# Moonwell Artemis Grant Proposal

Abstract

Moonwell is an open lending and DeFi protocol built on Moonbeam and Moonriver, and is the largest DeFi protocol by TVL in the Dotsama ecosystem. In order to foster the development of a robust web3 ecosystem on Moonbeam, core protocols such as decentralized exchanges and lending protocols like Moonwell provide basic DeFi primitives, and create a solid foundation of liquidity that developers can build new Dapps on top of, enabling the connected contracts future that the Moonbeam community envisions.

Motivation

The Lunar Technology Foundation is responsible for fostering the development of the Moonwell protocol and its ecosystem, similar to the role that the Moonbeam Foundation plays in the broader Moonbeam ecosystem. The Foundation is honored to submit a proposal for a grant that aims to help build useful liquidity in the Moonbeam ecosystem, with the goal of creating this base liquidity that will be broadly useful for other Dapps and developers on Moonbeam.

The success of a new web3 ecosystem like Moonbeam will largely depend on whether the community can successfully bootstrap the flywheel illustrated below. By first building liquidity, next, strong base DeFi primitives such as Decentralized Exchanges and Lending, new and novel applications such as NFT marketplaces and Multichain Dapps using connected contracts can flourish, which in turn should bring more liquidity. As this flywheel builds up momentum in the form of deeper liquidity and more Dapps, this leads the entire ecosystem to more growth and greater success.
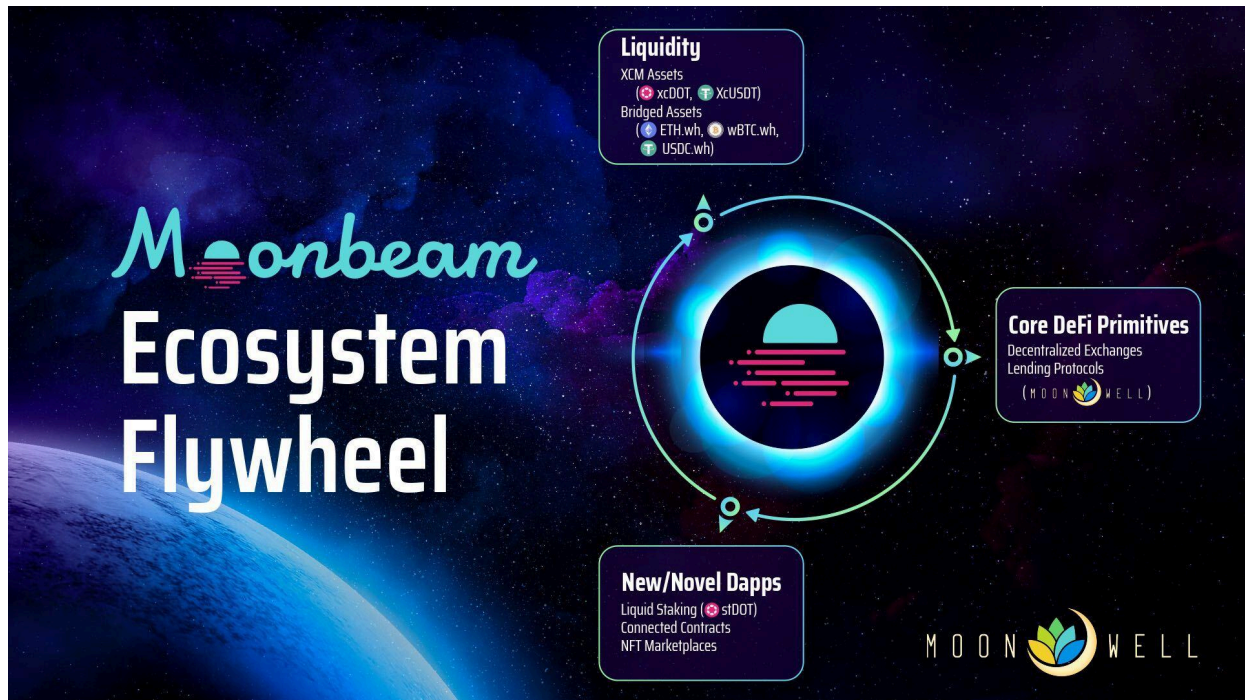
Project Overview

Moonwell Artemis uses battle tested code from the [Moonwell Apollo](#) protocol to provide an open, non-custodial lending and borrowing DeFi protocol. Whereas Apollo is the Moonwell protocol's deployment on Moonriver (Kusama), Artemis is Moonwell's deployment on Moonbeam (Polkadot). At its peak, Moonwell accumulated over $350M in TVL earlier in 2022. The Moonwell community worked together with key ecosystem partners such as Solarbeam, StellaSwap, and the Moonbeam Foundation to achieve a high degree of success in a short time.

INTRODUCTION

Moonwell is an open lending and borrowing protocol built on Moonbeam and Moonriver. Moonwell serves as the interface to the entire Polkadot and Kusama (DotSama) ecosystem by supporting parachain assets
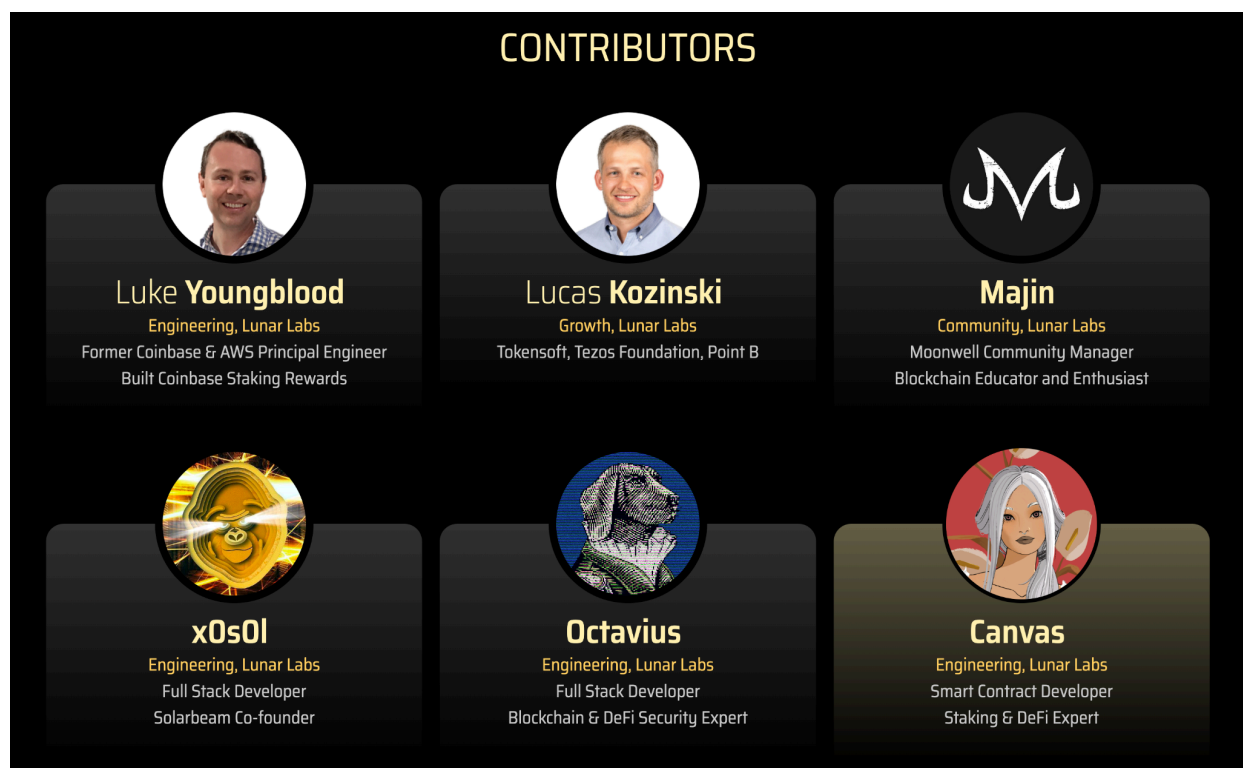
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Moonwell's goal is to be the most user-friendly, fast, and secure liquidity protocol in the ecosystem. With this in mind, an emphasis was placed on having a high standard of security. On-chain governance and multi-signature systems are implemented for all smart contracts that make up the protocol, with the cyber-security team at Halborn Security providing continuous security as a service. There is also a generous bounty program through a partnership with the team at ImmuneFi, which allows security researchers to submit their findings for review and earn a bounty for discovering security vulnerabilities.
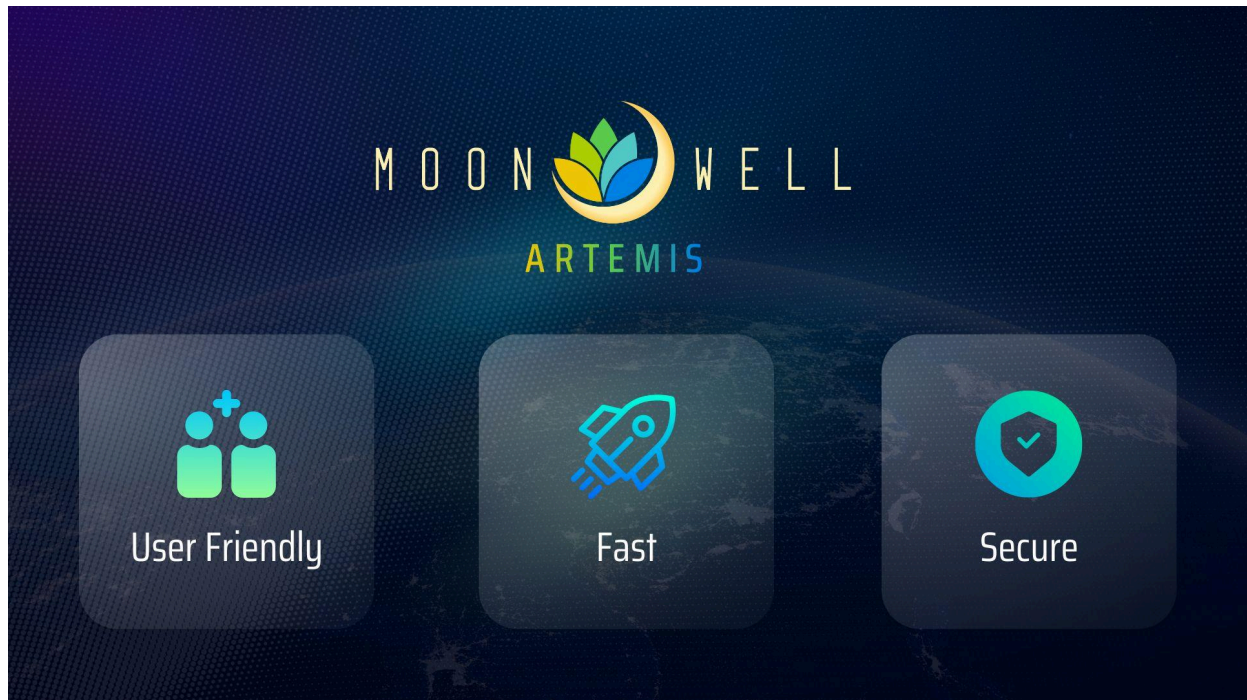
Fundraising and Key Contributors

The Lunar Technology Foundation [successfully raised approximately $26M in March 2022](#) through a combination of a private funding round and a public sale of the WELL token, and has 4+ years of runway at the current burn rate. Moonwell was also the first project to be funded by Arrington Capital's [$100M Moonbeam Ecosystem Fund](#). The core contributors to the Moonwell ecosystem represent an all-star roster of some of the best minds in technology, web3, DeFi, smart contracts, and staking, including **Luke Youngblood**, who was the tech lead at Coinbase responsible for launching Staking Rewards, a multi-billion TVL product with millions of users globally, and **Lucas Kozinski**, COO at TokenSoft, who helped many of the best parachains, including Moonbeam, Acala, Manta, Zeitgeist, and others raise funds through token sales.

CONTRIBUTORS

Luke Youngblood
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Built Coinbase Staking Rewards

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Solarbeam Co-founder

Octavius
Engineering, Lunar Labs
Full Stack Developer
Blockchain & DeFi Security Expert

Canvas
Engineering, Lunar Labs
Smart Contract Developer
Staking & DeFi Expert

Other Contributors and Partners

In its role to foster the broader development of the Moonwell ecosystem, the Lunar Technology Foundation has also engaged with many other contributors and partners that have helped Moonwell to achieve its goals of being the most user-friendly, fast, and secure liquidity protocol in the ecosystem. Some key partners contributing to the Moonwell ecosystem are highlighted below.

Security Audits and Ongoing Advisory by Halborn

After working closely with Halborn Security for several months and completing multiple audits of the Moonwell protocol, in May 2022, Moonwell announced the onboarding of Halborn Security through their Security Advisory as a Service (SAAAS). This ongoing security service aims to provide users with peace of mind and the protocol with efficient scaling of the best security practices in the industry.

Economic Safety and Health Monitoring

In addition to contract and code security, economic security is also important. One of the contributors to the Moonwell protocol is the team at Gauntlet Network, a firm providing top-notch financial modeling from the algorithmic trading industry to inform on-chain protocol management, in addition to simulations and risk modeling which carefully allow for better protection of the markets and user assets by ensuring there is a more complete and comprehensive idea of potential economic impacts.

Gauntlet recently launched the Moonwell Apollo Risk Dashboard, and is currently completing the data analysis and modeling required to support Moonwell Artemis as well.

Chainlink Price Feeds

Moonwell has already integrated Chainlink Price Feeds into the Moonwell Apollo deployment on the Moonriver network, and is pleased to announce integration into Moonwell Artemis. Integration with Chainlink's industry-leading and decentralized oracle network helps ensure the collateralization and liquidation ratios on Moonwell's platform are backed by accurate–and fair–market rates. Chainlink helps to secure billions of dollars worth of assets for leading protocols by providing a high amount of security, reliability, and data quality.

Wormhole

Jump Crypto and the team behind Wormhole represent one of the strongest bridges in the crypto industry, and we are excited to welcome them to Moonbeam. As they bring the best wrapped assets from Ethereum and other ecosystems, it is important that we work together as an ecosystem to build liquidity on Wormhole wrapped assets to help bootstrap the broader Moonbeam ecosystem.

On Chain Governance

One overarching goal of the Moonwell community has been to create financial infrastructure that will stand the test of time and outlive any contributing team or individual. Applications and developers that build on top of Moonwell should have confidence that the protocol will have the resilience to operate indefinitely. By decentralizing governance, removing single points of failure and empowering the community to ratify changes to the protocol, a viable path to this goal has been created.
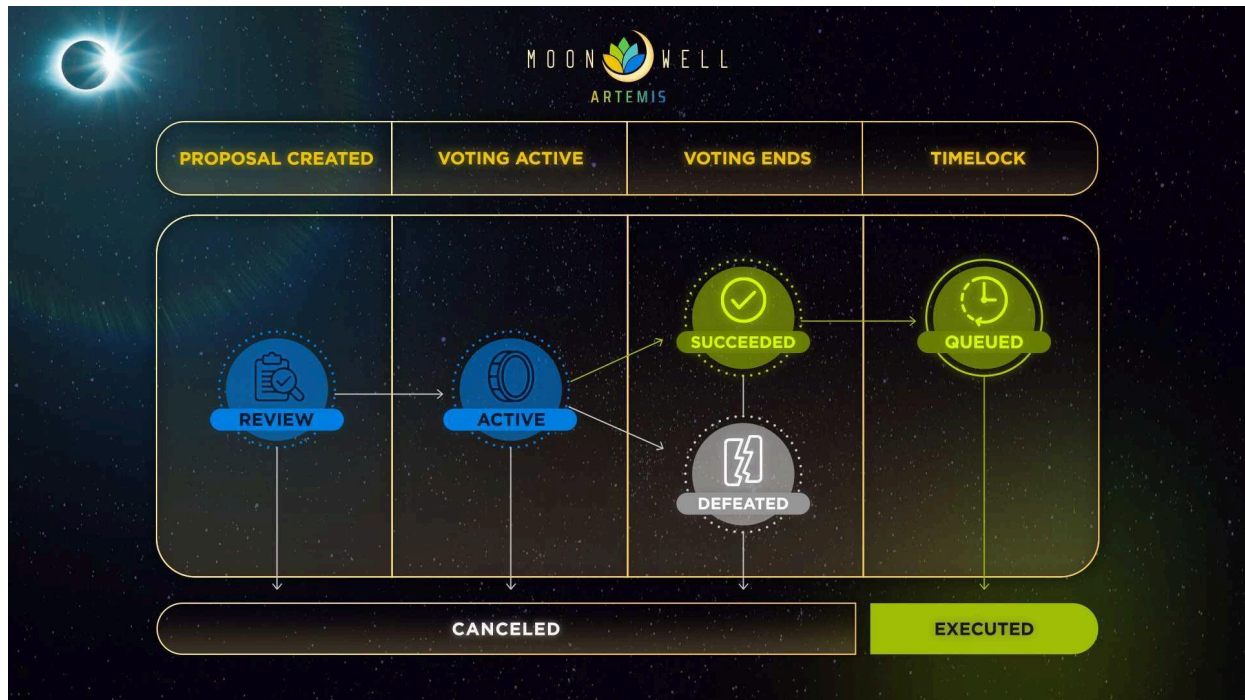
With the passage of [MIP-1](#) (Moonwell Improvement Proposal #1), the Moonwell community's on chain governance system has now successfully executed an on chain proposal and the community can now govern all aspects of the protocol.

This demonstrates the Moonwell community's desire to participate in open, democratic self-governance, which will ultimately lead to long term stability of the broader Moonbeam ecosystem.
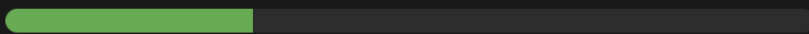
Bridge Selection Process

Recently, Moonwell community governance enabled the broader Moonbeam ecosystem, including StellaSwap, to poll users for their bridge preference through a [snapshot vote](#). This is how the community selected Wormhole as the preferred bridge, and demonstrates the power and capabilities of Moonwell governance.
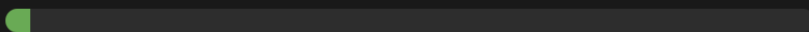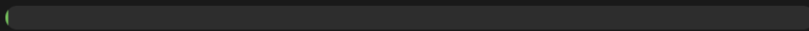
Results

Wormhole	301M WELL	66.02%
Axelar	140M WELL	30.64%
Multichain	14M WELL	3.08%
No Bridge	1.2M WELL	0.26%
Other	0 WELL	0%
Quorum		457M / 10M
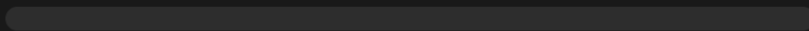
Grant Proposal

This grant proposal aims to increase active users, TVL and liquidity in key money markets on Moonwell, which will lead to lower borrowing costs and greater overall ecosystem liquidity that can be used by other Dapps in the ecosystem, including NFT marketplaces, connected contract use cases, and other novel and emerging use cases.

Current Assets Supported

After the devastating collapse of the Nomad bridge, the Moonwell community removed support for Nomad assets through on-chain governance. This left the following assets currently supported on Moonwell for lending and borrowing:
- GLMR - Moonbeam's native token
- xcDOT - Polkadot from the relay chain
- FRAX - Frax is a stablecoin that is a native asset on Moonbeam and other networks

Enabling Support for Wormhole and XCM assets

Through this grant proposal funding, the Moonwell community aims to increase liquidity and open new money markets for the following assets:
- USDC.wh - USDC wrapped by the Wormhole bridge
- ETH.wh - Ethereum wrapped by the Wormhole bridge
- wBTC.wh - wBTC wrapped by the Wormhole bridge
- BUSD.wh - BUSD wrapped by the Wormhole bridge
- xcUSDT - Tether transferred from the Statemine parachain

Cost of the Grant

The Moonwell community has mapped out the incentives required for the next 6 months, and has collaborated with leading DEXes in the ecosystem, including StellaSwap, to come up with a liquidity incentives proposal that will fit into the combined 12M GLMR budget for the next 6 months.

Similar to StellaSwap's grant proposal, we are dividing the 6 month grant duration into two parts. Given the current market dynamics, the 12M budget is not enough to sustain an equal distribution across the entire duration of 6 months and to support all the assets required.

While this proposal is designed to work in conjunction with StellaSwap's grant proposal, it is important to note that the Moonwell community is neutral on which DEX the liquidity comes from. As long as sufficient liquidity exists on any reliable DEX in the ecosystem, it will meet the needs of the Moonwell community. It is important that liquidity builds in these new assets on decentralized exchanges like StellaSwap prior to the Moonwell community adding support, so that there is sufficient liquidity to liquidate underwater loans without too much slippage.

Schedule of Liquidity Incentives

The 6 month duration is broken into two parts, with the corresponding GLMR requirements:
1. First 12 weeks: From October 5th to December 28th:
   - First 4 weeks: From October 5th to November 2nd - during this time period, the DEXes will be building liquidity on Wormhole assets, so the incentive requirements are reduced.

- GLMR required: **370,850 GLMR**
- Assets supported: **GLMR**, **xcDOT**, and **FRAX**
  - Next 8 weeks: From November 2nd to December 28th - during this time period, it is anticipated that there will be sufficient liquidity of the new assets, so new markets will be launched and incentives will need to increase.
    - GLMR required: **2,534,400 GLMR**
    - Assets supported: **GLMR, xcDOT, FRAX, xcUSDT, USDC.wh, ETH.wh, wBTC.wh, BUSD.wh**
2. Second 12 weeks: From December 28th to March 22nd:
   - GLMR required: **1,632,000 GLMR**
   - Assets supported: **GLMR, xcDOT, FRAX, xcUSDT, USDC.wh, ETH.wh, wBTC.wh, BUSD.wh**

Phases of Liquidity Incentives

Phase 1 - 4 weeks

During the first 4 weeks, from October 5th to November 2nd, decentralized exchanges such as StellaSwap will be building TVL and liquidity in the new bridged assets, such as xcUSDT, USDC.wh, ETH.wh, wBTC.wh, BUSD.wh. While the Moonwell community desires to add support for these assets as soon as possible, adding them safely and securely requires sufficient liquidity first, so it is anticipated that during this 4 week timeframe, Moonwell will only support the 3 existing, native assets: GLMR, xcDOT, and FRAX.

Phase 2 - 8 weeks

During the next 8 weeks, from November 2nd to December 28th, there should be sufficient liquidity on decentralized exchanges to expand asset support beyond the 3 native assets and adding support for new assets: xcUSDT, USDC.wh, ETH.wh, wBTC.wh, and BUSD.wh. This will require increased liquidity incentives.

The first 12 weeks (encompassing phases 1 and 2) are represented in this spreadsheet below, which represents the Moonwell community's recommended split of 60% of tier 3 liquidity incentives going to DEX liquidity, while 40% go to Moonwell markets:

First 12 weeks emissions								
Tier 3 Budget	12,000,000	Week	DEX Split	Lending	DEX	Moonwell	Totals	Cumulative
Incentive	66.00%							
Total incentive	7,920,000	10/5/2022	100%	0%	396,000	0	396,000	396,000
		10/12/2022	100%	0%	396,000	0	396,000	792,000
		10/19/2022	100%	0%	396,000	0	396,000	1,188,000
		10/26/2022	100%	0%	396,000	0	396,000	1,584,000
		11/2/2022	60%	40%	475,200	316,800	792,000	2,376,000
		11/9/2022	60%	40%	475,200	316,800	792,000	3,168,000
		11/16/2022	60%	40%	475,200	316,800	792,000	3,960,000
		11/23/2022	60%	40%	475,200	316,800	792,000	4,752,000
		11/30/2022	60%	40%	475,200	316,800	792,000	5,544,000
		12/7/2022	60%	40%	475,200	316,800	792,000	6,336,000
		12/14/2022	60%	40%	475,200	316,800	792,000	7,128,000
		12/21/2022	60%	40%	475,200	316,800	792,000	7,920,000
		Totals			5,385,600	2,534,400	7,920,000	

Phase 3 - 12 weeks

During the next 12 weeks, from December 28th to March 22nd, 2023, the rewards will be reduced across both decentralized exchanges and Moonwell, in order to stay within the tier 3 grants budget of 12M. Rewards will continue to be distributed across all of the markets supported on Moonwell, which should include native assets GLMR, xcDOT, xcUSDT, and FRAX, as well as bridged assets USDC.wh, ETH.wh, wBTC.wh, and BUSD.wh.

The next 12 weeks (encompassing phase 3) is represented in the spreadsheet below, which represents the Moonwell community's recommended split of 60% of tier 3 liquidity incentives going to DEX liquidity, while 40% go to Moonwell markets:

Next 12 weeks emissions								
Tier 3 Budget	12,000,000	Week	DEX Split	Lending	DEX	Moonwell	Totals	Cumulative
Amount used	34.00%							
Total incentive	4,080,000	12/28/2022	60%	40%	204,000	136,000	340,000	340,000
		1/4/2023	60%	40%	204,000	136,000	340,000	680,000
		1/11/2023	60%	40%	204,000	136,000	340,000	1,020,000
		1/18/2023	60%	40%	204,000	136,000	340,000	1,360,000
		1/25/2023	60%	40%	204,000	136,000	340,000	1,700,000
		2/1/2023	60%	40%	204,000	136,000	340,000	2,040,000
		2/8/2023	60%	40%	204,000	136,000	340,000	2,380,000
		2/15/2023	60%	40%	204,000	136,000	340,000	2,720,000
		2/22/2023	60%	40%	204,000	136,000	340,000	3,060,000
		3/1/2023	60%	40%	204,000	136,000	340,000	3,400,000
		3/8/2023	60%	40%	204,000	136,000	340,000	3,740,000
		3/15/2023	60%	40%	204,000	136,000	340,000	4,080,000
		Totals			2,448,000	1,632,000	4,080,000	

Experience and Likelihood of Success

One important factor for the Moonbeam community to consider is the experience of the Moonwell community and the likelihood of successfully achieving the goals to increase ecosystem liquidity. The Moonwell community would like GLMR holders and participants in governance to know that this liquidity plan was developed in collaboration with DeFi experts and advisors that helped to perform slippage analysis and created a very similar liquidity plan to support the initial launch of Moonwell Artemis on June 23rd with Nomad assets.

By following an almost identical liquidity plan, the StellaSwap and Moonwell communities were able to successfully build over $50M TVL on StellaSwap and over $185M TVL on Moonwell Artemis. The Moonwell community has a high degree of confidence in the plan and the ability to achieve the goal of growing ecosystem liquidity, but as is all things in crypto and life in general, it is impossible to say that such goals will be met with certainty.

Conclusion

The Moonwell community would like to thank the broader Moonbeam community for your incredible support during the last 8 months. Together, we've onboarded thousands of new DeFi users to Moonbeam and Polkadot, and shared in success that is unrivaled by any other parachain in the Dotsama ecosystem. We are long term builders and community members,, and believe strongly in the connected contracts and interoperability vision that Moonbeam brings to Polkadot. We hope to spend many years building alongside you all, and hope to launch key connected contract use cases, such as enabling XCM and multichain/multiprotocol governance for our industry-leading governance solution.

Thank you for considering this grant proposal. Let's build liquidity and connected contracts together!