



**MANAGEMENT'S DISCUSSION AND ANALYSIS**

**THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2022**

**Northern Dynasty Minerals Ltd.**  
**Management's Discussion and Analysis**  
**Three and Nine Months Ended September 30, 2022**

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**1.1 Date**

This Management's Discussion and Analysis ("**MD&A**") should be read in conjunction with the unaudited condensed consolidated interim financial statements (the "**Financial Statements**") of Northern Dynasty Minerals Ltd. ("**Northern Dynasty**" or the "**Company**") for the three and nine months ended September 30, 2022, and the Company's audited consolidated financial statements for the year ended December 31, 2021 (the "**2021 Financial Statements**") and the annual MD&A for the same period (the "**2021 Annual MD&A**"), as publicly filed under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

The Company reports in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("**IASB**") and interpretations of the IFRS Interpretations Committee (together, "**IFRS**"). The following disclosure and associated Interim Financial Statements are presented in accordance with IFRS. This MD&A is prepared as of November 14, 2022.

**All dollar amounts herein are expressed in Canadian dollars, unless otherwise specified.**

**Glossary**

<b>Abbreviations commonly used in this MD&amp;A:</b>	
<b>2021 Pebble PEA</b>	The technical report entitled " <i>Preliminary Economic Assessment NI 43-101 Technical Report, Pebble Project, Alaska, USA</i> ", effective date September 9, 2021, by R. Kalanchey, P.Eng., Ausenco, Hassan Ghaffari, P.Eng., Tetra Tech, Sabry Abdel Hafez, P.Eng., Tetra Tech, Les Galbraith, P.Eng., P.E., Knight Piesold, J. David Gaunt, P.Geo., Hunter Dickinson Services, Eric Titley, P.Geo., Hunter Dickinson Services, Stephen Hodgson, P.Eng., Hunter Dickinson Services and James Lang, P.Geo., JM Lang Professional Consulting, as filed under the Company's profile at <a href="http://www.sedar.com">www.sedar.com</a> and <a href="http://www.sec.gov">www.sec.gov</a> .
<b>2022 Pebble PEA</b>	The technical report entitled " <i>Preliminary Economic Assessment NI 43-101 Technical Report Update, Pebble Project, Alaska, USA</i> ", effective date October 1, 2022, by R. Kalanchey, P.Eng., Ausenco, Hassan Ghaffari, P.Eng., Tetra Tech, Sabry Abdel Hafez, P.Eng., Tetra Tech, Les Galbraith, P.Eng., P.E., Knight Piesold, J. David Gaunt, P.Geo., Hunter Dickinson Services, Eric Titley, P.Geo., Hunter Dickinson Services, Stephen Hodgson, P.Eng., Hunter Dickinson Services and James Lang, P.Geo., JM Lang Professional Consulting, as filed under the Company's profile at <a href="http://www.sedar.com">www.sedar.com</a> and <a href="http://www.sec.gov">www.sec.gov</a> .
<b>CWA</b>	Clean Water Act
<b>EIS</b>	Environmental Impact Statement
<b>EPA</b>	U.S. Environmental Protection Agency
<b>NEPA</b>	The United States National Environmental Policy Act
<b>ROD</b>	The Record of Decision issued by the USACE on November 20, 2020 denying the permit application of the Pebble Partnership under Section 404 of the CWA
<b>Revised Proposed Determination</b>	The revised proposed determination of the EPA under Section 404(c) of the CWA in respect of the Pebble Project published in May 2022
<b>Royalty Agreement</b>	The royalty agreement dated July 26, 2022 between the Pebble Partnership, together with certain other wholly-owned subsidiaries of the Pebble Partnership, and the royalty holder
<b>Royalty Holder</b>	The holder of a royalty granted under the Royalty Agreement

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<b>SEC</b>	The United States Securities and Exchange Commission.
<b>USACE</b>	U.S. Army Corps of Engineers

**Forward Looking Statements**

This MD&A contains certain forward-looking information and forward-looking statements within the meaning of applicable Canadian securities laws and forward-looking statements within the meaning of the United States *Private Securities Litigation Reform Act of 1995*. Forward-looking statements describe our future plans, strategies, expectations and objectives, and are generally, but not always, identifiable by use of the words "may", "will", "should", "continue", "expect", "anticipate", "estimate", "believe", "intend", "plan" or "project" or the negative of these words or other variations on these words or comparable terminology.

Forward-looking statements contained or incorporated by reference into this MD&A include, without limitation, statements regarding:

- our expectations regarding the potential for securing the necessary permitting of a mine at the Pebble Project and our ability to establish that such a permitted mine can be economically developed;
- the success of our appeal of the ROD of the USACE denying the issuance of certain permits required for the Pebble Project, and the timing of a decision on this appeal;
- our ability to successfully obtain federal and state permits required for the Pebble Project, including under the CWA, the NEPA, and relevant legislation;
- our ability to successfully challenge the EPA's Revised Proposed Determination;
- the outcome of the US government investigations involving the Company;
- our ability to successfully defend against purported class action law suits that have been commenced against the Company;
- our plan of operations, including our plans to carry out and finance exploration and development activities;
- our ability to raise capital for the exploration, permitting and development activities and meet our working capital requirements;
- our expected financial performance in future periods;
- our expectations regarding the exploration and development potential of the Pebble Project;
- the outcome of the legal proceedings in which we are engaged;
- the contribution of the Pebble Project to the United States federal, state and regional economies;
- that any additional prepayment investments will be made in connection with our gold and silver production Royalty Agreement (as defined below) for the Pebble Project;
- the uncertainties with respect to the effects of COVID-19;
- uncertainties related to the conflict in Ukraine; and
- factors relating to our investment decisions.

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Such forward-looking statements or information related to the Preliminary Economic Assessment include statements regarding (i) the mine plan for the Pebble Project, the financial results of the 2022 PEA, including net present value and internal rates of return, and the ability of the Pebble Partnership to secure the financing to proceed with the development of the Pebble Project, including any stream financing and infrastructure outsourcing, (ii) the social integration of the Pebble Project into the Bristol Bay region and benefits for Alaska, (iii) the political and public support for the permitting process, (iv) the ability to successfully appeal the negative ROD and secure the issuance of a positive ROD by the USACE and the ability of the Pebble Project to secure all required federal and state permits, (v) the right-sizing and de-risking of the Pebble Project, including any determination to pursue any of the expansion scenarios for the Pebble Project or to incorporate a gold plant, (vi) the design and operating parameters for the Pebble Project mine plan, including projected capital and operating costs, (vii) exploration potential of the Pebble Project, (viii) future demand for copper and gold and the metals prices assumed for the financial projections including the 2022 PEA, (ix) the potential addition of partners in the Pebble Project, (x) the ability and timetable of NDM to develop the Pebble Project and become a leading copper, gold and molybdenum producer, and (xi) the ability of the Company to successfully challenge the EPA's Revised Proposed Determination. Although NDM believes the expectations expressed in these forward-looking statements are based on reasonable assumptions, such statements should not be in any way be construed as guarantees that the Pebble Project will secure all required government permits, establish the commercial feasibility of the Pebble Project, achieve the required financing or develop the Pebble Project. Such forward-looking statements or information related to this Preliminary Economic Assessment include but are not limited to statements or information with respect to the mined and processed material estimates; the internal rate of return; the annual production; the net present value; the life of mine; the capital costs, operating costs estimated for each of the Proposed Project and three potential expansion scenarios for the Pebble Project; and other costs and payments for the proposed infrastructure for the Pebble Project (including how, when, where and by whom such infrastructure will be constructed or developed); projected metallurgical recoveries; plans for further development, and securing the required permits and licenses for further studies to consider expansion of the operation; and market price of precious and base metals; or other statements that are not statement of fact.

The 2022 PEA is preliminary in nature, and includes Inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no assurance that the 2022 PEA will be realized. Mineral Resources that are not mineral reserves do not have demonstrated economic viability, and there is no assurance that the Pebble Project mineral resources will ever be upgraded to reserves. The 2022 PEA assumes that the Proposed Project will ultimately be able to obtain the required permits from the USACE and state of Alaska authorities to enable development of the Proposed Project. Neither the 2022 PEA, nor the mineral resource estimates on which the 2022 PEA is based, have been adjusted for any risk that the Pebble Partnership may not be able to successfully appeal the record of decision issued by the USACE on November 25, 2020 denying the granting of the required permit under the Clean Water Act. The 2022 PEA has also not been adjusted for any risk that the Pebble Partnership may not be able to successfully challenge the Revised Proposed Determination.

Forward-looking information is based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made, but which may prove to be incorrect. We believe that the assumptions and expectations reflected in such forward-looking information are reasonable.

Key assumptions upon which the Company's forward-looking information are based include:

- that our appeal of the ROD with the USACE will be successful;
- that we will ultimately be able to demonstrate that a mine at the Pebble Project can be developed and operated in an environmentally sound and socially responsible manner, meeting all relevant federal, state and local regulatory requirements so that we will be ultimately able to obtain permits authorizing construction of a mine at the Pebble Project;

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- that we will be able to secure sufficient capital necessary for continued environmental assessment and permitting activities and engineering work which must be completed prior to any potential development of the Pebble Project which would then require engineering and financing in order to advance to ultimate construction;
- that we will ultimately be able to demonstrate that a mine at the Pebble Project will be economically feasible based on a mine plan for which permitting can be secured;
- the EPA's Revised Proposed Determination process under the CWA will not have a negative impact on the ability of the Pebble Partnership to develop the Pebble Project;
- that the COVID-19 outbreak will not materially impact or delay our ability to obtain permitting for a mine at the Pebble Project;
- that the market prices of copper, gold, molybdenum, silver and rhenium will not significantly decline or stay depressed for a lengthy period of time;
- the projected contributions of the Pebble Project to the Alaskan and United States economies are subject to the assumptions underlying the 2022 PEA and other assumptions as to economic impact;
- that our key personnel will continue their employment with us; and
- that we will continue to be able to secure adequate financing on acceptable terms.

Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions that may have been used. Forward-looking statements are also subject to risks and uncertainties facing our business, any of which could have a material impact on our outlook.

Some of the risks we face and the uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements include:

- we may be unsuccessful in our appeal of the ROD with respect to the decision to deny the issuance of permits which we require to operate a mine at the Pebble Project, and the timing of a decision on the appeal may be longer than anticipated;
- we may be unsuccessful in challenging the EPA's Revised Proposed Determination under the CWA;
- our inability to ultimately obtain permitting for a mine at the Pebble Project;
- our inability to establish that the Pebble Project may be economically developed and mined or contain commercially viable deposits of ore based on a mine plan for which government authorities are prepared to grant permits;
- we may not be successful in defending shareholder securities litigation claims that have been filed against us in the U.S. and in Canada, and we may be obligated to indemnify our underwriters in addition to being subject to liabilities to the plaintiffs;
- the uncertainty of the outcome of current or future government investigations and inquiries, including but not limited to, matters before the U.S. Department of Justice, a federal grand jury in Alaska and the SEC;
- government efforts to curtail the COVID-19 pandemic may delay the Company in completion of its work relating to this permitting process;
- our ability to obtain funding for working capital and other corporate purposes associated with advancement of the Pebble Project;
- the Royalty Holder under our gold and silver production Royalty Agreement may not increase its investment;
- an inability to continue to fund exploration and development activities and other operating costs;
- our actual operating expenses may be higher than projected;
- the highly cyclical and speculative nature of the mineral resource exploration business;

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- the pre-development stage economic viability and technical uncertainties of the Pebble Project and the lack of known reserves on the Pebble Project;
- an inability to recover even the financial statement carrying values of the Pebble Project if we cease to continue on a going concern basis;
- the potential for loss of the services of key executive officers;
- a history of, and expectation of further, financial losses from operations impacting our ability to continue on a going concern basis;
- the volatility of copper, gold, molybdenum, silver and rhenium prices and share prices of mining companies;
- uncertainty related to the conflict in Ukraine;
- the impact of inflation on project costs and budgets for 2022 and beyond;
- stock market volatility resulting from rising interest rates and the impact on our ability to complete equity financings;
- the inherent risk involved in the exploration, development and production of minerals, and the presence of unknown geological and other physical and environmental hazards at the Pebble Project;
- the potential for changes in, or the introduction of new, government regulations relating to mining, including laws and regulations relating to the protection of the environment and project legal titles;
- potential claims by third parties to titles or rights involving the Pebble Project;
- the uncertainty of the outcome of current or future litigation including but not limited to, the appeal of the Record of Decision denying the issuance of permits required to operate a mine at the Pebble Project;
- the possible inability to insure our operations against all risks;
- the highly competitive nature of the mining business;
- the projected contributions of the Pebble Project to the United States federal, state and regional economies may not be realized;
- the potential equity dilution to current shareholders due to future equity financings or from the exercise of outstanding share purchase options and warrants to purchase the Company's common shares; and
- that we have never paid dividends and will not do so in the foreseeable future.

While the effort was made to list the primary risk factors, this list should not be considered exhaustive of the factors that may affect any of our forward-looking statements or information. Forward-looking statements or information are statements about the future and are inherently uncertain, and actual achievements of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements or information due to a variety of risks, uncertainties and other factors, including, without limitation, the risks and uncertainties described above. See [1.15.5 Risk Factors](#) and the risk factors and related discussions in the Company's annual information form for the year ended December 31, 2021 (the "2021 AIF") and 2021 Annual MD&A.

Our forward-looking statements and risk factors are based on the reasonable beliefs, expectations and opinions of management on the date of this MD&A. Although we have attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There is no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should appreciate the inherent uncertainty of, and not place undue reliance on forward-looking information. We do not undertake to update any forward-looking information, except as, and to the extent required by, applicable securities laws.

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For more information on the Company, investors should review the Company's 2021 AIF, the 2021 Annual MD&A and other continuous disclosure filings that are available on SEDAR at [www.sedar.com](http://www.sedar.com), and the Company's Annual Report on Form 40-F filed with the SEC available at [www.sec.gov](http://www.sec.gov).

**Cautionary Note to Investors Concerning Estimates of Measured, Indicated and Inferred Resources**

The following section uses the terms "Measured Resources", "Indicated Resources" and "Inferred Resources". The Company advises investors that these terms are recognized and required by Canadian regulations under National Instrument 43-101, *Standards of Disclosure for Mineral Properties* ("**43-101**"). The SEC has adopted amendments to its disclosure rules to modernize the mineral property disclosure required for issuers whose securities are registered with the SEC under the *U.S. Securities Exchange Act of 1934* ("**The SEC Modernization Rules**"). The SEC Modernization Rules include the adoption of definitions of the terms and categories of resources which are "substantially similar" to the corresponding terms under Canadian Regulations in 43-101. Accordingly, there is no assurance any mineral resources that we may report as Measured Resources, Indicated Resources and Inferred Resources under 43-101 would be the same had we prepared the resource estimates under the standards adopted under the SEC Modernization Rules. Investors are cautioned not to assume that all or any part of the mineral deposits in these categories will ever be converted into reserves.

In addition, Inferred Resources have a great amount of uncertainty as to their economic and legal feasibility. Under Canadian rules, estimates of Inferred Resources may not form the basis of feasibility or pre-feasibility studies, or economic studies except for a Preliminary Economic Assessment as defined under 43-101.

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## 1.2 Overview

Northern Dynasty is a mineral exploration company which, through its wholly-owned Alaskan registered limited partnership, the Pebble Limited Partnership (the "**Pebble Partnership**"), holds a 100% interest in mining claims that host the Pebble Copper-Gold-Molybdenum-Silver-Rhenium deposit, the basis of the Pebble Project (**or "Pebble"**) in southwest Alaska, USA ("**U.S.**"). The Company's business in Alaska is operated through the Pebble Partnership.

The Pebble Project is an initiative to develop one of the world's most important mineral resources. The current estimate of the Pebble Mineral Resources<sup>1</sup> at a 0.30% copper equivalent cut-off grade comprises:

- 6.5 billion tonnes in the combined **Measured and Indicated** categories at a grade of 0.40% copper, 0.34 g/t gold, 240 ppm molybdenum, 1.7 g/t silver and 0.41 ppm rhenium, containing 57 billion pounds of copper, 71 million ounces of gold, 3.4 billion pounds of molybdenum, 345 million ounces of silver and 2.6 million kilograms of rhenium; and
- 4.5 billion tonnes in the **Inferred** category at a grade of 0.25% copper, 0.25 g/t gold, 226 ppm molybdenum, 1.2 g/t silver and 0.36 ppm rhenium, containing 25 billion pounds of copper, 36 million ounces of gold, 2.2 billion pounds of molybdenum, 170 million ounces of silver and 1.6 million kilograms of rhenium.

Pebble has the potential to produce significant quantities of copper which is considered to be essential for green power and electrification technologies, including EVs. Pebble also contains a number of other important metals, including a globally significant resource of rhenium, used in jet engines and related military applications and as a catalyst in industrial applications for the production of such things as high octane, lead-free gasoline.

A July 2022 study by S&P Global, entitled '*The Future of Copper: Will the looming supply gap short-circuit the energy transition?*' highlights the critical connection between electrification goals and the development of new resources of copper, like Pebble. The report was authored in response to the growing concern expressed by global authorities and governments that there are insufficient resources of copper to support the goal of Net-Zero Emissions by 2050, and concludes that "unless massive new supply [of copper] comes online in a timely

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<sup>1</sup> David Gaunt, P.Geo., a qualified person as defined under 43-101, who is not independent of Northern Dynasty, is responsible for the mineral resource estimate, effective date August 18, 2020.

The Measured and Indicated Resources include 527 Mt of Measured grading 0.65% CuEq (0.33% Cu, 0.35 g/t Au, 178 ppm Mo, 1.7 g/t Ag and 0.32 ppm Re) and 5,929 Mt of Indicated grading 0.77% CuEq (0.41% Cu, 0.34 g/t Au, 246 ppm Mo, 1.7 g/t Ag and 0.41 ppm Re).

Copper equivalent ("**CuEq**") calculations use metal prices: US\$1.85/lb for Cu, US\$902/oz for Au and US\$12.50/lb for Mo, and recoveries: 85% Cu, 69.6% Au, and 77.8% Mo (Pebble West zone) and 89.3% Cu, 76.8% Au, 83.7% Mo (Pebble East zone). Contained metal calculations are based on 100% recoveries. A 0.30% CuEq cut-off is considered to be appropriate for porphyry deposit open pit mining operations in the Americas.

The mineral resource estimate is constrained by a conceptual pit shell that was developed using a Lerchs-Grossman algorithm and is based in the following parameters: 42 degree pit slope; metal prices and recoveries of US\$1,540.00/oz and 61% Au, US\$3.63/lb and 91% Cu, US\$20.00/oz and 67% Ag and US\$12.36/lb and 81% Mo, respectively; a mining cost of US\$1.01/ton with a US\$0.03/ton/bench increment and other costs (including processing, G&A and transport) of US\$6.74/ton. All mineral resource estimates, cut-offs and metallurgical recoveries are subject to change as a consequence of more detailed analyses that would be required in pre-feasibility and feasibility studies.

For further information on analytical, QA/QC and data verification, and the estimate, refer to the 2022 PEA.

The mineral resource estimates contained herein have not been adjusted for any risk that the required environmental permits may not be obtained for the Pebble Project. The risk associated with the ability of the Pebble Project to obtain required environmental permits is a risk to the reasonable prospects for eventual economic extraction of the mineralisation and its classification as a mineral resource.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

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way, the goal of Net-Zero Emissions by 2050 will be short-circuited and remain out of reach.”<sup>2</sup> The report and the information on the S&P Global website regarding the report are not incorporated into this MD&A.

Recent global events have demonstrated the fragility and insecurity of the global supply chain, and further underscored the need for the U.S. and other countries to achieve security over important commodities, a key part of the energy transition. The Company believes the Pebble Project would help the U.S. to advance its stated goal of mineral security.

***Royalty agreement secured for proceeds of up to US\$60 million on non-core metals***

In July 2022, Northern Dynasty announced that the Pebble Partnership, together with certain other wholly-owned subsidiaries of the Pebble Partnership, had entered into the Royalty Agreement with the Royalty Holder to receive up to US\$60 million over the next two years, in return for the right to receive a portion of the future gold and silver production from the Pebble Project for the life of the mine. The Company received an initial non-refundable payment of US\$12 million from the Royalty Holder concurrently with execution of the Royalty Agreement, and granted the option to the Royalty Holder to increase its investment to US\$60 million, in aggregate. The Company retained the right to 100% of the copper production from the Pebble Project.

Pursuant to the terms of the Royalty Agreement, the Royalty Holder made the initial non-refundable payment of US\$12 million in exchange for the right to receive 2% of the payable gold production and 6% of the payable silver production from the Pebble Project, in each case after accounting for a notional payment by the Royalty Holder of US\$1,500 per ounce of gold and US\$10 per ounce of silver, respectively, for the life of the mine. If, in the future, spot prices exceed US\$4,000 per ounce of gold or US\$50 per ounce of silver, then the Company will share in 20% of the excess price for either metal. Additionally, the Company will retain a portion of the metal produced for recovery rates in excess of 60% for gold and 65% for silver, and so is incentivized to continually improve operations over the life of the mine. Within two years of the date of the Royalty Agreement, the Royalty Holder has the right to invest additional funds, in US\$12 million increments, for the right to receive additional 2% increments of gold production and 6% of silver production to an aggregate total of US\$60 million, in return for the right to receive an aggregate of 10% of the payable gold and 30% of the payable silver (in each case, in the aggregate) on the same terms as the first tranche of the investment. The Royalty Holder is under no obligation to invest additional amounts to increase its interest in the gold and silver production from the Pebble Project.

The Pebble Partnership has also granted to the Royalty Holder a right of first refusal in respect of the sale of any gold or silver production from the Pebble Project pursuant to a streaming, royalty or other similar transaction in exchange for an upfront payment. The Royalty holder has granted to the Pebble Partnership a right of first refusal should it propose to sell any of its rights under the Royalty Agreement.

Subject to certain conditions, the Royalty Agreement does not restrict the Company's ability to form partnerships to assist in the development of the Proposed Project, for example (but not restricted to) other mining companies or Alaska Native Corporations.

***2022 Update of Preliminary Economic Assessment: the Pebble Project maintains strong economic fundamentals with latest royalty financing***

In September 2021, the Company announced the results of the 2021 PEA of the Pebble Project, providing production, financial and cost estimates for its proposed Pebble Project (the "**Proposed Project**") as described in the Pebble Project permit application and its amendments, which underwent a comprehensive review by the USACE culminating in their publishing of the Pebble EIS in July 2020. The 2021 PEA also examined three Potential Expansion Scenarios and potential alternative strategies for gold recovery that could form the basis

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<sup>2</sup> <https://ihsmarkit.com/info/0722/futureofcopper.html>

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for future permit applications and review. The 2021 PEA presented robust projected financial results and globally significant potential metal production with excellent optionality.

During the quarter, the Company and its consultants conducted a study to assess the impact of the Royalty Agreement on the results of the Proposed Project. Subsequent to the quarter end on November 14, 2022, the Company announced the filing of the 2022 PEA in support of that work. The 2022 PEA updates the 2021 PEA to examine both the impact from the US\$12 million tranche of the previously completed royalty investment and the potential impact of a US\$60 million royalty investment if all five tranches are fully committed. The 2022 PEA highlights that the Pebble Project remains very robust and, although the Company believes the royalty has the potential to be very valuable, it has minimal impact on the forecasted economics of the project while strengthening the Company's balance sheet position.

The following table provides a comparison of the key projected results for the Proposed Project pre and post-royalty. U.S. dollars and U.S. standard units are used unless otherwise indicated in the 2022 PEA. All results are post-tax.

**Comparison of key projected results for Proposed Project Base Case  
(20 year life, per Proposed Project submitted to the NEPA process) <sup>1, 2</sup>**

Description	Units	LOM Values No Royalty <sup>4</sup>	LOM Values L/T Prices, 2% Gold / 6% Silver Royalty	LOM Values L/T Prices, 10% Gold / 30% Silver Royalty
<b>Financial Summary</b>				
Mining Taxes & Government Royalties	US\$ M	\$1,479	\$1,467	\$1,420
Corporate Income Tax	US\$ M	\$2,125	\$2,098	\$1,988
Post-Tax Undiscounted Cash Flow	US\$ M	\$8,224	\$8,131	\$7,759
Post-tax NPV at 7% <sup>3</sup>	US\$ M	\$2,281	\$2,245	\$2,097
Post-Tax IRR	%	15.7	15.6	15.1%
Post-Tax Payback Period	years	4.8	4.8	4.9

Source: 2022 PEA

1 Case shown includes major infrastructure (access road, port, power) provided by third parties under lease agreement

2 Long-term metal prices: copper \$3.50/lb; gold \$1,600/oz; molybdenum \$10/lb; silver \$22/oz; rhenium \$1,500/kg

3 Net Present Value is calculated using a 7% discount rate, given the polymetallic nature of the Pebble deposit and the large contributions of gold to total project revenues.

4 The Life of Mine Values ("LOM Values"). No Royalty are derived from the 2021 PEA, now supplanted by the 2022 PEA. The 'LOM Values 2% Gold/6% Silver Royalty' are the results for the initial \$12 million tranche; the 'LOM Values 10% Gold/30% Silver Royalty' are the results if all tranches of the royalty financing are completed. Further details on the 2021 PEA results can be found in the October 25, 2021 news release.

The 2022 PEA also assesses the royalty's impact on the projected results for three potential expansion scenarios and potential alternative strategies for gold recovery that could form the basis for future permit applications and review. The royalty was found to also have a minimal impact on the results of these potential scenarios.

The 2022 PEA is preliminary in nature and includes inferred mineral resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no assurance that the 2022 PEA will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Additional information on the 2022 PEA is provided in the technical report, which is filed under Northern Dynasty's profile on SEDAR ([www.sedar.com](http://www.sedar.com)). It will also be filed on EDGAR ([www.sec.gov](http://www.sec.gov)) and made available

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on the Northern Dynasty website. Investors should review the information presented in this MD&A in the context of the full information presented in the 2022 PEA.

***Permitting Status***

A CWA 404 Permit Application for the Pebble Project was submitted to the USACE by the Pebble Partnership in December 2017 and the federal permitting process was initiated in January 2018, led by the USACE. From that time to the ROD announcement by the USACE in November 2020, most of the activities of the Company, through the Pebble Partnership, were focused on support of this process and included ongoing technical studies, responses to requests for information, and stakeholder engagement and consultation. While this work continued post-receipt of the ROD through 2020 and 2021, and is ongoing in 2022, the focus has shifted to Pebble Partnership's appeal of the negative ROD by the USACE (see [1.2.1.1, Permitting](#), for more details on the process and aspects of it, including the EIS, compensatory mitigation and the appeal of the ROD). The USACE completed the administrative record for the appeal and provided a copy to the Pebble Partnership in June 2021, following which the Pebble Partnership and its legal counsel reviewed the voluminous record for completeness and relevance to the USACE's permitting decision, and its sufficiency to support a fair, transparent and efficient review. In August 2021, the USACE informed the Pebble Partnership that a new Review Officer ("**RO**") had been appointed to lead the Pebble Project appeal. An appeal conference was held in July 2022. The timing for the final decision on the appeal remains uncertain.

On September 9, 2021, the EPA announced it planned to re-initiate the process of making a CWA Section 404(c) determination for the waters of Bristol Bay (the "**Proposed Determination**"), which would set aside the 2019 withdrawal of that action that was based on a 2017 settlement agreement between the EPA and Pebble Partnership. The Company believes the results of the Pebble EIS support the 2019 withdrawal. The 2019 withdrawal of the Proposed Determination was contested by Project opponents. In that litigation, the EPA requested the court vacate the withdrawal decision and remand the case to the EPA, which would result in the reinstatement of the Proposed Determination. The Pebble Partnership filed a response to this request in October, asking the Court to impose a schedule ensuring that the EPA is not able to regulate by inaction. On October 29, 2021, the court granted the EPA's motion for remand and vacated the EPA's withdrawal decision, thus reinstating the Section 404(c) Proposed Determination. The Court declined to impose a schedule on the EPA's proceedings on remand. The EPA subsequently extended the deadline to either withdraw the Proposed Determination or to prepare a recommended determination regarding the Pebble Project until May 31, 2022. The EPA has announced that this extended timeline will allow the EPA to consider available information, including the substantial volume of new information that has become available since the EPA issued the Proposed Determination, to determine its next steps in the Section 404(c) process. As part of its review process, the EPA issued a letter dated January 27, 2022, to the Pebble Partnership advising as to the EPA's belief that the discharge of dredged or fill associated with mining of the Pebble Project could result in unacceptable adverse effects on important fishery areas and of its intent to issue a Revised Proposed Determination. The EPA's letter was also addressed to the USACE and the State of Alaska Department of Natural Resources. The EPA invited the Pebble Partnership, the USACE, the State of Alaska Department of Natural Resources to submit information "*to demonstrate that no unacceptable adverse effects to aquatic resources*" would result from the Pebble Project. The Pebble Partnership responded to the EPA on March 28, 2022 contesting both the factual claim by the EPA as to the impact on aquatic resources and the legal basis on which the EPA has proposed to act.

Specifically, the Pebble Partnership has asserted that:

- The EPA has failed to appropriately consider the revised smaller footprint mine plan for the Pebble Project reflected in the Pebble EIS, versus the original mine plan that was the subject of the original 2014 Proposed Determination. In addition, the EPA failed to fully consider the mitigation measures proposed and summarized in the Pebble EIS;
- The EPA's authority to undertake a Proposed Determination under Section 404(c) is narrowly prescribed by the CWA statute and regulations and is only to be used as a last resort. As the EPA still has a full opportunity to participate in the EIS and CWA permit review processes for the Pebble Project, the EPA's

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use of the veto at this stage is unwarranted and unjustified. Rather, the EPA should only act under Section 404(c) if the USACE proposes to issue a permit to which the EPA objects;

- The EPA's assertion of impacts to fishery areas is not supported and is contradictory to the conclusion in the Pebble EIS that the Pebble Project would have no measurable impact on returning salmon;
- A Section 404(c) veto would violate the rights of the State of Alaska established under the Alaska Statehood Act and would undermine the State's legally protected interests in the development of lands it intentionally acquired and designed for mineral development; and
- There is a critical need for the minerals that would be produced by the Pebble Project which are essential to the transition to renewable energy sources to reduce climate impacts from fossil fuels. The EPA must consider the need for the Pebble Project in light of this demand, and the environmental and social costs that would result from a determination not to proceed with the development of a U.S. based source of the minerals needed to support the clean energy transition.

The State of Alaska also responded to the EPA's letter by letter dated March 28, 2022. The State of Alaska advised the EPA of its position that the issuance of a Section 404(c) veto would contravene the Alaska Statehood Act, the Cook Inlet Land Exchange Act and potentially the "takings clause" of the United States Constitution. The State of Alaska also stated its view that the issuance of a Section 404(c) Proposed Determination would conflict with both federal and state laws and short-circuit the longstanding, science-based and thorough processes for environmental review and regulatory compliance under the existing federal and state permitting processes. The State noted that it has a comprehensive, robust and rigorous set of environmental laws that serve to avoid and minimize impacts to lands, waters, habitats, and resident species, and that these laws would be bypassed were the EPA to proceed unilaterally. The State also expressed its view that bypassing the federal and state permitting process would deprive the EPA of the ability to fully evaluate the protections that would be imposed on the Pebble Project and accurately gauge the impacts of the project.

On May 25, 2022, the EPA announced that it intends to advance its pre-emptive veto of the Pebble Project and issued a revised Proposed Determination. The Revised Proposed Determination would establish a "defined area for prohibition" coextensive with the current mine plan footprint in which the EPA would prohibit the disposal of dredged or fill material for the Pebble Project. The Revised Proposed Determination would also establish a 309-square-mile "defined area for restriction." Public comments on the Revised Proposed Determination were due on September 6, 2022.

On September 6, 2022, the EPA announced it was extending the time period for a decision on the Revised Proposed Determination until December 2, 2022. In September 2022, the Pebble Partnership submitted extensive comments on the Revised Proposed Determination, objecting to the EPA's preemptive veto of the Pebble Project. The Pebble Partnership called upon the EPA to withdraw its action and refrain from further action against the project. A compelling letter and comments by the State of Alaska and a second letter signed by a total of 14 states were also submitted to the EPA, protesting against the EPA's overreach with the Revised Proposed Determination.

Future action by the EPA could negatively affect the ability of the Pebble Partnership to obtain required permitting and develop the Project, even if the appeal of the 2020 ROD is successful. The Company will continue to monitor these developments closely to determine the possible impacts to the project and permitting process, as it remains the Company's position that the withdrawal of the preemptive veto by the EPA was sound and appropriate.

### ***Other Activities***

The Company completed a monitoring and maintenance program at the Pebble site in Q2. In the current quarter, a field team completed the clean up of a logistical storage site on the property that had had been damaged by a wildfire that was part of the broader wildfire activity that occurred in Alaska in early July.

Through the Pebble Partnership, the Company maintained an active corporate presence in Alaska and Washington, D.C., to engage and consult with project stakeholders through the Pebble Partnership. Corporate

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activities continued to be mainly directed toward the appeal of the ROD, and providing comments on the Revised Proposed Determination, as well as raising funds, as necessary, to support permitting, corporate reporting and discussions directed toward securing a partner with which to advance the overall development of the project.

From 2001, when Northern Dynasty's involvement with the Pebble Project began, to September 30, 2022, a total of \$998 million (US\$898 million) has been invested to advance the project.<sup>3</sup>

## **Corporate**

As at September 30, 2022, the Company had \$24.5 million in cash and cash equivalents and working capital of \$21.7 million.

The Company has prioritized the allocation of its available financial resources to meet key corporate and Pebble Project expenditure requirements in the near term, including the funding of the appeal of the ROD and other matters addressed in [1.5.3 Plan of Operations](#). With the receipt of the first tranche of US\$12 million on the execution of the Royalty Agreement (discussed above under "[Royalty agreement secured for proceeds of up to US\\$60 million on non-core metals](#)"), the Company has funds to continue further development of the project beyond the twelve-month period starting from September 30, 2022. The Company is also intending to file a new base shelf prospectus and corresponding F-10 registration statement as the previous base shelf prospectus expired on August 2, 2022. After qualification of the base shelf prospectus and the filing of a further prospectus supplement in respect of the ATM facility, the Company will again have access to the At-the-Market Offering Agreement, whereby the Company can sell through the agent, up to US\$13.8 million in common shares (the "**ATM Facility**"). The ATM Facility, when available, does not restrict the Company from conducting other financings through any or a combination of debt and equity and/or contributions from possible new Pebble Project participants; however, there can be no assurances that it will be successful in obtaining additional financing. If the Company is unable to raise the necessary capital resources to meet obligations as they come due, the Company will at some point have to reduce or curtail its operations.

### **1.2.1 Pebble Project**

The Pebble Project is located in southwest Alaska, approximately 17 miles from the villages of Iliamna and Newhalen, and approximately 200 miles southwest of the city of Anchorage. Situated in an area of rolling hills approximately 1,000 feet above sea-level and 125 miles from Bristol Bay, the site conditions are generally favorable for the mine site and infrastructure development.

#### **1.2.1.1 Project Background and Status**

The Pebble deposit was discovered in 1989 by a prior operator, which by 1997 had developed an initial outline of the deposit.

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<sup>3</sup> Of this, approximately \$595 million (US\$573 million) was provided by a wholly-owned subsidiary of Anglo American plc, which participated in the Pebble Partnership from 2007 to 2013, and the remainder was financed by Northern Dynasty. A major part of the 2007-2013 expenditures were on exploration, resource estimation, environmental data collection and technical studies, with a significant portion spent on engineering of possible mine development models, as well as related infrastructure, power and transportation systems. The technical and engineering studies that were completed during the period prior to December 2013 relating to mine-site and infrastructure development provide background support for management's current understanding of the most likely development scenarios for the Project. However, the scenarios evaluated during that period are not considered to be current. Accordingly, the Company is uncertain as to the extent to which it can realize significant value from this prior work. Environmental baseline studies and data, as well as geological and exploration information, remain important information available to the Company to advance the project.

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Northern Dynasty has been involved in the Pebble Project since 2001. Exploration since that time has led to significant expansion of the mineral resources in the Pebble deposit, including a substantial volume of higher grade mineralization in its eastern part. The deposit also remains open to further expansion at depth and to the east. A number of other occurrences of copper, gold and molybdenum have also been identified along the extensive northeast-trending mineralized system that underlies the property. The potential of these earlier-stage prospects has not yet been fully explored.

Comprehensive deposit delineation, environmental, socioeconomic and engineering studies of the Pebble deposit began in 2004. A Preliminary Assessment of the Pebble Project completed in 2011 provided initial insights into the size and scale of project that the Pebble resource might support. The Pebble Partnership continued to undertake detailed engineering, environmental and socioeconomic studies over the next two years.

The 27,000-page Environmental Baseline Document ("EBD") for the Pebble Project was publicly released in 2012. The 2012 EBD characterizes a broad range of environmental and social conditions in southwest Alaska – including climate, water quality, wetlands, fish and aquatic habitat, wildlife, land and water use, socioeconomics and subsistence activities during the period 2004-2008 and from some disciplines in 2009. Data from the 2009-2013 period was compiled into the Supplemental EBD (2009 to 2013), and both volumes were substantively updated since 2012. Data collected through 2019 was also provided to USACE for the Pebble EIS process. Wetlands field work was conducted in the summer of 2020 for the purpose of verifying appropriate wetlands quality/quantity for the new compensatory mitigation plan ("CMP") in the Koktuli watershed.

In February 2014, the EPA announced the Proposed Determination under the CWA to consider restriction or a prohibition of mining activities associated with the Pebble deposit. A multi-dimensional strategy, including legal and other initiatives to ward off this action undertaken by Northern Dynasty and the Pebble Partnership from 2014-2017 were successful, resulting in the joint settlement agreement announced on May 12, 2017, and enabling the project to move forward with state and federal permitting. As part of the joint settlement agreement, the EPA agreed to initiate a process that led to the withdrawal of the Proposed Determination in July 2019.

On April 17, 2020, a US federal district court judge in Alaska ruled in favour of the EPA by granting a motion to dismiss a case brought by a collection of litigants opposed to the Pebble Mine that challenged the EPA's July 2019 decision to formally withdraw its Proposed Determination under Section 404(c) of the CWA. The ruling was based on a determination that the litigants had failed to state a claim upon which relief can be granted. This dismissal was appealed to the Ninth Circuit Court of Appeals. On June 17, 2021, the Ninth Circuit Court of Appeals issued an opinion reversing in part the District Court's opinion and remanding the case to the Alaska federal district court to undertake further proceedings consistent with the decision of the Court of Appeals. Specifically, the Court of Appeals upheld the District Court's finding that the CWA contained no meaningful legal standard for judicial review in its broad grant of discretion to the EPA, but the Court of Appeals remanded the case because it found that EPA's regulations contain a meaningful legal standard for review. The case was therefore remanded to the District Court for further proceedings to determine whether the EPA's withdrawal of the proposed determination was arbitrary, capricious or an abuse of power contrary to law. On September 9, 2021, the EPA announced they planned to file a motion seeking remand of the withdrawal decision, which would re-initiate the Proposed Determination. The Pebble Partnership sought and was granted status as an intervenor and filed a response to the EPA's motion in October 2021, asking the Court to impose a schedule requiring the EPA to issue a final decision on the 2014 Proposed Determination under the CWA, whether that be to withdraw or finalize it. On October 29, 2021 the court granted the EPA's motion for remand, vacating the EPA's withdrawal decision, and thus reinstating the Section 404(c) Proposed Determination, without imposing any schedule on the agency. In May 2022, the EPA announced that it intends to advance its preemptive veto of the Pebble Project and issued the Revised Proposed Determination. The Revised Proposed Determination would establish a "defined area for prohibition" coextensive with the current mine plan footprint in which the EPA would prohibit the disposal of dredged or fill material for the Pebble Project. The Revised Proposed Determination would also establish a 309-square-mile "defined area for restriction." A public comment period

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on the Revised Proposed Determination closed on September 6, 2022. The EPA has announced an extension to the time period for a decision on the Revised Proposed Determination until December 2, 2022. The Pebble Partnership submitted comprehensive comments stating its concerns about the numerous legal and factual flaws in the Revised Proposed Determination, which can be found on the requisite EPA website and at <https://northerndynastyminerals.com/site/assets/files/4968/2022-09-06-pebble-comments.pdf>.

### Permitting

In the latter part of 2017, a project design was developed for the Pebble Project. The CWA 404 permit application was submitted to the USACE on December 22, 2017, initiating federal review for the Pebble Project under NEPA. Significant milestones in this permitting process are summarized below:

- In January 2018, the Pebble Partnership received notice from USACE that the CWA Act 404 permitting documentation was accepted and that an EIS would be required to comply with its NEPA review of the Pebble Project;
- On February 5, 2018, USACE announced the appointment of AECOM, a leading global engineering firm, as third-party contractor for the USACE EIS process;
- On March 19, 2018, USACE published guidelines and timelines for completing CWA permitting, and the associated USACE EIS process;
- Between April and August 2018, the Pebble Project was advanced through the Scoping Phase of the EIS process administered by the USACE, which included a 90-day public comment period. The Scoping Document was released on August 31, 2018;
- On February 20, 2019, USACE posted the draft EIS on its website, then initiated a public comment process on the draft EIS, which was completed on July 2, 2019;
- In February 2020, a preliminary version of the final EIS was distributed for comment and review to cooperating agencies and to tribes participating in the process;
- In March 2020, USACE announced it had decided on a Northern Transportation Route option as the draft Least Environmentally Damaging Practicable Alternative ("LEDPA") for accessing the proposed Pebble mine site, subsequent to which the Pebble Partnership revised its Proposed Project Description to align with the USACE selection. The Northern Transportation Route includes adjustments to the port site (location at Diamond Point with off-shore lightering station) and a road and pipeline route (located further to the north with no lake crossings or ferry terminals);
- In May 2020, the EPA issued a letter confirming the EPA's decision not to pursue so-called 3(b) elevation under the CWA 404(q) guidelines; and
- On July 24, 2020, the USACE posted the final Pebble EIS on its website.

Publication of the final Pebble EIS in July 2020 followed 2½ years of intensive review by the USACE and eight federal cooperating agencies (including the US Environmental Protection Agency and US Fish & Wildlife Service), three state cooperating agencies (including Alaska Department of Natural Resources and Alaska Department of Environmental Conservation), the Lake & Peninsula Borough and federally recognized tribes. The final Pebble EIS was viewed by the Company as positive in that it found impacts to fish and wildlife would not be expected to affect harvest levels, there would be no measurable change to the commercial fishing industry including prices and there would be a number of positive socioeconomic impacts on local communities.

The CWA 404 Permit Application submitted in December 2017, initiated the permitting process which involved the Pebble Partnership being actively engaged with the USACE on the evaluation of the Pebble Project. There were numerous meetings between representatives of the USACE and the Pebble Partnership regarding, among other things, compensatory mitigation for the Pebble Project. The Pebble Partnership submitted several draft compensatory mitigation plans to the USACE, each refined to address comments from the USACE and that the

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Pebble Partnership believed were consistent with mitigation proposed and approved for other major development projects in Alaska. In late June 2020, USACE verbally identified the "significant degradation" of certain aquatic resources, with the requirement of new compensatory mitigation. The Pebble Partnership understood from these discussions that the new compensatory mitigation plan for the Pebble Project would include in-kind, in-watershed mitigation and continued its work to meet these new USACE requirements.

The USACE formally advised the Pebble Partnership by letter dated August 20, 2020, that it had made preliminary factual determinations under Section 404(b)(1) of the CWA that the Pebble Project as proposed would result in significant degradation to aquatic resources. In connection with this preliminary finding of significant degradation, the USACE formally informed the Pebble Partnership that in-kind compensatory mitigation within the Kaktuli River watershed would be required to compensate for all direct and indirect impacts caused by discharges into aquatic resources at the mine site. The USACE requested the submission of a new compensatory mitigation plan to address this finding within 90 days of its letter.

Based on these requirements, the Pebble Partnership developed a new CMP to align with the requirements outlined by the USACE as conveyed to the Pebble Partnership. This plan envisioned creation of an 112,445-acre Kaktuli Conservation Area on land belonging to the State of Alaska in the Kaktuli River watershed downstream of the Project. During the period in which this CMP was developed, the Pebble Partnership continued to confer with the USACE regarding its proposed approach to mitigation. An initial draft of the CMP was submitted to the USACE for an interim review by the USACE in September 2020. The Pebble Partnership then revised the CMP based on the input from the USACE. The objective of the preservation of the Kaktuli Conservation Area was to allow the long-term protection of a large and contiguous ecosystem that contains aquatic and upland habitats. If adopted, the Kaktuli Conservation Area would preserve 31,026 acres of aquatic resources within the Kaktuli River watershed. The protected resources were designed to address the physical, chemical, and biological functions highlighted by the EPA and the U.S. Fish & Wildlife Service. Preservation of the Kaktuli Conservation Area was proposed with the objective of minimizing the threat to, and preventing the decline of, aquatic resources in the Kaktuli River watershed from potential future actions, and sustaining the fish and wildlife species that depend on these aquatic resources, while protecting the subsistence lifestyle of the residents of Bristol Bay and commercial and recreational sport fisheries. The revised plan was submitted to the USACE on November 4, 2020.

On November 25, 2020, the USACE issued the ROD. The ROD rejected the compensatory mitigation plan as "noncompliant" and determined the Pebble Project would cause "significant degradation" and was contrary to the public interest. Based on this finding, the USACE rejected Pebble Partnership's permit application under the CWA.

The Pebble Partnership submitted a request for appeal of the ROD (the "**RFA**") to the USACE Pacific Ocean Division on January 19, 2021. The RFA reflects the Pebble Partnership's position that the USACE's ROD and permitting decision are contrary to law, unprecedented in Alaska, and fundamentally unsupported by the administrative record, including the Pebble Project EIS. The specific reasons for appeal asserted by the Pebble Partnership in the RFA include (i) the finding of "significant degradation" by the USACE is contrary to law and unsupported by the record, (ii) the USACE's rejection of the Pebble Partnership's compensatory mitigation plan is contrary to USACE regulations and guidance, including the failure to provide the Pebble Partnership with an opportunity to correct the alleged deficiencies, and (iii) the determination by the USACE that the Pebble Project is not in the public interest is contrary to law and unsupported by the public record.

On January 22, 2021, the State of Alaska, acting in its role as owner of the Pebble lands and subsurface mineral estate, announced that it had also filed a request for appeal. That appeal was rejected on the basis that the State did not have standing to pursue an administrative appeal with the USACE.

In a letter dated February 24, 2021, the USACE confirmed the Pebble Partnership's RFA is "complete and meets the criteria for appeal." The USACE completed the administrative record for the appeal and provided a copy to the Pebble Partnership in June 2021, following which the Pebble Partnership and its legal counsel reviewed the voluminous record for completeness and relevance to the USACE's permitting decision, and its sufficiency to

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support a fair, transparent and efficient review. In August 2021, the USACE also informed the Pebble Partnership that a new RO had been appointed to lead the Pebble Project appeal. The appeal will be reviewed by the USACE based on the administrative record and any clarifying information provided, and the Pebble Partnership will be provided with a written decision on the merits of the appeal at the conclusion of the process. The appeal is governed by the policies and procedures of the USACE administrative appeal regulations. While federal regulations suggest the appeal should conclude within 90 days, and in no case should extend beyond one year, the USACE has indicated the complexity of issues and volume of materials associated with Pebble's case means the review will take additional time. An appeal conference was held in July 2022. The timing for the final decision remains uncertain. There is no assurance that the Company's appeal of the ROD will be successful or that the required permits for the Pebble Project will ultimately be issued. The permits are required in order that the Pebble Project can be developed as proposed by the Company. If the Pebble Partnership's administrative appeal of the ROD is successful, then we anticipate that the permitting decision would be remanded back to the USACE's Alaska District in order that the permitting process would then continue based on the administrative record and the findings and determinations made by the USACE Pacific Division in its appeal decision. There is no assurance that a successful appeal will ultimately result in the issuance of a positive ROD by the USACE Alaska District. If the Pebble Partnership's administrative appeal is not successful, the Company may seek judicial review of the ROD in the appropriate US District Court. There is no assurance that any judicial review would be successful in overturning an unsuccessful appellate decision.

### **Project Description**

Northern Dynasty, through Pebble Partnership, continued to advance engineering studies to refine the mine design and to support the EIS process. The results of this work were reported in updates to the Project Description.

During the permitting process, a number of transportation infrastructure routes and alternatives were assessed, and the USACE determined that the northern corridor route was the most appropriate LEDPA alternative. It is the Pebble Partnership's intent to undertake the actions necessary to acquire the rights to build and operate the most appropriate transportation and infrastructure corridor to allow the development of the State's and Pebble Partnership's mineral rights. Information on Right-of-Way agreements is provided in [1.2.1.3 Socioeconomic](#).

The final Pebble EIS analyzes the potential impacts of four action development alternatives, and a "No Action" alternative. The development option selected by USACE as the draft LEDPA is described in the June 2020 Project Description. It includes a proposed open-pit mining operation and associated ore processing facilities in southwest Alaska, an 82-mile road, pipeline and utilities corridor to a permanent, year-round port facility on Cook Inlet, a lightering location in Iniskin Bay, a 164-mile natural gas pipeline from existing energy infrastructure on the Kenai Peninsula to the Pebble mine site, a 270 MW natural gas-fired power plant at the mine site and smaller power generation facility at the port site.

Over 20 years of mining, the Pebble Project as proposed will extract approximately 70 million tons of mineralized material annually at the extremely low strip ratio of 0.12:1. A conventional blast-haul-crush and froth flotation milling process with nameplate capacity of 180,000 tons per day will be employed to produce, on average, 613,000 tons of copper-gold concentrate each year (containing 318 million lb Cu, 362,000 oz Au and 1.8 million oz Ag) and 15,000 tons of molybdenum concentrate (containing 14 million lb Mo). The current mine plan proposal encompasses the important environmental safeguards previously described, including:

- a smaller footprint, consolidating major site infrastructure in a single drainage.
- a more conservative Tailings Storage Facility ("TSF") design, including enhanced buttresses, flatter slope angles and an improved factor of safety;
- separation of potentially acid generating ("PAG") tailings from non-PAG bulk tailings for storage in a fully-lined TSF;

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- co-storage of PAG waste rock within the PAG TSF and transfer of the PAG tailings and waste rock to the open pit at closure;
- no permanent waste rock piles; and
- no secondary gold recovery plant.

The proposed project seeks to develop a portion of the currently estimated Pebble mineral resources. This does not preclude development of additional resources in other phases of the project in the future, although any subsequent phases of development would require extensive regulatory and permitting review by federal, state and local regulatory agencies, including a further comprehensive EIS review process under NEPA. During the NEPA process, the Pebble Partnership received a Request for Information ("**RFI**") from USACE for a description of a concept for an expanded Project. The Pebble Partnership prepared the description in response to the RFI and this response is included in the EIS Administrative Record.

In September 2021, the Company announced the results of the 2021 PEA, which includes studies of the Project Proposed as well as three Potential Expansion Scenarios and alternative gold treatment strategies, the latter of which could be the subject of future permitting. In November 2022, the Company announced the filing of the 2022 PEA, which updates the 2021 PEA to evaluate the impact of the royalty financing, finding that although the Company believes the royalty has the potential to be very valuable, it has minimal impact on the forecasted economics of the project.

#### **1.2.1.2 Technical Programs**

The 2022 site program was initiated in May, and completed by the end of June. Further details on the program can be found in the Company's Q2 MDA.

Alaska suffered record-breaking wildfires earlier this summer, caused by lightning strikes and hot, dry conditions, with more acreage burned faster than any other year on record. The Company's logistical storage site, used to store equipment, was damaged. During the quarter, a team was mobilized to clean up the storage site, and was completed in under a week in September.

Also during the quarter the Company was focused on working with its consultants to review, complete requisite analyses and update the Preliminary Economic Assessment of the Pebble Project as further described in the [Overview](#). The technical report was filed on November 14, 2022.

#### **1.2.1.3 Socioeconomic**

##### *Community Engagement*

Pebble Project technical programs are supported by stakeholder engagement activities undertaken by the Pebble Partnership in Alaska. The objective of stakeholder outreach programs undertaken by the Pebble Partnership are to:

- advise residents of nearby communities and other regional interests about Pebble work programs and other activities being undertaken in the field;
- provide information about the proposed development plan for the Pebble Project, including potential environmental, social and operational effects, proposed mitigation and environmental safeguards;
- allow the Pebble Partnership to better understand and address stakeholder priorities and concerns with respect to development of the Pebble Project;
- encourage stakeholder and public participation in the regulatory permitting process for Pebble; and
- facilitate economic and other opportunities associated with advancement and development of the Pebble Project for local residents, communities and companies.

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In addition to meeting with stakeholder groups and individuals, and providing project briefings in communities throughout Bristol Bay and the State of Alaska, the Pebble Partnership's outreach and engagement program have included:

- workforce and business development initiatives intended to enhance economic opportunities for regional residents and Alaska Native corporations;
- initiatives to develop partnerships with Alaska Native corporations, commercial fishing interests and other in-region groups and individuals;
- outreach to elected officials and political staff at the national, state and local levels; and
- outreach to third-party organizations and special interest groups with an interest in the Pebble Project, including business organizations, community groups, outdoor recreation interests, Alaska Native entities, commercial and sport fishery interests, and conservation organizations, among others.

Through these various stakeholder initiatives, the Company seeks to advance a science-based project design that is responsive to stakeholder priorities and concerns, provides meaningful benefits and opportunities to local residents, businesses and Alaska Native corporations, and energizes the economy of Southwest Alaska. This program of engagement and consultation also includes discussions to secure stakeholder agreements to support the project's development.

*Right-of-Way Agreements and Other Community Initiatives*

The Pebble Partnership has finalized Right-of-Way ("**ROW**") agreements with Alaska Native village corporations and other landowners with land holdings along proposed transportation and infrastructure routes for the Pebble Project. The ROW agreements secure access to portions of several proposed transportation and infrastructure routes to the Pebble Project site for construction and operation of the proposed mine and represents a significant milestone in the developing relationship between Pebble and the Alaska Native people of the region. Transportation and other infrastructure for a mine at Pebble is expected to benefit Alaska Native village corporations, their shareholders and villages through toll payments and user fees, contracting opportunities, and improved access to lower cost power, equipment and supplies, as well as enhanced economic activity in the region.

On June 16, 2020, the Company announced the Pebble Partnership has established the Pebble Performance Dividend LLC ("**PPD LLC**") to provide a local revenue sharing program with the objective of ensuring that full-time residents of communities in southwest Alaska benefit directly from the future operation of the proposed Pebble Project. The intention is for PPD LLC to distribute cash generated from a 3% net profits royalty interest in the Pebble Project to adult residents of Bristol Bay villages that have subscribed as participants, with a guaranteed minimum aggregate annual payment of US\$3 million each year the Pebble mine operates, beginning at the outset of project construction. Future payments following capital payback are expected to increase beyond this initial amount as estimated in the *'Economic Contribution Assessment of the Proposed Pebble Project to the US national and state economies'*, prepared by IHS Markit.

A Memorandum of Understanding ("**MOU**") between the Pebble Partnership and APC was announced on July 6, 2020. The Alaska Peninsula Corporation ("**APC**") is an Alaska Native village corporation with extensive land holdings proximal to the Pebble site. The MOU envisages that APC will lead the development of a consortium of Alaska Native village corporations with land holdings along the Northern Transportation Route. It is contemplated that the consortium would provide road maintenance, truck transport, port operations and other logistical services to the Pebble Project should the development of the mine proceed. The MOU is consistent with the Company's strategy of ensuring the development of the Pebble Project will benefit local Alaska communities and people. The MOU is not a binding final contract. Any final contracts with APC or other Alaska Native village corporations will require further negotiation of commercial terms and negotiation of definitive contracts. There is no assurance that these contracts will be concluded or that the Alaska Native village corporations will support the Pebble Project.

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*Environmental, Social & Governance Report*

In April 2021, the Company published an Environmental, Social & Governance ("ESG") Report for the Pebble Project which addresses the broad range of progressive principles, practices and commitments employed at Pebble by the Company and the Pebble Partnership over the past two decades to advance the project.

### **1.2.2 Legal Matters**

*Grand Jury Subpoena*

On September 23, 2020, the Company announced that Tom Collier, the former Chief Executive Officer of the Pebble Partnership, had submitted his resignation in light of comments made about elected and regulatory officials in Alaska and the Pebble Project in private conversations covertly videotaped by an environmental activist group. Conversations with Mr. Collier, as well as others with Ron Thiessen, Northern Dynasty's President and Chief Executive Officer, were secretly videotaped or audiotaped by unknown individuals posing as representatives of a Hong Kong-based investment firm, which represented that it was linked to a Chinese State-Owned Enterprise (SOE). The Company understands that a Washington DC-based environmental group, the Environmental Investigation Agency, released portions of the recordings online after obscuring the voices and identities of the individuals posing as investors.

Following the release of the recordings, the USACE issued a statement that, following a review of the transcripts of the recordings, they had "*identified inaccuracies and falsehoods relating to the permit process and the relationship between our regulatory leadership and the applicant's executives*". Further, the Pebble Partnership received a letter from the Committee on Transportation and Infrastructure of the United States House of Representatives on November 19, 2020, stating that the comments made by Mr. Collier and Mr. Thiessen regarding the expansion, capacity, size and duration of the potential Pebble mine were believed to be inconsistent with the testimony of Mr. Collier before the Committee and demanding production of documents apparently related to the comments. The Company has been producing documents in response to those requests. The Company also responded to the Committee by letter denying and refuting that there was any inconsistency as raised in the Committee's November 19, 2020 correspondence. On October 28, 2022, the Committee Chair released a Staff Report alleging false testimony to the Committee and indicating a referral has been made to the U.S Attorney General's office. The Committee released the Staff Report without providing the Company any opportunity to respond to the allegations contained in the Staff Report prior to its release. Nor did the Committee publicly request or conduct any interviews of Northern Dynasty or Pebble employees after its November 19, 2020 correspondence. The Pebble Partnership, in a press release, responded "[w]e want to be absolutely clear, however, that to the extent the report contains any suggestion that we tried to mislead regulators in any way, it is categorically wrong and misinformed of the realities of the Pebble permitting process." The Company also stated "[w]e look forward to laying out the essential context missing from the report."

On February 5, 2021, the Company announced that the Pebble Partnership and Tom Collier, the former Chief Executive Officer of the Pebble Partnership, had each been served with a subpoena issued by the United States Attorney's Office for the District of Alaska to produce documents in connection with a grand jury investigation. The Company is not aware of any criminal charges having been filed against any entity or individual in this matter. The Company also self-reported this matter to the SEC, and there is a related inquiry being conducted by the enforcement staff of the SEC's San Francisco Regional Office. The Company and the Pebble Partnership are cooperating with each of these investigations.

*Class Action Litigation following the USACE'S Record of Decision*

On December 4 and 17, 2020, separate putative shareholder class action lawsuits were filed against the Company and certain of its current and former officers and directors in the U.S. District Court for the Eastern District of New York regarding the drop in the price of the Company's stock following the ROD by the USACE

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regarding the Pebble Project. These cases are captioned *Darish v. Northern Dynasty Minerals Ltd. et al.*, Case No. 1:20-cv-05917-ENV-RLM, and *Hymowitz v. Northern Dynasty Minerals Ltd. et al.*, Case No. 1:20-cv-06126-PKC-RLM. Each of the complaints was filed on behalf of a purported class of investors who purchased shares of the Company's stock from December 21, 2017, through November 25, 2020, the date the USACE announced its decision, and seeks damages allegedly caused by violations of the federal securities laws. On March 17, 2021, the two cases were consolidated and a lead plaintiff and counsel were appointed. A consolidated and amended complaint was filed in June 2021, naming the Company, the Company's CEO and the Pebble Partnership's former CEO as defendants. The Company intends to defend itself vigorously and has filed a motion to dismiss the complaint on behalf of all defendants.

On December 3, 2020, a putative shareholder class action lawsuit was filed against the Company, certain of its current and former officers and directors, and one of its underwriters in the Supreme Court of British Columbia regarding the decrease in the price of the Company's stock following the USACE's November 25, 2020 decision regarding the Pebble Project. The case is captioned *Haddad v. Northern Dynasty Minerals Ltd. et al.*, Case No. VLC-S-S-2012849. The claim was filed on behalf of a purported class of investors, wherever they may reside, who acquired common shares of the Company's stock between December 21, 2017 and November 25, 2020, and seeks damages for (i) alleged misrepresentations in the Company's primary market offering documents and continuous disclosure documents, and (ii) allegedly oppressive conduct. The Company has been served the claim and intends to defend itself vigorously. The underwriter has asserted contractual rights of indemnification against the Company for any loss that the underwriter may incur in connection with the lawsuit. On April 20, 2022, the putative plaintiff filed and subsequently served an application to amend his pleadings to harmonize with the pleadings in the Woo case described below, add Mr. Woo as a plaintiff, and add new underwriter defendants. Also on April 20, 2022, the putative plaintiff filed and subsequently served an application for leave to commence a secondary market liability claim under s. 140.3 of the B.C. Securities Act, for an order certifying the action as a class action, and for related relief.

On February 17, 2021, a putative shareholder class action lawsuit was filed against the Company, certain of its current and former officers and directors, and certain of its underwriters in the Supreme Court of British Columbia regarding the decrease in the price of the Company's stock following (i) the USACE's August 24, 2020 announcement that the Pebble Project could not be permitted as proposed, and (ii) the USACE's November 25, 2020 decision regarding the Pebble Project. The case is captioned *Woo v. Northern Dynasty Minerals Ltd. et al.*, Case No. VLC-S-S-211530. The claim was filed on behalf of a purported class of investors, wherever they may reside, who purchased securities of the Company between June 25, 2020 and November 25, 2020, and seeks damages for (i) alleged misrepresentations in the Company's primary market offering documents and continuous disclosure documents, (ii) allegedly oppressive conduct, (iii) alleged unjust enrichment, and (iv) negligence. The Company has been served and intends to defend itself vigorously. The underwriters have asserted contractual rights of indemnification against the Company for any loss that they may incur in connection with the lawsuit.

On March 5, 2021, a putative shareholder class action lawsuit was filed against the Company, certain of its current and former officers and directors, and certain of its underwriters in the Ontario Superior Court of Justice regarding the decrease in the price of the Company's stock following the USACE's November 25, 2020 decision regarding the Pebble Project. The case is captioned *Pirzada v. Northern Dynasty Minerals Ltd. et al.*, Case No. CV-21-00658284-00CP. The claim was filed on behalf of a purported class of investors, wherever they may reside, who acquired securities of the Company between June 25, 2020 and November 25, 2020, and seeks damages for (i) alleged misrepresentations in the Company's primary market offering documents and continuous disclosure documents, (ii) allegedly oppressive conduct, and (iii) alleged negligence. On March 30, 2022, the plaintiff made a motion to discontinue the claim without costs and the court granted the discontinuance in April 2022.

#### *Indemnification Obligations*

The Company is subject to certain indemnification obligations to both present and former officers and directors, including Mr. Collier, in respect to the legal proceedings described above. These indemnification

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obligations will be subject to limitations prescribed by law and the articles of the Company, and may also be subject to contractual limitations.

### **1.2.3 At-The-Market Offering Agreement**

The Company has an At-the-Market Offering Agreement (the "**ATM Agreement**") with H.C. Wainwright & Co. (the "Agent"), which it entered into in June 2021, whereby the Company, at its sole discretion and from time-to-time during the term of the ATM Agreement, can sell common shares, through the Agent, as sales agent (the "**ATM Facility**"). On August 2, 2022, the underlying base shelf prospectus that supports the ATM Facility expired. The Company is currently unable to use the ATM Facility, but will be able to resume sales upon qualification of a further base shelf prospectus and corresponding Form F-10 registration statement, and the filing of a further prospectus supplement thereto in respect of the ATM Facility. The amount that will be available under the ATM Facility is currently US\$13.8 million as the Company sold 1,212,805 common shares at an average share price of US\$0.567 for gross proceeds of approximately US\$0.69 million (\$0.87 million) in September 2021 (more fully described in the 2021 Annual MD&A), and which to date of this MD&A are the only sales under the ATM Facility.

Pursuant the ATM Agreement, sales of the common shares are to be made in "at the market distributions", as defined in National Instrument 44-102, directly on the NYSE American stock exchange or on any other existing trading market in the United States. No offers or sales of Common Shares will be made under the ATM Facility in Canada on the Toronto Stock Exchange or other trading markets in Canada.

Under the ATM Facility, the Company will determine, at its sole discretion, the date, price and number of common shares to be sold. The common shares will be distributed at market prices or prices related to prevailing market prices from time to time. The Company is not required to sell any common shares at any time during the term of the ATM Facility, and there are no fees for having established the ATM Facility. The ATM Agreement does not restrict the Company from conducting other financings. The Company will pay the Agent a placement fee for common shares sold under the ATM Agreement and will reimburse certain expenses of the Agent.

The Company intends to use the net proceeds from the ATM Facility at the discretion of the Company, for (i) the appeal of the ROD by the USACE, (ii) continued engineering, environmental, permitting and evaluation work on the Pebble Project, (iii) maintenance of Company's corporate presence in Alaska, (iv) maintenance of the Pebble Project mineral claims, (v) pursuit of the partnering process for the Pebble Project, (vi) preparation of engineering reports on the Pebble Project, and (vii) general corporate purposes.

### **1.2.4 Use of Proceeds**

On July 15, 2020, Northern Dynasty completed a bought deal offering ("**July 2020 Offering**") of 24,150,000 common shares of the Company at a price of US\$1.46 per share for gross proceeds of approximately US\$35.26 million. The offering was completed pursuant to an underwriting agreement dated July 10, 2020, among the Company and Cantor Fitzgerald Canada Corporation, as lead underwriter and bookrunner, and a syndicate of underwriters including BMO Nesbitt Burns Inc., Canaccord Genuity Corp, H.C. Wainwright & Co., LLC, Paradigm Capital Inc., TD Securities Inc., Roth Capital Partners, LLC and Velocity Trade Capital Ltd. (collectively, the "**July 2020 Underwriters**"). The July 2020 Underwriters were paid a 5% cash commission.

The July 2020 Offering was completed by way of a prospectus supplement to the Company's existing Canadian base shelf prospectus and related U.S. registration statement on Form F-10 (SEC File No. 333-238933).

On July 30, 2020, and August 6, 2020, Northern Dynasty completed two tranches of a non-brokered private placement (outside of the United States) of 5,807,534 common shares and 100,000 common shares, respectively, at US\$1.46 per share for gross proceeds of US\$8.6 million. The shares issued pursuant to the

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private placement were subject to applicable resale restrictions, including a four-month hold period under Canadian securities legislation.

The following table sets out a comparison of the Company's disclosed expected use of net proceeds from the July 2020 Offerings to the actual use of net proceeds as at September 30, 2022. The net proceeds were used to advance the Company's business objectives and milestones as follows:

Intended Use of Net Proceeds of 2020 Offerings		Actual Use of Net Proceeds from 2020 Offerings	Variance – (Over)/Under Expenditure	Explanation of Variance and impact on business objectives
Ongoing work with Alaska and federal regulatory agencies in support of the issuance of the EIS and the Record of Decision for the Pebble Project	US\$1,000,000	US\$-	US\$1,000,000	Expenses yet to be incurred.
Maintain an active corporate presence in Alaska by continuing to build relationships with both federal and Alaska state governments and agencies and Native Corporations and communities in connection with advancement of the Pebble Project	US\$4,515,231	US\$4,515,231	-	NA
Commence the Alaska state permitting process for the Pebble Project, contingent upon issuance of a positive EIS and Record of Decision for the Pebble Project and management determinations as to timing	US\$17,750,000	US\$-	US\$17,750,000	State permitting has not yet been initiated and is pending appeal of the ROD denial. Funds allocated to general corporate purposes below.
Maintenance of the Pebble claims in good standing.	US\$1,400,000	US\$1,400,000	-	NA
Ongoing discussions and possible negotiations to secure a project partner(s) with the financial resources to advance development of the Pebble project	US\$1,000,000	US\$-	US\$1,000,000	Expenses yet to be incurred.

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Intended Use of Net Proceeds of 2020 Offerings		Actual Use of Net Proceeds from 2020 Offerings	Variance – (Over)/Under Expenditure	Explanation of Variance and impact on business objectives
General corporate purposes in connection with the advancement of the Pebble Project	US\$16,205,819	US\$35,955,819	US\$(19,750,000)	Shortfall funded by reallocation from state permitting above and existing treasury.
Total	US\$41,871,050	US\$41,871,050	US\$–	

### 1.2.5 Market Trends

Copper prices in 2017 were variable to improving, resulting in an increase in the average annual price. Prices were variable in early 2018, trended downward from June to August, then improved through to the end of the year and into 2019. Prices decreased in April/May of 2019 and were slightly variable through September, when they increased, then remained stable until late January 2020 when they dropped sharply, losing the gain made in late 2019. In March 2020, prices dropped sharply in response to changing economic conditions related to COVID-19 but rebounded in May and trended upward during the third quarter. Prices dropped slightly in October 2020, then increased by the end of the year. In 2021, prices were variable to improving through to May, dropped in June and then were stable until October when they again began to show some variability. Copper prices increased in early 2022, then decreased from late April to July, then stabilized somewhat and have increased in November. The closing price on November 11, 2022, was US\$3.83/lb.

Gold prices were variable to increasing during most of 2017, but then dropped late in the year. After rebounding in January 2018, prices were relatively stable for several months in 2018, but decreased in the third quarter. Prices increased in the latter part of 2018 and through most of 2019 before stabilizing from September to December 2019. Gold prices increased from January to March 2020, when they dropped sharply, and then resumed the upward trend in response to uncertainty about global economic conditions related to COVID-19. Prices reached record highs in late July and early August 2020, then decreased before stabilizing for the remainder of the year. Prices were variable in 2021, then increased from October and into early 2022. Prices have been variable to decreasing from March to November 2022, when prices increased. The closing price on November 11, 2022, was US\$1,759/oz.

Molybdenum prices increased in 2017 and through most of 2018, and were steady from September to December 2018. Prices had varied only slightly in 2019, before dropping from October through to mid-January 2020. Molybdenum prices decreased for the most part in 2020 but began to increase in August 2020, and continued to do so to July 2021, then dropped slightly. Prices have been relatively stable to increasing in 2022. On November 11, 2022, the closing price was US\$19.00/lb.

Silver prices were variable, then declined in late 2017. Prices recovered in January 2018, but were variable the rest of 2018. Prices were variable in 2019, but stabilized in November and December and the annual average price increased in 2019. After increasing in early January 2020, silver prices fell to US\$12.00/oz in March 2020, then began to increase in response to uncertainty about global economic conditions related to COVID-19, reaching over US\$27.00/oz in mid-August, then decreased for a time, and increased for the remainder of the year, resulting in an increase in the average annual price in 2020. Silver prices were variable in 2021 but the average annual price increased. Prices have been variable in 2022, and the average prices has decreased. Prices have increased in November. On November 11, 2022, the closing price was US\$21.48/oz.

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Average annual prices of copper, gold, molybdenum and silver for the past five years as well as the average prices so far in 2022 are shown in the table below:

Year	Average metal price <sup>1,2</sup>			
	Copper US\$/lb	Gold US\$/oz	Molybdenum US\$/lb	Silver US\$/oz
2017	3.22	1,272	7.26	16.49
2018	2.96	1,269	11.94	15.71
2019	2.72	1,393	11.36	16.21
2020	2.80	1,769	8.68	20.54
2021	4.27	1,799	15.94	25.14
2022 (to November 11, 2022)	4.03	1,803	17.98	21.83

1. Source for copper, gold, molybdenum (2016-2017) and silver is Argus Media at [www.metalprices.com](http://www.metalprices.com)  
LME Official Cash Price for copper and molybdenum (2016-2017)  
LBMA PM Price for gold  
London PM fix for silver
2. Source for 2018-2022 prices for molybdenum is Platts

### 1.3 Selected Annual Information

Not required for the interim MD&A

### 1.4 Summary and Discussion of Quarterly Results

All monetary amounts are expressed in thousands of dollars except per share amounts and where otherwise indicated. Minor differences are due to rounding.

Excerpts from Statements of Comprehensive Loss	Sep 30 2022	Jun 30 2022	Mar 31 2022	Dec 31 2021	Sep 30 2021	Jun 30 2021	Mar 31 2021	Dec 30 2020
<b>Expenses</b>								
Exploration and evaluation	\$ 1,839	\$ 2,182	\$ 2,301	\$ 2,897	\$ 2,907	\$ 3,345	\$ 3,286	\$ 7,183
General and administrative	2,132	2,517	2,093	2,644	2,405	2,480	2,462	3,139
Legal, accounting and audit	1,699	1,521	84	(1,386)	3,124	1,916	2,287	112
Share-based compensation	1,874	6	6	6	244	1,286	1,322	1,288
Other items <sup>1</sup>	(127)	(38)	(22)	(28)	(14)	197	162	1,218
<b>Loss for the quarter</b>	<b>\$ 7,415</b>	<b>\$ 6,188</b>	<b>\$ 4,462</b>	<b>\$ 4,133</b>	<b>\$ 8,666</b>	<b>\$ 9,224</b>	<b>\$ 9,519</b>	<b>\$ 12,940</b>
Basic and diluted loss per common share	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.02	\$ 0.02	\$ 0.02	\$ 0.03
Weighted average number of common shares (000s)	529,779	529,779	529,779	529,751	528,470	516,077	511,259	508,916

1. Other items include interest income, finance expense, exchange gains or losses, gain or loss on revaluation of warrants, gain on lease term modification, loss on disposal of property, plant and equipment, and other income.

### Discussion of Quarterly Trends

Exploration and evaluation expenses ("E&E") has fluctuated depending on activities undertaken. In Q1 2021, the Company focused on the review of the USACE's Record of Decision and the submission of an administrative appeal thereof. In Q2 to Q4 2021, the Company completed engineering work to finalize the 2021 PEA for the Pebble Project and also completed a summer field program. In Q1 2022, the Company focused on the review and issue of the study on the economic contribution assessment of the proposed Pebble Project, as well as

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advancing the summer field program. In Q2, the Company completed its summer field program and in Q3 2022 the Company completed its wildfire cleanup program. Further details are discussed in Section [1.2.1.2 Technical Programs](#). E&E also includes costs for Native community engagement, site leases, land access agreements and annual claim fees.

General and administrative expenses ("G&A") in 2022 are trending lower than 2021 and Q4 2020. In Q4 2020, the Company incurred higher consulting fees and costs relating to the annual general meeting which was held in December of that year.

Legal, accounting and audit expenses have fluctuated in response to legal fees incurred in relation to class action lawsuits, the preparation for and response to the grand jury investigation in Alaska, and response to the Revised Proposed Determination. In Q4 2021 and Q1 2022, the Company received insurance proceeds for certain of the costs incurred relating to class action lawsuits and the grand jury investigation, which offset fees paid.

Share-based compensation expense ("SBC") has fluctuated due to timing (affects the estimate of fair value determined) of share purchase option ("option") grants, the quantum of option grants and the vesting periods associated with these option grants. The Company granted 11,254,000 options in Q3 2022. No option grants were issued in 2021 and in the first two quarters of 2022.

## **1.5 Results of Operations**

The following financial data has been prepared from the Financial Statements, and is expressed in *thousands* of Canadian dollars unless otherwise stated.

The Company's operations and business are not driven by seasonal trends, but rather are driven towards the achievement of project milestones relating to the Pebble Project such as the achievement of various technical, environmental, socio-economic and legal objectives, including obtaining the necessary permits, the completion of pre-feasibility and final feasibility studies, preparation of engineering designs, as well as receipt of financings to fund these objectives along with mine construction.

### **1.5.1 Results of Operations - Three and nine months ended September 30, 2022 versus 2021**

For the three months ended September 30, 2022, the Company recorded a \$1.2 million decrease in net loss as loss from operating activities decreased by \$1.1 million primarily due to a \$1.4 million decrease in legal, accounting and audit expenses and a \$1.1 million decrease in E&E.

For the nine months, the Company recorded a \$9.3 million decrease in net loss as loss from operating activities decreased by \$8.8 million as a result of a \$3.2 million decrease in E&E and a \$4.0 million decrease in legal, accounting and audit expenses.

#### **Exploration and evaluation expenses**

The breakdown of E&E (in thousands of dollars) for the period as compared to 2021 is as follows:

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E&E	Three months		Nine months	
	2022	2021	2022	2021
Engineering	\$ 149	\$ 737	\$ 1,195	\$ 3,384
Environmental	650	553	1,748	1,833
Property fees	6	6	6	6
Site activities	379	653	1,215	1,761
Socio-economic	482	499	1,506	1,899
Transportation	164	411	599	511
Other activities and travel	9	48	53	144
<b>Total</b>	<b>\$ 1,839</b>	<b>\$ 2,907</b>	<b>\$ 6,322</b>	<b>\$ 9,538</b>

E&E decreased by \$1.1 million in the current quarter due largely to a decrease in engineering. The higher engineering costs in 2021 was due to the Company focusing on completing the 2021 PEA, the results of which were announced in September 2021. Also site activities and transportation costs were lower in the current quarter as the summer site program was shorter than in 2021. For the nine months, E&E decreased by \$3.2 million due to decreases in engineering, site activities and transportation costs (discussed previously).

#### General and administrative expenses

The following table (in thousands of dollars) provides a breakdown of G&A, and also includes legal, accounting and audit expenses incurred, in the period as compared to 2021:

G&A	Three months		Nine months	
	2022	2021	2022	2021
Conference and travel	\$ 40	\$ 38	\$ 189	\$ 93
Consulting	188	558	457	1,116
Depreciation of right-of-use assets	26	53	77	166
Insurance	664	440	1,688	979
Office costs, including information technology	165	166	585	627
Management and administration	774	914	2,338	3,013
Shareholder communication	228	223	1,040	1,115
Trust and filing	47	13	368	238
<b>Total G&amp;A</b>	<b>2,132</b>	<b>2,405</b>	<b>6,742</b>	<b>7,347</b>
<b>Legal, accounting and audit</b>	<b>1,707</b>	<b>3,124</b>	<b>3,312</b>	<b>7,327</b>
	<b>\$ 3,839</b>	<b>\$ 5,529</b>	<b>\$ 10,054</b>	<b>\$ 14,674</b>

G&A decreased by \$0.3 million in the quarter and by \$0.6 million in the nine months period versus the comparative periods in 2021. In the quarter, decreases occurred in consulting and management and administration which were offset by increases in insurance amortization. For the nine months, the decrease was due to less consulting fees and management and administration costs paid however, this was offset by an increase in insurance amortization, conference and travel costs, and trust and filing costs the latter due largely to expensing of deferred ATM costs.

Legal, accounting and audit expenses decreased by \$1.4 million in the quarter and by \$4.0 million in the nine months. In the current quarter and year to date, the Company incurred less legal fees relating to the grand jury investigation and class action lawsuits. In the year to date, the Company received insurance proceeds for costs incurred on class actions and the grand jury investigation (in Q1 2022). In 2021, insurance proceeds were lower as they were for costs incurred on class actions only.

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**Other**

The Company recognized an increase in SBC of \$1.6 million in the quarter and a decrease of \$1.0 million for the nine month period. SBC fluctuates due to the timing of when options, RSUs and DSUs are granted, as well as the quantum thereof, and the vesting periods associated with these grants. SBC in the quarter and for the nine months relate to the issue of DSUs and options granted in the quarter. There were no grants in 2021.

**1.5.2 Financial position as at September 30, 2022 versus December 31, 2021**

The total assets of the Company decreased by \$0.2 million. Although cash and cash equivalent and amounts receivable and prepaid expenses increased by \$2.2 million and \$1.6 million respectively, this was offset by a \$4.1 million decrease in the carrying value of the Company's mineral property, plant and equipment. The latter is the result of the depreciation of the Canadian dollar in relation to US dollar.

**1.5.3 Plan of Operations**

Our business objectives for 2022 are to:

- continue with the appeal of the ROD by the USACE;
- challenge the EPA's Revised Proposed Determination;
- continue with engineering, environmental, permitting and evaluation work on the Pebble Project as required;
- maintain an active corporate presence in Alaska to advance relationships with political and regulatory offices of government (both in Alaska and Washington, D.C.), Alaska Native partners and broader stakeholder relationships;
- contingent on a successful appeal of the RFA, initiate Alaska state permitting activities;
- maintain the Pebble Project and Pebble claims in good standing;
- continue to seek potential partner(s) with greater financial resources to further advance the Pebble Project; and
- continue general and administrative activities in connection with the advancement of the Pebble Project.

The key milestones in the development of the Company's business is presently the successful completion of an appeal of the ROD.

The USACE's ROD has had a material impact on the Company's previously disclosed plan of operations. Accordingly, the Company has altered its intended business activities and milestones to be completed over the next 12 months to focus on the appeal of the ROD. In addition, the Company will evaluate available options to challenge the EPA's Revised Proposed Determination. The Company's present business objectives and milestones are anticipated to generally include the following activities over the next 12 months:

Milestone/Business Objective	Business Activity within Next 12 Months	Timeframe for Completion <sup>1</sup>	Anticipated Budget during Next 12 Months
Continue with engineering, environmental, permitting and evaluation work on the Pebble Project as required	Work includes ongoing site maintenance to remain in compliance with permitting and demobilization of field equipment as required, additional engineering and evaluation of the Pebble Project	Ongoing through next twelve months	US\$3,042,000
Maintain an active corporate presence in Alaska	Continue to build relationships with:	Ongoing through next twelve months	US\$3,717,000

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Milestone/Business Objective	Business Activity within Next 12 Months	Timeframe for Completion <sup>1</sup>	Anticipated Budget during Next 12 Months
	<ul style="list-style-type: none"> <li>• both federal and Alaska state governments and agencies;</li> <li>• Native Corporations and communities, an example being the establishment of the Pebble Performance Dividend, which is intended to provide a direct benefit to the people of Bristol Bay;</li> <li>• Right-of-Way Payments to various Native Corporations</li> </ul>		
Pebble claims maintenance	Continue to maintain the Pebble claims in good standing.	Ongoing through next twelve months	US\$935,000
Pebble partnering process <sup>1</sup>	Ongoing discussions and possible negotiations to secure a project partner(s) with the financial resources to advance development of the Pebble project. Management will continue to seek suitable partner(s) with the objective to maximize shareholder value through 2022. <sup>2</sup>	Ongoing through next twelve months	US\$1,000,000
General corporate purposes, including appeal of the ROD by the USACE on Pebble, challenge to EPA's Revised Proposed Determination; defence of Class Action Lawsuits, settlement of historical liabilities, handling of grand jury investigation	Pursue successful appeal of the ROD, challenge of EPA's Revised Proposed Determination and defense of legal proceedings	Ongoing through next twelve months	US\$7,815,000

Notes

1. Due to the COVID-19 pandemic, some due diligence activities that a partner may usually undertake such as site visits have been slower than anticipated.
2. There is no assurance that these discussions or possible negotiations will result in any binding agreement with any partner for the development of the Pebble Project. See [1.15.5 Risk Factors](#).

The Company's actual plan of operations and expenditures for the next twelve months may vary depending on future developments and at the discretion of the Company's board of directors and management.

The Company will require additional financing beyond its current cash and working capital in order to carry out these further business activities. The Company believes that its ability to obtain additional financing has been and will continue to be negatively impacted by the Record of Decision and its ability to successfully appeal the ROD. Other than the ATM Facility, which the Company currently is not able to use (see [1.6 Liquidity](#)), the Company does not have any arrangement in place for any future financing, and there is no assurance that the Company will be able to achieve the required additional financing when required. In addition, the Company cautions that while a successful appeal of the ROD will reduce one of the significant risk factors faced by the Pebble Project, significant risk factors will remain for the development of the Pebble Project, as described in [1.15.5 Risk Factors](#).

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In the event that appeal of the ROD is unsuccessful, the Company will be required to re-assess its options for advancing the development of the Pebble Project. These options may include a re-assessment of the scope of the Pebble Project and the submission of a revised permit application. While the Company is unable to assess the full impact of any adverse appellate result of the ROD at this time, the Company anticipates that such a negative result on appeal of the ROD will have a negative impact on the Company's ability to achieve additional financing, and will most likely limit the Company's financing options to further issuances of the Company's equity securities.

The Company may also attempt to reduce the amount of additional financing required by entering into a potential joint venture or other partnership arrangement for advancement of the Pebble Project. The Company is continuing to evaluate the availability of long-term project financing options among mining companies, private equity firms and others, utilizing conventional asset level financing, debt, royalty and alternative financing options. There is no assurance that Northern Dynasty will be able to partner the Pebble Project or secure additional financing when required. In July 2022, the Company was able to raise royalty financing, with the receipt of the first tranche of US\$12 million on the execution of the Royalty Agreement (discussed above under "[Royalty agreement secured for proceeds of up to US\\$60 million on non-core metals](#)")

To the extent that Northern Dynasty is unable to raise additional financing, it will have to curtail its operational activities, which will ultimately delay advancement of the Pebble Project.

Northern Dynasty's inability to successfully appeal the ROD may ultimately mean that it will be unable to proceed with the development of the Pebble Project as currently envisioned or at all. Similarly, the inability to successfully challenge the EPA's Revised Proposed Determination may also ultimately mean that the Company will be unable to proceed with the development of the Pebble Project as currently envisioned or at all.

## **1.6 Liquidity**

The Company's major sources of funding have been the issuance of equity securities for cash, primarily through private placements and prospectus offerings to sophisticated investors and institutions, and proceeds pursuant to the exercise of options and warrants. The Company's access to financing is always uncertain. There can be no assurance of continued access to equity funding.

As at September 30, 2022, the Company had cash and cash equivalents of \$24.5 million, an increase of \$2.2 million from December 31, 2021. The Company employed \$14.0 million in its operating activities in the nine months ended September 30, 2022. The Company has prioritized the allocation of its available financial resources to meet key corporate and Pebble Project expenditure requirements in the near term, being the next 12 months, as outlined above under [1.5.3 Plan of Operations](#). In July 2022, the Company through the Pebble Partnership, received an initial payment of US\$12 million on the execution of the Royalty Agreement. Pursuant to the Royalty Agreement, the Company may, at the option of the Royalty Holder, receive an additional US\$48 million in US\$12 million increments over the next two years (refer [Royalty agreement secured for proceeds of up to US\\$60 million on non-core metals](#) in section 1.2 *Overview*). The Company currently is unable to use the ATM Facility (discussed in [1.2.3 At-The-Market Offering Agreement](#)), but will be able to resume sales upon qualification of a further base shelf prospectus and corresponding Form F-10 registration statement, and the filing of a further prospectus supplement thereto in respect of the ATM Facility. The Company does not have any arrangements in place for additional funding. There can be no assurances that the Company will be successful in obtaining additional financing when required. If the Company is unable to raise the necessary capital resources to meet obligations as they come due, the Company will have to reduce or curtail its operations at some point.

At September 30, 2022 and December 31, 2021, the Company had a working capital of \$21.7 million. The Company has no lease or any other long-term obligations other than those disclosed below:

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The following commitments and payables (expressed in *thousands*) existed at September 30, 2022:

	Payments due by period as of the reporting date			
	Total	≤ 1 year	1-5 years	> 5 years
Trade and other payables <sup>1</sup>	\$ 6,681	\$ 5,802	\$ 879	\$ –
Payables to related parties	327	327	–	–
Lease commitments <sup>2</sup>	858	202	515	141
Other commitments <sup>3</sup>	458	195	263	–
<b>Total</b>	<b>\$ 8,324</b>	<b>\$ 6,526</b>	<b>\$ 1,657</b>	<b>\$ 141</b>

Notes to table

1. Includes US\$635 payable on completion of a partnering transaction.
2. Relates to the undiscounted lease payments to be made by the Company over the remaining lease terms.
3. Includes payments due on a short term lease and payments for the use of offices and shared space from a related party.
4. US dollar amounts have been converted at the closing rate on September 30, 2022, of \$1.3833 per US dollar.

The Company has no "Purchase Obligations", defined as any agreement to purchase goods or services that is enforceable and legally binding on the Company that specifies all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. The Company is responsible for maintenance payments on the Pebble Project claims and payment of annual toll payments and fees pursuant to the right of way agreements (see [Right-of-Way Agreements](#) under Section [1.2.1.1 Project Background and Status](#)). In addition, the Company has payments relating to routine site and office leases, which is included in the table above.

## 1.7 Capital Resources

The Company's capital resources consist of its cash reserves, which include its cash and equivalents. As at September 30, 2022, other than noted in [1.6 Liquidity](#), the Company has no other long-term debt and no commitments for material capital expenditures.

The Company has no lines of credit or other sources of financing.

## 1.8 Off-Balance Sheet Arrangements

As at September 30, 2022, the Company had no off-balance sheet arrangements.

## 1.9 Transactions with Related Parties

### Transactions with Hunter Dickinson Services Inc. ("HDSI")

Hunter Dickinson Inc. ("HDI") and its wholly owned subsidiary, HDSI are private companies established by a group of mining professionals engaged in advancing and developing mineral properties for a number of private and publicly-listed exploration companies, one of which is the Company.

Current directors of the Company, namely Robert Dickinson and Ron Thiessen, Board Chair and Chief Executive Officer ("CEO"), respectively, are active members of the HDI Board of Directors. Mark Peters, the Company's Chief Financial Officer ("CFO"), is also the CFO of HDSI. Other key management personnel of the Company –

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Adam Chodos, Stephen Hodgson<sup>4</sup>, Bruce Jenkins, Trevor Thomas and Mike Westerlund – are active members of HDI's senior management team.

*The business purpose of the related party relationship*

HDSI provides technical, geological, corporate communications, regulatory compliance, administrative and management services to the Company, on an as-needed and as-requested basis from the Company.

HDSI also incurs third party costs on behalf of the Company. Such third party costs include, for example, directors and officers insurance, travel, conferences, and technology services.

As a result of this relationship with HDSI, the Company has ready access to a range of diverse and specialized expertise on a regular basis, without having to engage or hire full-time experts. The Company benefits from the economies of scale created by HDSI.

*The measurement basis used*

The Company procures services from HDSI pursuant to an agreement (the "**Services Agreement**") dated July 2, 2010, whereby HDSI agreed to provide technical, geological, corporate communications, administrative and management services to the Company. A copy of the Services Agreement is publicly available under the Company's profile at [www.sedar.com](http://www.sedar.com).

Services from HDSI are provided on a non-exclusive basis as required and as requested by the Company. The Company is not obligated to acquire any minimum amount of services from HDSI. The fees for services is determined based on an agreed upon charge-out rate for each employee performing the service and the time spent by the employee. The charge-out rate also includes overhead costs such as office rent, information technology services and administrative support. Such charge-out rates are agreed and set annually in advance.

Third party expenses are billed at cost, without any markup.

*Ongoing contractual or other commitments resulting from the related party relationship*

Other than noted below, there are no ongoing contractual or other commitments resulting from the Company's transactions with HDSI, other than the payment for services already rendered and billed. The agreement may be terminated upon 60 days' notice from either party.

In an addendum to the Services Agreement between HDSI and the Company, dated October 10, 2015, following a change of control, the Company is subject to termination payments if the Services Agreement is terminated. The Company will be required to pay HDSI \$2.8 million, and an aggregate amount equal to six months of annual salaries payable to certain individual service providers under the Services Agreement and their respective employment agreements with HDSI.

The Company has an office use agreement with HDSI, whereby HDSI is providing two offices and a non-fixed space, on as needed basis, for a five-year term, which commenced May 1, 2021, and ends April 29, 2026. Pursuant to this agreement, the Company has a remaining undiscounted commitment at September 30, 2022 of \$0.4 million, which has been disclosed in the table under section [1.6 Liquidity](#). The commitment is a flow through cost at market rates.

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<sup>4</sup> Stephen Hodgson has been providing services to the Company under the Services Agreement, including acting as the Vice President, Engineering for the Company since 2005. In July 2018, he was transferred to a subsidiary of HDSI, Hunter Dickinson Servicepay (US) Inc., and provided services to the Pebble Partnership as Senior Vice President, Engineering & Project Director until the end of February 2021 when he was transferred back to HDSI, and continues to provide services to the Company under the Services Agreement, including acting as the Vice President, Engineering for the Company.

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*Transactions during the Reporting Period and Balances with HDSI at the end of the Reporting Period*

Disclosure as to transactions with HDSI and any amounts due to or from HDSI is provided in Note 7 in the notes to the Financial Statements which accompany this MD&A and which are available under the Company's profile at [www.sedar.com](http://www.sedar.com).

**Key Management Personnel**

The required disclosure for the remuneration of the Company's key management personnel is provided in Note 7 in the notes to the Financial Statements which accompany this MD&A and which are available under the Company's profile at [www.sedar.com](http://www.sedar.com).

**1.10 Fourth Quarter**

Not applicable

**1.11 Proposed Transactions**

There are no proposed asset or business acquisitions or dispositions, other than those in the ordinary course, before the Board of Directors for consideration.

**1.12 Critical Accounting Estimates**

The required disclosure is provided in Note 2 in the notes to the Financial Statements which accompany this MD&A and which are available under the Company's profile at [www.sedar.com](http://www.sedar.com).

**1.13 Changes in Accounting Policies including Initial Adoption**

The required disclosure is provided in Note 2 in the notes to the Financial Statements which accompany this MD&A and which are available under the Company's profile at [www.sedar.com](http://www.sedar.com).

**1.14 Financial Instruments and Other Instruments**

The Company is exposed in varying degrees to a variety of financial instrument related risks. The Board approves and monitors the risk management processes, inclusive of documented investment policies, counterparty limits, and controlling and reporting structures. The type of risk exposure and the way in which such exposure is managed is provided as follows:

*Credit Risk*

Credit risk is the risk of potential loss to the Company if a counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its liquid financial assets, including cash and cash equivalents and restricted cash and amounts receivable. The Company limits the exposure to credit risk by only investing with high-credit quality financial institutions in business and saving accounts, guaranteed investment certificates, government treasury bills, low risk corporate bonds and money market funds, which are available on demand by the Company as and when required or mature in timeframes appropriate to the needs of the Company. There has been no change in the Company's objectives and policies for managing this risk except for changes in the carrying amounts of financial assets exposed to credit risk, and there was no significant change to the Company's exposure to credit risk during the three and nine months ended September 30, 2022. Amounts receivable include receivable balances with government agencies, prepaid expenses and refundable deposits. Management has concluded that there is no objective evidence of impairment to the Company's amounts receivable.

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*Liquidity Risk*

Liquidity risk is the risk that the Company will not be able to meet its financial obligations when they become due. There has been no change in the Company's objectives and policies for managing this risk. The Company's liquidity position is discussed further in Section [1.6 Liquidity](#).

*Foreign Exchange Risk*

The Company is subject to both currency transaction risk and currency translation risk: Group entities, the Pebble Partnership, Pebble Services Inc. and U5 Resources Inc., have the US dollar as functional currency; and certain of the Company's corporate expenses are incurred in US dollars. The fluctuation of the US dollar in relation to the Canadian dollar has an impact upon the losses incurred by the Company as well as the value of the Company's assets as the Company's functional and presentation currency is the Canadian dollar. The Company has not entered into any agreements or purchased any instruments to hedge possible currency risks at this time.

There has been no change in the Company's objectives and policies for managing this risk, except for the changes in the carrying amounts of the financial assets exposed to foreign exchange risk. The Company's exposure to foreign exchange risk is as follows:

US dollar denominated financial assets and liabilities (in thousands of Canadian Dollars)	September 30 2022	December 31 2021
<b>Financial assets:</b>		
Amounts receivable	\$ 174	\$ 168
Cash and cash equivalents and restricted cash	16,272	5,433
	16,446	5,601
<b>Financial liabilities:</b>		
Non-current trade payables	(1,386)	(1,365)
Current trade and other payables	(5,445)	(1,670)
Payables to related parties	(82)	(190)
	(6,913)	(3,225)
<b>Net financial assets exposed to foreign currency risk</b>	<b>\$ 9,533</b>	<b>\$ 2,376</b>

Based on the above net exposures and assuming that all other variables remain constant, a 10% change in the value of the Canadian dollar relative to the US dollar would result in a gain or loss of \$953 (December 31, 2021 – \$238) in the reported period. This sensitivity analysis includes only outstanding foreign currency denominated monetary items.

*Interest rate risk*

The Company is subject to interest rate risk with respect to its investments in cash and cash equivalents. There has been no change in the Company's objectives and policies for managing this risk and no significant change to the Company's exposure to interest rate risk during the three and nine months ended September 30, 2022.

*Commodity price risk*

While the value of the Company's Pebble Project is related to the prices of copper, gold, molybdenum, silver and rhenium and the outlook for these minerals, the Company currently does not have any operating mines and hence does not have any hedging or other commodity based risks in respect of its operational activities.

Copper, gold, molybdenum, silver and rhenium prices have fluctuated widely historically and are affected by numerous factors outside of the Company's control, including, but not limited to, industrial and retail demand, central bank lending, forward sales by producers and speculators, levels of worldwide production, short-term

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changes in supply and demand because of speculative hedging activities, and certain other factors related specifically to gold.

#### *Capital Management*

The Company's policy is to maintain a strong capital base to maintain investor and creditor confidence and to sustain future development of the business. The capital structure of the Company currently consists of equity, comprising share capital and reserves, net of accumulated deficit.

There were no changes in the Company's approach to capital management during the period. The Company is not subject to any externally imposed capital requirements.

### **1.15 Other MD&A Requirements**

Additional information relating to the Company, including the Company's 2021 AIF, is available under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

#### **1.15.1 Disclosure of Outstanding Share Data**

The capital structure of the Company as of November 14, 2022, is as follows:

	Number
Common shares issued and outstanding	529,779,388
Share options pursuant to the Company's incentive plan	27,693,500
Deferred share units	539,286
Non-incentive plan options <sup>1</sup>	94,000

Note to table:

1. These were issued on the acquisition of Cannon Point in October 2015.

#### **1.15.2 Disclosure Controls and Procedures**

The Company has disclosure controls and procedures in place to provide reasonable assurance that any information required to be disclosed by the Company under securities legislation is recorded, processed, summarized and reported within the applicable time periods and that required information is accumulated and communicated to the Company's management so that decisions can be made about the timely disclosure of that information.

#### **1.15.3 Management's Report on Internal Control over Financial Reporting ("ICFR")**

The Company's management, including the CEO and the CFO, is responsible for establishing and maintaining adequate ICFR. ICFR is a process designed by, or under the supervision of, the CEO and CFO and effected by the Company's Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with IFRS. The Company's ICFR includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the company; and

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- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

There has been no change in the design of the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's ICFR during the period covered by this MD&A.

#### **1.15.4 Limitations of Controls and Procedures**

The Company's management, including its CEO and CFO, believe that any system of disclosure controls and procedures or ICFR, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Furthermore, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty and breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost effective control system, misstatements due to error or fraud may occur and not be detected.

#### **1.15.5 Risk Factors**

The securities of Northern Dynasty are highly speculative and subject to a number of risks. A prospective investor or other person reviewing Northern Dynasty for a prospective investor should not consider an investment in Northern Dynasty unless the investor is capable of sustaining an economic loss of their entire investment. The risks associated with Northern Dynasty's business include:

*Northern Dynasty May be Unsuccessful in Appealing the Record of Decision and challenging the EPA's Revised Proposed Determination and may ultimately not be able to Obtain the Required Environmental Permits for the Pebble Project.*

The USACE's ROD issued on November 25, 2020, has denied Northern Dynasty's environmental permit for development of the Pebble Project under the CWA. This environmental permit is required for Northern Dynasty to proceed with the development of the Pebble Project. While the Pebble Partnership is appealing the ROD, there is no assurance that the appeal of the ROD will be successful. Even if the appeal is successful, there is no assurance that a positive ROD will ultimately be obtained by the Pebble Partnership or that the required environmental permit will be obtained. An inability to successfully appeal the ROD will mean that Northern Dynasty cannot proceed with the development of the Pebble Project as presently envisioned. There is no assurance that Northern Dynasty will be able to redesign the Pebble Project in a manner that addresses the "significant degradation" finding reached by the USACE or ultimately develop any compensatory mitigation plan that the USACE accepts as appropriately addressing the "significant degradation" determination or that will change the USACE's position that environmental permitting of the Pebble Project under the CWA is against the public interest. Northern Dynasty's inability to address these issues may mean that the Company is ultimately not able to secure the environmental permits that are required to develop the Pebble Project. Accordingly, there is no assurance that Northern Dynasty will ever be able to proceed with the development of the Pebble Project and that investors will be able to recover their investment in the Company.

In addition, the EPA has re-initiated the CWA Section 404(c) process, and has issued a Revised Proposed Determination for the waters of Bristol Bay. The Revised Proposed Determination would establish a "defined

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area for prohibition" coextensive with the current mine plan footprint in which the EPA would prohibit the disposal of dredged or fill material for the Pebble Project and would also establish a 309-square-mile "defined area for restriction." Such EPA activity could negatively affect the ability of the Pebble Partnership to obtain required permitting and develop the Project, even if the appeal of the 2020 ROD is successful. There is no assurance that any challenge by the Company to the EPA's Revised Proposed Determination will be successful. The inability to successfully challenge the EPA's Revised Proposed Determination may ultimately mean that the Company will be unable to proceed with the development of the Pebble Project as currently envisioned or at all.

*Inability to Ultimately Achieve Mine Permitting and Build a Mine at the Pebble Project.*

The Company may ultimately be unable to secure the necessary permits under United States federal and Alaskan State laws to build and operate a mine at the Pebble Project. The EPA has undertaken regulatory action through the issuance of the Revised Proposed Determination to restrict development of the Pebble Project and there is no assurance that the EPA will not seek to undertake future regulatory action to impede or restrict the Pebble Project. In addition, there are prominent and well-organized opponents of the Pebble Project and the Company may be unable, even if it presents solid scientific and technical evidence of risk mitigation, to overcome such opposition and convince governmental authorities that a mine should be permitted at the Pebble Project. The Company faces not only the permitting and regulatory issues typical of companies seeking to build a mine, but additional public and regulatory scrutiny due to its location and potential size. Accordingly, there is no assurance that the Company will obtain the required permits.

The Company through the Pebble Partnership filed a CWA 404 permit application with the USACE, which triggered an EIS process under NEPA and ultimately resulted in the issuance by the USACE of the ROD. As discussed in this MD&A and in our 2021 AIF, 2021 Annual MD&A, the Company's permit application has been denied by the USACE and there is no assurance that the Company will be able to successfully appeal this decision or ultimately be able to advance with development of a mine at the Pebble Project. The uncertainty of the USACE appeal process casts doubt as to whether the Company will ever be able to obtain these permits for the Pebble Project as currently planned or within the timeline envisioned. If the Company is ultimately able to secure all permits required to begin construction, a number of additional years would be required to finance and build a mine and commence operations and there is no certainty as to this time frame. During these periods, the Company would likely have no income and will accordingly require additional financing to continue its operations. There is no assurance that this financing will be available to the Company. Unless and until the Company builds a mine at the Pebble Project, it will be unable to achieve revenues from operations and may not be able to sell or otherwise recover its investment in the Pebble Project, which would have a material adverse effect on the Company and an investment in the Company's common shares.

*The Current Mine Plan for the Pebble Project in the 2022 PEA is Not Supported by Any Preliminary or Final Feasibility Study.*

The current mine plan that is included in the Project Description for the development of the Pebble Project is supported by the 2022 PEA but is not supported by any preliminary or final feasibility study. Accordingly, there is a substantial risk that the Company will not be able to proceed with the development of the Pebble Project, that the Pebble Project cannot be economically mined or that shareholders may not be able to recover their investment in the Company. The 2022 PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the 2022 PEA results will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability, and there is no assurance that the Pebble Project mineral resources will ever be upgraded to mineral reserves. The 2022 PEA assumes that the Proposed Project will ultimately be able to obtain the required permits from the USACE and state of Alaska authorities to enable development of the Proposed Project, however there is no assurance that these permits will be obtained. Neither the 2022 PEA, nor the mineral resource estimates on which the 2022 PEA is based, have been adjusted for any risks that (i) the Pebble Partnership may not be able to successfully appeal the record of decision issued by the USACE on November

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25, 2020, denying the granting of the required permit under the CWA, or (ii) the Pebble Partnership may not be able to successfully challenge the Revised Proposed Determination, each of which could adversely impact the ability of the Proposed Project to proceed. In addition, the 2022 PEA does not account for any additional capital or operating costs that may be necessary to obtain the required federal or state permits, should adjustments to the operating or environmental mitigation plans be required to be made in order to secure the required permits. In addition, recent inflationary pressures may adversely impact estimated capital and operating costs in the PEA. Further, the net present value calculations in the PEA are based on assumed discount rates which may not account for future increases in interest rates. For these reasons, there is significant risk that the economics for the Pebble Project indicated in the 2022 PEA, including production forecasts, capital costs, operating costs, revenues from operations, net present values and internal rates of return, will not be achieved should the Pebble Project be developed. The 2022 PEA should be viewed in this context and should not be considered a substitute for a preliminary or final feasibility study.

*If Northern Dynasty is Unable to Defend the Proposed Class Action Lawsuits against it, there is No Assurance that Northern Dynasty will not be Subject to Judgements for Damages against it.*

Northern Dynasty is the subject of proposed class action lawsuits against it that assert liability against Northern Dynasty on behalf of a purported class of shareholders under securities laws, both in Canada and in the United States. While Northern Dynasty intends to vigorously defend these claims, there is no assurance that Northern Dynasty will be successful in defending all claims made against it. Should Northern Dynasty not be successful in defending these claims, it may be subject to judgements against it and be required to pay substantial amounts in damages to the plaintiffs under these judgements. These damages could result in a material and adverse impairment to Northern Dynasty's financial condition and capital resources, and may further impair its ability to pursue the development of the Pebble Project.

In addition, Northern Dynasty is required under the terms of the indemnification agreements that it has entered into with underwriters in connection with Northern Dynasty's public financings to indemnify the underwriters for any losses that they incur. As certain of Northern Dynasty's underwriters have been named as defendants in certain of these class action lawsuits, Northern Dynasty may be required to indemnify and pay monies to the underwriters for any losses that they suffer and expenses that they incur. In addition, Northern Dynasty may be required to indemnify certain of its officers and directors for any losses that they suffer or expenses that they incur.

There is no assurance that Northern Dynasty's existing insurance policies will respond and be sufficient to cover any amounts that it may be required to pay to the plaintiffs in these class action lawsuits, or the underwriters under our indemnification obligations. We may also be required to indemnify certain of our officers and directors who have been named as party to these lawsuits. These damages could result in a material and adverse impairment to our financial condition and capital resources, and may further impair our ability to raise additional financing and pursue the development of the Pebble Project.

*Grand Jury Investigation and Related Matters.*

The Company is cooperating with a grand jury investigation involving the United States Attorney's Office for the District of Alaska, and an SEC inquiry, as described above under [1.2.2 Legal Matters](#). The Company is not able to provide investors with guidance as to the outcome of the grand jury investigation or SEC inquiry, or whether either of them will result in any charges or other claims against the Company, the Pebble Partnership or their associated individuals. The Company does anticipate, however, that it will incur substantial expenses in connection with the grand jury and SEC matters, including legal fees and expenses related to the collection, review, and production of documents, among other things. Any adverse civil or criminal proceedings could have a material adverse impact on Northern Dynasty's prospects and ability to advance development of the Pebble Mine project.

In addition, Northern Dynasty and the Pebble Partnership may face ongoing and further inquiries, demands or allegations concerning future plans for the Pebble Project from the U.S. Congress' House Committee on

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Transportation and Infrastructure. Again, any adverse civil or criminal proceedings relating to the Committee's investigation could have a material adverse impact on Northern Dynasty's prospects and ability to advance development of the Pebble Project. In addition, these inquiries or any possible resulting civil or criminal proceedings could erode any existing political support for the Pebble Project, which may reduce the likelihood of the Pebble Project obtaining the required environmental permitting.

*The Record of Decision has had an Ongoing Adverse Impact on Northern Dynasty's Ability to Finance the Pebble Project.*

Northern Dynasty believes that the USACE's ROD has had a material adverse impact on its ability to finance its operations and will continue to adversely impact its financing options for so long as the ROD remains outstanding. In addition, the EPA's Revised Proposed Determination may adversely impact Northern Dynasty's ability to complete future financings. Appealing the ROD in any future litigation and challenging the EPA's Revised Proposed Determination will require a substantial amount of our current cash and financial resources. As Northern Dynasty does not have any revenues, and does not anticipate revenues in the foreseeable future, Northern Dynasty will require additional financing to continue its operations. If Northern Dynasty is unsuccessful in its appeal of the ROD or challenge of the EPA's Revised Proposed Determination, Northern Dynasty's financing options may be substantially limited and it may not be able to generate the necessary financing to enable continued operations without a substantial reduction or restructuring of the Pebble Project. The Company's inability to secure this additional required financing will negatively impact the ability of shareholders to recover their investment in the Company.

*Risks Associated with the Novel Coronavirus ("COVID-19").*

The current outbreak of COVID-19, and any future emergence and spread of similar pathogens, could have a material adverse effect on global and local economic and business conditions, which may adversely impact Northern Dynasty's business and results of operations and the operations of contractors and service providers. The extent to which the COVID-19 impacts our operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information that may emerge concerning its severity and the actions taken to contain the virus or treat its impact, among others. The adverse effects on the economy, the stock market and Northern Dynasty's share price could adversely impact its ability to raise capital, with the result that our ability to pursue development of the Pebble Project could be adversely impacted, both through delays and through increased costs. Any of these developments, and others, could have a material adverse effect on the Company's business and results of operations and could delay its plans for development of the Pebble Project.

*Risk of Secure Title or Property Interest.*

There can be no certainty that title to any property interest acquired by the Company or any of its subsidiaries is without defects. Although the Company has taken reasonable precautions to ensure that legal title to its properties is properly documented, there can be no assurance that its property interests may not be challenged or impugned. Such property interests may be subject to prior unregistered agreements or transfers or other land claims, and title may be affected by undetected defects and adverse laws and regulations.

The Pebble Partnership's mineral concessions at Pebble are located on State of Alaska lands specifically designated for mineral exploration and development. Alaska is a stable jurisdiction with a well-developed regulatory and legal framework for resource development and public lands management, a strong commitment to the rule of law and lengthy track record for encouraging investment in the development of its land and natural resources.

*The Pebble Project is Subject to Political and Environmental Regulatory Opposition.*

The Pebble Project faces concerted opposition from certain individuals and organizations who are motivated to preclude any possible mining in the Bristol Bay Watershed (the "BBW"). The BBW is an important wildlife

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and salmon habitat area. Accordingly, one of the greatest risks to the Pebble Project is seen to be political/permitting risk, which may ultimately preclude construction of a mine at the Pebble Project. Opposition may include legal challenges to exploration and development permits, which may delay or halt development. Other tactics may, and have been, employed by opposition groups to delay or frustrate development at Pebble, included political and public advocacy, electoral strategies, media and public outreach campaigns, attempting to purchase intervening land rights, and protest activity. These efforts could materially increase the cost and time for development of the Pebble Project and the related infrastructure, or require changes to development plans, which could adversely impact project economics.

*The Pebble Partnership's Mineral Property Interests Do Not Contain Any Mineral Reserves or Any Known Body of Economic Mineralization.*

Although there are known bodies of mineralization on the Pebble Project, and the Pebble Partnership has completed core drilling programs within, and adjacent to, the deposits to determine measured and indicated resources, there are currently no known reserves or body of commercially viable ore. Accordingly, the Pebble Project must be considered an exploration prospect only. Extensive additional work is required before Northern Dynasty or the Pebble Partnership can ascertain if any mineralization may be economic and hence constitute "ore".

The current mine plan that is included in the Project Description for the development of the Pebble Project is supported by a preliminary economic assessment but is not supported by any preliminary or final feasibility study. Accordingly, even if permitting is achieved, there is a substantial risk that the Company will not be able to proceed with the development of the Pebble Project, that the Pebble Project may not be proven to be economically mineable and shareholders may not be able to recover their investment in the Company. See discussion above under "*The Current Mine Plan for the Pebble Project in the 2022 PEA is Not Supported by Any Preliminary or Final Feasibility Study.*"

*Mineral Resources Disclosed by Northern Dynasty or the Pebble Partnership for the Pebble Project are Estimates Only.*

Northern Dynasty has included mineral resource estimates that have been made in accordance with 43-101. These resource estimates are classified as "measured resources", "indicated resources" and "inferred resources". Northern Dynasty advises United States investors that although the SEC now recognizes estimates of "measured mineral resources", "indicated mineral resources" and "inferred mineral resources", there is no assurance any mineral resources that Northern Dynasty may report as "measured mineral resources", "indicated mineral resources" and "inferred mineral resources" under 43-101 would be the same had Northern Dynasty prepared the resource estimates under the standards adopted under the SEC Modernization Rules. Further, "inferred resources" have a great amount of uncertainty as to their economic and legal feasibility. Under Canadian securities law, estimates of "inferred mineral resources" cannot form the basis of feasibility or prefeasibility studies, or any economic study except a Preliminary Economic Assessment as prescribed under NI 43-101.

All amounts of mineral resources are estimates only, and Northern Dynasty cannot be certain that any specified level of recovery of metals from the mineralized material will in fact be realized or that the Pebble Project or any other identified mineral deposit will ever qualify as a commercially mineable (or viable) ore body that can be economically exploited. Mineralized material, which is not mineral reserves, does not have demonstrated economic viability. In addition, the quantity of mineral reserves and mineral resources may vary depending on, among other things, metal prices and actual results of mining. There can be no assurance that any future economic or technical assessments undertaken by the Company with respect to the Pebble Project will demonstrate positive economics or feasibility.

The mineral resource estimates contained herein have not been adjusted for any risk that the required environmental permits may not be obtained for the Pebble Project. The risk associated with the ability of the Pebble Project to obtain required environmental permits is a risk to the reasonable prospects for eventual economic extraction of the mineralisation and their definition as a mineral resource.

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*There Is No Assurance That Northern Dynasty Will Be Able To Partner The Pebble Project.*

One of Northern Dynasty's business objectives is to enter into a joint venture or other partnership arrangement with a third-party partner to fund the advancement of the development of the Pebble Project. There is no assurance that Northern Dynasty will be able to enter into an arrangement with a partner for the development of the Pebble Project, and the negative impact of the ROD and the investigations regarding the Pebble Project may negatively impact the Company's ability to enter into any arrangement. To the extent that Northern Dynasty does not enter into any agreement to partner the Pebble Project, it will continue to be required to fund all exploration and other related expenses for advancement of the Pebble Project, of which there is no assurance.

*Negative Operating Cash Flow and Financing Requirements.*

The Company currently has a negative operating cash flow and anticipates that it will continue to do so for the foreseeable future. Accordingly, the Company will require substantial additional capital in order to fund its future exploration and development activities. The Company does not have any arrangements in place for this additional funding and there is no assurance that such funding will be achieved when required. The Company has historically relied on equity financings to finance its operations but there is no assurance that future equity financings will be available to the Company. Further, any additional equity financing may result in substantial dilution to existing shareholders. Any failure to obtain additional financing or failure to achieve profitability and positive operating cash flows will have a material adverse effect on its financial condition and results of operations. Further there is no assurance that the Royalty Holder under the Royalty Agreement will exercise its right to purchase any additional rights to future gold and silver production from the Pebble Project, or that the Company will enter into additional streaming or royalty agreement financing arrangements for the Pebble Project.

*Northern Dynasty Has No History of Earnings and No Foreseeable Earnings, and May Never Achieve Profitability or Pay Dividends.*

Northern Dynasty has only had losses since inception and there can be no assurance that Northern Dynasty will ever be profitable. Northern Dynasty has never declared or paid any dividends on its common shares. Northern Dynasty intends, for the foreseeable future, to retain its future earnings, if any, to finance its exploration activities and its operations. Northern Dynasty presently has no ability to generate earnings from its mineral properties as its mineral properties are in the pre-development stage.

*Northern Dynasty's Condensed Consolidated Interim Financial Statements have been Prepared Assuming Northern Dynasty will continue on a Going Concern Basis.*

Northern Dynasty prepared its Financial Statements on the basis that Northern Dynasty will continue as a going concern. At September 30, 2022, the Company had working capital of \$21.7 million. Northern Dynasty has prioritized the allocation of its financial resources to meet key corporate and Pebble Project expenditure requirements in the near term, including the funding of the appeal of the ROD. Additional financing will be required to progress any material expenditures at the Pebble Project and for working capital. Northern Dynasty's continuing operations and the underlying value and recoverability of the amounts shown for mineral property interest are entirely dependent upon the existence of economically recoverable mineral reserves at the Pebble Project, the ability of the Company to finance its operating costs, the completion of the exploration and development of the Pebble Project, the Pebble Partnership obtaining the necessary permits to mine, and on future profitable production at the Pebble Project. Furthermore, failure to continue as a going concern would require that Northern Dynasty's assets and liabilities be restated on a liquidation basis, which would likely differ significantly from their going concern assumption carrying values. Refer also to discussion in [1.6 Liquidity](#).

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*Northern Dynasty has a History of Negative Cash Flow from Operations Which Is Anticipated to Continue for the Foreseeable Future.*

Northern Dynasty experiences negative cash flow from operations and anticipates incurring negative cash flow from operations for 2022 and beyond as a result of the fact that it does not have revenues from mining or any other activities. In addition, as a result of Northern Dynasty's business plans for the development of the Pebble Project, Northern Dynasty expects cash flow from operations to continue to be negative until revenues from production at the Pebble Project begin to offset operating expenditures, of which there is no assurance. Accordingly, Northern Dynasty's cash flow from operations will be negative for the foreseeable future as a result of expenses to be incurred in connection with advancement of the Pebble Project.

*As the Pebble Project is Northern Dynasty's only Mineral Property Interest, any Failure to establish that the Pebble Project Possesses Commercially Viable and Legally Mineable Deposits of Ore may cause a Significant Decline in the Trading Price of Northern Dynasty's Common Shares and reduce its ability to obtain New Financing.*

The Pebble Project is, through the Pebble Partnership, Northern Dynasty's only mineral project. Northern Dynasty's principal business objective is to carry out further exploration and related activities to establish whether the Pebble Project possesses commercially viable deposits of ore. If Northern Dynasty is not successful in its plan of operations, Northern Dynasty may have to seek a new mineral property to explore or acquire an interest in a new mineral property or project. Northern Dynasty anticipates that such an outcome would adversely impact the price of Northern Dynasty's common shares. Furthermore, Northern Dynasty anticipates that its ability to raise additional financing to fund exploration of a new property or the acquisition of a new property or project would be impaired as a result of the failure to establish commercial viability of the Pebble Project.

*If Prices for Copper, Gold, Molybdenum, Silver and Rhenium Decline, Northern Dynasty May Not Be Able To Raise the Additional Financing Required To Fund Expenditures for the Pebble Project.*

The ability of Northern Dynasty to raise financing to fund the Pebble Project will be significantly affected by changes in the market price of the metals for which it explores. The prices of copper, gold, molybdenum, silver and rhenium are volatile, and are affected by numerous factors beyond Northern Dynasty's control. The level of interest rates, the rate of inflation, the world supplies of and demands for copper, gold, molybdenum, silver and rhenium and the stability of exchange rates can all cause fluctuations in these prices. Such external economic factors are influenced by changes in international investment patterns and monetary systems and political developments. The prices of copper, gold, molybdenum, silver and rhenium have fluctuated in recent years, and future significant price declines could cause investors to be unprepared to finance exploration of copper, gold, molybdenum, silver and rhenium, with the result that Northern Dynasty may not have sufficient financing with which to fund its activities related to the advancement of the Pebble Project.

*The Russian-Ukrainian Conflict – Potential Effects Which Could Detrimentally Affect the Global Economy, Peace and Stability in Europe and Beyond, and Our Business and Share Price*

In February 2022, Russian military forces invaded Ukraine. In response, Ukrainian military personnel and civilians are actively resisting the invasion. Many countries throughout the world have provided aid to the Ukraine in the form of financial aid and in some cases military equipment and weapons to assist in their resistance to the Russian invasion. The North Atlantic Treaty Organization ("NATO") has also mobilized forces to NATO member countries that are close to the conflict as deterrence to further Russian aggression in the region. The outcome of the conflict is uncertain and is likely to have wide-ranging consequences on the peace and stability of the region and the world economy. In addition, certain countries including Canada and the United States, have imposed strict financial and trade sanctions against Russia, which sanctions may have far reaching effects on the global economy. The long-term impacts of the conflict and the sanctions imposed on Russia remain uncertain and could have an adverse impact on the Company's business and results of operations and may have wide-ranging consequences on the peace and stability of the region and the world economy.

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The conflict could affect the economies and securities markets of countries in ways that cannot necessarily be foreseen at the present time. These events could also exacerbate other pre-existing political, social and economic risks. Such events could also cause substantial market volatility, exchange trading suspensions and closures and affect the Company's performance, the price of its securities and its ability to successfully raise capital at reasonable rates or at all. As a result, the market price of the Common Shares may decline even if the Company's operating results, underlying asset values or prospects have not changed.

Although we do not have employees, suppliers or business activities in Ukraine or Russia at this time, the conflict may have a detrimental impact on our business and operations at some point in the future if the conflict spreads, escalates or affects Europe or the world more broadly.

*Mining is Inherently Dangerous and Subject to Conditions or Events beyond the Company's Control, which could have a Material Adverse Effect on the Company's Business.*

Hazards such as fire, explosion, floods, structural collapses, industrial accidents, unusual or unexpected geological conditions, ground control problems, power outages, inclement weather, seismic activity, cave-ins and mechanical equipment failure are inherent risks in the Company's exploration, development and mining operations. These and other hazards may cause injuries or death to employees, contractors or other persons at the Company's mineral properties, severe damage to and destruction of the Company's property, plant and equipment and mineral properties, and contamination of, or damage to, the environment, and may result in the suspension of the Company's exploration and development activities and any future production activities. Safety measures implemented by the Company may not be successful in preventing or mitigating future accidents.

*Northern Dynasty Competes with Larger, Better Capitalized Competitors in the Mining Industry.*

The mining industry is competitive in all of its phases, including financing, technical resources, personnel and property acquisition. It requires significant capital, technical resources, personnel and operational experience to effectively compete in the mining industry. Because of the high costs associated with exploration, the expertise required to analyze a project's potential and the capital required to develop a mine, larger companies with significant resources may have a competitive advantage over Northern Dynasty. Northern Dynasty faces strong competition from other mining companies, some with greater financial resources, operational experience and technical capabilities than Northern Dynasty possesses. As a result of this competition, Northern Dynasty may be unable to maintain or acquire financing, personnel, technical resources or attractive mining properties on terms Northern Dynasty considers acceptable or at all.

*Compliance with Environmental Requirements will take Considerable Resources and Changes to these Requirements could Significantly Increase the Costs of Developing the Pebble Project and Could Delay These Activities.*

Northern Dynasty and the Pebble Partnership must comply with stringent environmental legislation in carrying out work on the Pebble Project. Environmental legislation is evolving in a manner that will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. Changes in environmental legislation could increase the cost to the Pebble Partnership of carrying out its exploration and, if warranted, development of the Pebble Project. Further, compliance with new or additional environmental legislation may result in delays to the exploration and, if warranted, development activities.

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*Changes in Government Regulations or the Application thereof and the Presence of Unknown Environmental Hazards on Northern Dynasty's Mineral Properties May Result in Significant Unanticipated Compliance and Reclamation Costs.*

Government regulations relating to mineral rights tenure, permission to disturb areas and the right to operate can adversely affect Northern Dynasty. Northern Dynasty and the Pebble Partnership may not be able to obtain all necessary licenses and permits that may be required to carry out exploration at the Pebble Project. Obtaining the necessary governmental permits is a complex, time-consuming and costly process. The duration and success of efforts to obtain permits are contingent upon many variables not within the Company's control. Obtaining environmental permits may increase costs and cause delays depending on the nature of the activity to be permitted and the interpretation of applicable requirements implemented by the permitting authority. There can be no assurance that all necessary approvals and permits will be obtained and, if obtained, that the costs involved will not exceed those that the Company previously estimated. It is possible that the costs and delays associated with the compliance with such standards and regulations could become such that the Company would not proceed with the development or operation of a mine at the Pebble Project.

*Litigation.*

The Company is, and may in future be, subject to legal proceedings, including with regard to actions discussed in [1.2.2. Legal Matters](#) in the pursuit of its Pebble Project. Given the uncertain nature of these actions, the Company cannot reasonably predict the outcome thereof. If the Company is unable to resolve these matters favorably, it will likely have a material adverse effect of the Company.

*Northern Dynasty is Subject to Many Risks that are Not Insurable and, as a Result, Northern Dynasty will Not Be Able to Recover Losses through Insurance Should Such Certain Events Occur.*

Hazards such as unusual or unexpected geological formations and other conditions are involved in mineral exploration and development. Northern Dynasty may become subject to liability for pollution, cave-ins or hazards against which it cannot insure. The payment of such liabilities could result in an increase in Northern Dynasty's operating expenses, which could, in turn, have a material adverse effect on Northern Dynasty's financial position and its results of operations. Although Northern Dynasty and the Pebble Partnership maintain liability insurance in an amount which they consider adequate, the nature of these risks is such that the liabilities might exceed policy limits, the liabilities and hazards might not be insurable against, or Northern Dynasty and the Pebble Partnership might elect not to insure against such liabilities due to high premium costs or other reasons, in which event Northern Dynasty could incur significant liabilities and costs that could materially increase Northern Dynasty's operating expenses.

*If Northern Dynasty Loses the Services of the Key Personnel that it Engages to Undertake its Activities, then Northern Dynasty's Plan of Operations May Be Delayed or be More Expensive to Undertake than Anticipated.*

Northern Dynasty's success depends to a significant extent on the performance and continued service of certain contractors, including HDSI (refer [1.9 Transactions with Related Parties](#)). The Company has access to the full resources of HDSI, an experienced exploration and development firm with in-house geologists, engineers and environmental specialists, to assist in its technical review of the Pebble Project. There can be no assurance that the services of all necessary key personnel will be available when required or, if obtained, that the costs involved will not exceed those previously estimated. It is possible that the costs and delays associated with the loss of services of key personnel could become such that the Company would not proceed with the development or operation of a mine at the Pebble Project.

*The Volatility of Northern Dynasty's Common Shares Can Expose Northern Dynasty to the Risk of Litigation.*

Northern Dynasty's common shares are listed on the TSX and NYSE American. Securities of mining companies have experienced substantial volatility in the past, often based on factors unrelated to the financial performance or prospects of the companies involved (see previous risk). These factors include macroeconomic

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developments in North America and globally, currency fluctuations and market perceptions of the attractiveness of particular industries. The price of Northern Dynasty's common shares is also likely to be significantly affected by short-term changes in copper, gold, molybdenum, silver and rhenium prices or in Northern Dynasty's financial condition or results of operations as reflected in quarterly earnings reports.

As a result of any of these factors, the market price of Northern Dynasty's common shares at any given point in time may not accurately reflect their long-term value. Securities class action litigation often has been brought against companies following periods of volatility in the market price of their securities. Northern Dynasty is, and may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management's attention and resources.

*Northern Dynasty Will Require Additional Funding to Meet the Development Objectives of the Pebble Project.*

Northern Dynasty will need to raise additional financing (through share issuances, debt or asset level partnering) to achieve permitting and development of the Pebble Project. In addition, a positive production decision at the Pebble Project would require significant capital for project engineering and construction. Accordingly, the continuing permitting and development of the Pebble Project will depend upon Northern Dynasty's ability to obtain financing through debt financing, equity financing, the joint venturing of the project or other means. There can be no assurance that Northern Dynasty will be successful in obtaining the required financing, or that it will be able to raise the funds on terms that do not result in high levels of dilution to shareholders. If Northern Dynasty is unable to raise the necessary capital resources, it may at some point have to reduce or curtail its operations, which would have a material adverse effect on its ability to pursue the permitting and development of the Pebble Project.

#### **1.15.6 Qualified Persons**

Stephen Hodgson, P.Eng., and David Gaunt, P.Geo., qualified persons who are not independent of Northern Dynasty, have reviewed and approved the scientific and technical information associated with the 2022 PEA that is contained in this MD&A.

#### **1.15.7 U.S. Securities Matters**

The Company is a "foreign issuer" under the U.S. Exchange Act and entitled to file continuous disclosure reports with the SEC under the Multi-Jurisdictional Disclosure System ("**MJDS**") between Canada and the United States, and to provide disclosure on our mineral properties, including the Pebble project, in accordance with NI 43-101 disclosure standards and CIM Definition Standards. For this reason, information contained in this MD&A in respect of the Pebble project may not be comparable to similar information made public by United States companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.