

STAKE STEAK



PRODUCT PAPER
MAY 2021



DIRECTOR'S OVERVIEW

StakeSteak is a suite of financial products centered around fUSD, including but not limited to interest-bearing assets, liquidity pools, auto-compounding vaults, and loaning/borrowing.

fUSD is Fantom's native stablecoin that can be created by the fMint function from Fantom's official wallet at <https://pwawallet.fantom.network/>. Any person can lock up their FTM (Fantom's native token) and mint fUSD at a 500% collateralization ratio. A \$1000 FTM position is able to mint \$200 worth of fUSD. Additionally, the collateral that is locked earns around 8% APR.

Essentially, fMint acts as a mechanism for people to borrow fUSD using FTM as their collateral. Unfortunately, these borrowed positions are riskless, which puts fUSD in a unique situation where its market value is no longer pegged to \$1. Ultimately, there are two major reasons why fUSD is unable to hold its peg: Lack of liquidations and lack of infrastructure.



LACK OF LIQUIDATIONS

fUSD follows a similar structure as many prominent stablecoins such as DAI, BUSD, or USDP in that they are all Collateralized Debt Positions (CDPs). DAI, BUSD, and USDP are able to hold peg properly because they have a mechanism called liquidations keeping people's borrowed positions well-collateralized and punishing people who are undercollateralized.

Liquidations is a key component that keeps these CDP stablecoins pegged at \$1, and fUSD currently does not have this mechanism to keep its price stable. The lack of liquidations has driven down fUSD's price dramatically. Throughout March and May of 2021, fUSD's price has fluctuated from a high of \$1.00 to \$0.15. In the absence of liquidations, fUSD has become susceptible to exploiters. These exploiters are able to take advantage of the current situation by collateralizing their FTM to mint fUSD, selling the new fUSD for FTM, locking up their new FTM to mint more fUSD, and repeating the process until it's insignificant to continue. This technique is referred to as "folding." Here is the example used from StakeSteak's Medium article "Will FUSD ever hold peg?".



HOW fMINT IS EXPLOITED

Let's say someone completed the process I talked about above with 1000 FTM at \$0.80 and FUSD at \$0.40.

Mint 160 FUSD with 1000 FTM

Sell 160 FUSD to 80 FTM

Stake 80 FTM

Mint 16 FUSD

Sell 16 FUSD to 8 FTM

Stake 8 FTM

This strategy works out great if FUSD stays at \$0.40 or dips lower since they are earning yields on an additional 88 FTM.

However, if FUSD increases in price, which it eventually will when FUSD holds peg, people folding will lose a lot of money.

Let's see what happens when this person tries to withdraw all their FTM when FUSD goes to \$1.

8 FTM can only buy 6.4 FUSD (Need 9.4 FUSD more to unlock 80 FTM)

80 FTM can only buy 64 FUSD (Need 94 FUSD more to unlock 1000 FTM)

That's $9.4 + 94 = \$103.4$ or 64.6% loss compared to just holding FUSD that you originally minted to unlock 1000 FTM. If you can't afford to get that additional 103.4 FUSD, the 1000 FTM is liquidated as well.



LACK OF INFRASTRUCTURE

The lack of infrastructure for fUSD is a negative feedback loop that continues to suppress the price away from peg. The uncertainty surrounding fUSD price stability prevents people from building with it. As a result, there is no usages for fUSD except swap into FTM, which creates downward price pressure on fUSD. When prices go down, people are more hesitant to build with fUSD, speculators become less confident that fUSD will hold peg, sell offs continue to happen, and the cycle continues. Originally, the only infrastructure built by the community was SpiritSwap's fUSD-FTM LP pools that were incentivized with SPRT tokens. However, these incentives were removed shortly after due to the instability of fUSD's price. If this negative feedback loop were to continue, fUSD's price trajectory could eventually hit 0 or hover closely above 0.

Infrastructure development is critically important for preventing fUSD from failing, regardless if liquidations are added. While liquidations are Fantom's responsibility to implement, it's the community's responsibility to make fUSD usable. This product paper will introduce the different areas that StakeSteak has or plans on building to make fUSD a viable stablecoin.





Launching on 5/20/2021, StakeSteak is the first protocol fully backing the infrastructure development of fUSD (Other than the Fantom Foundation). We introduced three major components: iFUSD, incentivized FUSD Liquidity Pools, and xSTEAK.

iFUSD

iFUSD (interest-bearing fUSD) is a wrapper token for fUSD that redistributes the revenue generated from StakeSteak's protocol operations. At launch, StakeSteak is incentivized liquidity pools on SpiritSwap using STEAK as the reward token. There is a 0.5% deposit fee required for participating in farming rewards. The LP tokens that are collected as fees are redeemed for the underlying assets, which are fUSD and another token. This token is sold for fUSD, and the total amount of FUSD is sent to the iFUSD contract at:

[0x9fC071cE771c7B27b7d9A57C32c0a84c18200F8a](https://etherscan.io/address/0x9fC071cE771c7B27b7d9A57C32c0a84c18200F8a)

445 + 148 + 242 + 768 + 4532 + 3686 + 2310 + 4378 + 6573 +
8140 + 2045 + 1977 + 1562 + 1639 = 30,154 fUSD have been
redistributed in fees in the first 5 days since launch. With 4.9
mil fUSD locked, averaging 50.7% APY



Dollar Cost Averaging:

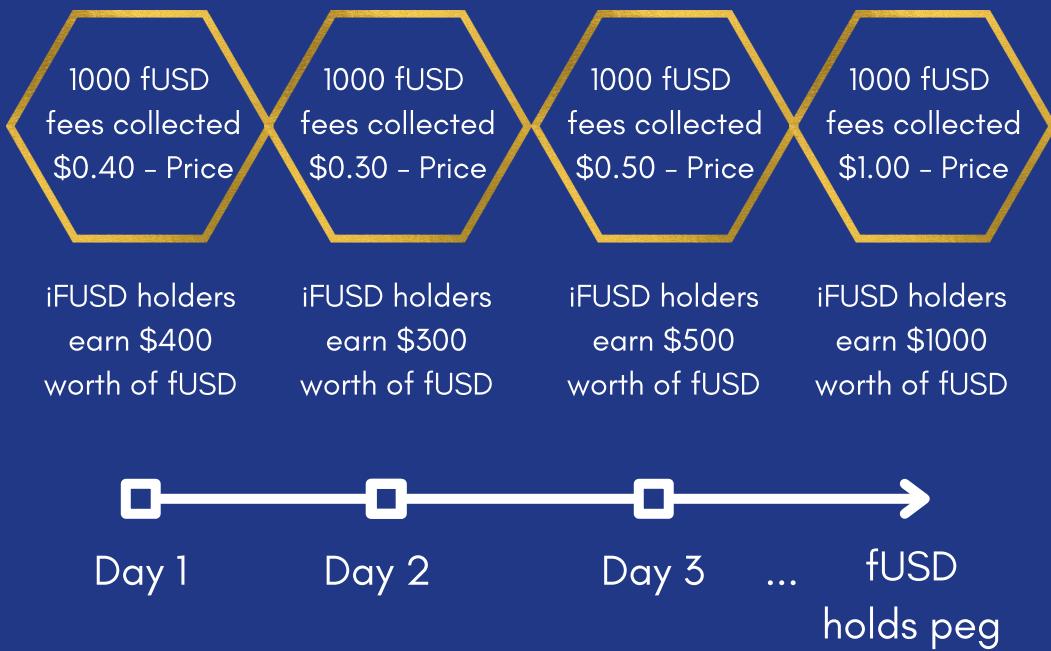


FIGURE 1.

In the future, fees generated from autocompounding vaults and loaning/borrowing will be used to increase yields on iFUSD as well.

iFUSD LIQUIDITY POOLS (LPs)

Due to the lack of fUSD liquidity pool incentives, the only place to buy fUSD is on Fantom's Official Wallet, which is rather obscure and confusing for many people. By incentivizing SpiritSwap LPs, users can more easily access fUSD and swap the token without high slippage. Using a modified version of [Sushi Swap's MasterChef contract](#), nine pools were incentivized at launch: STEAK-fUSD, FTM-fUSD, USDC-fUSD, fUSDT-fUSD, DAI-fUSD, BTC-fUSD, ETH-fUSD, SPRT-fUSD, and BNB-fUSD. In order to consolidate liquidity, StakeSteak transitioned into 3 pools: FTM-fUSD, STEAK-fUSD, and USDC-fUSD. Consolidating liquidity at the beginning was essential to make sure those who wanted to buy fUSD could do so with low slippage. As liquidity and the projects grow, more pools will be incentivized in order to improve the utilization of fUSD.

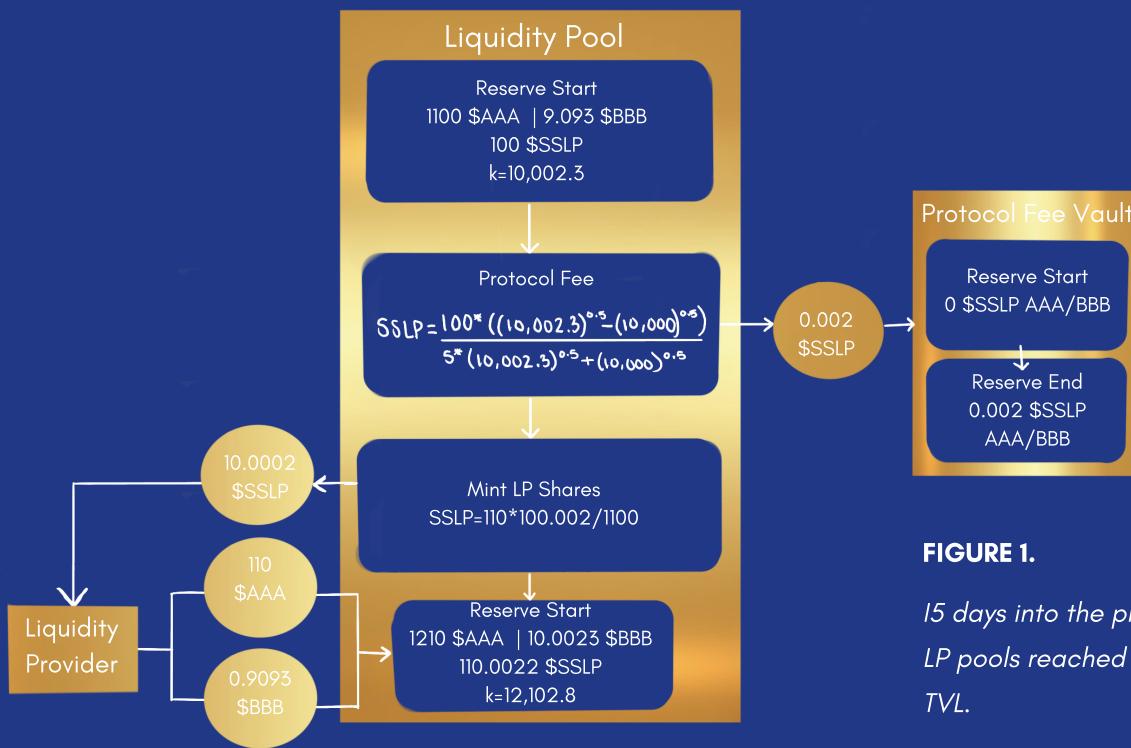
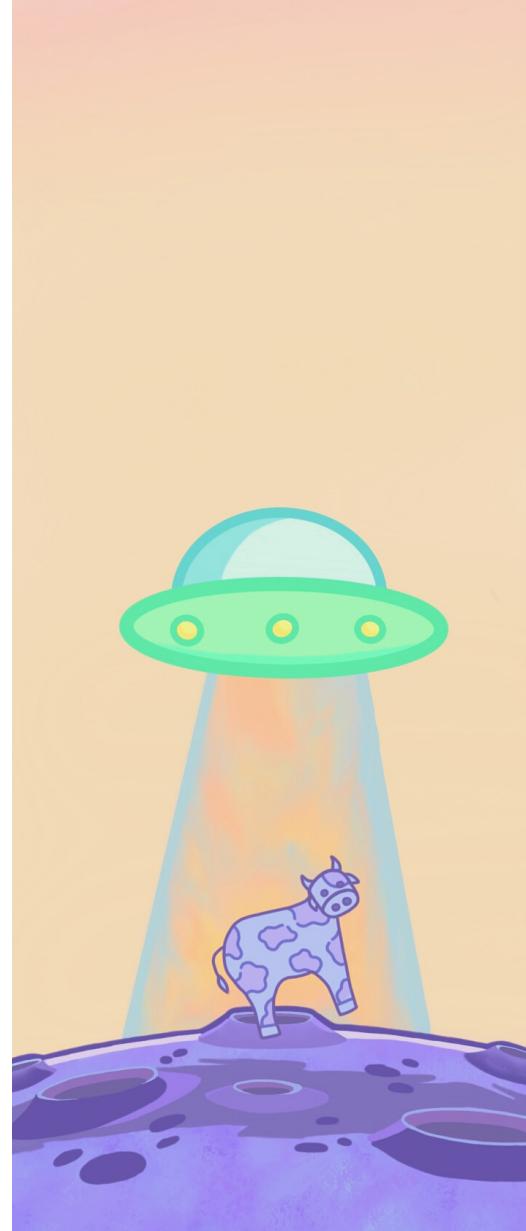
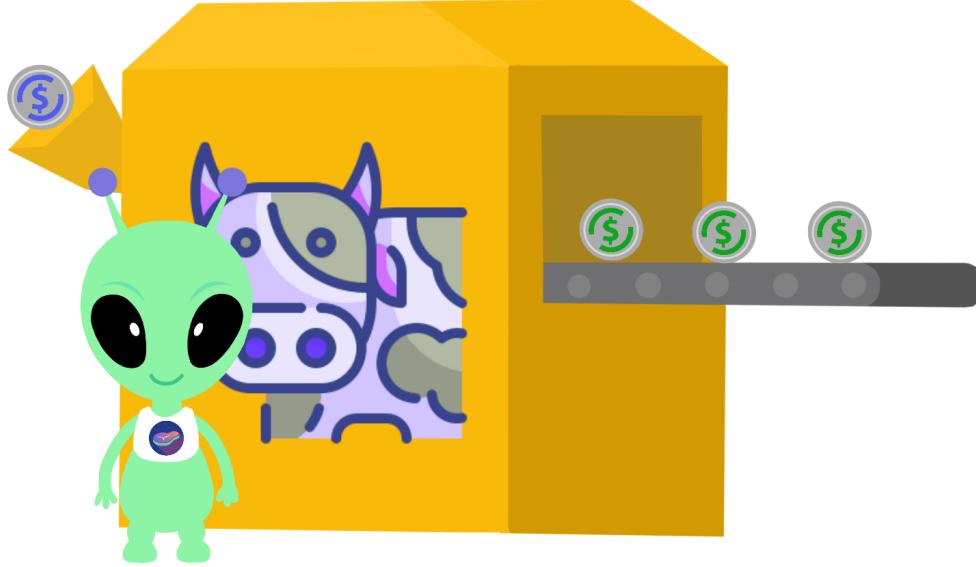


FIGURE 1.

15 days into the project the LP pools reached \$646,839 TVL.

CONTINUED

Finally, there was one more transition into iFUSD LP pools. Taking on all the benefits on fUSD LP pools, iFUSD LP pools removed the opportunity cost for fUSD holders to either stake in iFUSD or LP for fUSD pools. With these new pools, the user can choose whether or not to take on the additional risk of LPing, without missing out on other rewards for having fUSD. Essentially, this move aligns incentives between iFUSD and LPs.



xSTEAK and (veSTEAK)

xSTEAK is the current fee distribution contract for long-term StakeSteak project believers. xSTEAK holders receive 10% (reduced from 20%) of all the STEAK harvested from farms. Currently, we are sending out fees manually, but are planning on creating off-chain automation that sends fees randomly 2-3 times a day. The randomization of fee distribution is crucial to prevent exploiters from staking the moment before fees are distributed and unstaking immediately afterwards. Eventually, xSTEAK will transition into the timelocked model of veSTEAK. The veSTEAK model will allow stakers to lock their STEAK to boost their farming rewards and vote on pool allocations. This model is forked from Curve's veCRV.

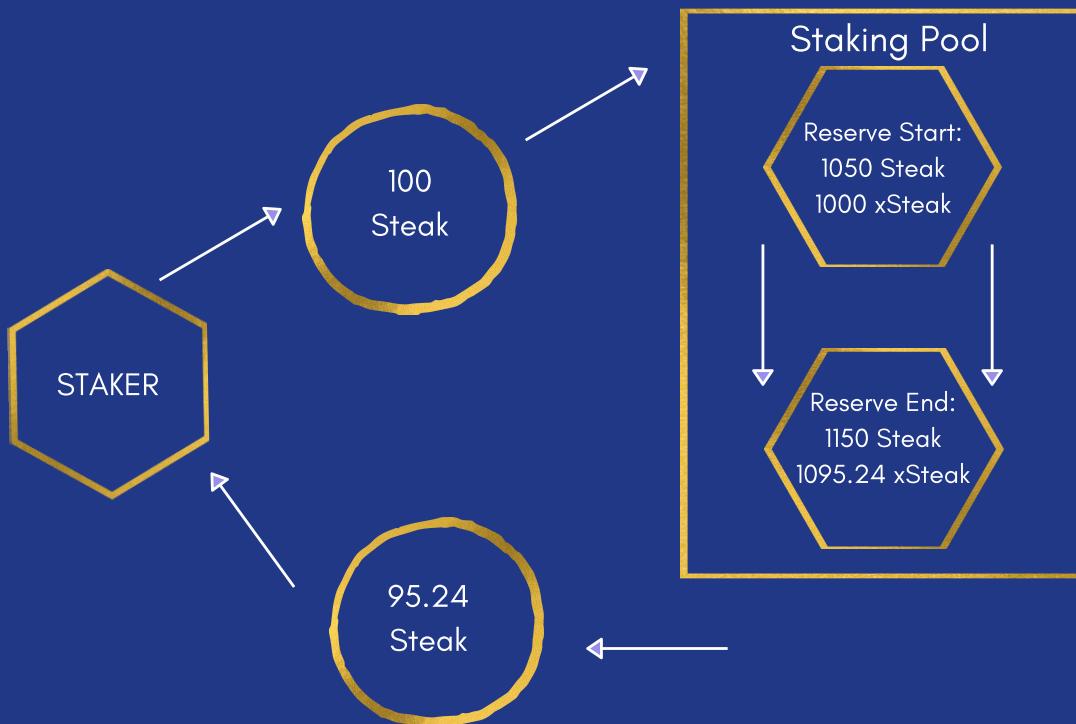


FIGURE 1.

15 days after launch xSTEAK holders have received 116 + 662 + 2781 + 2512 + 2081 + 6573 + 2047 + 1159 + 1464 + 1197 + 1366 = 21,920 STEAK has been distributed to the 106,511 xSTEAK holders

ROADMAP

Launch 5/20 ✓

vFat Farming Tool ✓

Automated Fee Distribution

Reaper Auto-Compounding

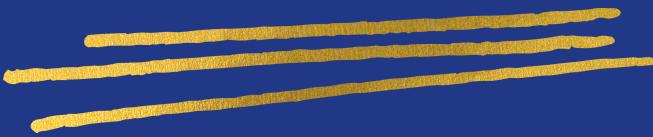
Outreach

-  Spirit
-  Fantom Foundation
-  Hoop/CRV

veSteak

Loan/Borrow

Additional Features

- 
1. **Loaning/Borrowing:** There are many different models for lending and borrowing out there. The goal here is to allow users to put up iFUSD and xSTEAK as collateral so that interest can be earned that can help pay-off the borrowing interest payments.
 2. **Outreach:** Accomplished: listed on vFat and added to Reaper Farms. Partnering with Curve or a Curve fork such as HOOP will help maintain fUSD's peg. Depending on the A parameter set for the pools, the range of imbalance can be rather large and still allow users to swap between fUSD and other stablecoins with minimal slippage.

Partnering with Spirit is important as well, they are one of the first swaps on Fantom. Getting their support could help boost rewards for fUSD LPs and gain broader recognition for StakeSteak.

Receiving a grant from Fantom Foundation would completely legitimize StakeSteak as an important project on the Fantom ecosystem. Fantom can provide knowledge, experience, and capital to improve StakeSteak's products.