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# Fortuna announces maiden Inferred Mineral Resource of 350,000 ounces at 3.16 g/t gold at the Sunbird discovery at Séguéla, Côte d'Ivoire

Vancouver, March 15, 2022-- Fortuna Silver Mines, Inc. (NYSE: FSM) (TSX: FVI) is pleased to announce a maiden Inferred Mineral Resource estimate for the Sunbird discovery located at its Séguéla gold Project in Côte d'Ivoire.

Paul Weedon, Senior Vice President of Exploration of Fortuna, commented, "The Sunbird discovery, with important similar geological characteristics to the nearby previously defined deposits, remains open along strike and at depth, providing excellent potential for additional growth based on the successful ongoing expansion drilling program presently being conducted." Mr. Weedon continued, "We regard the definition of the Sunbird deposit as a single step in the discovery journey with many more exploration targets identified and yet to be tested." Mr. Weedon concluded, "We remain very encouraged at the potential for further exploration work programs to help in determining the ultimate scale of the Séguéla gold Project."

Fortuna estimates the Sunbird deposit contains an Inferred Mineral Resource of 3.4 million tonnes at an average grade of 3.16 g/t Au containing 350,000 gold ounces (refer to Table 1). The Inferred Mineral Resource will not materially change the existing Mineral Resource estimate at the Séguéla gold Project or impact its current construction plan.

Table 1: Sunbird deposit maiden Inferred Mineral Resource estimation
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Classification	Tonnes	Au (g/t)	Contained Au (oz)
Inferred Mineral Resource	3,446,000	3.16	350,000

Notes:

- 1. Mineral Reserves and Mineral Resources are as defined by the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves
- 2. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability
- 3. Factors that could materially affect the reported Mineral Resources or Mineral Reserves include changes in metal price and exchange rate assumptions; changes in local interpretations of mineralization; changes to assumed metallurgical recoveries, mining dilution and recovery; and assumptions as to the continued ability to access the site, retain mineral and surface rights titles, maintain environmental and other regulatory permits, and maintain the social license to operate
- 4. Mineral Resources are estimated and reported as of December 31, 2021
- 5. Mineral Resources are reported constrained within an optimized pit shell at a cut-off grade of 0.5 g/t Au based on an assumed gold price of US\$1,700/oz, metallurgical recovery rate of 94.5%, mining cost of US\$2.80/t, processing and G&A costs of US\$21.64/t, and refining/selling costs including state and third-party royalties of US\$121.60/oz. The pit design was completed based on overall slope angle of between 50° and 53.3°
- 6. Matthew Cobb is the Qualified Person responsible for Mineral Resources, being an employee of Roxgold Inc.
- 7. Totals may not add due to rounding procedures

### Sunbird deposit geology and drilling

The Sunbird deposit is located approximately 1.5 kilometers to the southeast of the previously reported Antenna deposit at the Séguéla gold Project (refer to Figure 1). Sunbird's local geology comprises an interlayered package of tholeiitic and pillow basalts, similar to the Boulder and Agouti deposits, however where the former two also contain felsic intrusives, Sunbird is considered to contain extrusive felsic units interlayered with the basalts (rhyolites). Mineralization is closely associated with the rhyolitic units similar to the adjacent Antenna deposit. Gold is contained within quartz carbonate veins, with visible gold common in the higher-grade portions of the deposit.

This maiden Inferred Mineral Resource estimate incorporates a total of 73 diamond and reverse circulation (RC) drill holes totaling 11,330 meters, drilled by Fortuna in 2021.

All RC drilling at the Sunbird deposit used a 5.25-inch face sampling pneumatic hammer with samples collected into 60-liter plastic bags. Samples were kept dry by maintaining enough air pressure to exclude groundwater inflow. If water ingress exceeded the air pressure, RC drilling was stopped, and drilling converted to diamond core tails. Once collected, RC samples were riffle split through a three-tier splitter to yield a 12.5% representative sample for submission to the analytical laboratory. The residual 87.5% samples were stored at the drill site until assay results were received and validated. Coarse reject samples for all mineralized samples corresponding to significant intervals are retained and stored on-site at the Company-controlled core yard.

All diamond drill holes at the Sunbird deposit were drilled with HQ sized diamond drill bits. The core was logged, marked up for sampling using standard lengths of one meter or to a geological boundary. Samples were then cut into equal halves using a diamond saw. One half of the core was left in the original core box and stored in a secure location at the company core yard at the project site. The other half was sampled, catalogued and placed into sealed bags and securely stored at the site until shipment.

All Sunbird RC and diamond core samples were shipped to ALS Laboratories preparation laboratory in Yamoussoukro for preparation and then, via commercial courier, to ALS's facility in Ouagadougou, Burkina Faso for finishing. Routine gold analysis using a 50-gram charge and fire assay with an atomic absorption finish was completed for all Séguéla samples. Quality control procedures included the systematic insertion of blanks, duplicates, and standards into the sample stream. In addition, the ALS laboratory inserted its own quality control samples.

# **Inferred Mineral Resource estimation**

Sunbird's Inferred Mineral Resource estimate was prepared using data with an effective cut-off date of December 31, 2021. Three dimensional wireframes were generated of the host lithologies, including the weathering profile and alluvial cover, as well as for 15 mineralized envelopes based on a nominal cut-off grade of 0.2 g/t Au and minimum downhole thicknesses of 2 meters and maximum internal dilution of 2 meters (refer to Figure 2).

Wireframes for each mineralized envelope were used to select and flag drillhole samples. Samples were preferentially sampled at 1-meter intervals regardless of drilling technique. Consequently, all input data was composited to 1 meter.

Composites for each mineralized domain were reviewed separately and in conjunction with log probability plots, histograms and box and whisker plots, with no clear evidence for multiple discrete grade

populations identified within the Sunbird deposit. All data was collectively treated as a single statistical domain for the purposes of geostatistical analysis.

Input composite data for each individual domain were assessed for the existence of outliers. Top cut grade capping was applied on a semi-quantitative basis per-domain, based on the histograms, log probability and mean/variance plots for each domain. Very poorly informed domains typically did not have grade caps applied and were left untreated. Grade caps were generally applied at the 98<sup>th</sup> percentile or above.

An experimental semi-variogram was generated for the collective input data from all domains. From this, a model semi-variogram was developed, typified by a moderate nugget, and two spherical structures.

A block model was built to encompass the Sunbird deposit mineralization in its entirety. The block model was aligned with the national grid utilising the same UTM coordinate system as the input data with consideration of the likely selective mining unit used to define block size.

The wireframes defining mineralized domains were used as hard boundaries in the grade interpolation. Only grades inside each mineralized wireframe were used to interpolate the blocks inside the same wireframe. Ordinary kriging (OK) was selected for grade interpolation in the mineralized domains. It is considered by the Qualified Person to be appropriate for this style of deposit.

All estimates were performed on a parent block basis. Search parameters for estimation were determined based on Quantitative Kriging Neighbourhood Analysis (QKNA). Single block QKNA within a well-informed portion of the deposit was utilised. The search radii used a quadrant search method to improve sample selectivity for each estimate. An oriented ellipsoid search was used to select data for interpolation. Search ellipsoid orientations were based on orientations derived from variogram analysis. A two-pass expanding search was used to complete the estimation for gold within the individual mineralization objects, based on the variogram ranges. The Sichel mean, an expected value, was used to inform remaining un-estimated blocks. Typically, greater than 98% of the blocks were estimated consistently in the first two passes.

Fixed bulk density values were assigned to individual lithologies based on more than 1,000 water immersion measurements of drill core taken from across the Séguéla gold Project. Mineralization was assigned the average density of 2.8 g/cm<sup>3</sup> for mineralized fresh material and 2.2 g/cm<sup>3</sup> for oxide material.

Initial validation of the Sunbird deposit block model was undertaken using a variety of methods, including checks for un-estimated mineralization blocks, incorrect or absent assignation of density values, and mineralized blocks or blocks with density values above topography.

Following these checks, swath plots were generated along the three principal axes to assess the representativity of estimated grade profiles in comparison to the input composite grades. Swath plots were generated on a per-mineralization solid basis. Swath plots and log-probability plots from the two largest, volumetrically, and most well-informed mineralized domains indicate a suitable level of adherence of the estimated grades to the expected values observed within the input composite data.

# Ongoing exploration work program

Drill activities are ongoing at the Sunbird deposit. This work is targeting extensions down dip and along strike from the currently modelled Inferred Mineral Resource, and infilling areas of lower density of drilling within the currently modelled Inferred Mineral Resource.

Following on from the receipt of all data associated with this drilling campaign, the Sunbird Inferred Mineral Resource estimate will be updated, with a view to potentially upgrading portions of the Inferred Mineral Resource to higher confidence classifications, and to better define the extents of the mineralization, which currently remains open at depth and along strike.

## **Qualified Person**

Eric Chapman, Fortuna's Senior Vice President of Technical Services, is a Professional Geoscientist of the Association of Professional Engineers and Geoscientists of the Province of British Columbia (Registration Number 36328) and a Qualified Person as defined by National Instrument 43-101- Standards of Disclosure for Mineral Projects. Mr. Chapman has reviewed and approved the scientific and technical information contained in this news release and has verified the underlying data.



Figure 1: Séguéla gold Project deposit locations



Figure 2: Oblique northwest view of the Sunbird deposit showing mineralized wireframes and drillholes

#### **About Fortuna Silver Mines Inc.**

Fortuna Silver Mines Inc. is a Canadian precious metals mining company with four operating mines in Argentina, Burkina Faso, Mexico and Peru, and a fifth mine under construction in Côte d'Ivoire. Sustainability is integral to all our operations and relationships. We produce gold and silver and generate shared value over the long-term for our stakeholders through efficient production, environmental protection, and social responsibility. For more information, please visit our <u>website</u>.

ON BEHALF OF THE BOARD

Jorge A. Ganoza President, CEO, and Director Fortuna Silver Mines Inc.

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#### Forward looking Statements

This news release contains forward looking statements which constitute "forward looking information" within the meaning of applicable Canadian securities legislation and "forward looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 (collectively, "Forward looking Statements"). All statements included herein, other than statements of historical fact, are Forward looking Statements and are subject to a variety of known and unknown risks and uncertainties which could cause actual events or results to differ materially from those reflected in the Forward looking Statements. The Forward looking Statements in this news release may include, without limitation, statements about the Company's plans for drilling at the Sunbird deposit in 2022 and prospective targets at the Séguéla gold Project; the anticipated exploration and development programs at the Sunbird deposit and the Séguéla gold Project, the anticipated results of the exploration program at the Sunbird deposit, and the intention to expand mineralization at the Séguéla gold Project; the Company's business strategy, plans and outlook; the merit of the Company's mineral properties; mineral resource and reserve estimates; timelines; the future financial or operating performance of the Company; expenditures; approvals and other matters. Often, but not always, these Forward looking Statements can be identified by the use of words such as "estimated", "potential", "open", "future", "assumed", "projected", "used", "detailed", "has been", "gain", "planned", "reflecting", "will", "containing", "remaining", "to be", or statements that events, "could" or "should" occur or be achieved and similar expressions, including negative variations.

Forward looking Statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any results, performance or achievements expressed or implied by the Forward looking Statements. Such uncertainties and factors include, among others, changes in general economic conditions and financial markets; the duration and effects of the COVID-19 pandemic on our operations and workforce and the effects on the global economy and society; changes in prices for silver, gold and other metals; the success of the Company's exploration program at the Sunbird deposit and the Séguéla gold Project; technological and operational hazards in Fortuna's mining and mine development activities; risks inherent in mineral exploration; fluctuations in prices for energy, labor, materials, supplies and services; fluctuations in currencies; uncertainties inherent in the estimation of mineral reserves, mineral resources, and metal recoveries; our ability to obtain all necessary permits, licenses and regulatory approvals in a timely manner; governmental and other approvals; political unrest or instability in countries where Fortuna is active; labor relations issues; as well as those factors discussed under "Risk Factors" in the Company's Annual Information Form. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ from those anticipated, estimated or intended.

Forward looking Statements contained herein are based on the assumptions, beliefs, expectations and opinions of management, including but not limited to expectations regarding the results from the exploration programs conducted at the Sunbird Prospect; expected trends in mineral prices and currency exchange rates; the accuracy of the Company's information derived from its exploration programs at the Sunbird Prospect current mineral resource and reserve estimates; that the Company's activities will be in accordance with the Company's public statements and stated goals; that there will be no material adverse change affecting the Company or its properties; that all required approvals will be obtained; that there will be no significant disruptions affecting operations and such other assumptions as set out herein. Forward looking Statements are made as of the date hereof and the Company disclaims any obligation to update any Forward looking Statements, whether as a result of new information, future events or results or otherwise, except as required by law. There can be no assurance that Forward looking Statements. Accordingly, investors should not place undue reliance on Forward looking Statements.

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Inferred mineral resources are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves.

#### Cautionary Note to United States Investors Concerning Estimates of Reserves and Resources

Reserve and resource estimates included in this news release have been prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy, and Petroleum Definition Standards on Mineral Resources and Mineral Reserves. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for public disclosure by a Canadian company of scientific and technical information concerning mineral projects. Unless otherwise indicated, all mineral reserve and mineral resource estimates contained in the technical disclosure have been prepared in accordance with NI 43-101 and the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards on Mineral Resources and Reserves.

Canadian standards, including NI 43-101, differ significantly from the requirements of the Securities and Exchange Commission, and mineral reserve and resource information included in this news release may not be comparable to similar information disclosed by U.S. companies.