Lido just expanded to Solana with a full-fledged liquid staking solution for SOL staking ($stSOL) built by theChorus One team. This proposal concerns bootstrapping liquidity for stSOL on leading Solana DEXes with LDO from the DAO treasury.

Background

The native Solana token SOL has recently entered the top 10 cryptoassets in terms of market capitalization. Solana has managed to attracted many high-profile projects and institutions looking for a scalable blockchain substrate, especially for financial applications that require high throughput and low cost transactions (e.g. Serum (orderbook DEX), Pyth (market data), Mango Markets (perpetuals), and many others - including AMM protocols like Raydium, Saber, and Mercurial Finance).

The main goal for stSOL is to be integrated as collateral into DeFi applications in the Solana ecosystem. With stSOL, Solana DeFi stands to get access to billions of dollars of collateral without users having to forgo SOL staking rewards (which at current rates amount to around 7.5% APY).

With this proposal, we want to propose moving a first batch of LDO tokens to Solana to bootstrap stSOL liquidity integrations and to get LDO into the hands of Solana users.

Proposal

- Move 800,000 LDO to an account on Solana that is governed by the Lido DAO (if possible the4/7 multisig)
- Distribute 800,000 LDO to different liquidity venues over a 2 month (60 day) period (in the spirit of having a more diversified liquidity strategy from the start):
- Raydium stSOL/USDC (250,000 LDO) and stSOL/ETH (250,000 LDO) liquidity pools:Raydium is the OG of AMMs on Solana with over $1bn TVL and the largest trading volume ($500m+ a day). Raydium integrates with Serum liquidity to provide users with an optimal price quote.
- Saber stSOL/SOL liquidity pool (150,000 LDO): Saber is a fast-growing StableSwap automated market maker on Solana with aTVL of above $2bn at the time of writing.
- Mercurial stSOL/SOL liquidity pool (150,000 LDO): Mercurial Finance is an automated market maker protocol that aggregates liquidity from Serum, can support multiple assets, and is currently #5 in TVL on Solana with total liquidity of over $150m.

- Raydium stSOL/USDC (250,000 LDO) and stSOL/ETH (250,000 LDO) liquidity pools:Raydium is the OG of AMMs on Solana with over $1bn TVL and the largest trading volume ($500m+ a day). Raydium integrates with Serum liquidity to provide users with an optimal price quote.
- Saber stSOL/SOL liquidity pool (150,000 LDO): Saber is a fast-growing StableSwap automated market maker on Solana with aTVL of above $2bn at the time of writing.
- Mercurial stSOL/SOL liquidity pool (150,000 LDO): Mercurial Finance is an automated market maker protocol that aggregates liquidity from Serum, can support multiple assets, and is currently #5 in TVL on Solana with total liquidity of over $150m.

Details

The liquidity incentives given in LDO will be matched by Saber (around 50k SBR/day) and Mercurial (around 1.223m MER over the two months) through their own liquidity programs. This will mean liquidity providers for the stSOL pairs on either will stand to earn both LDO and SBR/MER tokens respectively.

Because stSOL is value-accruing - in contrast to Lido's stETH, which is rebasing to be pegged to ETH (which is not possible on Solana at this point) - the Mercurial team will work with us to adjust their liquidity pool to minimize the potential for impermanent loss for LPs in the short run. This will involve making use of our internal price oracle to adjust pool parameters as the stSOL to SOL exchange rate increases due to accruing staking rewards.

Analysis

We have done an analysis of the resulting APY for various liquidity depths to ensure Lido for Solana. We also did an analysis on the payback period of these incentives for Lido given the SOL staking APY and assumed TVL levels. They can be found here. The TL;DR is that for a given liquidity depth per pool of $50m (i.e. $200m total liquidity), the APY for LPs would outperform purely holding stSOL between 10-20% for the duration of the incentives. Given the assumptions, LPing would outperform simply holding stSOL for up to $250m per integration ($1bn in total liquidity). The analysis also looks at the time it would take for the Lido DAO to receive back the money in LDO spent on these incentives (and Chorus One's token grant), which e.g. comes out at 9 months (given a 5% market share and the other assumptions).

It is important to note that unlike Lido on Ethereum, our liquid staking solution on Solana does support withdrawals. Nevertheless, we believe the primary way to exit a staking position with Lido should be through AMM swaps, as withdrawals will expose the user to Solana deactivation periods and thus we expect this function to be taken on by more sophisticated users (such as market makers that arbitrage withdrawals from Lido and the secondary market).

Bridging to Solana

We believe having LDO on Solana is a major step and are looking to establish a path to also bring stETH to Solana and stSOL to Ethereum. The actual transfer of LDO from Ethereum to Solana will be done via the Wormhole v2 token bridge that is about to launch.

If this proposal will pass the Snapshot vote, a payment of the 800,000 LDO discussed in this proposal will be added to an upcoming Lido omnibus vote (expected Sep 16) and will be bridged to Solana from where it will be distributed to the respective AMM pool liquidity mining contracts.