



**Perpetua
Resources**

2022 SUSTAINABILITY REPORT

Published June 20, 2023

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ABOUT THIS REPORT



The purpose of this Sustainability Report is to provide transparent disclosure on the Environment, Social, and Governance (ESG) topics that were most material to Perpetua Resources (Perpetua or the Company) in 2022. It also outlines Perpetua Resources' key achievements for the year and provides an update on its ESG performance and commitments. Perpetua Resources' ESG

goals were developed to align with the United Nations' Sustainable Development Goals (UNSDG).

The reporting in this document is aligned with the Sustainability Accounting Standards Board (SASB) reporting framework and includes a full quantitative summary in Appendix B. SASB standards guide the disclosure of financially material sustainability information by companies to the investment community.*

*See Materiality Assessment on page 7.

2022 AT A GLANCE

2022 ESG Highlights

In 2022, the Perpetua Resources team maintained its focus on revitalizing an abandoned mining district and providing the nation with mission critical resources through the advancement of the Stibnite Gold Project. The Company's actions over the past year were guided by its commitments to protect the environment, provide opportunities for its community, deliver long-term value for its shareholders, and do business the right way.

HEALTH, SAFETY + WELLBEING



130 MONTHS
with no reportable spills

85 months with no lost-time incidents

214 safe fuel hauls without incident or spill, a 100% safety record since 2009

1,834 safety training hours in 2022

GOVERNANCE



100% OF EMPLOYEES
participated in business integrity and compliance related training

Released 9th annual **sustainability report**; aligned with SASB framework

Launched **Sustainability Roadmap**

33% of Board members are gender or ethnically diverse

Strengthened **Board of Directors** with appointment of Laura Dove

PEOPLE



67% WOMEN
executive management

30 full-time employees

43% women workforce

83% of employees are based in Idaho, 30% in Valley County

SOCIAL & ECONOMIC DEVELOPMENT



1,064 HOURS
in the community

~\$12M total Idaho spending

~\$4M total compensation

\$471,000 total community contributions

\$39,000 in charitable giving donations

\$42,000 in STEM and education support

\$10,000 awarded in scholarships to graduating high school seniors

114 community presentations and **28 site tours**

ENVIRONMENT



750 TREES
planted

Started cleanup work to proactively address legacy water contamination

Continued Independent Water Monitoring Program with the Stibnite Advisory Council

4,705 kWh solar energy produced on site



Foreword From The CEO

**AT PERPETUA RESOURCES,
WE BELIEVE IN THE VALUE
OF OUR WORD. WE DELIVER
COMMITMENTS, NOT EMPTY
PROMISES.**

This report highlights our Company's sustainability achievements from the past year and the work we are doing to be a responsible mining company in America. We are living up to our commitments to build stronger communities, restore the environment, and support the development of stronger, more resilient supply chains.

While I am proud of all of our team's accomplishments, it's worth calling special attention to the early restoration work that took place at Stibnite. We successfully completed the 2022 summer field program, including stream diversion activities and the removal of the Defense Minerals Exploration Administration legacy adit

waste rock dump from within and along a tributary to the East Fork of the South Fork of the Salmon River. This marked the start of a multi-year, multi-million-dollar investment designed to improve environmental conditions at the site.

We will continue our work to perform restoration activities and address legacies impacting water quality conditions in the historic Stibnite Mining District in 2023.

Our vision has always been to use a modern mining approach to develop the Stibnite Gold Project and leave the site better than we found it. I am proud we can officially say it is already happening.

SINCERELY,

LAUREL SAYER
President and CEO of Perpetua Resources



Message From The Chairman

"The cornerstone of Perpetua's continued success and national relevance has been the Company's early commitment to environmental protection, social responsibility, and governance excellence. In 2022, Perpetua delivered on our commitments and once again showed how our guiding ESG principles can create value for our stakeholders and our nation. I am proud of the Perpetua team's relentless effort to progress the Stibnite Gold Project through permitting and bring this national strategic asset to life."

MARCELO KIM
Chairman of the Board

APPROACH TO SUSTAINABILITY

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07 [MATERIALITY ASSESSMENT](#)



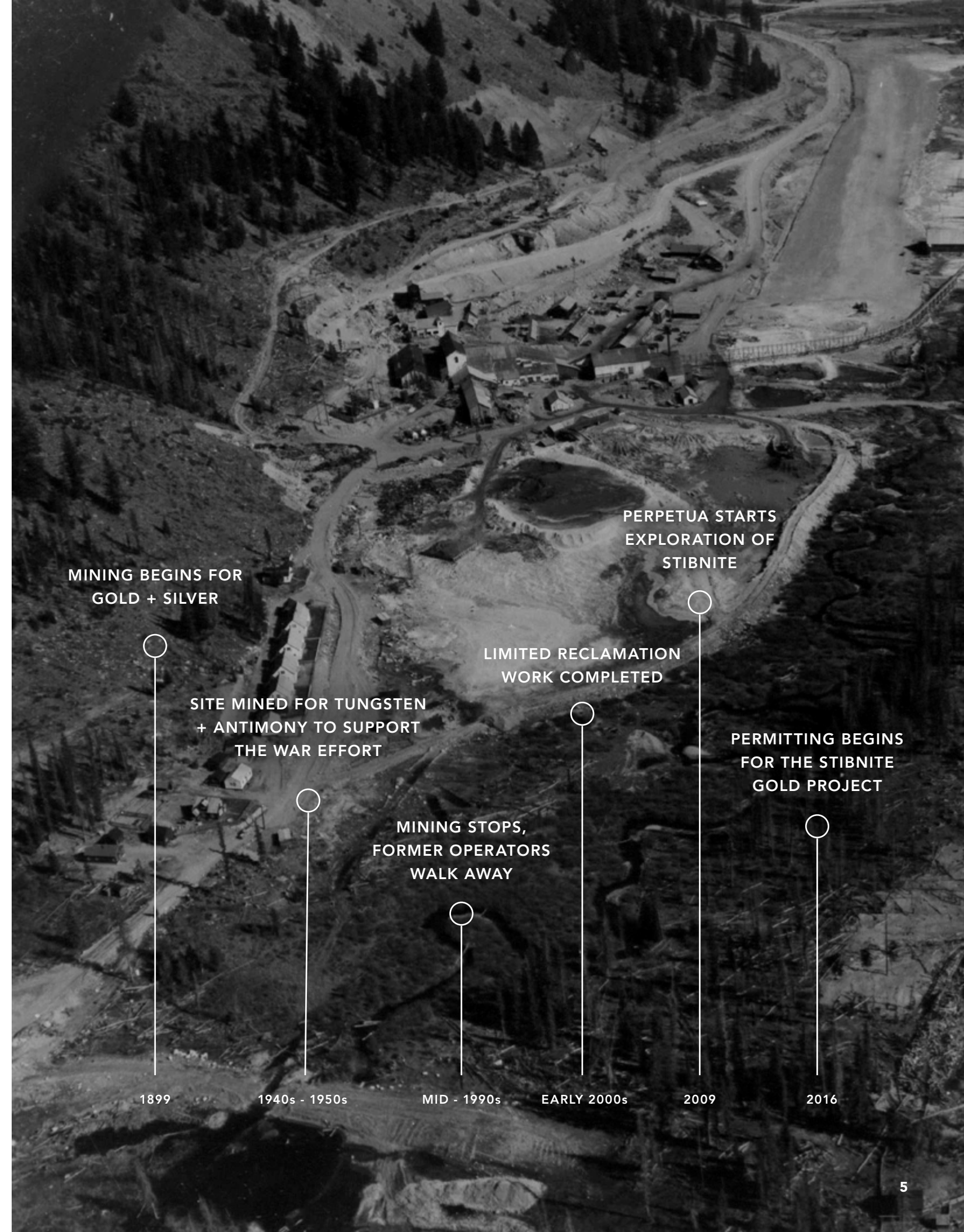
MISSION + VALUES

Perpetua Resources is dedicated to taking an area abandoned after 100 years of mining activity and using responsible mine redevelopment to restore the environment, bring benefit to the communities, and provide the minerals the nation needs for a more secure and sustainable future.

PROJECT LOCATION + HISTORY

The proposed Stibnite Gold Project is located in the historical Stibnite Mining District in Valley County, Idaho. The district has seen more than 100 years of mining activity. During World War II and the Korean War, the site was mined heavily for tungsten and antimony to serve the war efforts. After the war era, gold was mined from Stibnite until the mid-1990's when mining in the district stopped. Unfortunately, only limited reclamation work was ever done, so many environmental legacies remain today.

Perpetua Resources has offices in Boise, Donnelly, and Stibnite, Idaho.



MINING BEGINS FOR
GOLD + SILVER

PERPETUA STARTS
EXPLORATION OF
STIBNITE

LIMITED RECLAMATION
WORK COMPLETED

SITE MINED FOR TUNGSTEN
+ ANTIMONY TO SUPPORT
THE WAR EFFORT

PERMITTING BEGINS
FOR THE STIBNITE
GOLD PROJECT

MINING STOPS,
FORMER OPERATORS
WALK AWAY

1899

1940s - 1950s

MID - 1990s

EARLY 2000s

2009

2016

ESG PRINCIPLES



To leave the Project site better than the Company found it, and leave a lasting legacy of positive economic benefits in the community.



Doing the right thing is good for business. Responsible corporate behavior, with respect to environmental, social and governance factors, can generally have a positive influence on long-term financial performance.



Disclosure is the key that allows stakeholders and other interested parties to better understand, evaluate and assess potential risk and return, including the potential impact of environmental, social and governance factors on Perpetua Resources' performance.



Investment analysis should incorporate environment, social and governance factors to the extent that they affect risk and return.



Division of authority and responsibilities among shareholders, directors and managers are key to corporate governance.

2022 ESG MILESTONES

Perpetua Resources aims to be a model for responsible American mining through its actions. Here is a look at key activities that took place over the last year.

- 1. Actions to improve water quality:** After years of planning with our regulatory partners (the EPA and the Payette National Forest), Perpetua was able to start early cleanup work to address legacy mine features that are negatively impacting ground and surface water. The Company also supported the second year of the Stibnite Advisory Council's Independent Water Monitoring Program.
- 2. Safety remains a core value:** In 2022, Perpetua expanded wilderness first aid training requirements for its team to ensure the health, safety and wellbeing of employees and community members, and extended HAZWOPER training opportunities to local first responders. The Company completed another year with no Lost Time Incidents or Reportable Spills.
- 3. Listening and improving:** In 2022, Perpetua worked with the Stibnite Advisory Council to assess community needs and priorities. Perpetua is using the feedback to identify community needs and mitigate impacts with local stakeholders. Additionally, over 19,000 comments were received on the Project's Supplemental Draft Environmental Impact Statement.
- 4. Supporting Idaho:** Perpetua spent more than \$12 million in Idaho in 2022, which included providing \$471,000 to support important causes like early efforts to expand public transportation options across the region, STEM programming and classroom support and scholarships for Idaho students.
- 5. Stronger ESG reporting:** Perpetua is proud to have launched its Sustainability Roadmap and to have delivered its ninth annual sustainability report, including the first annual report using the SASB reporting framework.
- 6. Performance:** Finally, Perpetua is focused on delivering long-term value for its shareholders. The Company's share price picked up momentum through the end of 2022 following the publication of the SDEIS for public comment and the Defense Production Act funding announcement. Perpetua anticipates that its valuation will continue to re-rate as it achieves major milestones and advances toward development.

ESG TOPICS - MATERIALITY* ASSESSMENT

Perpetua determines materiality for ESG-related topics using a holistic approach focused on areas that have the greatest potential impact to its business and stakeholders. The material topics addressed in this report include:

 GOVERNANCE <ul style="list-style-type: none">✓ Business Ethics✓ Transparency✓ Diversity & Inclusion	 SOCIAL <ul style="list-style-type: none">✓ Workforce Health & Safety✓ Workforce Engagement✓ Labor Relations✓ Community Relations✓ Security✓ Human Rights✓ Rights of Indigenous Peoples	 ENVIRONMENT <ul style="list-style-type: none">✓ GHG Emissions✓ Air Quality✓ Energy Management✓ Water Management✓ Waste & Hazardous Materials Management✓ Biodiversity Impacts✓ Tailing Storage Facilities Management
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The Company determined materiality based on areas with the greatest potential to negatively impact Perpetua’s ability to leave the Project site better than it was found and leave behind a legacy of economic benefits. The assessment focused on areas most important to the Company’s stakeholders, including social and environmental performance, as well as those related to risk and return, and those that could have the greatest impact to Perpetua’s long-term financial performance. ESG factors most material to industry peers and best practices being adopted by the mining industry were also considered when identifying materiality.

*See Forward Looking Statement on page 44.





GOVERNANCE

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UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

This section aligns with the following goals:

<p>5 GENDER EQUALITY</p> 	<p>8 DECENT WORK AND ECONOMIC GROWTH</p> 	<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> 	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p> 
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STRONG GOVERNANCE IN 2022

Strong governance creates opportunity. In the case of Perpetua Resources, ESG-guided governance has built a company that recognizes that in order to create a successful mining operation, the Company must be dedicated to pursuing local, regional

and national benefits. This responsible approach has opened the Company to partnerships and solution-driven project features that have strengthened the Project's viability and, in return, provide benefit to stakeholders, shareholders, and downstream consumers.

For example, designing the Stibnite Gold Project to address abandoned mine legacies has offered a unique value proposition to local communities and stakeholders as a method of bringing environmental uplift to degraded water quality and habitat that would otherwise not likely occur. And partnering with Ambri Inc. to provide a responsible, secure, U.S. source of antimony for long-duration stationary grid storage batteries made the Project relevant in the global fight against climate change.

Now, Perpetua's willingness to prioritize antimony trisulfide for national defense purposes has established the Project as critical to the U.S. defense industrial base and provided Perpetua with a Defense Production Act Title III award of up to \$24.8 million to complete the permitting process and advance construction readiness.

With a clear vision and guiding ESG policies, Perpetua's Corporate Board and executive leadership have been able to prioritize these opportunities and shape the Stibnite Gold Project into a project with great potential returns for investors and a much-needed solution for pressing issues of the surrounding communities, country, and planet.

ESG-thinking and governance has provided the Company with the support and capital required to keep Perpetua Resources competitive for long-term viability, profitability, and growth.

2022 GOVERNANCE HIGHLIGHTS

100% OF EMPLOYEES

participated in business integrity and compliance related training.

Launched **Sustainability Roadmap**

Released sustainability report in 2022 using **SASB framework**.

33% of Board members are gender or ethnically diverse

Strengthened Board of Directors with the **appointment of Laura Dove**.



CORPORATE GOVERNANCE

Strong corporate governance is the foundation for good business practices, transparency, and accountability. Perpetua's approach to governance is designed to mitigate risk and provide a structure that enables long-term value creation for all stakeholders.

As a public company, Perpetua Resources is dedicated to the highest of corporate governance practices. Corporate governance begins with Perpetua's Board of Directors (Board), who are responsible for the control and direction of the Company. Perpetua's Board is responsible for the oversight of the risks that are relevant to the Company and delegates certain risk oversight responsibility to the Audit, Compensation, Corporate Governance, and Nominating and Technical Committees. These committees are each comprised of a majority of independent directors with diverse backgrounds and experiences, and each hold regular meetings throughout the year.

The Board views good corporate governance as a foundation to the long-term success of the Company.

Details of the Company's committee charters and governance policies are available on Perpetua's website: www.investors.perpetuareources.com/investors/policies



THE BOARD IMPLEMENTS THE FOLLOWING BEST PRACTICES:

SHAREHOLDERS
ELECT
DIRECTORS
ANNUALLY

CONDUCTING
ANNUAL BOARD,
COMMITTEE
AND INDIVIDUAL
DIRECTOR SELF-
EVALUATIONS.

MAINTAINING AN
INDEPENDENT
CHAIRPERSON
(89% OF THE
BOARD IS
INDEPENDENT)

MINIMUM
DIRECTOR STOCK
OWNERSHIP
REQUIREMENTS

MAJORITY
VOTING POLICY

NEW DIRECTOR
ORIENTATION
AND
CONTINUING
EDUCATION

REQUIRING
MEMBERS TO
FOLLOW CODES
OF CONDUCT
AND ETHICS

DIVERSE
REPRESENTATION
OF EXPERIENCE
AND
BACKGROUNDS

ESG GOVERNANCE

Perpetua's Board has direct oversight of the Company's ESG efforts and supports the Company to deliver long-term benefits for all its stakeholders.

FULL BOARD OVERSIGHT OF ESG TOPICS

- ✓ STAKEHOLDER ENGAGEMENT
- ✓ ENTERPRISE RISK MANAGEMENT
- ✓ CYBER SECURITY
- ✓ SUSTAINABILITY POLICIES
- ✓ GOVERNMENT RELATIONS
- ✓ EMERGENCY PLANNING + RESPONSE
- ✓ COMMITTEE REPORT OUTS ON SPECIFIC ESG TOPICS

BOARD COMMITTEE OVERSIGHT OF ESG TOPICS

AUDIT COMMITTEE

- ✓ Compliance
- ✓ Whistleblower Policy
- ✓ Code of Conduct + Ethics
- ✓ Cyber Security
- ✓ Political Contributions

COMPENSATION COMMITTEE

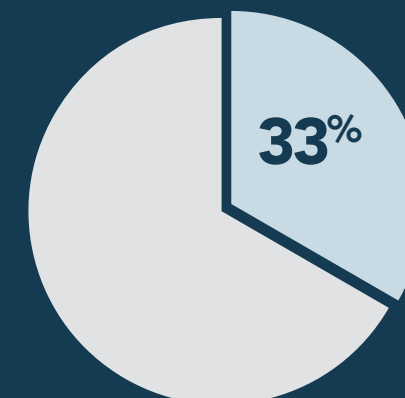
- ✓ Executive Compensation
- ✓ Fair Labor Practices
- ✓ Employee Benefits

CORPORATE GOVERNANCE + NOMINATING COMMITTEE (CG&N)

- ✓ Diversity, Equity + Inclusion
- ✓ Board Governance
- ✓ Anti-Bribery and Anti-Corruption

TECHNICAL COMMITTEE

- ✓ Safety + Health Policies and Performances
- ✓ Environmental Policies + Performances



THIRTY-THREE PERCENT OF THE BOARD IS GENDER OR ETHNICALLY DIVERSE

PERPETUA RESOURCES' BOARD OF DIRECTORS:

Perpetua Resources' Board represents a broad group of distinguished leaders with unique and diverse skillsets. Each director is nominated by the Corporate Governance and Nominating committee (CG&NZ) and the Board as a whole, and then approved by shareholders annually.

CHAIRMAN	LEAD DIRECTOR	DIRECTOR	DIRECTOR	DIRECTOR	DIRECTOR	DIRECTOR	DIRECTOR	PRESIDENT + CEO	DIRECTOR
									
CG&N Chair Technical	Technical Chair Compensation CG&N	Audit Chair CG&N	Technical Compensation	Audit CG&N	Audit CG&N	Compensation Chair	Technical	Audit Compensation	

EXPERIENCE	MARCELO KIM	CHRIS ROBISON	BOB DEAN	DAVID DEISLEY	LAURA DOVE	JEFF MALMEN	CHRIS PAPAGIANIS	LAUREL SAYER	ALEX STERNHELL
EXECUTIVE LEADERSHIP	✓	✓	✓	✓	✓	✓	✓	✓	
FINANCIAL	✓	✓	✓			✓	✓		✓
ACCOUNTING/AUDIT			✓		✓	✓			✓
RISK MANAGEMENT	✓	✓	✓	✓				✓	
OPERATIONS		✓					✓		
INDUSTRY (NATURAL RESOURCES)	✓	✓	✓	✓		✓	✓	✓	
ENVIRONMENTAL and/or CLIMATE CHANGE RELATED	✓	✓		✓	✓	✓	✓	✓	✓
HEALTH and/or SAFETY		✓				✓		✓	
HUMAN RESOURCES MANAGEMENT						✓	✓	✓	
GOVERNMENTAL AFFAIRS and/or REGULATORY		✓	✓	✓	✓	✓	✓	✓	✓

*Note: as of December 31, 2022

RISK MANAGEMENT

EM-MM-160A.1

Perpetua's approach to risk management begins with the [Code of Conduct & Ethics Policy](#). This policy dictates how the organization is expected to live up to the Company's core values, which in turn influences the actions and decisions each employee makes. All employees have a duty to report potential violations of the Code, any internal policy, or the law, and may do so confidentially and anonymously. It provides a mechanism of accountability for all employees and business partners to mitigate potential risks before they become larger problems.



Perpetua team members and stakeholders at site

OTHER POLICIES FORMALLY ADOPTED BY PERPETUA:



ESG



ANTI-BRIBERY + ANTI-CORRUPTION



WHISTLEBLOWER



CHARITABLE DONATIONS



INSIDER TRADING + REPORTING



INFORMATION TECH + SECURITY



POLITICAL CONTRIBUTIONS



DIVERSITY



CONDUCT + ETHICS

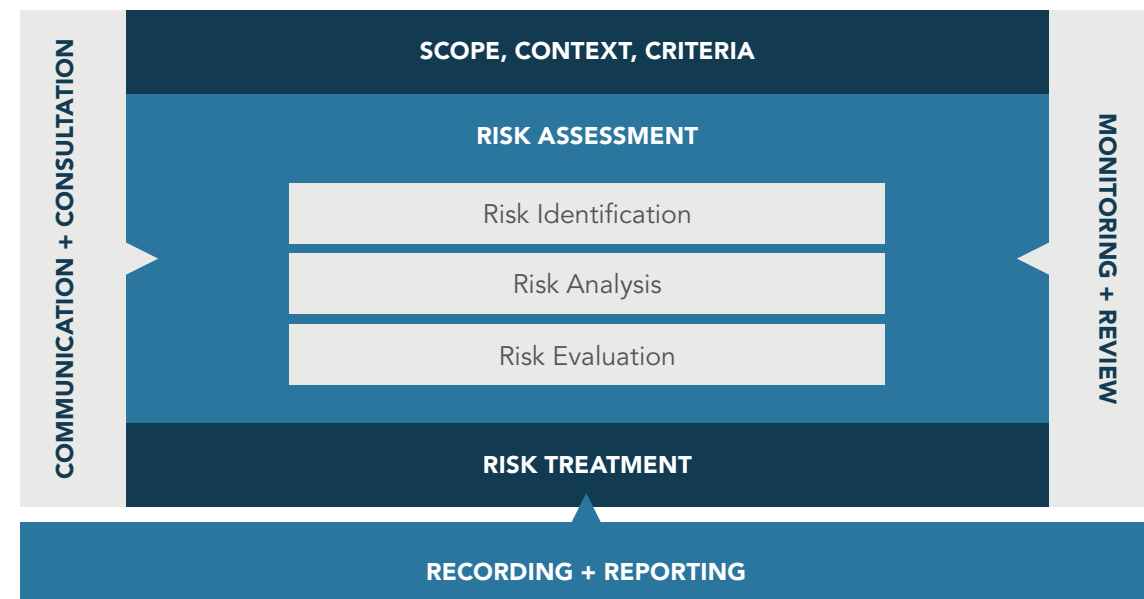
These and other policies are available [here](#).

ENTERPRISE RISK MANAGEMENT

Through Perpetua's Enterprise Risk Management (ERM) process, the Company identifies, analyzes, reports and discusses the top risks with senior leaders and the Board of Directors. The Chief Financial Officer manages the ERM process and works to expand a culture focused on minimizing risk and creating and protecting value.

The Board oversees Perpetua's risk management activities as part of its efforts to ensure the Company has an appropriate risk management process in place which regularly assesses, monitors, and mitigates risks. As part of regular Board and Committee meetings, the Directors oversee management of risks relevant to the Company. While the full Board has overall responsibility for risk oversight, the Board has delegated responsibility related to certain risks to the Audit Committee, the Compensation Committee, the Corporate Governance and Nominating Committee, and the Technical Committee.

ENTERPRISE RISK MANAGEMENT FRAMEWORK



EOH&S MANAGEMENT SYSTEM

Perpetua Resources utilizes an integrated Environmental, Occupational, Health and Safety (EOH&S) Management System to enhance its risk management practices and allow for management and the Board to track key metrics and continually improve processes and systems. This system was developed in accordance with ISO 14001 and ISO 45001, and will undergo third-party audit and certification before the mine is in operation.

As a part of the integrated EOH&S management system's continuous improvement cycle, key advancements in 2022 included:



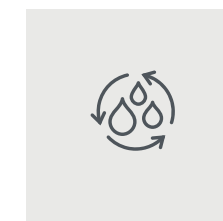
EMERGENCY RESPONSIVENESS

Conducted Arc Flash Victim and Suspension Trauma Strap Deployment emergency response drills, a HAZWOPER response drill with onsite crew and a joint vehicle rollover practice drill with the Yellow Pine Fire Department.



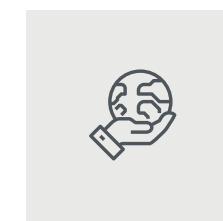
ENHANCED TRAINING

Continued the development and implementation of a software-based training platform for both employees and contractors. The system provides for overall content management, establishment of employee/contractor class requirements, and tracking/notification capability.



WATER MANAGEMENT

Comprehensive update and implementation of the Stormwater Pollution Prevention Plan to account for construction best management practices in support of early cleanup activities at site.



WASTE MANAGEMENT

Comprehensive update on waste determinations in support of Project activities.

Perpetua Resources' Idaho Board

Perpetua Resources Idaho, Inc.'s Board of Directors represents a cross section of perspectives and experiences in Idaho. As a subsidiary board, the directors' role is to advise and oversee the Idaho team in the development of the Stibnite Gold Project and ensure the values and needs of Valley County and local stakeholders are represented.



SCOTTY DAVENPORT

McCall, Idaho

Scotty knows business and understands the benefit Perpetua Resources can have in the community. As a founding member of the Valley County Economic Development Council and a leader within the Cascade and McCall Chambers of Commerce, Scotty wants to see the Valley County economy, job market and community continue to thrive. Scotty owns several retail stores and businesses in Valley County. He is passionate about renewable energy and is dedicated to connecting communities to geothermal energy.

APRIL WHITNEY

McCall, Idaho

April doesn't sit on the sidelines. You can find her out on the slopes skiing and hiking in Idaho's backcountry, working in her garden or spending time with her husband and daughter. When April learned about the Stibnite Gold Project, she realized this was a once-in-a-lifetime opportunity for a mining company to restore an area in need of repair and decided she needed to get involved. As a board member, she wants to make sure the voices of the community are heard and that people have the information they need about Perpetua Resources' future plans. April lives in McCall and runs a marketing company.

SHAUNA ARNOLD

Cascade, Idaho

Residents in Cascade know if they ever need help, Shauna will be one of the first ones there. She loves serving her community and joined the Perpetua Resources Board to ensure Cascade had a voice in the Stibnite Gold Project. She is the eyes and ears of the community and helps residents learn more about the Project and how they can get involved. As an Idaho-native, Shauna is excited to be part of a Project that transforms an area in need of repair and leaves a positive legacy for future generations. When Shauna isn't volunteering or working as a massage therapist, you can often find her hiking, spending time in her garden or with her husband and two children.

LAUREL SAYER

Eagle, Idaho

Laurel Sayer, based in Boise, Idaho, has served as President and CEO of Perpetua Resources since 2016. Before her appointment as CEO, Ms. Sayer served on the Perpetua Resources Corp. Board for two years. Prior to her appointment to the Perpetua Resources Board, she worked as the executive director of the Idaho Coalition of Land Trusts (ICLT), which is dedicated to supporting and advancing private land conservation in Idaho. Ms. Sayer also spent more than two decades working on policy matters with Idaho Congressman Mike Simpson and Idaho United States Senator Mike Crapo, with an emphasis on natural resource issues.



"Existing and new relationships formed over the past 10 years of the project have helped the Idaho Board members listen to and consider a broad variety of locally-based concerns, and in turn, address those concerns with the company. Project safety, water quality, and potential economic impacts are a few of the top issues that the Idaho Board has been able to advocate for throughout the planning and permitting processes."

- SCOTTY DAVENPORT, CHAIRMAN OF THE BOARD

SOCIAL

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UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

This section aligns with the following goals:

 <p>3 GOOD HEALTH AND WELL-BEING</p>	 <p>4 QUALITY EDUCATION</p>	 <p>5 GENDER EQUALITY</p>	 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	 <p>10 REDUCED INEQUALITIES</p>	 <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	 <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	 <p>17 PARTNERSHIPS FOR THE GOALS</p>
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WORKING TOGETHER FOR A SAFER IDAHO

Keeping employees and community members safe is imperative to Perpetua Resources. The Company cares that everyone makes it home each day to their family and friends. Perpetua Resources has an entrenched environmental, health and safety culture that reinforces its team to operate in a safe and neighborly manner and holds them to the highest of standards. As the Project moves forward and new partners are brought in to work with Perpetua, they will also be expected to participate and build the same culture and high standards of safety.

Members of the Perpetua Resources team logged 1,834 hours of safety training over the last year. The Company holds daily and weekly safety briefings with its team. However, they recognize they also need the eyes and ears of Idahoans to keep everyone safe.

In 2022, the Company launched a new community-based safety initiative, encouraging the public to alert Perpetua of any safety concerns or applaud team members' courteous and safe actions by emailing safety@perpetua.us

The inbox is monitored daily and every concern is investigated.

Perpetua knows safety is not something that happens by chance. By building in more stakeholder accountability, Perpetua hopes to continue advancing its culture of safety.

2022 SOCIAL HIGHLIGHTS

COMMUNITY

228 TOURS
of Stibnite

114 Community Presentations & project updates

12 Office Hours held

12 Stibnite Advisory Council meetings

ECONOMIC SUSTAINABILITY

\$12M TOTAL
Idaho spending

\$471,000 total community contributions

\$10,000 in community scholarships

\$41,000 in STEM and education support

140 hours of education outreach

1,064 volunteer hours

400 hats, gloves, and warm clothes to local students

\$20,000 to help fund a regional housing study

30 full-time employees

83% of employees based in Idaho with **30%** in Valley County | **17%** of employees based outside of Idaho

~\$4.5 million total compensation of Perpetua workforce | **~\$3.3 million** total compensation of Idaho workforce

PEOPLE, HEALTH & SAFETY

100% SAFE
fuel hauls since 2009 (214 total)

85 months with no Lost Time Incidents and **130 months** with no reportable spills

Collectively employees logged **over 1,834 health and safety training hours** in 2022

100% employee participation in environmental, occupational health & safety awareness and directed job task specific trainings

67% women executive management and **43% women** workforce

COMMUNITY ENGAGEMENT

EM-MM-210B.1

LISTENING TO COMMUNITY FEEDBACK

Responsible mining requires listening and responding. Perpetua Resources prides itself on having strong working relationships with many of the people who live closest to the site to ensure transparency and accountability through strong communication and public engagement.

NUMBER OF COMMUNITY ENGAGEMENT HOURS

2017	1,794	2018	3,053
2019	2,592	2020	1,424
2021	1,269	2022	1,064

14,091
(since 2015)

IN 2022:

1,064

HOURS OF
COMMUNITY
ENGAGEMENT

28

SITE TOURS

12

COMMUNITY
OFFICE HOURS

6

WEBINARS

12

STIBNITE
ADVISORY
COUNCIL
MEETINGS

114

COMMUNITY
MEETINGS &
PRESENTATIONS

THOUSANDS OF COMMENTS ON THE STIBNITE GOLD PROJECT

In 2022, the U.S. Forest Service released its Supplemental Draft Environmental Impact Statement (SDEIS) on the Stibnite Gold Project. During the 75-day comment period, more than 19,000 people took the time to submit feedback on the Project.

The SDEIS evaluated the improvements Perpetua Resources made to its mining plan following the 2020 Draft Environmental Impact Statement comment period. The U.S. Forest Service identified the Company's updated plan, officially known as the Modified Mine Plan, as the Preferred Alternative.

The Modified Mine Plan was developed to address concerns raised by stakeholders during the 2020 comment period. Perpetua Resources identified ways to eliminate long-term water treatment, reduce water temperatures on site, increase the amount of habitat available to fish, and make the overall Project footprint smaller.

More than 83 percent of the comments received during the SDEIS were in support of the Stibnite Gold Project. The comment period marks a major milestone in the permitting process and moves the Company one step closer to a Record of Decision on the Project.



RESPONDING TO FEEDBACK & COMMUNITY NEEDS

Responsible mining requires listening and responding. Perpetua Resources understands this extends to issues beyond mining, which is why the Company is actively engaged in its community and works hard to be part of the solution when it comes to regional issues. Here are a few highlights of Company efforts over the last year.

TAILINGS STORAGE FACILITY

After reviewing comments on the 2020 Draft Environmental Impact Statement, it was clear community members wanted to better understand the design of the tailings storage facility and verify its safety and effectiveness. This sentiment was echoed by the Stibnite Advisory Council.

Perpetua Resources hired an independent, third-party contractor to audit the design in 2022.

Bryan Ulrich, a highly respected engineer and tailings specialist with more than 36 years of experience in the mining industry, spent extensive time reviewing Perpetua Resources' proposed tailings storage facility. Ulrich shared his findings with the Company and members of the Stibnite Advisory Council (SAC), taking time to walk through his analysis and answer questions. Ulrich reported Perpetua's tailings storage facility was the most robust design he has come across in his career and believes it will be a safe and protective facility.



"Having an independent report provided us with valuable information and helped to validate the safety of Perpetua Resources' designed tailings storage facility. Now, we can talk to our community members with confidence and speak to some of the concerns they raised in comments to the U.S. Forest Service."

– Bob Crump, Stibnite Advisory Council

SAC was formed in 2018 to give eight of the communities closest to the Project site a seat at the table and a direct line of communication with Perpetua Resources.

HOUSING STUDY

Affordable housing is a concern for Valley County residents. Understanding this, Perpetua Resources partnered with the West Central Mountains Economic Development Council (WCMEDC) to help develop and fund a regional housing study. The goal of the study is to identify how many housing units are currently needed and determine what future demand will look like in 5 and 10 years. The study, which is set to take place in 2023, will also review regional infrastructure capabilities, such as sewer and water systems, and City and County code requirements to understand potential deterrents to development. By supporting this study, Perpetua Resources hopes it can help communities in the region better prepare for future growth, especially as it relates to the Stibnite Gold Project.



"Perpetua Resources' donation helps us start the much-needed work of acquiring vital baseline data to address the region's workforce housing needs. The last assessment of this kind was conducted in 2005. Obviously, a lot has changed since then, and we appreciate Perpetua Resources being a part of helping us find solutions to move our region forward."

– Dylan Martin, WCMEDC Board President

CASCADE CULTURAL ARTS CENTER

Perpetua Resources is proud to be a major sponsor of the Cascade Cultural Arts Center's afterschool program, which provides students with access to free, high-quality activities. The program is designed to support students' social, emotional, and cognitive development to enhance students' learning and reduce risky behaviors. The Cascade Cultural Arts Center also provides year-round art, S.T.E.M, music, and cultural programs for all members of the community.



"Without the support of Perpetua, we would not be able to provide the enriched, in-depth programs we offer our students."

– Shauna Arnold, Director of the Cascade Cultural Arts Center

STIBNITE ADVISORY COUNCIL COMMUNITY NEEDS ASSESSMENT

The Stibnite Advisory Council conducted an [assessment](#) at the beginning of 2022 to identify each community’s potential areas of concern related to the Stibnite Gold Project. The information was categorized and prioritized on the regional level.

Three clear themes emerged.

- 1. First Responder Readiness:** Communities want their first responders to be prepared. This means understanding Perpetua’s emergency plans and having access to hazardous materials and safety training, as well as the necessary equipment to be able to respond in a timely fashion if necessary.
- 2. Employee Transportation:** Cities throughout the region want to identify carpool or bussing opportunities for future Perpetua Resources employees.
- 3. Clear Communication:** First responders want to develop clear communication plans with Perpetua Resources around the transportation of hazardous materials to the site. Agencies want to know what is being transported, how much, and when. They also want to ensure they are provided with adequate resources to respond if an accident were to occur.

The Council shared this information with Perpetua Resources so the Company could begin working directly with communities to address their concerns and develop solutions. Discussions around future training opportunities and emergency transportation are officially underway. Perpetua Resources is also supporting a pilot bus program this summer in partnership with St. Luke’s and the City of New Meadows. The program will provide transportation from New Meadows to McCall two days per week during the summer of 2023.



“New Meadows does not have a grocery store, laundry facilities, or medical service. Our community relies on the offerings of the McCall area. The pilot transit program between New Meadows and McCall is the crucial first step in providing a much-needed transportation option for residents and businesses in New Meadows and McCall.”

– Mayor Julie Good, **New Meadows**

CITIZENS WATER MONITORING

The Stibnite Advisory Council continued its Independent Water Monitoring Program for the second year in a row to provide more transparency to the water monitoring surrounding the Stibnite Gold Project and assurances that the Company is following sound agency-approved sampling procedures during its collection activities. This year, the Stibnite Advisory Council added another layer of oversight by sending a Stibnite Advisory Council representative to oversee the sampling sessions.

Ground and surface water samples were collected from ten different locations throughout the site and divided between Perpetua Resources and the Idaho Water Resources Research Institute of the University of Idaho, the independent entity hired by SAC, for analysis. The results showed testing between the two labs was consistent.

The program is rooted in science and provides continued oversight, both of which are essential parts of being a responsible mining company.



“We launched the Independent Water Monitoring Program in response to our neighbors’ requests to bring more transparency to water quality conditions at Stibnite. Now, we all have access to tools to verify the information Perpetua Resources has been sharing. I am grateful for the Company’s willingness to work alongside the Stibnite Advisory Council and make this program possible.”

– Bob Crump, **Riggins Stibnite Advisory Council member**



STAKEHOLDER ENGAGEMENT

Perpetua Resources believes effective corporate governance includes year-round engagement with its shareholders and other stakeholders. The Company regularly meets with stakeholders, hosts monthly office hours, and provides formal avenues for discussion through the Stibnite Advisory Council. In fact, in the last

eight years, Perpetua hosted over 1,133 community meetings and engagements.

Below is a summary of key stakeholder groups, general issues of concern, and the manner in which Perpetua engages with each group and highlights of 2022 engagements.

Stakeholders	General issues of concern	Engagement processes	Highlights of 2022 engagements
Shareholders	Share price performance, financial results, permitting progress and results, corporate governance, risk management, and ESG performance.	Annual and quarterly financial reports, regulatory filings, annual general and special meetings, investor conferences and events, webinars, website, phone calls, emails, mailings and press releases.	Several investor conferences, site tours for investors, Annual General Meeting, investor webinars including an ESG specific webinar, and more.
Community Members	Employment opportunities, health and safety, care for wildlife habitat and water, community investments, and scholarship programs.	Stibnite Advisory Council, Office Hours, community events, and site tours.	12 meetings with the Stibnite Advisory Council, 114 community meetings and Project presentations, 12 open office hours, 28 tours, and continued social media. Launched our “See Something, Say Something” program to take in community feedback on safety performance. The U.S. Forest Service launched a 75-day comment period on the Supplemental Draft EIS, in total nearly 19,000 individuals and entities wrote in.
Employees	Health and safety, Company strategy, diversity and inclusion, training programs, advancement opportunities, wages and benefits.	Employee policy handbook, employee assistance program, safety and other training programs, employee surveys, performance feedback, and regular weekly meetings with executive leadership.	Continued weekly meetings for all employees and executive leadership. Increased employee safety training hours by 14% compared to the prior year..
Municipalities & Local Organizations	Potential impacts of the Project on community socioeconomics, infrastructure, recreational resources and emergency services. Compliance with applicable county and city laws community relations. Continued efforts to find solutions.	Participate in and support local events. Communicate continued compliance with applicable laws through continued interaction with community representatives. Maintain communication pathways & encourage participation.	24 meetings with local cities, counties and civic organizations to update them on the Project and the release of the Supplemental Draft EIS. The Stibnite Advisory Council provided a community needs evaluation to inform Perpetua Resources’ community impacts and benefits mitigation planning.
Regulators & Governmental entities (state & federal)	Obtain all necessary approvals and permits and demonstrate compliance with applicable laws and regulation. Demonstrate all appropriate environmental monitoring and reporting programs.	Communicate with relevant agencies to understand permitting process. Conduct regular technical presentations and reviews with agencies to communicate Project objectives and environmental goals. Demonstrating continued Project compliance.	Held weekly meetings with lead agency (United States Forest Service) to track progress. USFS published the SDEIS and identified Perpetua’s proposal as the Preferred Alternative. Received the Air Permit to Construct after 3 years of engagement with the Idaho Department of Environmental Quality and stakeholders. Received up-to \$24.8M from the U.S. Department of Defense to continue through the NEPA process and advance construction readiness.
Non-governmental entities (NGOs)	Impacts to environment and communities, particularly rivers, fish, habitat and at-risk species, such as salmon.	Regular outreach to discuss the Project and gather feedback with environmental organizations in Idaho.	Met with interested NGO groups to discuss modification to the Project design and tour the project location.
Tribal/Indigenous Communities	Treaty rights, fish habitat, and downstream water quality.	Participation in comment periods, regular meetings, and mediation.	Continued outreach to tribal governments. Formal mediation continued. Supported Salmon transplant at the Project site.
Business partners, vendors and suppliers	Economic opportunities, workforce readiness, and a clean supply chain.	Regular meetings, community and business events and personal communications.	Ongoing workforce survey, vendor and supplier intake forms, and regular in-person engagement.

ECONOMIC SUSTAINABILITY & DEVELOPMENT

EM-MM-210B.1

LOCAL ECONOMIC CONTRIBUTIONS

Perpetua Resources has carefully designed its Stibnite Gold Project to benefit the local community. Not only will the Project finance much-needed environmental restoration, it will also inject millions of dollars into Idaho's economy, bring hundreds of jobs to rural Idaho, and contribute significant local and state tax revenue.

In 2022, Perpetua Resources provided full-time employment to **30** individuals and purchased goods and or services from **138** Idaho vendors. The Company provided **\$3.9 million** USD in salaries and benefits to its Idaho workforce and spent a total of **\$12.4 million** USD in the state over the past year. Perpetua's positive economic impact will continue to grow as the Project moves forward.

MEET PERPETUA'S VENDORS

Early on, Perpetua committed to hiring, contracting, and purchasing supplies and services locally, whenever possible. This commitment helps ensure economic benefits are felt locally and the Company's staff and contractors are representative of the values, identities, experiences, and needs of the region.



"Every dealing with Perpetua is executed just as it is presented. They are very honest, fair, and trustworthy clients. Their employees are upstanding, professional, and a pleasure to work with. Perpetua Resources has created positive momentum in our community and that has contributed to the success of many local businesses, including Granite Excavation."

– Josh Davis, owner Granite Excavation

Granite Excavation has provided construction services and road maintenance support to Perpetua Resources for over 10 years.



"We have been working with Perpetua Resources for 12 years now. They have become a big part of our core business we count on. Clients like Perpetua greatly improve our sales and cash flow, so we can continue to expand, upgrade our equipment and support our employees. I am excited for the Stibnite Gold Project to take off, as it will be a huge boost for our business along with many others in Valley County."

– Jim Hinson, owner Rocky Mountain Signs

Over the last 12 years, Perpetua Resources has consistently turned to Rocky Mountain Signs for its printing, sign and graphic needs.



"Perpetua always looks to utilize local resources on projects both big and small. They provide safety training to both their employees and contractors, ensuring the safest possible work environment. We look forward to continuing a successful working relationship, whether it's blading the road or delivering equipment to the mine. We will do whatever we can to help, and we can't thank Perpetua enough for supporting local businesses."

– Wade Olson, owner OK Gravel Works

Perpetua Resources has turned to OK Gravel works for help with road maintenance, excavation services and construction for the past 12 years.

SOCIAL CONTRIBUTIONS & INVESTMENTS

Perpetua wants the Stibnite Gold Project to be a driver for good. One of the most tangible ways to make this happen is through investing in the communities closest to the Project. Whenever possible, Perpetua supports charitable organizations, contributes to community projects, schools and hospitals, and purchases goods locally to keep the economic impact close to home.

Measuring Local Impact	2019	2020	2021	2022	TOTAL
TOTAL COMMUNITY GIVING	\$1,406,000	\$303,100	\$373,300	\$471,657	\$2,554,057
Charitable Contributions	\$59,200	\$49,000	\$49,900	\$39,700	\$197,800
Sponsorships of Community Organizations and Events <i>(Perpetua Resources began tracking this specific category in 2019. All previous years were compiled giving from 2014-2018)</i>	\$104,300	\$75,400	\$63,800	\$30,910	\$274,410
Sustainability Programs <i>(Perpetua Resources began tracking this specific category in 2019. All previous years were compiled into a comprehensive community giving from 2014-2018)</i>	\$1,178,000	\$137,900	\$221,500	\$358,500	\$1,895,900
Education Outreach and STEM Programming <i>(Perpetua Resources began tracking this specific category in 2019. All previous years were compiled into a comprehensive community giving from 2014-2018)</i>	\$64,700	\$40,700	\$38,000	\$42,400	\$185,800
Stibnite Advisory Council Independent Water Monitoring Program	Program started in 2021		\$89,000	\$90,000	\$179,000
Scholarships for Local Students	\$11,000	\$10,600	\$12,000	\$10,300	\$43,900
Contributions to Stibnite Foundation	\$200,000	\$100,000	N/A*	N/A*	\$300,000

*See page 24 for additional information on the Stibnite Foundation.

A big part of being a good corporate citizen means giving back to the community. Last year, Perpetua was honored to support a variety of community initiatives.

UNLOCKING YOUTH’S POTENTIAL | \$6,000

The Company supported Valley and Adams County youth 4-H programming.

PLANNING FOR THE FUTURE | \$5,000

Perpetua Resources supported the City of Cascade in updating its comprehensive plan.

UNDERSTANDING THE ECONOMIC LANDSCAPE | \$2,500

The Company was proud to support the return of the West Central Mountains Economic Development Council’s economic summit to provide business owners information on the current financial landscape.

INVESTING IN IDAHO’S NEXT GENERATION | \$6,000

Perpetua Resources continued its valued partnership with the Idaho STEM Action Center, focusing on growth and development opportunities for Idaho students and educators.

WARM CLOTHES FOR KIDS IN NEED | \$7,800

Perpetua Resources donated more than 400 coats, hats, gloves, snowpants, boots, and other warm winter clothing items to local schools.

RECREATIONAL ACCESS FOR LOCAL KIDS | \$5,000

The Company supported the Shred Shed and Spring Break Ski Week, so children throughout Valley County could have access to the ski and snowboard equipment and lessons needed to enjoy Tamarack Resort.





STIBNITE FOUNDATION

AN ENDOWMENT FOR THE FUTURE

Perpetua wants the Stibnite Gold Project to bring economic benefits to the region that will last beyond the life of the Project. As a part of the 2018 Community Agreement, Perpetua and eight local communities founded the Stibnite Foundation as a charitable non-profit. Run by a board of representatives from across the region, the foundation is currently funded by Perpetua Resources based on development milestones and will shift to annual profit-sharing contributions once in production.

To-date, Perpetua Resources has contributed \$300,000 to the foundation along with a contribution of 150,000 shares in the Company and the foundation board has allocated more than \$158,000 to support local projects. In 2022, the Stibnite Foundation awarded \$46,200 in grants to 11 organizations across the region and another \$12,000 to regional fire departments and emergency medical services.

Stibnite Foundation	2019	2020	2021	2022
Contribution in Shares to the Stibnite Foundation	150,000 shares <i>(Represents initial 1.5M shares after the 2021 10:1 consolidation)</i>	0	0	0
Contribution in Cash from Perpetua to Stibnite Foundation	\$200,000	\$100,000	\$0	\$0
Stibnite Foundation community giving	Stibnite Foundation was officially established in 2019	\$64,000	\$36,000	\$58,200
Number of Nonprofit Organizations Receiving Funds	Stibnite Foundation was officially established in 2019	14	10	17
Number of Foundation Meetings	12	11	11	11

2022 STIBNITE FOUNDATION GRANT RECIPIENTS:

City of Cascade:

Grants will be used to install a fitness pod for the community at the Sports Park.

Cascade School District:

Funds will be used to help support the development of positive peer culture within the school district.

Cascade Food Pantry and Pride of the Pantry Plots:

The grant will help with the purchase of soil amendments and new weed barrier fencing for the community garden.

City of Riggins:

Funds will be used to repaint the exterior of its ambulance station.

Council Elementary School:

The money will be used to construct a greenhouse for the elementary school and greater community.

Idaho Trails Association:

The grant will fund several stewardship programs to help care for hiking trails across the West Central Mountains.

Meadows Valley Public Library:

The library will be able to install a new sign by the highway to increase visibility.

McCall Youth Hockey Association:

The grant will allow the McCall Youth Hockey Association to purchase equipment and expand its accessible hockey program.

Payette Lakes Community Association:

The grant will help fund field trips for students participating in afterschool programs.

Snowdon Wildlife Sanctuary, Inc:

The money will help bring the Wild about Wildlife! program into elementary schools throughout the region.

PEOPLE, HEALTH, SAFETY & WELLBEING

EM-MM-320A.1, EM-MM-160A.1.

HAZARD IDENTIFICATION & MITIGATION

Perpetua Resources follows Occupational Safety and Health Administration (OSHA) standards and reporting through its Project specific Environmental, Occupational, Health and Safety (EOH&S) Integrated Management System. The Company is not yet regulated by Mine Safety and Health Administration (MSHA) standards, because the Project is not currently in operations, but will be in the future.

All employees and contractors are trained in hazard identification and risk assessment per OSHA regulations, and many Perpetua employees take an additional 20+ courses to ensure they have the knowledge needed to safely perform their job.

Perpetua has implemented procedures for the identification, assessment and control of Environmental, Occupational Health and Safety (EOH&S) hazards. Risks and consequences are reviewed and given likelihood scores for each risk identified in the EOH&S Risk Assessment Matrix of the Hazards Register. Controls related to these risks have been implemented and are updated as changes to processes, conditions, and other factors warrant.

2022 HEALTH & SAFETY MEASURES

0	OSHA Lost Time Incidents
0	Fatalities
1,834	Employee Health & Safety Training Hours
546	Contractor Health & Safety Training Hours



HEALTH & SAFETY TRAINING

As the Stibnite Gold Project gets closer to construction and operations, safety remains paramount and is essential to our business. Perpetua is getting ready for operations through continuous improvement to its safety culture and enhancing resources available to staff and contractors and sharing these resources with surrounding communities.

In 2022, employees logged **1,834** hours of training and contractors completed **546** hours. In fact, employees logged 14% more training hours year over year and contractor training increased by 245% with more workers on site assisting with early cleanup activities.

SHARING TRAINING & RESOURCES

Perpetua Resources is committed to growing joint training opportunities with local first responders and public health and safety officials. Perpetua reached out to all Valley County Fire Departments to provide no-cost joint HAZWOPER training and practical exercises, and in 2022 held an onsite Joint HAZWOPER training class with individuals from the Cascade and Yellow Pine fire departments.

In 2022, Perpetua Resources and the Yellow Pine Fire Department held a joint vehicle rollover practice drill alongside Stibnite Road. Company employees and Yellow Pine volunteer firefighters practiced how they would respond to a single car rollover. After the group walked through how to extricate a driver, they practiced transporting them up the hill and onto the road safely using a Stokes Litter. While Perpetua Resources does all it can to avoid serious accidents from occurring along Stibnite Road, joint trainings like this will help everyone be ready to jump into action, if ever needed.



“Training with the team from Stibnite went great. We are excited to be able to work with other agencies to help prepare for the future and protect the safety of Yellow Pine and Stibnite.”

– Tim Rogers, Yellow Pine Fire Chief

COMMUNITY HEALTH & SAFETY

IFC STANDARD 4

When work to improve water quality started at Stibnite in the summer of 2022, Perpetua Resources significantly increased training for its team members and contractors.

Despite the additional training, when work first started, local residents expressed concerns over how the contractors were driving on the roadways. Perpetua Resources responded immediately. The Company halted all cleanup work in order to host an all-hands safety meeting to review its policies and outline its expectations on creating and maintaining a safe environment for everyone in the area.

Following the meeting, the contractor implemented new policies for its employees, including requiring pilot vehicles for all heavy equipment and trailers and not driving more than 7 miles per hour within the Village of Yellow Pine. And safety meetings were held every day before any work started.

After Perpetua and its contractors took those extra steps, there were no more complaints from community members and the cleanup work continued without any lost time incidents.



LABOR PRACTICES

EM-MM-000.B

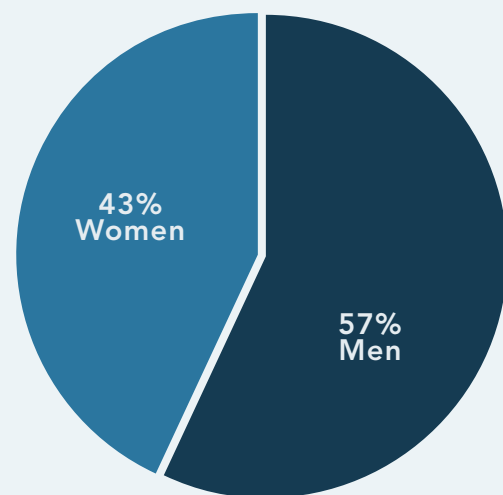
DIVERSITY & INCLUSION

Perpetua Resources knows its team is better when it has a diverse set of experiences, expertise, and identities represented. Relative to industry norms, the Company's senior management and staff reflect greater gender diversity. As of December 31, 2022, **67% of executive management (including the CEO) and 43% of Perpetua's workforce were female.** Perpetua Resources remains committed to promoting a diverse workforce.

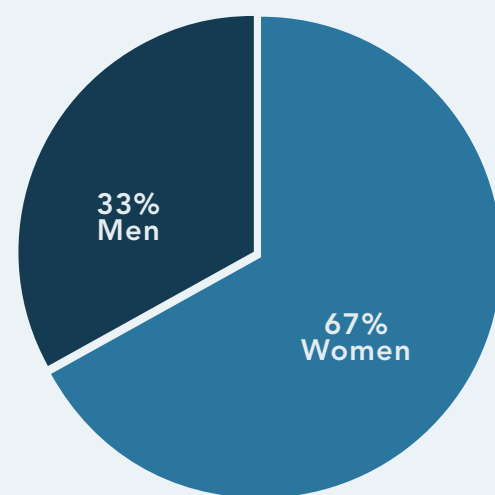


"I am proud to work at a Company that defies statistics and challenges the status quo of the mining industry. Historically, mining has been a male-dominated industry, but we are charting a new course. Women have a prominent seat at the table at Perpetua Resources. I hope our team can help break stereotypes and usher in a new generation of modern miners."

– Ariana Fernandez, Environmental Data Analyst



TOTAL STAFF

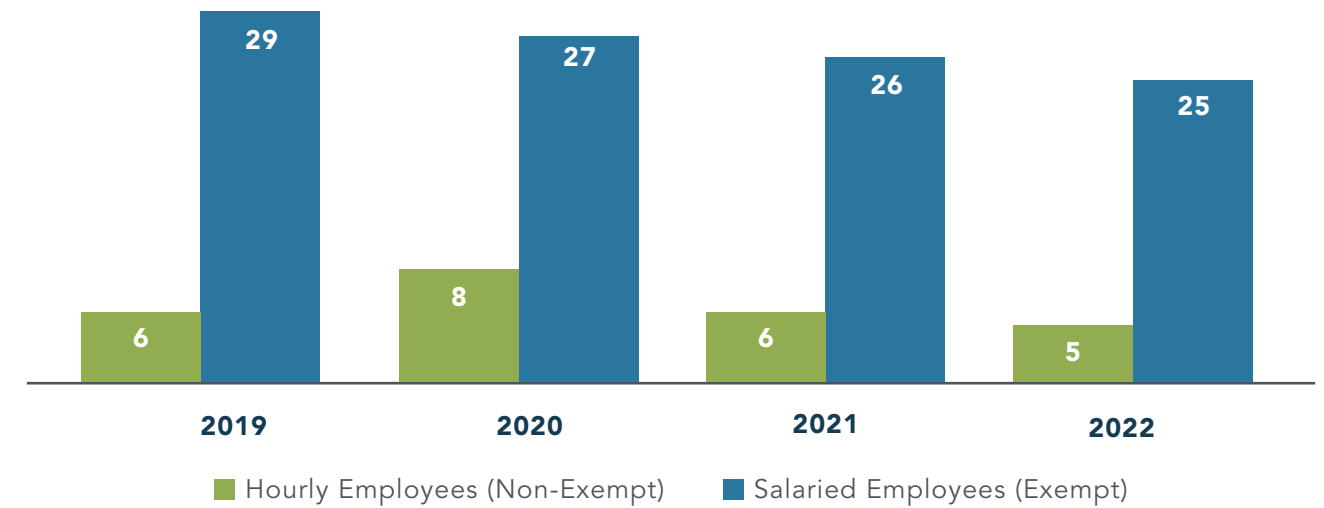


EXECUTIVE MANAGEMENT

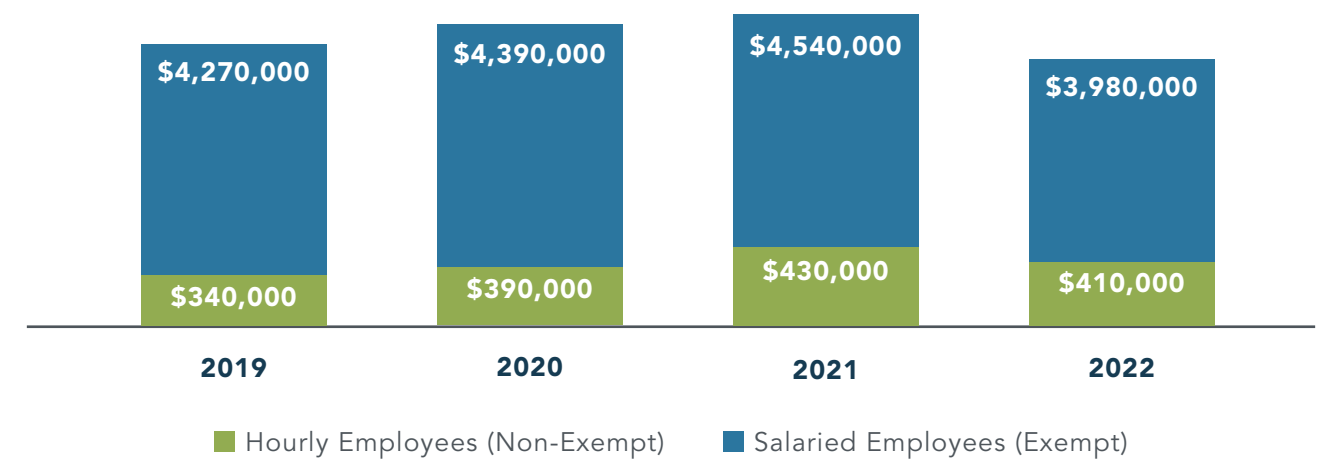
FAIR LABOR PRACTICES

Once in operations, all suppliers of goods and services to the Stibnite Gold Project will be required to uphold a Supplier Code of Ethics, including respect for fundamental human rights and labor rights for all employees, anti-discrimination employment policies and the prohibition of forced or compulsory and child labor.

NUMBER OF EMPLOYEES



TOTAL CASH COMPENSATION



HUMAN RIGHTS

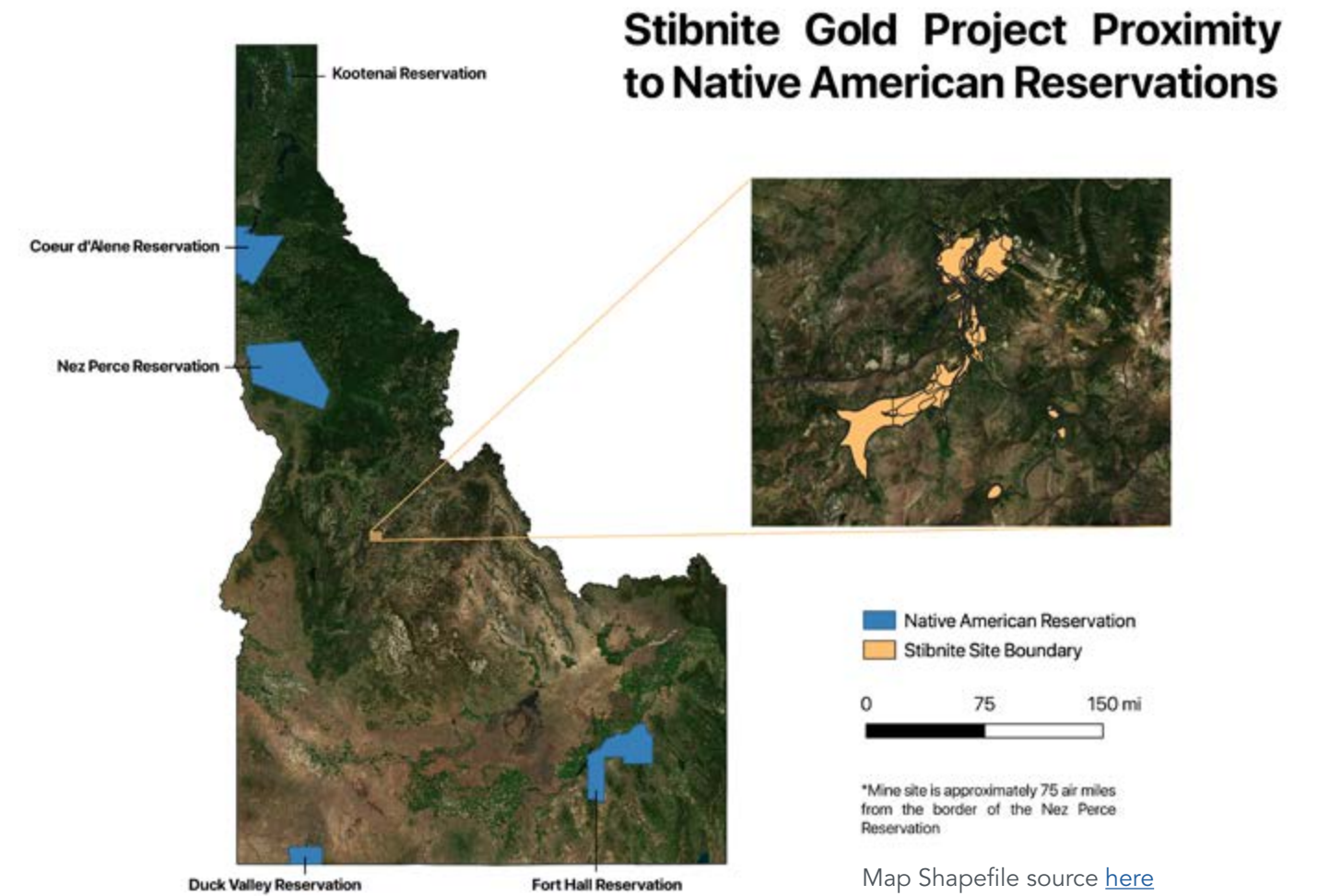
EM-MM-210A.3, EM-MM-210A.1, EM-MM-210A.2, & EM-MM-210B.1, IFC STANDARD 8.

RIGHTS OF INDIGENOUS PEOPLES & PROTECTION OF CULTURAL HERITAGE

In conjunction with the National Environmental Policy Act (NEPA), the U.S. Forest Service has led ongoing Government-to-Government Consultation and included ethnographic studies from three tribes into the analysis of the potential Project impacts on cultural heritage. Perpetua Resources offered financial assistance for tribes to update their ethnographic studies when it made improvements to its mining plan.

Additionally, the Company has regularly sought out opportunities with tribal governments to listen to areas of concern, work towards solutions, and create a pathway for open communication. Perpetua Resources has been in a formal mediation with the Nez Perce Tribe since February 2021 to attempt to resolve perspectives on the application of the Clean Water Act on current site conditions.

Perpetua knows by listening to tribal perspectives, providing an ongoing seat at the table, incorporating their knowledge, and partnering on shared goals, the Stibnite Gold Project can improve the water, fish, wildlife, and other resources at Stibnite for the benefit of all Idahoans.






ENVIRONMENT

- 30 [2022 HIGHLIGHTS](#)
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UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

This section aligns with the following goals:

6 CLEAN WATER AND SANITATION 	7 AFFORDABLE AND CLEAN ENERGY 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	13 CLIMATE ACTION 	15 LIFE ON LAND 
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2022 ENVIRONMENT HIGHLIGHTS

AIR, WATER & HABITAT

\$149,000+
for dust abatement
since 2014

Began early cleanup actions to address legacy water contamination in **July 2022**

\$830,000+ for dust abatement and road maintenance since 2014

Received Air Permit to Construct designed to **ensure protection of public health and the environment**

WASTE

5,380 POUNDS
recycled since 2014

96 pounds recycled in 2022

Independent third-party Tailings Storage Facility review completed

CLIMATE

25% OF SITE
operations powered
by solar in 2022

Published second GHG emissions audit in 2022



EARLY WATER QUALITY CLEANUP BEGAN

Perpetua Resources spent the summer and early fall of 2022 working to improve water quality in the historic Stibnite Mining District. The work marks the start of a multi-year, multi-million-dollar investment by Perpetua designed to improve environmental conditions at site before operations begin.

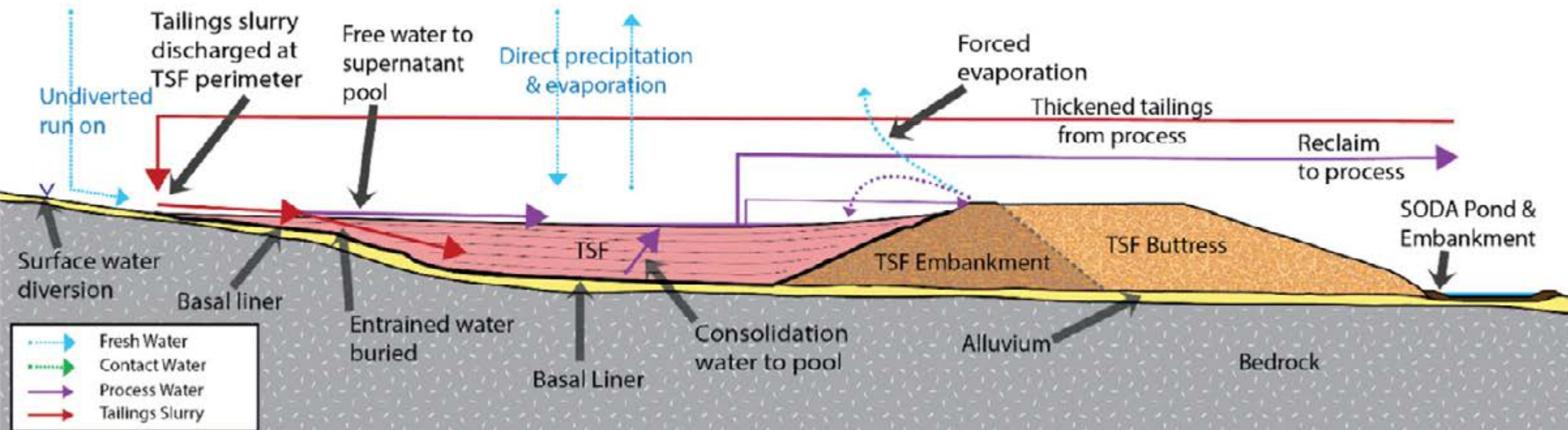
Water quality on site has been degrading for decades due to the millions of tons of unconstrained tailings and mine waste left behind by previous operators. Perpetua was granted permission to take voluntary action to address pressing water quality concerns through an agreement signed in 2021 between the Company, the Environmental Protection Agency, and the United States Forest Service.

WORK ON SITE IN 2022 INCLUDED:

LINING & IMPROVING STREAMS. Lining and improving the existing Hennessy Creek diversion channel around the Northwest Bradley Waste Rock Dumps to prevent leakage into the dumps and the resulting uptake of metals. Creating a lined diversion for surface water that previously contacted with legacy contamination around Smelter Flats, the former mill, and smelter site used by past operators.

REMOVING WASTE. Removing the Defense Minerals Exploration Administration legacy adit waste rock dump from within and along a tributary to the East Fork of the South Fork of the Salmon River and restoring the original streamflow course.

The 2023 environmental improvements are expected to include the relocation of over 300,000 tons of historic tailings and mine waste away from the East Fork of the South Fork of the Salmon River.



WATER & AIR QUALITY

The proposed mine site is located in the Salmon River watershed, at the headwaters of the East Fork of the South Fork of the Salmon River. Though it is within 100 miles of areas identified as medium-high water risk, the Stibnite site itself is located in a low-water-risk area per the World Resources Institute Aqueduct Water Risk Atlas.

PERPETUA OBTAINS AIR QUALITY PERMIT

EM-MM-120A.1

After three years of working with regulators and stakeholders to study and reduce air quality impacts, Perpetua Resources received an Air Quality Permit to Construct from the Idaho Department of Environmental Quality (IDEQ) in June of 2022. This was the first state issued permit granted for the Stibnite Gold Project and marked a significant milestone.

The Project demonstrated compliance with the Air Quality Permit to Construct regulations to the satisfaction of IDEQ because projected emissions will not cause or contribute to a violation of any ambient air quality standard for criteria pollutants, like particulate matter from road dust, or other regulated air pollutants like arsenic.

The permit issued by IDEQ for the Project will protect public health and the environment. Emissions from operations will be subject to enforceable emissions limits. The permit requires monitoring and emissions controls to ensure those protective limits are achieved.

DUST ABATEMENT

Perpetua Resources is mindful of keeping dust down, which, at the Project site, can have naturally high levels of arsenic, and other pollutants, out of the air, rivers, and streams. In order to prevent dust from effecting air and water quality, dust abatement is, and will continue to be, a high priority across the site.

Perpetua has invested over **\$149,000** in reducing dust on roads to the Project location and on site since 2014, including over **\$31,000** in 2022. Almost every spring, Perpetua grades the public roads leading to the Project to keep excess sediment from entering the watershed and to make the roads safer to travel on.

As the Project progresses, Perpetua will be required by state air permits to monitor fugitive dust and implement best management practices to control and mitigate potential dust generation.

WATER MANAGEMENT, DRAWS & CONSUMPTION

EM-MM-140A.1 AND EM-MM-140A.2

Since the Stibnite Gold Project is not yet in production, water use on site is minimal. Please review [Appendix B](#) for relevant SASB disclosures.



WASTE & TAILINGS MANAGEMENT

Perpetua Resources is not currently in operations, therefore it has not produced any mineral waste or tailings. At this point, the Company is not operating a tailings storage facility.

WASTE & HAZARDOUS MATERIALS MANAGEMENT

EM-MM-150A.4 AND EM-MM-150A.10

In preparation for mining to begin on site, Perpetua has created a hazardous waste management plan that will be followed during operations.

Currently, Perpetua tracks non-mineral waste production and recycling rates. The Company supports waste programs that support reuse, recycling, and recovery of hazardous and non-hazardous materials such as scrap metal, batteries, antifreeze, used oil, and paint/solvents. Based on daily waste generation estimates from the EPA and employee headcount in offices and on-site, it is estimated that Perpetua generated 2.5 metric tons (~5,500 lbs) of waste in 2022. Since 2014, the Company has successfully diverted 5,380 pounds of recyclable waste from the landfill.

TAILINGS MANAGEMENT

EM-MM-150A.4 AND EM-MM-150A.10

The Project mine plan incorporates the cleanup and safe storage of legacy materials along with all tailings generated by Project operations in the proposed Tailings Storage Facility (TSF) which is designed to a factor of safety of 5.9 and aligned with best practices and state and federal requirements. Idaho law only requires tailings storage facilities to meet a factor of safety of 1.5.

In 2022, Perpetua hired an independent contractor to audit its TSF design. The review concluded that the TSF meets or exceeds regulatory standards and will be a safe and protective facility.

CLIMATE CHANGE & ENERGY MANAGEMENT

IFC STANDARD 3

Perpetua Resources is mindful of its impact on the environment, surrounding communities, and the climate. The Company has built many climate resilience measures into its Project and is committed to:

1. Sourcing low-carbon, low-emissions hydroelectric energy through Idaho Power Company for project operations;
2. Providing antimony to Ambri for long-duration energy storage batteries, that could help power ~1 million American homes with solar on a daily cycle for 20 years –offsetting the GHG footprint of the Stibnite Gold Project;*
3. Annual auditing and disclosure of scope 1 & 2 GHG emissions;
4. Science-based carbon mitigation and offset opportunities in operations;
5. Revegetating legacy unreclaimed mine and wildfire-burned land by planting approximately 3,600 trees annually which sequesters carbon and moderates temperatures;
6. Implementation of the voluntary Wildlife Habitat Management Plan would result in considerable revegetation that would sequester carbon, reduce local air temperature, and improve local climate resiliency;
7. Mandating employee bussing/vanpooling for the majority of employees reduces trips and associated vehicle GHG contributions.

*See Forward Looking Statements on page 44.



SUPPORTING THE CLEAN ENERGY TRANSITION

Perpetua Resources is proud to support the clean energy future and be part of developing climate solutions through its partnership with large-scale battery maker Ambri Inc. The Company has committed a portion of the antimony production at Stibnite to support the commercialization of Ambri’s batteries*, which make it possible for power grids to rely more heavily on renewable energy sources.

Antimony from the Stibnite Gold Project could enable the production of batteries with over 13 gigawatt hours of clean energy storage capacity. That amount of storage could power approximately 1 million U.S. homes with solar energy over the targeted 20+ year lifespan of Ambri’s batteries.

In 2022, Xcel Energy selected Ambri as a partner to progress its commitment to deliver 100% carbon-free electricity by 2050. Xcel Energy plans to use the Solar Technology Acceleration Center in Colorado to demonstrate Ambri’s energy storage technology. Tech giant Microsoft also turned to Ambri to help with its clean energy goals as it moves away from diesel generation as a backup source for its data centers.

To keep up with growing demand, Ambri more than tripled its manufacturing capabilities by opening a new facility in Massachusetts. This provides the battery maker with even greater capacity to bring its products to commercial markets. Perpetua is proud to be a partner for a cleaner future.

**See Forward Looking Statements on page 44*



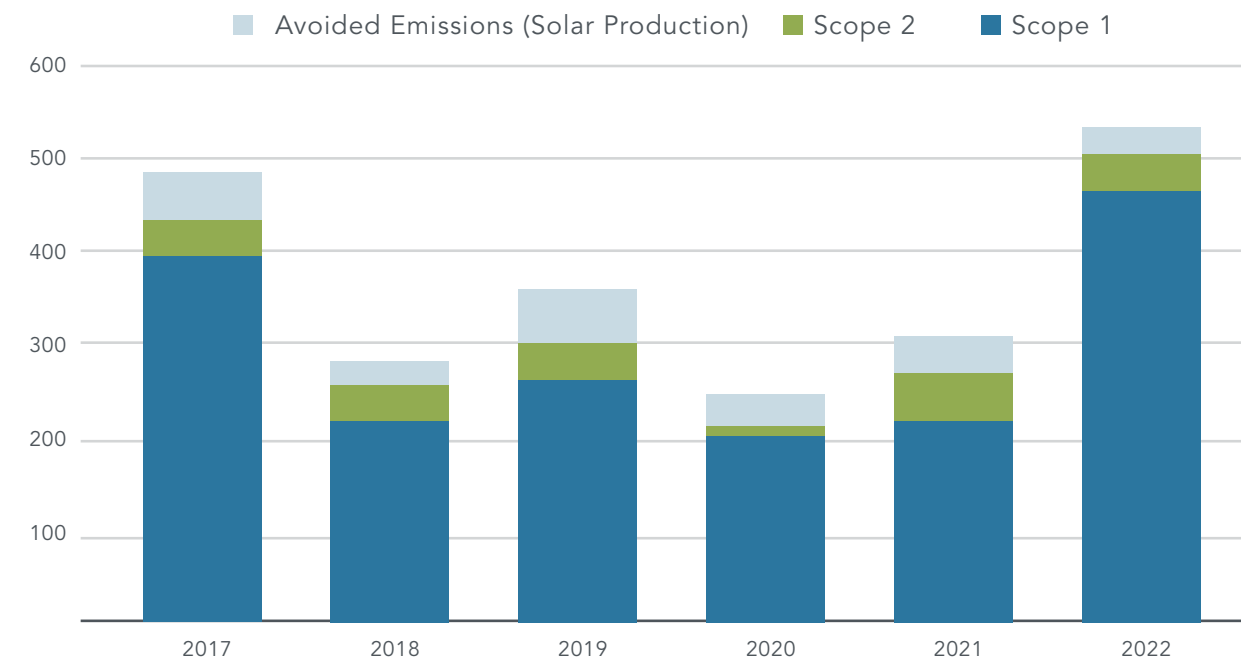
GREENHOUSE GAS (GHG) EMISSIONS

EM-MM-110A.1 AND EM-MM-110A.2

Perpetua has committed to third-party verified carbon accounting and mitigation. Scope 1 and 2 carbon emissions have been audited since 2017 and will continue to be accounted for while attempting to improve emission rates and identify opportunities for carbon emission offsets going forward. Once the final Project design is approved, more specific data on emissions will be made available.

The chart below illustrates the changes in Scope 1 and 2 emissions from 2017-2021. Also shown is avoided Scope 1 emissions due to partly generating power through solar panels rather than diesel generators on site.

GHG EMISSIONS YEAR-OVER-YEAR (MTC_{2e})



2022 Scope 1 GHG emissions increased due to early restoration activities at site in 2022.

HABITAT & BIODIVERSITY

EM-MM-160A.3, IFC STANDARD 6

Today, habitat and biodiversity are impacted by the environmental legacies left behind at Stibnite after over a century of mining activity.

Perpetua designed the Stibnite Gold Project to not only open fish access to miles of currently blocked critical stream habitat, but to also improve the overall stream habitat conditions. At the commencement of operations, the Project will allow fish to return to their native spawning grounds before mining begins by constructing a temporary 0.9-mile fish passageway. The 2022 Supplemental Draft Environmental Impact Statement concluded, the biggest benefit to Chinook salmon and steelhead will occur in Mine Year -1 when this feature is constructed because it will allow these species to voluntarily access habitat that has not been naturally accessible for decades (SDEIS 4.12.2:p.4-343). Through the life of the Project, the natural course of the East Fork of the South fork of the Salmon River (EFSFSR) will be restored with an anticipated **9%** uplift in habitat quality (functional units). Additionally, **20+ miles** of additional stream habitat will be accessible to migrating fish species, and water quality will be improved over existing conditions.

CRITICAL HABITAT

The EFSFSR and its tributaries are home to three fish species listed as “threatened” under the U.S. Endangered Species Act (ESA): Snake River spring/summer Chinook salmon, Snake River steelhead, and bull trout. The EFSFSR, including the stretch that runs through the Project site, is designated as a critical habitat under the ESA for Snake River spring/summer Chinook, bull trout, and steelhead.

The conditions of the river today are less than optimal, which is why Perpetua has designed the Stibnite Gold Project to restore the habitat and leave the area better for the fish and wildlife of the region.

IMPACT MITIGATION

Perpetua Resources is mindful of its future potential impacts to the environment and the team does all it can to reduce its footprint. This was evident when the U.S. Forest Service released its Supplemental Draft Environmental Impact Statement and identified Perpetua’s proposed plan as the agency’s Preferred Alternative. The agency’s analysis showed improvements Perpetua Resources made to its original mine plan would reduce environmental impacts, including:

- Decreased on-site disturbance footprint, a 13% reduction from 2016 design
- Reduced mined material by 10% (44 million tons)
- Eliminated waste rock storage areas (168 acres)
- Reduced volume of Hangar Flats pit by 70% and completely backfilled pit
- Added extra geosynthetic covers to protect long-term water quality
- Increased riparian vegetation and low flow channels to reduce water temperature
- Developed additional habitat feature to replace bull trout habitat
- Modified ore processing circuit to improve tailings chemistry
- Impact mitigation is engrained in the Company’s culture and it will continue to be top of mind as the Project moves forward

MINIMIZED DISTURBANCE

Perpetua was able to minimize the footprint of the Stibnite Gold Project by keeping Project infrastructure to previously disturbed areas whenever possible. As a result, 51% of the mine site footprint will occur on previously disturbed areas. Through additional refinement, Perpetua reduced its footprint by 13% from the original 2016 design. The total Project footprint is less than 1,900 acres.

Through our commitment to reduce our footprint, Perpetua has made a commitment to conduct its operations following dark skies best practices. The Company will light what it needs, when it needs it, with just the right amount of light. Today, there are only 12 lights on site, and most are operated via motion detection sensors. Details of Perpetua's Dark Skies plan can be found [here](#).

APPENDIX A:

SASB Disclosure Table

GHG Emissions: Scope 1 emissions were calculated based on total consumption of diesel, gasoline, and propane fuels. Total consumption is multiplied by the respective emissions factor for each fuel type (diesel: 10.2 kgCO₂/gallon; gasoline: 8.8 kgCO₂/gallon; propane: 61.7 kgCO₂/Btu), resulting in metric tons of CO₂ equivalent (MTCO₂e). Emissions factors are sourced from the [EPA Emissions Factors Hub](#)

Air Quality: Other air emissions were calculated based on total consumption of diesel, gasoline, and propane fuels. Total consumption is multiplied by the respective emissions factor for each fuel type, and for each air pollutant type, measured in lbs/ MMBtu (diesel: CO: 0.95, NO_x: 4.41, SO_x: 0.29, PM10: 0.31, VOCs: 0.36; gasoline: CO: 0.99, NO_x: 1.63, SO_x: 0.08, PM10: 0.1, VOCs: 3.03; propane: CO: 1.41, NO_x: 1.52, SO_x: 0.004, PM10: 0.05, VOCs: 0.91). Emissions factors are sourced from the [EPA's AP42 Air Pollutant Emissions Factors.](#)

Energy Management (Percentage Grid, Percentage Renewable): The percentage grid vs renewable energy was calculated based on Idaho Power's unique energy sources including hydroelectric, wind, solar sources, and other. The energy source mix for 2021 was 51% renewable and 49% non-renewable.

Water Management (Total freshwater consumed): Fresh water consumption estimates were calculated using employee headcount, working days, and an estimated 13 gallons/day/employee sourced from the [EPA's Energy Star Portfolio Manager.](#)

Waste and Hazardous Materials Management (Non-mineral waste): Non mineral waste was calculated based on employee headcount, working days, and an estimated 3.24 lbs of waste/person/day sourced from the [EPA.](#)

Biodiversity Impacts (Percentage of reserves near endangered species habitat): Proximity to endangered species habitats is defined as within 5km. All reserves at the Stibnite site are within 5km of the EFSFSR, which is designated as critical habitat under the ESA for Chinook, Steelhead and Bulltrout..

Security, Human Rights and Rights of Indigenous Peoples: Proximity to areas of conflict and indigenous lands is defined as within 5km. The Stibnite site is not within 5km of either areas.

Workforce Health and Safety (MSHA all incident rate): Perpetua Resources does not currently fall under MSHA regulations.

Workforce Health and Safety (Fatality rate, near miss frequency rate): Rates are calculated as (statistic count x 200,000) / total hours worked.

Topic	Details	2019	2020	2021	2022	Unit of Measure	SASB Code
Greenhouse Gas Emissions	Gross global Scope 1 emissions**	(a) 263.9 (b) 0	(a) 200.5 (b) 0	(a) 245.4 (b) 0	(a) 465.7 (b) 0	(a) Metric tons (t) CO ₂ -e (b) Percentage (%)	EM-MM-110a.1
Greenhouse Gas Emissions	Long-term and short-term strategy to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance **	N/A	2020 GHG Report	2021 GHG Report	2022 GHG Report	N/A	EM-MM-110a.2

Topic	Details	2019	2020	2021	2022	Unit of Measure	SASB Code
Air Quality	Air emissions of the following pollutants: (1) Carbon Monoxide (CO)**	1.6	1.2	1.3	2.8	Metric tons (t)	EM-MM-120a.1
Air Quality	(2) Nitrogen Oxide (NO _x) (excluding N ₂ O)**	6.6	5.0	5.0	11	Metric tons (t)	EM-MM-120a.1
Air Quality	(3) Sulfur Oxide (SO _x)	0.4	0.3	0.3	0.7	Metric tons (t)	EM-MM-120a.1
Air Quality	(4) Particulate matter (PM10)	0.5	0.3	0.3	0.8	Metric tons (t)	EM-MM-120a.1
Air Quality	(5) Mercury (Hg)	0	0	0	0	Metric tons (t)	EM-MM-120a.1
Air Quality	(6) Lead (Pb)	0	0	0	0	Metric tons (t)	EM-MM-120a.1
Air Quality	(7) Volatile organic compounds (VOCs)**	0.9	0.7	1.2	2.40	Metric tons (t)	EM-MM-120a.1
Energy Management	(1) Total energy consumed	435.8	101.5	475.8	331.4	Gigajoules (GJ)	EM-MM-130a.1
Energy Management	(2) Percentage grid electricity	92.5	80.5	95.7	95.4	Percentage (%)	EM-MM-130a.1
Energy Management	(3) Percentage renewable	7.5	19.5	4.3	4.6	Percentage (%)	EM-MM-130a.1
Water Management	(1) Total fresh water withdrawn**	0.91	0	0.06	.05	Thousand cubic meters (m ³)	EM-MM-140a.1
Water Management	(2) (a) Total fresh water consumed** (b) Percentage consumed in High or Extremely High Baseline Water Stress Region	(a) 0.39 (b) 0%	(a) 0 (b) 0%	a) 0.11 (b) 0%	(a) 0.11 (b) 0%	(a) Thousand cubic meters (m ³) (b) Percentage (%)	EM-MM-140a.1
Water Management	# of incidents of non-compliance associated with water quality permits, standards, and regulations	0	0	0	0	Number	EM-MM-140a.2

Topic	Details	2019	2020	2021	2022	Unit of Measure	SASB Code	Topic	Details	2019	2020	2021	2022	Unit of Measure	SASB Code
Waste + Hazardous Materials Management	Total weight of non-mineral waste generated**	6.1	0.8	2.5	2.5	Metric tons (t)	EM-MM-150a.4	Biodiversity Impacts	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	(1) 0 (2) 0 (3) 0	(1) 0 (2) 0 (3) 0	(1) 0 (2) 0 (3) 0	(1) 0 (2) 0 (3) 0	Percentage (%)	EM-MM-160a.2
Waste + Hazardous Materials Management	Operations Waste	The company has not produced tailings at this point								Biodiversity Impacts	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	100	100	100	100
Waste + Hazardous Materials Management	Total weight of tailings waste, percentage recycled**	The company has not produced tailings at this point						Security, Human Rights & Rights of Indigenous Peoples	Percentage of (1) proved and (2) probable reserves in or near areas of conflict			0	0	0	0
Waste + Hazardous Materials Management	Total weight of waste rock generated**	The company has not produced tailings at this point								Security, Human Rights & Rights of Indigenous Peoples	Percentage of (1) proved and (2) probable reserves in or near indigenous land	0	0	0	0
Waste + Hazardous Materials Management	Total weight of hazardous waste recycled**	The company has not produced tailings at this point						Security, Human Rights & Rights of Indigenous Peoples	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict						
Waste + Hazardous Materials Management	Number of significant hazardous materials and waste management incidents**	The company has not produced tailings at this point								Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests (Section 2.1)				
Waste + Hazardous Materials Management	Description of waste and hazardous materials management policies and procedures for active and inactive operations					N/A	EM-MM-150a.10	Community Relations	Number and duration of non-technical delays*			0	0	0	0
Waste + Hazardous Materials Management	Number of tailings impoundments, broken down by MSHA hazard potential**	The company has not produced tailings at this point													
Biodiversity Impacts	Description of environmental management policies and practices for active sites					N/A	EM-MM-160a.1								

APPENDIX B:

Greenhouse Gas Emissions

GREENHOUSE GAS (GHG) EMISSIONS AUDIT

PREPARED FOR PERPETUA RESOURCES

MARCH 15, 2023

Perpetua Resources engaged Warm Springs Consulting LLC to conduct a GHG emissions estimate based on fuel and electricity use data provided by Perpetua Resources. This document is a high-level estimate of Scope 1 and Scope 2 emissions from 2017 through present and is subject to change as more information becomes available.

TERMS

Scope 1 emissions: Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).

Scope 2 emissions: Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling

	2017	2018	2019	2020	2021	2022
Scope 1	397	218	262	199	218	466
Scope 2	36	34	36	11	50	37
Avoided Emissions (Solar Production)	52	29	58	35	36	30
Total Emissions	433	252	298	210	268	505

2022 Scope 1 GHG emissions increased due to early restoration activities at site in 2022.

SOURCE DATA

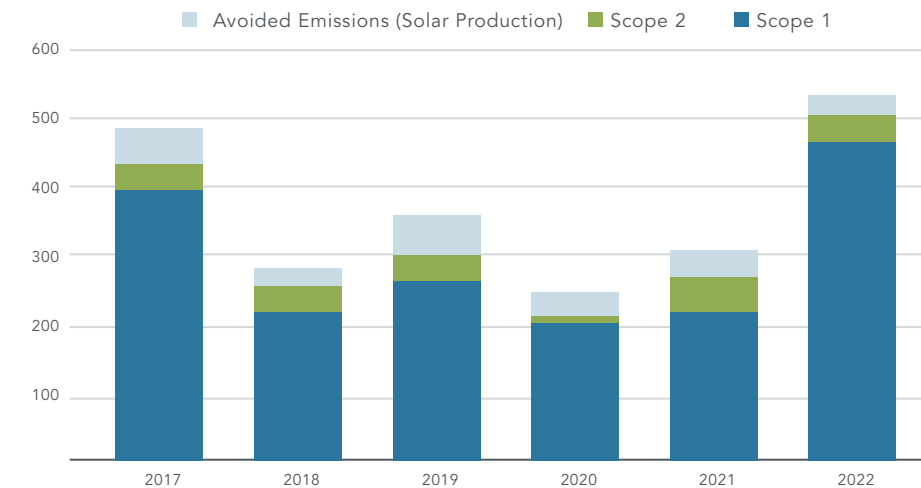
Source data for Scope 1 emission calculations are based on fuel use data provided by Perpetua Resources. Fuel use included light and heavy duty vehicles used for transportation and exploration, using both ethanol gasoline and diesel, along with propane fueled equipment. Avoided Scope 1 emissions calculations were based on solar production data provided by Perpetua Resources.

Source data for Scope 2 emission calculations are based on electricity use data provided by Perpetua Resources, obtained from Idaho Power. Electricity use data was collected for Perpetua Resources' office locations and on-site location, where applicable.

The base year for GHG emission comparisons is 2017, the earliest data received from Perpetua Resources. Base year emissions and/or the base year itself is subject to change if more information becomes available.

The following summarizes the estimated GHG emissions found by the consulting team measured in metric tons (MT) of Carbon Dioxide (CO2) equivalent, including avoided emissions due to solar production.

GHG EMISSIONS YEAR-OVER-YEAR (MTC2e)



The findings are calculated in accordance with the [Greenhouse Gas Protocol](#) Scope 1 and 2 emissions guidance and calculation tools.

Amendments

1. For the 2021 Sustainability Report, Scope 2 emissions for years 2017-2019 were amended to include electricity use from Perpetua Resource's Boise office. Due to COVID-19, Scope 2 emissions for 2020 do not include the Perpetua's Boise office as employees were not present.
2. No further amendments have been made as of March 15, 2023.

APPENDIX C:

References

GOVERNANCE POLICIES

- [Anti-bribery & Anti-corruption](#)
- [Charitable Donations](#)
- [Climate Change](#) (ESG Policy, pg. 10)
- [Code of Conduct & Ethical Values](#)
- [Director Travel Expenses](#)
- [Director Confidentiality](#)
- [Disclosure and Confidentiality](#)
- [Diversity and Inclusion](#)
- [Environmental, Social and Governance](#)
- [Human Resources](#)
- [Infectious Disease Control Summary](#)
- [Information Technology & Security](#)
- [Insider Trading & Reporting](#)
- [Political Contributions Policy](#)
- [Social Media](#)
- [Supplier Standards](#) (ESG Policy, pg. 6)
- [Whistleblower](#)

SOCIAL AND ENVIRONMENTAL COMMITMENTS

- Community Agreements: [2018 Community Agreement](#)
- Community Agreement, Stibnite Advisory Council, Annual Report: [Progress Report](#)
- Community Agreement, Stibnite Advisory Council, Independent Water Monitoring Program: [Program Announcement](#)
- Community Agreement, Stibnite Advisory Council, FAQ: [Frequently Asked Questions & Glossary](#)
- Community Agreement, Stibnite Advisory Council, Website: www.stibniteadvisorycouncil.com
- Community Agreement, Stibnite Foundation, Direct Profit Sharing: [Foundation](#)
- Community Agreement, Stibnite Foundation, Grant Funding: [Grant Recipients](#)
- Community Project Webinars: [Recorded Webinars](#)
- Agreement with Environmental Protection Agency to conduct pre-operations cleanup (Administrative Settlement Agreement and Order on Consent): [EPA Agreement](#)
- Dark Skies Commitment: [Dark Skies Report](#)
- Perpetua Resources, Hire Local Commitment (PRO, pg.3-1): [Hiring & Contracting Objectives](#)
- Safety Commitment: [Site Safety and Health Plan Summary](#)
- Safety Commitment: [Environmental, Occupational Health & Safety, Integrated Management System Summary](#)
- Values (PRO, Section 2): [Values](#)
- Restoration (PRO, Section 5): [Restoration](#)

PROJECT RESOURCES

- 2016 Plan of Restoration & Operations: [Executive Summary](#)
- 2021 Refined Modified Plan of Restoration & Operations: [Refined Proposed Action](#)
- Improvements One Pager: [Proposed Project Improvements](#)
- Feasibility Study: [Technical Report](#)
- Prefeasibility Study: [Technical Report](#)
- Tours: [Virtual Tour](#)
- Sustainability, Solar Power Use: [Sustainability from the Sun](#)
- Sustainability Reports: [Sustainability Report Library](#)
- [Sustainability, Greenhouse Gas \(GHG\): 2020 Emissions Report](#)
- [Sustainability, Greenhouse Gas \(GHG\): 2021 Emissions Report](#)

APPENDIX D:

Sustainability Roadmap Update







ENVIRONMENT ROADMAP UPDATE






ROADMAP GOAL	COMMITMENT	2022 ACTIONS
 <p>GOAL 1 Improve and protect water quality</p> <p>6 CLEAN WATER AND SANITATION</p>	<p>Comply with the Clean Water Act and all local and federal regulations.</p> <p>Improve water quality over existing conditions left behind by previous operators.</p>	<p>Completed second year of Citizen's Independent Water Monitoring program.</p> <p>Began legacy cleanup to improve water quality, rerouting and lining streams to keep clean water clean.</p> <p>Analysis from the U.S. Forest Services (USFS) on the improved project design published in the 2022 Supplemental Draft Environmental Impact Study (SDEIS) concluded arsenic in the East Fork of the South Fork of the Salmon River will be reduced by 40-47% and in Meadow Creek by 90%.</p>
 <p>GOAL 2 Conserve water</p> <p>6 CLEAN WATER AND SANITATION 12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>Reduce water consumption and reuse water whenever possible.</p>	<p>In 2022, Perpetua Resources submitted the water rights application for the Project, which includes mitigation beyond the proposed water usage.</p>
 <p>GOAL 3 Limit our footprint</p> <p>15 LIFE ON LAND</p>	<p>Minimize disturbances to land, water, air, wildlife, and night skies through identifying opportunities to eliminate, reduce, mitigate, or offset impacts.</p>	<p>Received Air Permit to Construct, showing emissions well below threshold levels.</p> <p>Reduced waste by recycling ~96 lbs of material, diverting it from landfills.</p> <p>Analysis in the Forest Service's SDEIS showed a reduction in Project disturbance by 13% from the original plan and a reduction in the Hangar Flats pit by 70%.</p> <p>Continued to support composting programs at local schools.</p>
 <p>GOAL 4 Be a responsible link in the clean energy supply chain</p> <p>7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>Take the necessary steps to ensure Perpetua's supply chain partners are operating in accordance with Company's ESG goals.</p>	<p>Continued antimony supply agreement with Ambri Inc.* to support clean energy production and the decarbonization of energy grids worldwide through the development of domestic manufacturing of battery technology.</p>

*See Forward Looking Statements on page 44.

SOCIAL ROADMAP UPDATE

ROADMAP GOAL	COMMITMENT	2022 ACTIONS
 <p>GOAL 5 Work with communities and regulators to refine environmental outcomes of the Stibnite Gold Project</p> <p>6 CLEAN WATER AND SANITATION 16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	Take public and stakeholder feedback seriously. Assess potential opportunities to further improve environmental outcomes and ensure the best project moves forward.	<p>Through continued listening to community, agency, and tribal feedback, the 2022 SDEIS showed project changes improved environmental outcomes, including to water quality.</p> <p>A public comment period on the SDEIS took place at the end of 2022, and received nearly 19,000 comments, more than 15,500 were in support of the project.</p>
 <p>GOAL 6 Nurture connections with our tribal communities and identify opportunities to collaborate</p> <p>11 SUSTAINABLE CITIES AND COMMUNITIES 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS</p>	Have direct dialogue and ongoing solution finding with Tribal leadership, staff and membership to ensure the Project protects tribal treaty rights and supports the social, cultural, and economic goals of the tribes.	<p>Continued open dialogue with Idaho tribes.</p> <p>Supported Nez Perce Tribe's salmon out planting program at the Project site in 2022.</p>
 <p>GOAL 7 Foster an open and transparent relationship with our local communities</p> <p>4 QUALITY EDUCATION 11 SUSTAINABLE CITIES AND COMMUNITIES 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS</p>	Commit to operating with transparency and accountability.	<p>Third-party Tailing Storage Facility (TSF) audit was completed and presented to the Stibnite Advisory Council. The audit confirmed the TSF plan exceeds current standards and is robust, safe, and protective.</p> <p>Delivered more than 114 community presentations and hosted 28 site tours.</p> <p>Held monthly public office hours and monthly Stibnite Advisory Council meetings.</p>
 <p>GOAL 8 Create economic partnerships that sustain beyond the life of the mine</p> <p>4 QUALITY EDUCATION 8 DECENT WORK AND ECONOMIC GROWTH 11 SUSTAINABLE CITIES AND COMMUNITIES 17 PARTNERSHIPS FOR THE GOALS</p>	<p>Share economic benefits from the Project with local communities.</p> <p>Hire and train locally when possible.</p> <p>Use profit-sharing agreement to fund charitable endowment to provide sustained economic benefits long after the life of the mine.</p>	<p>Spent \$12.4+ million on Idaho products and services.</p> <p>Partnered with 138 Idaho vendors in 2022.</p> <p>Continued hiring locally whenever possible. 83% of Company employees are Idaho residents.</p> <p>Awarded \$58,000+ through the Stibnite Foundation to 17 local nonprofit organizations and fire/EMS departments.</p> <p>Provided \$471,000 in community contributions.</p> <p>Volunteered 1,064 hours in our communities.</p>

GOVERNANCE ROADMAP UPDATE

ROADMAP GOAL	COMMITMENT	2022 ACTIONS
 <p>GOAL 9 Develop a diverse and inclusive team</p> <p>5 GENDER EQUALITY 10 REDUCED INEQUALITIES</p>	Recruit, build, and retain a diverse workforce.	<p>67% of executive management and 43% of Perpetua's workforce are women as of January 2023.</p> <p>Increased representation of women on Perpetua Resources Corporate Board of Directors to more than 20%.</p> <p>33% of Corporate Board members are gender or ethnically diverse.</p>
 <p>GOAL 10 Adopt a long-term ESG reporting framework</p> <p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	Engage in ESG policies and annual reporting to support consistent and reliable reporting, transparency, and accountability.	Issued 9th annual sustainability report and first report to follow the SASB framework.
 <p>GOAL 11 Disclose and report current and future GHG emissions</p> <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION 16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	Audit GHG emissions annually through third-party analysis, using the globally recognized GHG Protocol.	Reported Scope 1 & 2 GHG emissions, provided via third-party analysis.
 <p>GOAL 12 Set science-based GHG Emissions target before operations begin</p> <p>7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION</p>	Establish a GHG emissions baseline and develop a carbon reduction target based on feasible offsets, mitigations, and reductions.	<p>Utilized onsite solar panels to generate 25% of on-site power.</p> <p>Continued work with third parties to assess the feasibility of carbon emission offsets and mitigations.</p>
 <p>GOAL 13 Protect our people and our communities</p> <p>3 GOOD HEALTH AND WELL-BEING 8 DECENT WORK AND ECONOMIC GROWTH 12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>Implement an Environmental, Occupational Health & Safety Management System to grow internal training requirements for employees, contractors and consultants.</p> <p>Continually update and share emergency response plans.</p>	<p>Completed second year of Citizen's Independent Water Monitoring program.</p> <p>Began legacy cleanup to improve water quality, rerouting and lining streams to keep clean water clean.</p> <p>Analysis from the U.S. Forest Services (USFS) on the improved project design published in the 2022 Supplemental Draft Environmental Impact Study (SDEIS) concluded arsenic in the East Fork of the South Fork of the Salmon River will be reduced 40-47% and in Meadow Creek by 90%.</p>

APPENDIX E:

Stibnite Advisory Council Community Needs Assessment

The Stibnite Advisory Council (SAC) conducted an assessment at the beginning of 2022 to identify each community's potential areas of concern related to the Stibnite Gold Project. Priorities were rated on a scale from 1-5 by each of the eight communities, with 5 representing the highest community priority. Individual community scores were combined to get a regional perspective and the overall SAC priority number. The highest score possible was 40. The Council shared this information with Perpetua Resources, so the Company could begin working directly with communities to address their concerns and develop solutions.

	Commitment	SAC Priority Score
EMERGENCY SERVICES	Law Enforcement/Fire/EMS First Responder Resources - Requested communication on transport of hazardous materials - timing and contents identified with volumes. Resources may include spill kits along transportation corridors and regional response trailers.	24
	Emergency Training and Resources - Local first responders have requested training to address potential spills or handling of hazardous materials.	24
TRANSPORTATION	Carpooling/Pick Up Locations - Request opportunities to facilitate carpooling or bussing of employees from the region by offering parking facilities with bus services to the Stibnite Logistics Facility.	22
	Intersections and Impacts - Perpetua is in discussions with City of McCall, Valley County and Idaho Transportation Department (ITD) regarding upgrades to the intersections.	16
	Transportation - Communication boards to notify the public of potential road restrictions.	15
SOCIAL	Health Care Resources - Local first responders have requested an agreement for emergency transportation services.	20
	Workforce Competitiveness - Some communities expressed concern that existing employees may leave to go to work for Perpetua. With the two week on/off scheduling, some workers may continue to work part-time for their current employers.	19
	Workforce Training - To hire locally, Perpetua may need to provide training and support to local schools.	19
	Workforce Post-Operations Opportunities - Mine workers will have trade skills to transition to another job position within region (housekeepers, truck drivers, electricians, etc). Will there be a need for job search services, job fairs, additional training, etc.	18
	Workforce Childcare Availability - Communities have shared their concerns about the lack of childcare available to working families.	17
	School Capacity - Some comments raised questions about how local schools may be impacted by an increase in students and if Perpetua could help offset needs.	16
	Recreational Access - Some communities expressed a need to maintain recreational opportunities. Perpetua revamped the proposed plan to include seasonal access through the mine site to Thunder Mountain and identified mitigation for snowmobile traffic.	15

FORWARD LOOKING STATEMENTS

The publication of the SDEIS and the permitting schedule, and the identification by the USFS of the Modified Mine Plan as the Preferred Alternative in the SDEIS, does not indicate any commitments on the part of the USFS with regard to the content or timing of a final decision. In developing the Final Environmental Impact Statement ("FEIS"), the next phase of the NEPA planning process, the USFS may select various actions based on the Modified Mine Plan or each of the alternatives analyzed in the SDEIS. Furthermore, the USFS is not bound by the permitting schedule and anticipated milestones may be delayed materially or not be satisfied.

In addition, statements contained in this report and oral statements made in connection herewith that are not historical facts are "forward-looking information" or "forward-looking statements" (collectively, "Forward-Looking Information") within the meaning of applicable Canadian securities legislation and the United States Private Securities Litigation Reform Act of 1995. Forward-Looking Information includes, but is not limited to, disclosure regarding possible events, next steps and courses of action including our strategic plan, priorities, outlook and expected performance; environmental clean up actions by us and our contractors; our ability to comply with and obtain permits related to the Stibnite Gold Project; actions to be taken by the USFS, the State of Idaho and other government agencies and regulatory bodies; the timing of updates from the USFS related to the Stibnite Gold Project, including with respect to the FEIS, DROD and ROD; predictions regarding improvements to water quality, water temperature, and fish habitats and other environmental conditions at the site, including with respect to process and timing of such improvements; reduction of the Project footprint and the anticipated benefits and other effects thereof; our ability to successfully implement the Project and the occurrence of the expected benefits from the Project, including contributions to the workforce, national security and clean energy transition; other ESG and sustainability-related goals, strategies, priorities and initiatives, including, among others, water quality improvement, water conservation, limiting our footprint, ensuring a responsible and clean supply chain that acts in accordance with our ESG goals, community engagement, diversity and inclusion, developing an ESG disclosure framework, setting GHG emissions reduction targets and operational health and safety; our plans to achieve our ESG and sustainability-related goals and to monitor and report our progress thereon; ESG and sustainability-related engagement, commitments and disclosure; our and Ambri Inc.'s ability to perform under the supply agreement, which agreement is subject to certain conditions, including identification of one or more refiners to transform our antimony concentrate into antimony metal, and mutual agreement on certain material terms, including volume and pricing. In certain cases, Forward-Looking Information can be identified by the use of words and phrases or variations of such words and phrases or statements such as "anticipate", "expect", "plan", "likely", "believe", "intend", "forecast", "project", "estimate", "potential", "could", "may", "will", "would" or "should".

In preparing the Forward-Looking Information in this report, Perpetua Resources has applied several material assumptions, including, but not limited to, assumptions that the current exploration, development, environmental and other objectives concerning the Stibnite Gold Project can be achieved and that its other corporate activities will proceed as expected; that general business and economic conditions will not change in a materially adverse manner and that permitting and operations costs will not materially increase; the review process under the NEPA (including any joint review process involving the USFS, the State of Idaho and other agencies and regulatory bodies) as well as the FEIS will proceed in a timely manner and as expected; that we will be able to obtain sufficient funding to finance permitting, pre-construction and construction of the Project and that all requisite information will be available in a timely manner. Additionally, while we have provided information on several ESG and sustainability-related topics, including goals and ambitions, there are inherent uncertainties in

providing such information, due to the complexity and novelty of many methodologies established for collecting, measuring, and analyzing ESG and sustainability-related data. While we anticipate continuing to monitor and report on certain ESG and sustainability-related information, we cannot guarantee that such data will be consistent year-to-year, as methodologies and expectations continue to evolve. Furthermore, there are sources of uncertainty and limitations that exist that are beyond our control and could impact our plans and timelines, including the reliance on technological and regulatory advancements and market participants' behaviors and preferences. Moreover, many of the assumptions, standards, metrics and measurements used in preparing this report continue to evolve and are based on management assumptions believed to be reasonable at the time of preparation, but should not be considered guarantees. In some cases, the information is prepared, or based on information prepared, by third-party vendors and consultants and is not independently verified by Perpetua Resources. This data should not be interpreted as any form of guaranty or assurance of future results or trends.

Forward-Looking Information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Perpetua Resources to be materially different from any future results, performance or achievements expressed or implied by the Forward-Looking Information. Such risks and other factors include, among other things, changes in laws and regulations and changes in the application of standards pursuant to existing laws and regulations which may result in unforeseen results in the permitting process; uncertainty surrounding input to be received from regulators and community stakeholders; risks related to dependence on key personnel; risks related to unforeseen delays in the review process including availability of personnel from the USFS, State of Idaho and other stated, federal and local agencies and regulatory bodies (including, but not limited to, future US government shutdowns); risks related to opposition to the Project; risks related to increased or unexpected costs in operations or the permitting process; risks that necessary financing will be unavailable when needed on acceptable terms, or at all; risks related to the outcome of litigation and potential for delay of the Project, as well as those factors discussed in Perpetua Resources' public filings with the U.S. Securities and Exchange Commission (the "SEC") and its Canadian disclosure record. Although Perpetua Resources has attempted to identify important factors that could affect Perpetua Resources and may cause actual actions, events or results to differ materially from those described in Forward-Looking Information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that Forward-Looking Information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on Forward-Looking Information. For further information on these and other risks and uncertainties that may affect the Company's business, see the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of the Company's filings with the SEC, including Perpetua's Annual Report on Form 10-K filed with the SEC on March 16, 2023, which are available at www.sec.gov and with the Canadian securities regulators, which are available at www.sedar.com.

While this report describes future events and matters that may be significant, and with respect to which we may even use the word "material" or "materiality," the potential significance of these events and matters should not be read as equating to "materiality" as the concept is used in connection with our required disclosures made in response to SEC and exchange rules and regulations. The Forward-Looking Information in this report speaks only as of the date of the preparation of this report. Except as required by law, Perpetua Resources does not assume any obligation to release publicly any revisions to Forward-Looking Information contained in this report to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

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