (AMPL), with an effective date of September 14, 2020 (PEA),

provides an estimate of the mineral resources for the Pickett Mountain Mine site based on historic resources and current resources from mineral exploration activities conducted onsite by Wolfden and others. Ex. 2.1, Application, Attachment 14-A, pp. 85-106, PDF pp. 601-622.

166. Wolfden previously applied for a zone change for the Project in January 2020. At that time, the Project included the mine, a concentrator, and a tailings facility within the rezoning area. The LUPC determined that developing a concentrator and a tailings facility were separate activities and were not dependent on a particular natural feature. Those facilities could be located a distance from the mine with greater flexibility in siting. The previous application was withdrawn in October 2021. The current proposal limits the Project to a mine-only alternative that Wolfden contends is dependent on the natural feature that is present in the Project Area.
167. The Maine Geological Survey (MGS) commented in a memo dated June 15, 2023, that:

...[T]here are currently very few mineral deposits in Maine known to be of significant size and grade (see *Metallic Mineral Deposits of Maine* <https://www.maine.gov/dacf/mgs/explore/mining/metal.pdf>). Of those few, the Pickett Mountain polymetallic deposit stands out as most compatible with the objectives of the Maine Metallic Minerals Mining Act (MMMMMA), which favors small, high-grade deposits that can be mined underground, having less potential environmental impact than large, low-grade, surface mines. Also, one of the commodities in the deposit, zinc, is on the federal list of critical minerals, essential to the economic and national security of the United States. Therefore, in our view, it would be more appropriate management of the metallic mineral deposit to allow it to proceed to the permitting process as envisioned by the CLUP and regulated by the MMMMA, than to have it remain in the M-G[N] zone. Ex. 6.10, MGS Review Comments, p. 2, PDF p. 3.

Buffers and Infrastructure (self-contained and self-sufficient)

168. The proposal submitted by Wolfden includes a 400-foot wide buffer along and within the boundary of the D-PD subdistrict. Wolfden provides that no vegetative clearing would be allowed within the buffer. Except, the proposal allows for certain road and powerline crossings through the buffer as shown on the Conceptual Site Plan (Figure 2-1, dated 10/17/2022, Ex. 2.1, Application, p. 2.16, PDF p. 36) and for spray irrigation and snowmaking to occur anywhere within the rezoning area pursuant to a permit issued by the MDEP, including within the 400-foot buffer. Wolfden's basis for allowing spray irrigation and snowmaking in the buffer is to ensure the systems are sited most appropriately to maintain site hydrology. Ex. 2.3, Wolfden Response to LUPC, p. 7. Regardless, the rezoning area would be surrounded by the larger Wolfden parcel, which would provide additional buffering for adjacent uses.
169. The Commission's standards for D-PD subdistricts require, to the extent practicable, development proposals to provide for their own water and sewer, road maintenance, fire protection, solid waste disposal, and police security. Wolfden proposes to install an on-site water supply well, a subsurface wastewater disposal system, porta-potties, and a water treatment system with spray irrigation and snowmaking. Wolfden proposes a cooperative road maintenance agreement with commercial loggers who access their own private property as well as the Wolfden property. Ex. 2.1, Application, p. 21.4, PDF p. 845. Wolfden would also provide its own onsite security, present 24 hours per day, 7 days per week, through a contracted vendor and emergency

response and mine rescue teams, particularly providing for fire response underground, with its own employees. Ex. 2.1, Application p. 17.2, PDF p. 823. Solid waste would be transported off-site by a licensed solid waste hauler and disposed of at a licensed solid waste disposal facility, paid for by Wolfden. Ex. 2.1, Application, p. 19.1, PDF p. 828.

Layout and Design (well-planned and of high quality)

170. The proposed area for rezoning is approximately 374 acres, exceeding the required minimum acreage of 50. Wolfden stated that the 374-acre area is required for the construction, mining, closure, and reclamation of the Project and provided a conceptual layout of the facility on the Conceptual Site Plan. The conceptual layout allows for project development that avoids onsite freshwater wetlands and streams and allows for a 400-foot-wide buffer within the rezoning area.
171. In its application, Wolfden stated that “[a]lthough new to Maine, the Project’s proposed mine design would be considered a state of the art, small-scale, small footprint underground mining operation by typical worldwide mining methodologies and able to achieve Maine’s strict subdistrict standards.” Ex. 2.1, Application pp. 2.10-2.11, PDF pp. 30-31. They concluded that the Project would be developed, operated, and reclaimed in accordance with strict regulations (MDEP Rule Chapter 200) that ensure the protection of the surrounding environment. Ex. 2.1, Application, p. ES.4, PDF p. 9.
172. In its comments, MGS concluded that the site's features and arrangement overall were well laid out, efficient, and logical but asked questions on several details of the conceptual plan. They also commented that the proposed boundary might need to be expanded slightly to allow redesign as more detailed information becomes available. Ex. 6.10, MGS Review Comments, p. 2-3, PDF p. 3-4.
173. Wolfden responded in their August 2023 Letter that the Application seeks to limit the rezoning area to that necessary for a well-designed project. Wolfden believes the rezoning area is appropriate and consistent with D-PD subdistrict criteria. It also indicated detailed design elements would be addressed in the final design stages as part of the permitting phase. Ex. 2.4, Wolfden Response to Reviews, p. 5.

Financial Practicability

174. The Application includes information on Wolfden’s financing plan. The Application’s Financial Practicability exhibit, Exhibit 14, includes sources of funds used to date for the Pickett Mountain Mine project, namely equity raises and timber sales. Wolfden provided that market capitalization is an important factor for them to fully finance the Project's construction and asserted that investors may be cautious to invest in the project until principal regulatory requirements have been successfully completed. Wolfden also provided that a typical financing plan for a mine includes a combination of project debt and equity and that, for small companies, equity is usually raised through share issuance as project milestones are achieved. Currently, Wolfden’s two largest shareholders, Kinross and Altius, are larger mining companies. Wolfden asserted that Kinross and Altius have excess financial capacity to finance the Project's construction; however, no evidence was provided to this effect. In the Application, Wolfden stated that financing for the Pickett Mountain project would occur through equity raises, short-term and long-term debt facilities, or a joint venture with a larger producer. Ex. 2.1, Application, p. 14.2, PDF p. 503.

175. One of the most common concerns raised through public comments received by the LUPC is the adequacy of the Applicant's financial capacity and technical ability. Numerous comments state, "Wolfden has never operated a mine before and has failed to demonstrate the financial and technical capability to develop a mine safely." (For example, see Ex. 7.40, Multiple Public Requests to Reject Mine Proposal.)
176. In a telephone interview conducted by LUPC staff with the Acting Director of the Office of Project Management and Permitting, Alaska Department of Natural Resources, on February 21, 2020, the Acting Director indicated that the mining industry includes two types of companies, junior and major mining companies. Based on a web search, he confirmed that Wolfden is a junior mining company. He also provided helpful information on the mining industry, including the following:
- The role of the junior mining company is to stake claims, explore sites, and prove the viability of a resource. Their business model is one of low cost but high risk, with the potential for high reward.
 - Typically, a junior mining company will partner with or sell to a major company for the development of a mine.

The Acting Director indicated that the State of Alaska does not review financial capacity in its review of a mining proposal but instead reviews the project's Preliminary Economic Assessment for an early determination of whether a project is technically feasible and financially practicable. Alaska reviews the project's Prefeasibility Study during the permitting phase, which has more information on the company financing. Ex. 8.1, Alaska DNR Phone Notes, pp.1-3.

177. The Commission must first consider the statutory decision-making criteria of 12 M.R.S. Ch. 206-A in determining the appropriate tests to apply in considering financial requirements for a projects such as this. A test of financial capacity and technical ability is included in the statutory decision-making criteria for development review and approval (permitting decisions). See 12 M.R.S. §685-B(4)(A), Criteria for Approval. These criteria do not apply to the adoption or amendment of land use district boundaries (zoning decisions). The criteria for a zoning decision are established in 12 M.R.S. §685-A(8-A), within which there is no direct reference to a test of financial capacity or technical ability. Based on the review of the statutory decision-making criteria for zoning decisions and the information provided by the Alaska DNR, the Commission finds that considering the technical feasibility and financial practicability of the project as a whole, rather than assessing the financial resources held by the entity proposing a zone change during the planning stage, is the more appropriate test for a zoning decision, particularly in the case of a proposed metallic mineral mine, as discussed below.
178. The Commission cannot approve rezoning to a D-PD subdistrict for metallic mineral mining unless there is substantial evidence that, among other criteria, the proposed change in districting is consistent with the purpose and intent of 12 M.R.S. ch. 206-A, which includes sound planning and zoning, and with the standards and purpose of the D-PD subdistrict. 12 M.R.S. §685-A(8-A)(A), 01-672 C.M.R. ch. 10, §10.08(A)(1), and 01-672 C.M.R ch. 12, §4(B)(1)(a) and 4(C)(1)(p). "The purpose of the D-PD subdistrict is to allow for large scale, well-planned development,"

proposals for which the Commission will consider "provided they can be shown to be of high quality and not detrimental to other values" of the Commission's jurisdictional area. 01-672 C.M.R. ch. 10, §10.21(H)(1). Whether a project is technically feasible and financially practicable is a particularly important consideration for a custom zone, such as a D-PD subdistrict, that will be specifically established for a single large-scale development project. A project that is not technically feasible and financially practicable is not a well-planned or high-quality development and, therefore, would not satisfy the requirements of the statutory and regulatory criteria, including 01-672 C.M.R. ch. 12, § 4(B)(1)(a).

179. Wolfden provided the PEA and an update letter to the PEA, written by AMPL and dated December 26, 2022 (AMPL December 2022 Letter; Ex. 2.1, Application, Attachment 14-B, PDF 723-724). AMPL is an independent consulting agency with experience auditing mine practices and preparing technical reports according to Canada's rules and guidelines for mineral properties. Ex. 10.29, LeBlanc Pre-filed Testimony, p. 1. The PEA was prepared to provide a Canadian National Instrument 43-101 Technical Report and includes "Certificates of Qualified Persons" for the professionals responsible for drafting the report. The PEA includes data and information on the project resources and reserves, project operating plan, mine plan, processing, infrastructure, capital expenditures, operating costs, economic analysis, sensitivity analysis, and AMPL's conclusions and recommendations. Relevant AMPL conclusions, as reported in the PEA, include:

- The PEA has identified a diluted mineral resource of 4.2 million tonnes at 8.56% zinc, 1.11% copper, 3.4% lead, 0.79 g/t gold, and 88.9 g/t silver. The resource is comprised of 50% Indicated Resources and 50% Inferred Resources.
- The mine would operate at 432,000 tonnes per annum and produce \$1.36 billion in cash flow during the life of the mine.
- The estimated capital costs (working capital, sustaining capital, and financial assurance) total approximately \$261 million.
- The estimated total average operating cost (excluding smelting and refining) for the Pickett Mountain Mine is approximately \$93.08 per tonne [~\$416 million for the life of the mine].
- The Project provides positive returns based on the parameters and metal prices used in the study and should be developed further with the aim of bringing the deposit to production.
- Results indicate that at the expected parameters and metal prices, the Project is viable.
- The proposed Project would be considered a small to medium sized underground mining operation, which can be developed for production at a reasonable cost in the near-term horizon, provided regulatory approval and permits are acquired.

Ex. 2.1, Application, Attachment 14-A, pp. 4-7, 183, 185, PDF pp. 520-523, 699, 701.

180. Included in the PEA is a sensitivity analysis, which found “[t]he [internal rate of return] is most sensitive to variations in metal prices and mined grades and less sensitive to capital and operating costs.” Ex. 2.1, Application, Attachment 14-A, p. 5, PDF p. 521.
181. The PEA addresses the technical feasibility of the Project, in part by concluding:
- Specifically, the [Chapter 200 Rules] only allow underground mining methods and require tailings disposal as dry stacked tailings in lined facilities to be closed with a final cover of equal hydraulic performance. Technically, the Project can meet these two requirements.
 - Review of the many requirements for mine design, mine operation, mine closure, water collection and treatment, and reclamation and environmental monitoring, did not identify technical or operational requirements that could not be met by a well-designed and responsibly managed project. Ex. 2.1, Application, Attachment 14-A, p. 159, PDF p. 675.
182. Chapter 15 of the PEA states, “There has not yet been any Mineral Reserve estimation done.” Ex. 2.1, Application, Attachment 14-A, p. 107, PDF p. 623. Mineral Reserves have demonstrated economic viability. Ex. 8.4, SWCA ZP779 Review Memo, Attachment E, p. 16, PDF p. 56; Ex. 10.29, LeBlanc Pre-filed Testimony, pp. 6-7.
183. In their December 2022 letter, AMPL indicated that they had reviewed the economic impact of relocating the processing plant and tailings management facility to an off-site location. In that evaluation, they updated the capital and operating costs and concluded:
- The capital costs have not changed.
 - An additional \$5.69/tonne was included in the operating costs for haulage, considering a 15-mile travel distance to the processing plant.
 - Other costs considered were a second water treatment plant and costs related to proposed spray irrigation and snowmaking systems.
 - The project remains extremely robust and provides an excellent return on investment.
 - Ex. 2.1, Application, Attachment 14-B, PDF pp. 723-724.
184. Brian LeBlanc, President of AMPL, testified on behalf of Wolfden. Mr. LeBlanc is a professional engineer and a designated Qualified Person as defined by NI 43-101 guidelines under the Canadian National Instrument 43-101. He testified that the NI 43-101 defines a PEA as follows: “Preliminary economic assessment means a study, other than a pre-feasibility study or feasibility study, that includes an economic analysis of the potential viability of mineral resources.” He also testified that the Companion Policy 43-101 notes, “A preliminary economic assessment might be based on measured, indicated, or inferred mineral resources, or a combination of any of these.” Ex. 10.29, LeBlanc Pre-filed Testimony, p. 4.

Further, Mr. LeBlanc testified that:

Inferred Resources are estimated based on geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. In contrast, Indicated

Resources are simply economic mineral occurrences that have been sampled ...to a point where an estimate has been made, at a reasonable level of confidence, of their contained metal, grade, tonnage, shape, densities, and physical characteristics. Inferred Mineral Resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as “Mineral Reserves.” Mineral Resources that are not mineral reserves do not have demonstrated economic viability; therefore, there is no guarantee that the economic projections contained in this Preliminary Economic Assessment would be realized. Ex. 10.29, LeBlanc Pre-filed Testimony, pp. 6-7.

185. As stated above, the current PEA for the Pickett Mountain Mine is based on 50% Indicated Resources and 50% Inferred Resources. There have not been any Mineral Reserve estimations.
186. The Commission retained SWCA Environmental Consultants (SWCA) to complete an independent, third-party review of Wolfden’s technical feasibility and financial practicability assessment for the Project. SWCA assembled a senior-level team from five consulting firms to complete the review on behalf of the Commission, including SWCA, Engineering Analytics, Linkan Engineering, Montgomery & Associates, and Sunrise Americas, LLC. The SWCA team’s review focused on mining engineering and general mining strategies, mine dewatering, mine and process waters management, reclamation and closure, and financial practicability. Relating to financial practicability, the SWCA team reviewed infrastructure costs, marketing, project schedule, project economics, project financing, and socioeconomic considerations. The SWCA review memo, dated 1/29/2021, concludes that:

Given the level of effort for this stage of development, and compared with similar deposits, the proposed development is technically feasible with the understanding that significant detail is still required for the design of individual mine components in accordance with the State of Maine rules and regulations for development of this project. The estimates and assumptions presented in the rezoning application and preliminary economic assessment to support the financial practicality of the project are considered reasonable at this stage of development; more detailed evaluation, including establishing a mineral reserve, and conducting detailed engineering and negotiating firm contracts to improve the accuracy of capital and operating cost estimates, will be required during the next stages to confirm the economic viability of the project. SWCA Review Memo, p. 9.

187. SWCA also reviewed the AMPL December 2022 Letter updating the economic model for relocating the processing plant and tailings facility off-site and adding a second water treatment plant. Based on that review, SWCA concluded in a memo dated 5/24/2023 that “[t]he additional costs are relatively minor and less than 10% of the original economic model, which has an overall accuracy of $\pm 40\%$. As such the additional costs are within the accuracy of the model and considered reasonable for the level of analysis during this preliminary review.” Ex. 6.4, SWCA Updated Review, p. 2.
188. Mr. Levit testified in part on the financial practicability of the project, including comments on inferred and indicated resources. He stated, "...indicated resources cannot be considered a proven mineral reserve...." Ex. 10.39, Levit Pre-filed Testimony, p. 27. Mr. Levit further testified that:

Disclaimers are required and may be reasonable in a preliminary economic assessment, but in this case the exceedingly speculative nature of the estimated mineral resources is problematic

because it precludes the ability to demonstrate that the ore resources can support a viable project. If actual resources at the site prove to be less than predicted, or more expensive than planned to extract, then the value of the project would be reduced, meaning it might not be able [to] be completed as planned and would likely be less attractive to prospective investors. The history of mining reflects a series of booms and busts where mineral prices fluctuate and with them the success and survival of mining companies. This history warrants careful scrutiny by LUPC of Wolfden's and the project's financial viability. Ex. 10.39, Levit Pre-filed Testimony, p. 27.

189. Public comments also raise concerns about the financial practicability of Wolfden's proposal. For example, commenter Michael B. Hubbard raises concerns about the volatility of metal prices and the impact of inflation on projected project costs:

Whatever the chosen expression, the Project's economic viability and performance depend almost entirely on the price of zinc world-wide to provide sufficient headroom above capital investment and operating costs.

AMPL does not explain, however, how it regards the 2020 costs used in its commercial viability analysis to be "current" when the rate of inflation in the U.S. economy between 2020 and 2023 has spiked dramatically. Ex. 7.328, M. Hubbard Comments, pp. 3-4.

190. According to commenter Nickie Sekera, "Reuters reported on November 1, 2023 that operations at established U.S. zinc mines are suspending operations due to weak prices and the impacts of inflation, the third shutdown of zinc operations by producers in recent months." Ex. 7.330, N. Sekera Comments, p. 2; *see also* Ex. 7.344, Reddy November 2 Comments, PDF p. 48 (quoting *Large-scale mining in Burkina Faso*, GLOCON County Report Series, February 2019).

Financial Assurance

191. Because of the significant risks associated with metallic mineral mining and the high costs of clean-up associated with ground and surface water contamination, provisions for long-term financial assurance are critical for metallic mineral mines. Mr. Ouellette testified that:

...[U]nlike other forms of development, Maine's mining law includes comprehensive requirements related to financial assurance, including a requirement that funds be set aside and held in trust in an amount sufficient to address a host of contingencies, including catastrophic events and 100 years of potential remedial activities. Ex. 10.20, Ouellette Pre-filed Testimony, p. 7.

192. As part of its cost estimates for the project, Wolfden included a proposal for \$13.7 million for a "Financial Assurance Trust: Reclamation & Closure." Ex. 2.1, Application, Attachment 14-A, p. 5, PDF p. 521.

193. Mr. Levit testified that:

Given the massive potential impacts from hard rock mines and the long history of hard rock mines leaving a legacy of expensive environmental, human health, and other costs, having adequate financial assurance is essential. Financial assurance is particularly important in the

case of AMD because, as noted above, it can take many years to be detected, at which point Wolfden, or any other mine operator, may no longer exist (within Maine or at all). Based on remediation costs at other mines Wolfden's proposed \$13.7 million bond is grossly underestimated and unsupportable. Ex. 10.39, Levit Pre-filed Testimony, p. 18.

Goals and Policies of the CLUP Served (not detrimental to other values)

194. The CLUP goal pertaining to mineral resources includes a policy that states the Commission should “[p]ermit major metallic mining developments only in areas zoned for planned development and provide a rezoning procedure for this purpose which broadly considers impacts and benefits, competing uses and public values.” CLUP p. 15. A full discussion of the Project's consistency with the CLUP, including a consideration of public values, is covered in a separate section of this decision document.

Commission Finding

195. The Commission finds that the location of the proposed D-PD subdistrict is dependent on a particular natural feature and is the best reasonably available for the proposed use based on information provided by Wolfden documenting the mineral resource and the MGS comments. The proposed rezoning area meets the minimum size requirement for a D-PD subdistrict. In addition, the size of the proposed subdistrict is limited to an area necessary to conduct authorized mining and include the required vegetative buffer. It would allow some flexibility for the final design of the facility while providing a reasonable configuration for mapping and ground locating the boundaries of the subdistrict. The Commission also finds that the proposed development would be reasonably self-contained and self-sufficient.
196. Although Wolfden contends the Project's proposed mine design would be considered a state-of-the-art mining operation and able to achieve Maine's strict mining standards, the Commission has determined that an important consideration of a well-planned development of high quality is the financial practicability and technical feasibility of the proposal. This is particularly important when considering a proposed custom zone designed specifically for a single project. In that regard, the Commission finds the testimony of Mr. Levit to be credible and places the most weight on testimony and evidence showing:
- There has been no Mineral Reserve estimation for the proposed mine.
 - The mineral resource on which the PEA is based (only Inferred and Indicated Resources) has not demonstrated the Project's economic viability.
 - Mineral prices fluctuate, and with them, the success and survival of mining companies.
 - Although the sensitivity analysis indicates the Pickett Mountain Mine would be less sensitive to capital and operating costs, evidence in the record indicates that inflation has played a role in the recent shutdown of zinc mining operations. (See Finding 190.)
 - Adequate financial assurance is an essential component of the estimated project cost, and Wolfden's proposal for financial assurance is “grossly underestimated and unsupportable.”

Wolfden bases its arguments on the project's financial practicability and technical feasibility largely on the PEA, and the PEA is based on “mineral resources ...considered too speculative geologically to have economic considerations applied to them.” Considering all the evidence in the record and its weighing of that evidence, the Commission finds that Wolfden has not demonstrated that the Project would be financially practicable and technically feasible. Therefore, the Commission finds the project is not well-planned and of high value.

197. In addition, given the findings made on undue adverse impacts on water resources and those on CLUP consistency that will follow, the Commission finds that the Project would be detrimental to other values, particularly high-value natural resources, including class A waters, salmonid fisheries, and cultural resources, and the goals and policies of the CLUP are not served. Therefore, the Project is not consistent with the current standards for the D-PD subdistrict boundaries.

Consistency with the Comprehensive Land Use Plan

Criteria

198. 12 M.R.S. § 685-A(8-A)(A), the Commission’s Chapter 10 Rules, Section 10.08(A)(1), and the Commission’s Chapter 12 Rules, Section 4(B)(1)(a) require that a land use district boundary may not be adopted or amended unless there is substantial evidence that the proposed land use district is consistent with the Commission’s Comprehensive Land Use Plan.

CLUP Vision, Principle Values, Goals, and Policies of the CLUP

199. *Vision for the Jurisdiction:* The CLUP establishes a vision for Maine’s unorganized territories, providing that “[t]he Commission’s jurisdiction will retain its unique principal values and will exemplify a sustainable pattern of land uses.” CLUP, p. 2.
200. *Principle Values:* As part of that vision, the CLUP outlines four principal values: 1) The economic value of the jurisdiction derived from working forests and farmlands, 2) Diverse and abundant recreational opportunities, 3) Diverse, abundant, and unique high-value natural resources and features, and 4) Natural character. CLUP, p. 2.
201. *Sustainable Pattern of Land Uses:* Also, as part of that vision, the CLUP defines four characteristics of a sustainable pattern of land uses:
- Retaining extensive forests, undeveloped shorelines, remote woodland character, and a unique collection of natural and cultural resources and values;
 - Providing for a continuation of traditional ways of life, rural communities, sustainable economic opportunities, and outdoor recreation for the people of Maine, its visitors, and property owners and residents of the jurisdiction;
 - Supporting development in places where the principal values of the jurisdiction are least impacted and in areas identified by the Commission as most appropriate for development; and

- Encouraging long-term conservation in places where the principal values of the jurisdiction are most vulnerable to degradation and in areas identified by the Commission as least appropriate for development. CLUP, p. 3.

202. *Goal Pertaining to Location of Development:* Guide the location of new development in order to protect and conserve forest, recreational, plant or animal habitat and other natural resources, to ensure the compatibility of land uses with one another and to allow for a reasonable range of development opportunities important to the people of Maine, including property owners and residents of the unorganized and deorganized townships.

- In areas that are not appropriate as new development centers, allow for (a) planned developments which depend on a particular natural feature, subject to site plan review, and (b) other development, subject to concept plan review. CLUP, p. 6-7.

203. *Goal Pertaining to Economic Development:* Encourage economic development that is connected to local economies, utilizes services and infrastructure efficiently, is compatible with natural resources and surrounding uses, particularly natural resource-based uses, and does not diminish the jurisdiction's principal values. CLUP, p. 7

204. *Goal Pertaining to Plant and Animal Habitat Resources:* Conserve and protect the aesthetic, ecological, recreational, scientific, cultural and economic values of wildlife, plant and fisheries resources.

- Coordinate with and support agencies in the identification and protection of a variety of high-value wildlife habitats, including but not limited to: ... rare or exemplary natural community and ecosystem types; native salmonid fish species; riparian areas; ... waterfowl and wading bird habitats; ... and significant vernal pools.
- Regulate land use activities to protect sensitive habitats, including but not limited to habitats for fish spawning, nursery, feeding and other life requirements for fish species. CLUP p. 16

205. *Goal Pertaining to Water Resources:* Preserve, protect and enhance the quality and quantity of surface waters and groundwater. CLUP p. 18

- Regulate uses of land and water in order to prevent degradation of the jurisdiction's excellent water quality and undue harm to aquatic habitat.
- Protect groundwater quality throughout the jurisdiction through proper controls on potentially polluting activities.

206. *Goal Pertaining to Geologic Resources:* Allow environmentally responsible exploration and mining of metallic and non-metallic mineral resources where there are not overriding, conflicting public values which require protection.

- Permit major metallic mining developments only in areas zoned for planned development and provide a rezoning procedure for this purpose which broadly considers impacts and benefits, competing uses and public values.

- Regulate mining operations to minimize water, air, land, noise and visual pollution, to ensure public safety and health, and to avoid undue adverse impacts on fisheries, wildlife, botanical, natural, historic, archaeological, recreational and socioeconomic values. CLUP, p. 15

207. *LUPC Regulatory Approach, Bedrock and Mineral Resources.*

- First, a developer must petition to rezone the area proposed for mining and related facilities to the D-PD Subdistrict. If the Commission deems the area appropriate for this type of use and rezones it, the site review process follows, focusing on design, engineering and environmental protection.
- The Commission's approach to mining is aimed at providing an appropriate mix of flexibility and control, as reflected in Chapters 12 and 13 of the Commission's rules.
- The rezoning phase focuses on the socioeconomic and environmental effects associated with metallic mining facilities. The site review process [Now, DEP's responsibility] is designed to ensure a high-quality operation that is protective of existing uses and natural resources, and establishes specific data gathering requirements and standards regarding facility design, operation and closure.
- Modern metallic mineral mining has not been practiced in Maine on a large scale, so it is difficult to predict the economic and environmental implications of this land use. A large mining facility can bring significant economic benefits to the state, expanding its economic base and creating employment opportunities. Such benefits are particularly valuable in rural areas which lack such a base. But this activity has the potential to cause serious environmental problems, and the Commission will evaluate proposals for metallic mining operations with particular care.

CLUP p. 219-220.

Commission Analysis

208. Wolfden states that:

A specific goal in the 2010 Comprehensive Land Use Plan (CLUP), which governs development in the unorganized and deorganized areas, is to 'allow environmentally responsible exploration and mining of metallic and non-metallic mineral resources where there are not overriding, conflicting public values which require protection.' As described in the Application, the Project will not interfere with existing uses and will be operated in a manner fully protective of water and other natural resources. In addition to the significant indirect economic opportunities, it offers an estimated 272 high paying direct Project related jobs. It will also allow Maine to be a leader in showcasing responsible mining carried out in accordance with the strictest rules in the country, and in a manner consistent with the goals and policies of the CLUP and the rezoning requirements for a D-PD subdistrict. Ex. 2.1, Application, p. ES.1, PDF, p. 6.

209. Intervenor 2 contends that "...a project that threatens serious harm to the area's natural resources and its growing outdoor recreational economy is not one that is consistent with the LUPC's Comprehensive Plan." Ex. 10.12 Intervenor 2 Post Hearing Brief, p. 22, PDF p. 28.
210. Catherine Johnson, retired Forest and Wildlife Project Director for the Natural Resources Council of Maine, testified on behalf of Intervenor 2 that:

The CLUP prioritizes the undeveloped character of the North Woods and the preservation of its natural resources, while allowing for recreational activities and economic activities based on outdoor recreation, forestry, and farming. Despite Wolfden's contention that the location of the zinc deposit is the most important consideration of the rezoning, the CLUP requires the Commission to balance its four principal values and to avoid approving projects that will have undue adverse impacts on the area and its resources. The North Woods and the Katahdin region are important undeveloped wildlife and recreation areas, and Wolfden's mine would threaten all that makes these areas unique. Ex. 10.35, Johnson Pre-filed Testimony, p. 2.

Ms. Johnson further concluded that:

In addition to the four principal values, the CLUP promulgates a vision of a sustainable pattern of land use that retains the jurisdiction's unique principal values and is essential to achieving the Commission's vision for the future. Wolfden's proposed mine is not a sustainable pattern of land use that will meet present and future needs without compromising the principal values of the jurisdiction. Ex. 10.35, Johnson Pre-filed Testimony, p. 7.

211. *Consistency with Principal Values:* The CLUP establishes an overall vision for Maine's unorganized territories (UT) that states, "[t]he Commission's jurisdiction will retain its unique principal values and will exemplify a sustainable pattern of land uses." The CLUP vision contemplates balancing the retention of the principal values with a sustainable pattern of land uses, and it defines four characteristics of a sustainable pattern of land uses. While the proposed Project will not have a significant impact on working forests or farmlands, based on the analysis regarding impacts to water resources above, (Water Resources, Findings 103-107), the Project poses a high risk of significant adverse impacts on natural resources and associated recreational opportunities. As discussed in those findings, the Commission has found that Wolfden's proposed development presents an unacceptable risk of undue adverse impacts to surrounding water resources due to substantial record evidence demonstrating the likelihood of pollution occurring, resulting in adverse impacts on downgradient water resources. Although the CLUP does not prioritize one principal value over another, given the high value of the natural resources surrounding and downgradient of the Project and the extent of risk to those resources, the Commission places great weight on the principal value relating to diverse, abundant, and unique high-value natural resources and features. Given the severe and long-lasting damage that would be inflicted on these high-value natural resources in the event of pollution impacts on downgradient water resources, the Commission concludes that the acute risk to this critical principal value weighs heavily against a finding of consistency with the CLUP's principal values. On that basis, the Commission finds the Project would not retain the jurisdiction's unique principal values.
212. *Consistency with Sustainable Pattern of Land Uses:* The project would also not result in a sustainable pattern of land uses in that the proposed industrial development with a high risk of

adverse impacts on natural resources (Water Resources, Findings 103-107) will not provide for the continuation of traditional ways of life or water-related outdoor recreation. For context, a 50-year Patten resident and doctor commented:

The persistent asset of the Katahdin region is its natural resources.... We are starting to see the impact of an economy built on tourism. There is nothing about the Wolfden mining project that supports that future. Rather the short term presence of a mine, not to mention the potential long term environmental risks, are the antithesis of continued support for the area's future well being. What remains of the mining operation after its decade or so of production will discourage visitation, impeding development of an outdoor recreational tourist economy. Ex. 7.121, R. Blum Comments, pp. 1-2.

Importantly, the Project will not provide a sustainable economic opportunity for the region or State given the short project life, limited mineral resources onsite, and metallic mineral mining's vulnerability to market prices. According to Wolfden, the proposed Project is estimated "to occur over a 10- to 15-year life..." Ex. 2.1, Application, p. 2.1, PDF p. 21. The Project's "proposed mine design would be considered a...small-scale, small footprint underground operation..." Ex. 2.1, Application, p. 2.10, PDF p. 30. Also, Dr. Maest stated that:

The deposit, as currently defined, is the smallest of the known VMS deposits in the Maine/New Brunswick/Newfoundland area. As shown in Figure 1, the Pickett Mountain deposit is currently estimated to contain only 2.05 million metric tonnes (Mt) of indicated ore (also see A-Z Mining Professionals, 2019, Table 1.1, p. 2). Ex. 10.41, Maest Pre-filed Testimony, p. 4.

Noted previously, according to Nickie Sekera, "Reuters reported on November 1, 2023 that operations at established U.S. zinc mines are suspending operations due to weak prices and the impacts of inflation, the third shutdown of zinc operations by producers in recent months." Ex. 7.330, N. Sekera Comments, p. 2; *see also* Ex. 7.344, Reddy November 2 Comments, PDF p. 48 (quoting *Large-scale mining in Burkina Faso*, GLOCON County Report Series, February 2019). As stated in testimony by Mr. Levit, "[t]he history of mining reflects a series of booms and busts where mineral prices fluctuate and with them the success and survival of mining companies." Ex. 10.39, Levit, Pre-filed Testimony, p. 27. One of Wolfden's financial statements also shows the impact that market volatility can have on metallic mineral mining projects, "...the capital markets continue to be volatile and are largely out of the Corporation's control, and therefore, there remains material uncertainties that cast significant doubt on the Corporation's ability to continue as a going concern." Ex. 12.4, Wolfden Financial Statements, p. 7, PDF p. 9. Although the Commission has determined that financial capacity is not a decision making criterion for a rezoning application, the extensive record evidence demonstrating the risk of volatility in metals pricing, and the inherently short-term nature of mining activity, lead the Commission to conclude that Project will not provide sustainable economic opportunities and will not result in a sustainable pattern of land use.

Consistency with Goals of the CLUP

213. In addition to the principal values and characteristics of a sustainable pattern of land uses, the CLUP establishes a series of both broad and specific goals and policies to guide the Commission's decision-making. Key to this Application are the goals pertaining to economic

development, location of development, plant and animal habitat resources, water resources, and geologic resources.

214. The project location is only 4.5 miles from the Town of Hersey and 9.5 miles from Patten, which are connected by public roads to other organized towns and economic centers. The mine would be staffed with its own security and safety personnel, utilize onsite water and wastewater disposal, and have contracted services for solid waste disposal, minimizing the burden on local services. Operation of the mine would represent only a portion of the total Wolfden land holdings but would bring economic benefits to the region. According to Wolfden, direct benefits would include job skills training, primary wages to local employees, wages spent in the local economy, increased property tax revenue, and indirect wages at secondary jobs supporting mining operations. Ex. 2.1, Application, p. 9.4, PDF p. 273. Wolfden estimates indicate that the Project would result in \$622 million in spending during the planning and operation phases, of which \$340 million would be directed to businesses in the economic region of Aroostook and Penobscot Counties. Wolfden projects indirect and induced economic benefits totaling \$715 million in business sales and \$248 million in earnings. Ex. 2.1, Application p. 10.16, PDF p. 301. Wolfden did not identify any negative economic impacts that would result from the Project. Use of the remainder of the parcel surrounding the mine would include timber harvesting, a compatible use, continuing to support the forest industry, and contributing to Maine's natural resource-based economy. Because Wolfden states an intent to source labor and materials locally, the Property is relatively close (5.1 miles) to the State highway system, and operations will be relatively self-sufficient in terms of services, the Commission finds the proposal represents economic development that would be connected to local economies and utilize services and infrastructure efficiently consistent with the economic development goal of the CLUP. CLUP, p. 7.
215. Regarding the location of the development goal, the proposed site for rezoning is not located within a primary or secondary location as defined in the Commission's Chapter 10 rules, Section 10.08-A(C), and as such, is not appropriate for a new development center. However, according to Wolfden and supported by the record, its property contains unique geologic conditions that resulted in a mineral deposit of economic value, a high-grade polymetallic mineral resource including zinc, copper, and lead. Ex. 2.1, Application, pp. ES.1, 9.2, PDF pp. 6, 271. The proposed planned development for the Pickett Mountain Metallic Mineral Mine is, therefore, dependent on the location of a particular natural feature, the mineral resource at Pickett Mountain. However, to find the location of the development goal is met, the Commission must also ensure the protection of recreational, plant or animal habitats, and other natural resources and ensure the compatibility of land uses with one another. Based on the findings that the surrounding natural resources are of high value and there would be an undue adverse impact on those resources (Water Resources, Findings 103-107), the Project is not protective of natural resources nor compatible with traditional and cultural uses of those resources, and the location of development goal is not met. CLUP, p. 6-7.
216. The Commission has considered the CLUP goals for plant and animal habitat resources and water resources with particular care. Water resources are discussed in separate findings above. The potential impacts of the Project on those resources were also assessed in light of the goals set forth in the CLUP. Based on Findings 103 through 107, the Commission finds that the proposal would not conserve and protect the aesthetic, ecological, recreational, scientific, cultural, and economic values of fisheries resources. In addition, the Commission finds the proposal would degrade the jurisdiction's water quality, cause undue harm to aquatic habitat, and impact

groundwater quality based on prior findings that the Project will have an undue adverse impact on water resources (Findings 103 - 107). Therefore, the CLUP goals for plant and animal habitat resources and water resources are not met.

217. Consistent with the CLUP goal for geologic resources, CLUP, p. 15, Wolfden applied to rezone its property to a planned development subdistrict, and the Commission broadly considered potential impacts and benefits, competing uses, and public values. In particular, the Commission considered proposed methods to minimize water, air, land, noise, and visual pollution and potential adverse impacts on fisheries, wildlife, botanical, natural, historic, archaeological, recreational, and socioeconomic values.
218. When considering the factors, policies, and considerations set forth in the CLUP goal pertaining to geologic resources, the Commission finds that the key issues necessary for assessing consistency with the CLUP are 1) whether the Project represents environmentally responsible mining of metallic mineral resources and 2) whether there are overriding, conflicting public values that require protection. Of the principal values identified by the Commission as defining the distinctive character of its service area, CLUP p. 2, the values receiving the most focus in the comments and testimony in the record are the diverse, abundant, and unique high-value natural resources and features including lakes, rivers and other water bodies, and fish and wildlife resources; specifically, the nearby, high-quality surface and groundwater resources, and the salmonid fisheries, Atlantic salmon and brook trout.

Responsible Mining

219. Wolfden argues that the mining operation would represent responsible mining of the metallic mineral resource, based in part on their proposal for mine water management, including the collection and treatment of precipitation that contacts mined rock materials and other mine-management practices described in Exhibit 2 of the Application. Wolfden states that, collectively, the mine-management practices would prevent degradation or impacts to ground and surface water and protect water quality in adjacent aquatic habitats, thereby protecting aquatic life, including fisheries. Ex. 2.1, Application, p. 9.14, PDF p. 283. Wolfden concludes that “[i]n 2017, Maine enacted the most stringent mining regulations in the nation. The Project will meet those requirements and showcase mining techniques that allow for responsible and safe extraction of metallic minerals that are key to our future.” Ex. 2.1, Application, p. ES.1, PDF, p. 6.
220. As with other witnesses that had similar testimony, Mr. Levit, testified that:

Wolfden has not provided an example of a similar mine that accomplishes or has accomplished this and in my two-plus decades of experience I have not heard of a comparable hard rock mine achieving this. As discussed below, Wolfden’s proposal is not adequate to show that its proposed methods will actually work...

If Wolfden’s proposed treatment methods and promised results were realistic and practicable, it is highly likely that there would be available examples of other comparable mines achieving similar results because the technologies that Wolfden proposes to use are not new or unique...

Moreover, not only does the potentially prohibitive cost of the proposed complex treatment systems pose a serious risk that Wolfden will fail to meet its water treatment promises, but examples abound of mines failing to treat water successfully due to operational failures, design flaw, and human error, among other reasons. Ex. 10.39, Levit, Pre-filed Testimony, p. 2, 3, 5.

221. The Commission recognizes that there have been significant improvements in the mining industry over time. If the Project could successfully utilize all the proposed mine-management practices and comply fully with Chapter 200 and other DEP rules, the Commission believes the Project would represent responsible mining. However, as discussed in Finding 98, the record has substantial evidence to show that measures used to avoid or minimize the impacts of ARD/ML and other water quality impacts are often not successful (for example, the Kuipers and Maest study), and the Commission is not convinced that the proposed mine-management practices would be successful. Evidence in the record regarding the history of metallic mineral mining shows that mitigation measures have failed in most mines that have been studied, even under regulatory regimes that were presumably less stringent than that imposed by Chapter 200. Given the exceptionally high value of the natural resources at risk, Wolfden has not demonstrated with substantial evidence that the proposed Project would be the exception to this trend. While Wolfden contended that advances in mining rendered the historical comparisons inapt, notably, Wolfden did not produce a single credible example of a comparable mine that has succeeded in avoiding environmental impacts, nor did Wolfden produce countervailing studies demonstrating that current mine practices have reduced the mitigation failure rates documented in the record. On the basis of the record before it in this matter, the Commission concludes that it cannot find that the proposed mining operation would result in responsible mining of the metallic mineral resource at Pickett Mountain.

Overriding, Conflicting Public Values

222. As stated above, the key public values for this Application relate to the surrounding surface and groundwater resources, fisheries resources, including the salmonid Atlantic salmon and brook trout fisheries, and cultural resources. Separate findings address potential impacts on water resources, including fisheries (Reference Findings 56, 57, 78, and 80 - 83), and cultural resources (Reference Findings 84 - 86). Based on those findings, the Commission has determined that there are high-value natural resources surrounding and downgradient of the proposed Project, specifically Class A and AA rivers and streams designated for sustenance fishing use, State Heritage Fish Waters (which MDIFW considers unique, valuable, and irreplaceable ecological and angling brook trout resources), and designated critical habitat for the endangered Atlantic salmon. The Commission found the project would have an undue adverse impact on those resources. Based on that determination and the significant value of those natural resources as previously described, the Commission finds that there are overriding, conflicting public values that require protection.

Commission Finding

223. In summary, the Commission finds the proposed rezoning involves a planned development that is dependent on a particular natural feature, is connected to local economies, and utilizes services and infrastructure efficiently.

However, the Commission has found that the proposal will not retain the principal values of the CLUP, does not represent a sustainable pattern of land use, and does not meet several CLUP goals on which the Commission places significant weight (location of development, plant and animal habitat resources, and water resources). Additionally, Wolfden has not demonstrated that the Project could represent environmentally responsible exploration and mining, and there are overriding public values requiring protection. Therefore, the Commission finds the Project is not consistent with the CLUP.

Consistency with 12 M.R.S. Chapter 206-A

Criteria

224. 12 M.R.S. § 685-A(8-A)(A); Chapter 10, § 10.08(A)(1); and Chapter 12, § 4(B)(1)(a) provide that a land use district boundary may not be adopted or amended unless there is substantial evidence that the proposed land use district is consistent with the standards for district boundaries in effect, the comprehensive land use plan, and the purpose, intent, and provisions of 12 M.R.S. Chapter 206-A (herein Ch. 206-A or “the statute”).

Commission Analysis

225. The purpose of the law establishing the Land Use Planning Commission is to:

[E]xtend the principles of sound planning, zoning, and development to the unorganized and deorganized townships of the State: to preserve public health, safety and general welfare; to support and encourage Maine's natural resource-based economy and strong environmental protections; to encourage appropriate residential, recreational, commercial and industrial land uses; to honor the rights and participation of residents and property owners in the unorganized and deorganized areas while recognizing the unique value of these lands and waters to the State; to prevent residential, recreational, commercial and industrial uses detrimental to the long-term health, use and value of these areas and to Maine's natural resource-based economy; to discourage the intermixing of incompatible industrial, commercial, residential and recreational activities; to prevent the development in these areas of substandard structures or structures located unduly proximate to waters or roads; to prevent the despoliation, pollution and detrimental uses of the water in these areas; and to conserve ecological and natural values. 12 M.R.S. § 681.

226. The principles of “sound planning, zoning, and development” and the detailed policies by which the Commission will achieve the purpose and intent of the law are embodied in the Commission’s regulations and standards, as well as the CLUP, a comprehensive guide for development that was adopted as required by statute. 12 M.R.S. § 685-C(1). The last revision to the CLUP was in 2010, and this is the version against which the consistency of the Application is evaluated. Because the statutory Purpose and Scope section was amended in 2012, the CLUP is interpreted in light of the current law. In assessing the Application’s consistency with Ch. 206-A and the CLUP, the Commission considered the statutory purpose and scope, the principal values of the jurisdiction identified in the CLUP, the broad and specific goals of the CLUP, and the Commission’s applicable regulations and standards.

Commission Finding

227. Regarding the statutory purpose and scope, the Commission finds that its determination on consistency with the CLUP establishes consistency with the purpose and scope of the statute under which the CLUP must be adopted. This finding is based on the following:
- a. The Purpose and Scope of Ch. 206-A is embodied virtually verbatim in the broad goals of the CLUP and
 - b. In accordance with the statute, "[t]he [C]ommission must use the [CLUP] as a guide in ... generally fulfilling the purposes of this chapter." 12 M.R.S. §685-C(1).
228. The Commission finds of particular relevance several of the CLUP's specific goals and associated policies concerning economic development, location of development, plant and animal habitat resources, water resources, and geologic resources. The Commission's findings with respect to those goals are addressed in the analysis relating to consistency with the CLUP in Findings 211, 212, 214-216, 221, and 222.
229. In addition, in determining consistency with the statutory provisions, as explained more fully in Finding 227, the Commission has reviewed the Application under the statutory criteria for adoption or amendment of land use district boundaries and applicable regulations and standards, specifically the Commission's standards contained in Chapter 12 of its rules adopted pursuant to Ch. 206-A. In conducting its review and applying the applicable statutory provisions in Chapter 206-A and the relevant regulations and standards, the Commission interpreted and applied the statutory provisions, rules, and standards incorporated into the CLUP.
230. Based on the Commission's findings on consistency with the CLUP and its findings on the applicable statutory criteria and regulatory standards, with the most weight given to findings that the project does not represent environmentally responsible mining (Finding 221); there are overriding, conflicting public values that require protection, particularly the high-value water resources surrounding and downgradient of the Project Area (Finding 222); and the Project will have an undue adverse impact on water resources (Finding 108); the Commission finds that the Application is not consistent with Ch. 206-A. Specifically, in light of these findings, the Commission concludes that the project is not consistent with the purpose and scope provided by statute as it would not represent "sound planning, zoning and development," and would not be consistent with the Commission's statutory charge to "support ... Maine's natural resource-based economy and strong environmental protections;" prevent "commercial and industrial uses detrimental to the long-term health, use and value of" the areas within the Commission's jurisdiction; "prevent the despoliation, pollution and detrimental uses of the water in these areas; and ... conserve ecological and natural values."

Conclusions

Based upon the above analysis and findings:

1. The Commission concludes that the Applicant has not provided substantial evidence that the proposed land use districts are consistent with the standard for district boundaries in effect at this time, and thus has not met the corresponding requirements of 12 M.R.S. § 685-A(8-A)(A), restated in Chapter 12, § 4(B)(1)(a) based on Findings 196-197.
2. The Commission concludes that the Applicant has not provided substantial evidence that the proposed land use districts are consistent with the *Comprehensive Land Use Plan* and thus has not met the corresponding requirements of 12 M.R.S. § 685-A(8-A)(A), restated in Chapter 12, § 4(B)(1)(a) based on Finding 223.
3. The Commission concludes that the Applicant has not provided substantial evidence that the proposed land use districts will have no undue adverse impact on existing uses or resources, and thus has not met the corresponding requirements of 12 M.R.S. § 685-A(8-A)(B), restated in Chapter 12, § 4(B)(1)(b) based on Finding 108.
4. The Commission concludes approval of the petition would not be an act of sound land use planning, and that the proposed rezoning is not consistent with the purpose, intent and provisions 12 M.R.S. Ch. 206-A, and thus has not met the corresponding requirements of 12 M.R.S. § 685-A(8-A)(A), restated in Chapter 12, § 4(B)(1)(a) based on Finding 230.

Therefore, the Commission DENIES the Rezoning Application ZP 779A submitted by Wolfden Mt. Chase LLC to rezone 374 acres from General Management (M-GN) and Shoreland Protection (P-SL2) subdistricts to a (D-PD) Planned Development subdistrict.

In accordance with 5 M.R.S. § 11002 and Maine Rules of Civil Procedure 80C, this decision by the Commission may be appealed to Superior Court within 30 days after receipt of notice of the decision by a party to this proceeding, or within 40 days from the date of the decision by any other aggrieved person.

DONE AND DATED IN AUGUSTA, MAINE, THIS 14th DAY OF FEBRUARY 2024.

By: _____
Stacie R. Beyer, Acting Executive Director

Attachment A

Land Use Planning Commission List of Exhibits
for ZP 779A

Maine Land Use Planning Commission
Department of Agriculture, Conservation and Forestry



HEARING RECORD CONCERNING

**ZP779A, ZONING PETITION FILED BY WOLF DEN MT CHASE, LLC,
PICKETT MOUNTAIN TRACT, METALLIC MINERAL MINE, T6 R6 WELS**

List of Exhibits (2/2/2024)

Ex. #	Date Received/Posted	Description
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1. Statutes and Rules

- 1.1. Statute Administered by the Land Use Planning Commission: Title 12 M.R.S., Chapter 206-A, Amended Effective 8/8/2022
- 1.2. Fee Schedule, Chapter 1 of the Commission's Rules, Amended Effective 11/1/2021
- 1.3. Definitions, Chapter 2 of the Commission's Rules, Amended Effective 08/11/2023
- 1.4. Rules of Practice, Chapter 4 of the Commission's Rules, Amended Effective 08/11/2023
- 1.5. Rules for the Conduct of Public Hearings, Chapter 5 of the Commission's Rules, Amended Effective 11/1/2021
- 1.6. Land Use Districts and Standards, Chapter 10 of the Commission's Rules, Amended Effective 08/11/2023
- 1.7. Mining and Level C Mineral Exploration Activities, Chapter 12 of the Commission's Rules, Amended Effective 05/27/2013
- 1.8. Comprehensive Land Use Plan (CLUP) for Areas Within the Jurisdiction of the Maine Land Use Planning Commission, 2010

2. Application for Zone Change

- 2.1. 1/18/2023 Wolfden Mt. Chase LLC Application for Zone Change
- 2.2. 3/7/2023 Wolfden Mt. Chase LLC Errata for Wetland and Watercourse Delineation and Potential Vernal Pool Survey Report, Application Exhibit 6, Attachment 6A
- 2.3. 4/13/2023 Wolfden Mt. Chase LLC Response to LUPC 2/24/2023 Request for Additional Information

- 2.4. 8/11/2023 Wolfden Mt. Chase LLC Response to LUPC 7/13/2023 Request for Additional Information and Agency Reviews

3. Public Notice

- 3.1. 1/20/2023 Public Notice Documentation Form
- 3.2. 1/20/2023 DACF-LUPC Press Release
- 3.3. 1/20/2023 LUPC ZP779A Project-Specific Webpage
- 3.4. 2/24/2023 DACF-LUPC Press Release
- 3.5. 2/24/2023 LUPC ZP779A Project-Specific Webpage, updated 2/23/2023
- 3.6. 4/14/2023 LUPC GovDelivery – Wolfden Response Received
- 3.7. 6/7/2023 Initial Public Hearing Notice from the Houlton Pioneer Times and Bangor Daily News
- 3.8. 6/7/2023 Initial Public Hearing Notice sent to LUPC Pickett Mountain Mine GovDelivery Subscription List
- 3.9. 6/7/2023 Initial Public Hearing Notice sent by USPS and by Email
- 3.10. 7/12/2023 LUPC ZP779A Project-Specific Webpage, updated 6/8/2023
- 3.11. 7/18/2023 LUPC GovDelivery – Reviews by Technical consultants and Other Agencies Posted
- 3.12. 8/22/2023 LUPC ZP779A Project-Specific Webpage, updated 7/21/2023
- 3.13. 8/28/2023 LUPC GovDelivery – Wolfden Response Received
- 3.14. 8/28/2023 LUPC ZP779A Project-Specific Webpage, updated 8/25/2023
- 3.15. 9/15/2023 Notice of Public Hearing – LUPC GovDelivery
- 3.16. 9/15/2023 Notice of Public Hearing sent by USPS and by Email
- 3.17. 9/22/2023 Additional Notice of Public Hearing – LUPC GovDelivery
- 3.18. 9/22/2023 Notice of Bangor Public Comment Session – LUPC GovDelivery
- 3.19. 9/29/2023 LUPC GovDelivery – Pre-Filed Testimony Posted
- 3.20. 9/29/2023 LUPC ZP779A Project-Specific Webpage, updated 9/28/2023
- 3.21. 10/11/2023 LUPC GovDelivery – Millinocket Hearing Schedule
- 3.22. 10/13/2023 LUPC GovDelivery – Livestream Link for Hearing
- 3.23. 10/13/2023 LUPC ZP779A Project-Specific Webpage, updated 10/12/2023
- 3.24. 10/16/2023 LUPC GovDelivery – Updated Link for Livestream of Hearing
- 3.25. 11/3/2023 LUPC GovDelivery – Public Comments Posted
- 3.26. 11/8/2023 LUPC ZP779A Project-Specific Webpage, updated 11/7/2023

- 3.27. 12/4/2023 LUPC GovDelivery - Project-Specific Webpage updated with Deliberation Materials, Rebuttal Comments, Post-Hearing Briefs, Procedural Orders
- 3.28. 12/4/2023 LUPC ZP779A Project-Specific Webpage, updated 12/4/2023
- 3.29. 9/20/2023 Notice of Public Hearing, Houlton Pioneer Times
- 3.30. 9/22/2023 Notice of Public Hearing, Bangor Daily News
- 3.31. 9/27/2023 Additional Notice of Public Hearing, Houlton Pioneer Times and Bangor Daily News

4. Correspondence and Meeting Notes

- 4.1. 1/24/2023 Penobscot County Hearing Request Letters
- 4.2. 1/30/2023 LUPC Letter to Penobscot County
- 4.3. 2/24/2023 LUPC Letter to Wolfden Mt Chase LLC Requesting Additional Information
- 4.4. 7/13/2023 LUPC Letter to Wolfden Mt Chase LLC Requesting Additional Information and Providing Agency Reviews, Contractor Reviews, and Petitions to Intervene
- 4.5. 9/14/2023 Legislators' Letter Requesting Additional Public Comment Session

5. Commission Meetings

- 5.1. 12/1/2023 Commission Memo and Deliberation Materials for December 13, 2023 Commission Meeting
- 5.2. 12/13/2023 Commission Presentation for Deliberation Session, December 13, 2023, Commission Meeting
- 5.3. 2/2/2024 Commission Memo, Draft Decision Document, and Letters Regarding Delay Request for February 14, 2024 Commission Meeting

6. Agency and Contractor Review

- 6.1. 5/5/2023 MNAP Review Comments
- 6.2. 5/9/2023 Passamaquoddy Tribal Historic Preservation Office Review Comments
- 6.3. 5/12/2023 Tech Environmental Review of Noise Assessment
- 6.4. 5/24/2023 SWCA Letter Updating Review of the Preliminary Economic Assessment
- 6.5. 6/5/2023 MHPC Review Comments
- 6.6. 5/31/2023 D. Rocque Review of Soil Suitability
- 6.7. 6/8/2023 Penobscot County Commissioners' Review
- 6.8. 6/12/2023 Penobscot County UT Director's Review

- 6.9. 6/13/2023 Bureau of Parks and Lands, Outdoor Recreation Review Comments
- 6.10. 6/15/2023 Maine Geological Survey Review Comments
- 6.11. 6/16/2023 Maine Forest Service Review
- 6.12. 6/27/2023 Maine Department of Inland Fisheries and Wildlife Review Comments
- 6.13. 7/5/2023 Maine Department of Environmental Protection Review Comments
- 6.14. 7/10/2023 RBouvier Review of Socioeconomic Assessment
- 6.15. 8/14/2023 Penobscot County Sheriff Review Comments
- 6.16. 10/25/2023 Penobscot County Sheriff Review Comments
- 6.17. 11/7/2023 Maine Department of Inland Fisheries and Wildlife Comment on Eastern Wolf

7. Public Comment

- 7.1. 8/11/2022 C. Heath
- 7.2. 8/11/2022 C. Heath
- 7.3. 1/21/2023 G. Flanders
- 7.4. 1/27/2023 G. Roth
- 7.5. 2/24/2023 N. Seavey
- 7.6. 2/24/2023 M. Grant
- 7.7. 2/25/2023 S. Sprague
- 7.8. 2/26/2023 J. Banks
- 7.9. 2/27/2023 E. Teeple
- 7.10. 2/27/2023 B. Oliver
- 7.11. 2/27/2023 J. Slama
- 7.12. 2/28/2023 R. Richard
- 7.13. 3/07/2023 C. McDonald
- 7.14. 3/08/2023 D. Rice
- 7.15. 3/17/2023 Haymart AgriCal
- 7.16. 3/20/2023 R. Bossie
- 7.17. 3/23/2023 E. Thompson
- 7.18. 3/24/2023 J. Packard
- 7.19. 3/25/2023 B. Webb
- 7.20. 3/25/2023 S. Webb

- 7.21. 3/28/2023 C. Shorey
- 7.22. 3/28/2023 B. and B. Shorey
- 7.23. 3/28/2023 G. Lovet
- 7.24. 3/28/2023 G. Smallwood
- 7.25. 4/03/2023 K. Smallwood
- 7.26. 4/08/2023 T. Thurston-Hill
- 7.27. 4/11/2023 P. and M. Smallwood
- 7.28. 4/12/2023 S. Anderson
- 7.29. 4/12/2023 T. Clippinger
- 7.30. 4/12/2023 M. Reddy
- 7.31. 4/14/2023 B. Lincoln
- 7.32. 4/18/2023 G. Flanders
- 7.33. 4/21/2023 K. Potter
- 7.34. 4/24/2023 T. Potter
- 7.35. 5/01/2023 A. Stevens
- 7.36. 5/08/2023 P. Resident
- 7.37. 6/12/2023 D. Brown
- 7.38. 6/12/2023 N. Brown
- 7.39. 6/22/2023 S. Rowbotham
- 7.40. 6/28/2023 Multiple Interested Persons - Reject Wolfden's Disastrous Mine Proposal at Pickett Mountain I
- 7.41. 6/28/2023 L. Moceus
- 7.42. 6/28/2023 R. Rutkowski
- 7.43. 6/28/2023 C. Wilcoxon
- 7.44. 6/29/2023 C. Grimmel
- 7.45. 7/1/2023 A. Hoover
- 7.46. 7/5/2023 Native Fish Coalition
- 7.47. 7/10/2023 G. Sommers
- 7.48. 7/10/2023 Southern Aroostook Development Corporation
- 7.49. 7/10/2023 Multiple Interested Persons – Scanned Letters in Support I
- 7.50. 7/13/2023 J. Barrett
- 7.51. 7/13/2023 Multiple Interested Persons – Scanned Letters in Support II

- 7.52. 7/16/2023 G. Chubbuck
- 7.53. 7/16/2023 B. Bridgeo
- 7.54. 7/17/2023 T. Metcalf
- 7.55. 7/17/2023 V. Markiewicz
- 7.56. 7/17/2023 A. Tirrell
- 7.57. 7/18/2023 C. Heckscher
- 7.58. 7/24/2023 Multiple Interested Persons - Reject Wolfden's Disastrous Mine Proposal at Pickett Mountain II
- 7.59. 8/21/2023 Be. Noyes
- 7.60. 8/25/2023 D. and L. Grant
- 7.61. 8/28/2023 S. Adams
- 7.62. 8/30/2023 L. Farnsworth
- 7.63. 9/3/2023 A. Donaldson
- 7.64. 9/9/2023 R. Bond
- 7.65. 9/11/2023 Br. Noyes
- 7.66. 9/16/2023 Dark Sky Maine
- 7.67. 9/18/2023 M. Keglovich
- 7.68. 9/18/2023 A. Tuminello
- 7.69. 9/19/2023 J. Shelton
- 7.70. 9/21/2023 J. Bornstein
- 7.71. 9/23/2023 L. DeLeon
- 7.72. 9/23/2023 A. Bolstridge
- 7.73. 9/25/2023 J. Lawson
- 7.74. 9/25/2023 J. Loyd
- 7.75. 9/25/2023 D. Wilkins
- 7.76. 9/25/2023 Citizens Against Residential Mining Activity
- 7.77. 9/26/2023 E. Gass
- 7.78. 9/27/2023 M. Purcell
- 7.79. 9/27/2023 T. Jacobs
- 7.80. 9/27/2023 Multiple Interested Persons - Reject Wolfden's Disastrous Mine Proposal at Pickett Mountain III
- 7.81. 10/1/2023 Z. Senecal

- 7.82. 10/2/2023 MA. Mowry
- 7.83. 10/2/2023 T. Jackson
- 7.84. 10/2/2023 Multiple Interested Persons – Scanned Postcards in Opposition, Showing Area Pictures I
- 7.85. 10/3/2023 Multiple Maine Guides
- 7.86. 10/3/2023 K. Potter
- 7.87. 10/3/2023 H. Opitz
- 7.88. 10/3/2023 D. Davidge
- 7.89. 10/3/2023 M. Anderson
- 7.90. 10/4/2023 A. Legere
- 7.91. 10/4/2023 C. McEwen
- 7.92. 10/5/2023 T. Richardson
- 7.93. 10/5/2023 Maine Wilderness Guides
- 7.94. 10/6/2023 O. Kennedy
- 7.95. 10/6/2023 M. Michaud
- 7.96. 10/7/2023 E. Parsons
- 7.97. 10/7/2023 J. Rodonets
- 7.98. 10/7/2023 R. Hannay
- 7.99. 10/9/2023 K. Spitfire
- 7.100. 10/9/2023 R. Bates
- 7.101. 10/9/2023 D. Zavotsky
- 7.102. 10/10/2023 F. Hilton
- 7.103. 10/10/2023 M. Roper
- 7.104. 10/10/2023 C. Beal
- 7.105. 10/10/2023 D. Zuk
- 7.106. 10/10/2023 P. and E. Ferreira
- 7.107. 10/10/2023 S. Peralta
- 7.108. 10/10/2023 J. Stewart-Racicot
- 7.109. 10/10/2023 A. Le
- 7.110. 10/11/2023 J. Curtis
- 7.111. 10/11/2023 A. Blasi
- 7.112. 10/11/2023 K. Brown

- 7.113. 10/11/2023 J. Logalbo
- 7.114. 10/11/2023 N. Artz
- 7.115. 10/12/2023 S. Okusko
- 7.116. 10/12/2023 MA. Mowry
- 7.117. 10/12/2023 Dark Sky International
- 7.118. 10/13/2023 T. Simon
- 7.119. 10/13/2023 J. Ohare
- 7.120. 10/13/2023 J. Killeen
- 7.121. 10/13/2023 R. Blum
- 7.122. 10/13/2023 Multiple Interested Persons - Reject Wolfden's Disastrous Mine Proposal at Pickett Mountain IV
- 7.123. 10/13/2023 Multiple Interested Persons - Please Reject Wolfden Resources Corporation's Rezoning Proposal for Its Pickett Mountain Property I
- 7.124. 10/13/2023 Multiple Interested Persons – Scanned Postcards in Opposition, Showing Acid Mine Drainage I
- 7.125. 10/13/2023 Multiple Interested Persons – Scanned Letters in Support III
- 7.126. 10/14/2023 L. Memoli
- 7.127. 10/14/2023 P. Petrochko
- 7.128. 10/15/2023 G. Cain
- 7.129. 10/15/2023 C. Stout
- 7.130. 10/15/2023 C. and T. Comitta
- 7.131. 10/15/2023 B. Komulainen
- 7.132. 10/02/2023 K. Beaulieu
- 7.133. 10/15/2023 N. Gallagher
- 7.134. 10/16/2023 J. L. Cooper
- 7.135. 10/16/2023 J. Nelson
- 7.136. 10/16/2023 C. Brantley
- 7.137. 10/16/2023 R. Newhall
- 7.138. 10/16/2023 N. Angelos
- 7.139. 10/16/2023 J. Slack
- 7.140. 10/16/2023 Friends of Katahdin Woods and Waters
- 7.141. 10/16/2023 M. Washington

7.142. 10/16/2023 E. Ryland
7.143. 10/16/2023 B. Komulainen
7.144. 10/16/2023 A. Kraus
7.145. 10/16/2023 A. Wotton
7.146. 10/16/2023 J. Sharpe Minot
7.147. 10/16/2023 K. Page
7.148. 10/16/2023 A. McKeage
7.149. 10/16/2023 D. McClenahan
7.150. 10/16/2023 S. Hayhurst
7.151. 10/16/2023 H. Wilson
7.152. 10/16/2023 L. Bailets
7.153. 10/16/2023 W. Webber
7.154. 10/16/2023 K. Simone
7.155. 10/16/2023 Dark Sky Maine
7.156. 10/16/2023 A. Barnett
7.157. 10/16/2023 W. Sweet
7.158. 10/16/2023 F. Kretchman
7.159. 10/16/2023 T. Strecker
7.160. 10/17/2023 K. Wright
7.161. 10/17/2023 M. Mater
7.162. 10/17/2023 G. Flanders
7.163. 10/17/2023 R. Fleming
7.164. 10/17/2023 J. Hufnagel
7.165. 10/17/2023 S. Underwood
7.166. 10/17/2023 S. Klinger
7.167. 10/17/2023 B. Sweezy
7.168. 10/17/2023 L. Downing
7.169. 10/17/2023 R. Swennes
7.170. 10/17/2023 K. Mader
7.171. 10/17/2023 C. Loucka
7.172. 10/17/2023 N. Holmes

7.173. 10/17/2023 A. Funderburk
7.174. 10/17/2023 M. Martinez
7.175. 10/17/2023 JA. Dowe
7.176. 10/17/2023 K. von Donop
7.177. 10/17/2023 R. Ostrowski
7.178. 10/17/2023 L. Rhodes
7.179. 10/17/2023 M. Reddy
7.180. 10/17/2023 S. McGoldrick
7.181. 10/17/2023 Multiple Interested Persons – Scanned Letters in Support IV
7.182. 10/18/2023 C. Vettier
7.183. 10/18/2023 W. Mugdan
7.184. 10/18/2023 D. and K. Greene
7.185. 10/18/2023 L. Price
7.186. 10/18/2023 American Friends Service Committee Wabanaki Program
7.187. 10/18/2023 J. Cash
7.188. 10/18/2023 J. Barrett
7.189. 10/18/2023 R. Donaldson
7.190. 10/19/2023 R. McCutcheon
7.191. 10/19/2023 Multiple Interested Persons – Scanned Postcards in Opposition, Showing Area
Pictures II
7.192. 10/20/2023 A. Silva
7.193. 10/20/2023 P. Olson
7.194. 10/20/2023 K. Kolischak
7.195. 10/20/2023 S. T. White
7.196. 10/20/2023 M. Heath
7.197. 10/20/2023 B. Farrin
7.198. 10/21/2023 S. Painter
7.199. 10/21/2023 Gloria D.
7.200. 10/21/2023 C. Terrell
7.201. 10/21/2023 D. Oltarzewski and A. Burt
7.202. 10/21/2023 D. Goodman
7.203. 10/21/2023 Thompson Family

- 7.204. 10/22/2023 Multiple Interested Persons - Please Reject Wolfden Resources Corporation's Rezoning Proposal for Its Pickett Mountain Property II
- 7.205. 10/22/2023 Multiple Interested Persons - Reject Wolfden's Disastrous Mine Proposal at Pickett Mountain V
- 7.206. 10/22/2023 J. Curtis
- 7.207. 10/22/2023 S. Ruggiero
- 7.208. 10/22/2023 D. Baer
- 7.209. 10/22/2023 K. Smith
- 7.210. 10/22/2023 G. Soucy
- 7.211. 10/22/2023 L. Danzinger
- 7.212. 10/22/2023 M. Kinerson
- 7.213. 10/22/2023 J. Robinson Zeiner
- 7.214. 10/22/2023 S. Vittner
- 7.215. 10/22/2023 A. Eugley
- 7.216. 10/22/2023 E. Grant
- 7.217. 10/23/2023 L. Cutter
- 7.218. 10/23/2023 E. Oldach
- 7.219. 10/23/2023 A. Morgan
- 7.220. 10/23/2023 G. Nurme
- 7.221. 10/23/2023 K. Kalmar
- 7.222. 10/23/2023 M. Cook
- 7.223. 10/23/2023 M. A. Larson
- 7.224. 10/23/2023 R. Rubly Burggaff
- 7.225. 10/23/2023 The Wilderness Society
- 7.226. 10/23/2023 K. Haas
- 7.227. 10/23/2023 R. Herbener
- 7.228. 10/23/2023 K. Kirk
- 7.229. 10/23/2023 J. Ripton
- 7.230. 10/23/2023 W. Meserve
- 7.231. 10/23/2023 E. Weisman
- 7.232. 10/23/2023 M. Sch
- 7.233. 10/23/2023 D. Buck

7.234. 10/23/2023 K. Ziminsky
7.235. 10/23/2023 C. Hill
7.236. 10/23/2023 C. Robertson
7.237. 10/24/2023 D. and B. Twombly
7.238. 10/24/2023 C. Diebold
7.239. 10/24/2023 E. and J. MacArthur
7.240. 10/24/2023 S. Matloff
7.241. 10/24/2023 S. D'Alessandro
7.242. 10/24/2023 N. Swallow
7.243. 10/24/2023 J. Swallow
7.244. 10/24/2023 B. Wood
7.245. 10/24/2023 M. Grover
7.246. 10/25/2023 S. Beckman
7.247. 10/25/2023 P. Swank
7.248. 10/25/2023 L. Bell
7.249. 10/25/2023 Anonymous
7.250. 10/25/2023 A. Otto
7.251. 10/25/2023 Steve
7.252. 10/25/2023 Ruth
7.253. 10/25/2023 M. Holt
7.254. 10/25/2023 G. Seel
7.255. 10/25/2023 BA. And D. Carver
7.256. 10/25/2023 C. Brooks
7.257. 10/25/2023 J. Beaulieu
7.258. 10/25/2023 T. Chick
7.259. 10/26/2023 F. Weld
7.260. 10/26/2023 Southern Maine Astronomers
7.261. 10/26/2023 A. Manville
7.262. 10/26/2023 S. Scholar
7.263. 10/27/2023 Z. Austin
7.264. 10/27/2023 J. Fahey

7.265. 10/27/2023 C. Wilcox
7.266. 10/27/2023 F. Beck
7.267. 10/27/2023 L. Nolden
7.268. 10/27/2023 Maine Rivers
7.269. 10/27/2023 A. Hufnagel
7.270. 10/28/2023 S. Davies
7.271. 10/28/2023 B. Collins
7.272. 10/30/2023 Friends of Baxter State Park
7.273. 10/30/2023 Baxter State Park Authority
7.274. 10/30/2023 V. Watson
7.275. 10/30/2023 D. Brown
7.276. 10/30/2023 S. Walker Madore
7.277. 10/30/2023 K. Olmstead
7.278. 10/30/2023 B. Pendleton
7.279. 10/30/2023 Multiple Interested Persons - Reject the Wolfden Resources Rezoning Application
7.280. 10/30/2023 Multiple Interested Persons - No Mining at Pickett Mountain
7.281. 10/31/2023 R. Hammond
7.282. 10/31/2023 N. Rohdin
7.283. 10/31/2023 D. Jenkins
7.284. 10/31/2023 W. Baker
7.285. 10/31/2023 M. Fitz
7.286. 10/31/2023 M. and W. Voskian
7.287. 10/31/2023 Sierra Club Maine
7.288. 10/31/2023 National Park Service
7.289. 10/31/2023 Moosehead Region Futures Corporation
7.290. 10/31/2023 C. Hill
7.291. 11/1/2023 C. Tucker
7.292. 11/1/2023 S. Hatch
7.293. 11/1/2023 G. White
7.294. 11/1/2023 J. McMahon
7.295. 11/1/2023 Pax Christi Houlton

- 7.296. 11/1/2023 D. Perley
- 7.297. 11/1/2023 C. Hunkler
- 7.298. 11/1/2023 MA. Mowry
- 7.299. 11/1/2023 M. Hatch
- 7.300. 11/1/2023 R. Bell
- 7.301. 11/1/2023 A. Flores
- 7.302. 11/1/2023 A. Jones
- 7.303. 11/1/2023 L. Moceus
- 7.304. 11/1/2023 J. and K. Greenman
- 7.305. 11/1/2023 H. Hamblen
- 7.306. 11/1/2023 B. Tucker
- 7.307. 11/1/2023 M. Scully
- 7.308. 11/1/2023 Island Falls Lakes Association
- 7.309. 11/1/2023 D. Harlow
- 7.310. 11/1/2023 D. Courtemanch
- 7.311. 11/1/2023 M. Stewart
- 7.312. 11/1/2023 A. Kraus
- 7.313. 11/1/2023 R. Rawcliffe
- 7.314. 11/1/2023 R. Chapman
- 7.315. 11/2/2023 T. Ackerman
- 7.316. 11/2/2023 K. Mrozicki
- 7.317. 11/2/2023 National Parks Conservation Association
- 7.318. 11/2/2023 Multiple Interested Persons - Please Reject Wolfden Resources Corporation's Rezoning Proposal for Its Pickett Mountain Property III
- 7.319. 11/2/2023 Multiple Interested Persons - Reject Wolfden's Disastrous Mine Proposal at Pickett Mountain VI
- 7.320. 11/2/2023 Multiple Interested Persons – No Rezoning of Pickett Mountain
- 7.321. 11/2/2023 Multiple Interested Persons – No to Wolfden Resources
- 7.322. 11/2/2023 Multiple Interested Persons – Please Say No to Wolfden's Proposal
- 7.323. 11/2/2023 Multiple Interested Persons – The Proposal at Pickett Mountain Pond
- 7.324. 11/2/2023 Multiple Interested Persons – Miscellaneous
- 7.325. 11/2/2023 M. Kalin

7.326. 11/2/2023 M. Girouard
7.327. 11/2/2023 K. McClure
7.328. 11/2/2023 M. Hubbard
7.329. 11/2/2023 B. Bell
7.330. 11/2/2023 N. Sekera
7.331. 11/2/2023 H. Kingsley
7.332. 11/2/2023 Atlantic Salmon Federation
7.333. 11/2/2023 E. Carpenter
7.334. 11/2/2023 The Nature Conservancy
7.335. 11/2/2023 M. Rees
7.336. 11/2/2023 R. Hadlock Seeley
7.337. 11/2/2023 J. M. Roy
7.338. 11/2/2023 R. and L. Romero
7.339. 11/2/2023 C. Schmitt
7.340. 11/2/2023 K. Taylor
7.341. 11/2/2023 J. Daigle
7.342. 11/2/2023 M. Weatherhead
7.343. 11/2/2023 R. Hreljac
7.344. 11/2/2023 M. Reddy
7.345. 11/2/2023 L. Sanborn
7.346. 11/2/2023 B. Taylor
7.347. 11/2/2023 M. Fowler
7.348. 11/2/2023 A. Clemence
7.349. 11/9/2023 L. Gramlich – Rebuttal Comment
7.350. 11/9/2023 Dark Sky Maine – Rebuttal Comment
7.351. 11/9/2023 K. Taylor – Rebuttal Comment
7.352. 11/9/2023 D. Harlow – Rebuttal Comment
7.353. 11/9/2023 B. Taylor – Rebuttal Comment
7.354. 11/9/2023 M. Jerome Stewart – Rebuttal Comment

8. LUPC Exhibits

- 8.1. 7/18/2023 Exhibit 4.3 from ZP779, Phone Notes from Call with K. Moselle, Alaska Department of Natural Resources
- 8.2. 7/18/2023 Exhibit 4.10 from ZP779, LUPC Memorandum Regarding Pickett Mountain Site Visit, Clayton's Copper Butterfly, and Shrubby Cinquefoil
- 8.3. 7/18/2023 Exhibit 6.4 from ZP779, Penobscot County Review Comments Regarding Police Services
- 8.4. 7/18/2023 Exhibit 6.20 from ZP779, SWCA Technical Review Comments

9. Hearing Procedural Orders

- 9.1. 7/18/2023 First Procedural Order
- 9.2. 8/25/2023 Second Procedural Order
- 9.3. 8/25/2023 Email to Commissioners Regarding Ex Parte Communication
- 9.4. 9/11/2023 Third Procedural Order
- 9.5. 10/10/2023 Fourth Procedural Order
- 9.6. 10/13/2023 Fifth Procedural Order
- 9.7. 11/7/2023 Sixth Procedural Order
- 9.8. 11/20/2023 Seventh Procedural Order
- 9.9. 12/1/2023 Eighth Procedural Order
- 9.10. 10/23/2023 Mailing from Natural Resources Council of Maine to Commissioner Peter Pray

10. Pre-Hearing Meetings and Submissions

- 10.1. 6/23/2023 H. C. Haynes Petition to Intervene (Intervenor 1)
- 10.2. 6/28/2023 Tribes and Nonprofits Petition to Intervene (Intervenor 2)
- 10.3. 7/18/2023 Maine Audubon Interested Person Request Letter
- 10.4. 7/26/2023 Tribes and Nonprofits List of Hearing Topics
- 10.5. 7/26/2023 Wolfden List of Hearing Topics
- 10.6. 7/26/2023 H. C. Haynes List of Hearing Topics
- 10.7. 7/28/2023 Agenda for First Pre-hearing Conference
- 10.8. 8/30/2023 Intervenor 2 Remote Testimony Request
- 10.9. 8/31/2023 Wolfden Response to Remote Testimony Request
- 10.10. 9/1/2023 Intervenor 1 Response to Remote Testimony Request

10.11. 9/1/2023 Intervenor 2 Reply to Wolfden Response

10.12. 9/5/2023 Wolfden Reply to Intervenor 2 9/1/2023 Reply

10.13. 9/11/2023 Intervenor 1 Witness List

10.14. 9/11/2023 Intervenor 2 Witness List

10.15. 9/11/2023 Wolfden Witness List

10.16. 9/15/2023 Intervenor 2 Testimony Request

10.17. 9/18/2023 Intervenor 1 Response to Testimony Request

10.18. 9/18/2023 Wolfden Response to Testimony Request

10.19. 9/25/2023 Wolfden Pre-Filed Testimony Index of Witnesses and Exhibits

10.20. 9/25/2023 Wolfden Pre-Filed Testimony of Jeremy Ouellette

10.21. 9/25/2023 Wolfden Pre-Filed Testimony of Doug Stewart

10.22. 9/25/2023 Wolfden Pre-Filed Testimony of Gemma-Jayne Hudgell

10.23. 9/25/2023 Wolfden Pre-Filed Testimony of Mark Peters

10.24. 9/25/2023 Wolfden Pre-Filed Testimony of Brian Danyliw and Paul Thoen

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