1. Introduction

The Mantle Core Contributor Team is submitting this proposal to the community for the deployment of wstETH on Mantle.

Mantle Network is an optimistic Ethereum layer-2 (L2) solution with an EVM-compatible execution environment. Mantle is DAO-governed and employs a modular approach to execution, consensus, settlement, and data availability. In addition to a burgeoning ecosystem with 110+ dApps and counting, Mantle counts among its partners Game7, HyperPlay, EduDAO, Sozu Haus, and EigenLayer. The DAO-led community-driven Mantle possesses one of the largest on-chain treasuries — and the largest when discounting native tokens — including nearly 270K ETH/wstETH/WETH, priming it to be a major player in ETH LST and LSDFi.

2. Mantle Ecosystem Growth

Since its launch, Mantle has seen more than 22.5 million transactions and over 827,000 unique addresses transact on the network. At its peak, it reached 54,650 daily active addresses. To date, more than 3,900 developers have launched over 71,452 contracts.

As of now, Mantle has approximately ~$105 million total value bridged (TVB) and around ~$156 million in total value locked (TVL) across more than 40 different DeFi protocols, according to L2Beat. These metrics indicate a thriving ecosystem that Lido could benefit from by tapping into an existing, active user base.

Mantle Treasury

The Mantle Treasury is unmatched in terms of size. The treasury holds more than $740 million in assets excluding its own tokens (MNT) — the largest of any other DAO — which means ample runway to weather multiple cycles. It also has around $1.42 billion worth of MNT tokens, which provides a significant war chest to incentivize and bootstrap ecosystem growth.

Two proposals, MIP-24, and MIP-25, have since been passed to establish two key authorities that will carry out ecosystem funding and bootstrapping activities.

Mantle EcoFund

The Mantle EcoFund is a strategic initiative designed to inject $200 million into the Mantle ecosystem over the next three years. Comprising $100 million from Mantle's own Treasury and an additional $100 million matched by Strategic Venture Partners, the EcoFund serves multiple key objectives. These include supporting entrepreneurs and technologies within the Mantle ecosystem, accelerating adoption among developers and dApps, and incentivizing strategic partnerships. The fund will act as a seed investor in high-potential, early-stage projects and has the flexibility to provide additional liquidity or follow-on investments to successful ventures.

Mantle Economics Committee

The Mantle Economics Committee (EC) is a specialized sub-governance body operating under Mantle Governance. It will focus primarily on making informed, risk-averse decisions about the allocation of Mantle Treasury assets, without directly holding custody of these assets.

The Committee is authorized to manage Mantle LSP and Lido ETH staking strategies, with allowances up to 200k ETH, and has the flexibility to enter and exit these strategies based on commercial negotiations and risk evaluations. The Committee adopts a highly conservative risk management approach and operates within governance rules that prioritize caution in strategy entries while allowing quicker exits. Its diverse membership will include representatives from Mantle Governance, the Mantle community, and Mantle Core Contributor teams.

As of the time of writing, the EC has since tabled their first proposal to allocate up to:

- $160 million in liquidity support for applications
- $60 million in seed liquidity for RWA-backed stablecoins
- $18 million in liquidity support for third-party bridges

3. wstETH Demand

Demand for Lido (w)stETH is significantly driven by its utility within major ecosystems, which are leveraging its composability in various DeFi protocols. Notably, wstETH's overwhelming market share of staked ETH enhances its desirability. Additionally, wstETH's versatility, being used for a range of DeFi applications including collateral, lending, farming, indexing, minting, vaults, and stables, amplifies its demand further. Mantle aims to leverage this demand for ETH liquid staking tokens and make wstETH one of the core building blocks of the Mantle ecosystem, as well as a core asset of its treasury to sustainably grow its protocol-owned liquidity (POL).

4. Implementation

wstETH has already been deployed onto Mantle via the canonical bridge. This proposed new deployment will be replacing the existing wstETH with a one-way migration pool opened for users to migrate.

- Solution smart contracts
- GitHub - mantlenetworkio/lido-l2
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The Mantle team has taken the initiative to deploy wstETH to Mantle testnet that uses as a reference the wstETH on Optimism deployment (lidofinance - lido-l2) with some UX enhancements like ERC-2612.

- All management of the wstETH bridging components is designed to be performed by the Lido DAO via the previously developed cross-chain governance bridge (GitHub - lidofinance/governance-crosschain-bridges: This repo contains the crosschain governance bridges used for the aave markets deployed across different networks)
- Ownership & Governance
- Administrative roles and upgrade levers are to be assigned to the Lido DAO Aragon Agent: 0x3e40D73EB977Dc6a537aF587D48316feE66E9C8c
- This will be also used to forward L1->L2 motions via the OptimismBridgeExecutor contract. This setup is similar to the Optimism and Base wstETH cases as Mantle has an OVM-compatible execution environment.
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- Emergency brakes
- L1 ⅗ emergency brake multisig - previously established and maintained by the Lido DAO contributors: 0x73b047fe6337183A454c5217241D780a932777bD
- Mantle ⅗ emergency brake multisig being proposed for acceptance - freshly created with the same EOAs and quorum threshold as the L1 multisig: 0xa8579D42E34398267dE16e6eeeCdb7ED0EFF953C
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5. Conclusion

In conclusion, deploying wstETH on Mantle is a strategic move to form a mutually beneficial partnership with Lido. Mantle, with its established ecosystem and strong treasury, provides a viable platform for expanding wstETH's utility and adoption. Conversely, integrating wstETH could enhance Mantle's DeFi offerings and possibly attract more developers and users. The existing demand for wstETH, along with Mantle's growth initiatives like the EcoFund and its governance structures, supports a promising integration. This proposal, therefore, encourages the community to support a collaboration that expands the utility of wstETH and aids Mantle in advancing its position in the Ethereum Layer 2 space and the broader blockchain sector.

We propose that the Lido DAO formally accept ownership of the mainnet deployment of the wstETH bridging components referenced through a formal vote.

6. Audits

- Governance crosschain bridges (OptimismBridgeExecutor)
- wstETH on Mantle (L1ERC20TokenBridge, L2ERC20TokenBridge, ERC20BridgedPermit)

7. Contracts

- Testnet contracts:
- L1ERC20TokenBridge Impl: 0x8bed2E40522E21119B8A78A4842767c9bCceC47b
- L1ERC20TokenBridge Proxy: 0xBc6bbb98E73D15cc6a280e96b32Cc73b4f9068E1
- ERC20BridgedPermit Impl: 0x1008C85f796314c0985639b1a03083Be53eEf5aA
- ERC20BridgedPermit Proxy: 0x2C402BE58E5849c5413a79aa3b8aF3136e6C017F
- L2ERC20TokenBridge Impl: 0x7Aa9EEEcECD56Bd43Bb66ee1B42dBEB754792C84
- L2ERC20TokenBridge Proxy: 0xFCCC4297be972bb2861Da6D78a6fad588dF03ab1
- OptimismBridgeExecutor: 0xa09BA6f7660C616D2B45218b3169c855A695328f
- L1ERC20TokenBridge Impl: 0x8bed2E40522E21119B8A78A4842767c9bCceC47b
- L1ERC20TokenBridge Proxy: 0xBc6bbb98E73D15cc6a280e96b32Cc73b4f9068E1
- ERC20BridgedPermit Impl: 0x1008C85f796314c0985639b1a03083Be53eEf5aA
- ERC20BridgedPermit Proxy: 0x2C402BE58E5849c5413a79aa3b8aF3136e6C017F
- L2ERC20TokenBridge Impl: 0x7Aa9EEEcECD56Bd43Bb66ee1B42dBEB754792C84
- L2ERC20TokenBridge Proxy: 0xFCCC4297be972bb2861Da6D78a6fad588dF03ab1
- OptimismBridgeExecutor: 0xa09BA6f7660C616D2B45218b3169c855A695328f
- Mainnet contracts:
- L1ERC20TokenBridge Impl: 0x6fBBe1Af52D22557D7F161Dc5952E306F4742e23
- L1ERC20TokenBridge Proxy: 0x2D001d79E5aF5F65a939781FE228B267a8Ed468B
- ERC20Bridged Impl: 0x1FaBaAec88198291A4efCc85Cabb33a3785165ba
- ERC20Bridged Proxy: 0x458ed78EB972a369799fb278c0243b25e5242A83
- L2ERC20TokenBridge Impl: 0xf10A7ffC613a9b23Abc36167925A375bf5986181
- L2ERC20TokenBridge Proxy: 0x9c46560D6209743968cC24150893631A39AfDe4d
- OptimismBridgeExecutor: 0x3a7B055BF88CdC59D20D0245809C6E6B3c5819dd
- L1ERC20TokenBridge Impl: 0x6fBBe1Af52D22557D7F161Dc5952E306F4742e23
- L1ERC20TokenBridge Proxy: 0x2D001d79E5aF5F65a939781FE228B267a8Ed468B
- ERC20Bridged Impl: 0x1FaBaAec88198291A4efCc85Cabb33a3785165ba
- ERC20Bridged Proxy: 0x458ed78EB972a369799fb278c0243b25e5242A83
- L2ERC20TokenBridge Impl: 0xf10A7ffC613a9b23Abc36167925A375bf5986181
- L2ERC20TokenBridge Proxy: 0x9c46560D6209743968cC24150893631A39AfDe4d
- OptimismBridgeExecutor: 0x3a7B055BF88CdC59D20D0245809C6E6B3c5819dd

8. Ownership, roles, and levers Mainnet setup

- To be presented concurrently with the Mainnet deployment