# Cost Savings In Production

# Introduction

**Largest Resource**

**Cost** Control
Visibility **and** Actions

**Supply Inventory
and** Approvals

**Supply** Options

# People

Team Member Onboarding

Safety and Biosecurity

Fire Safety

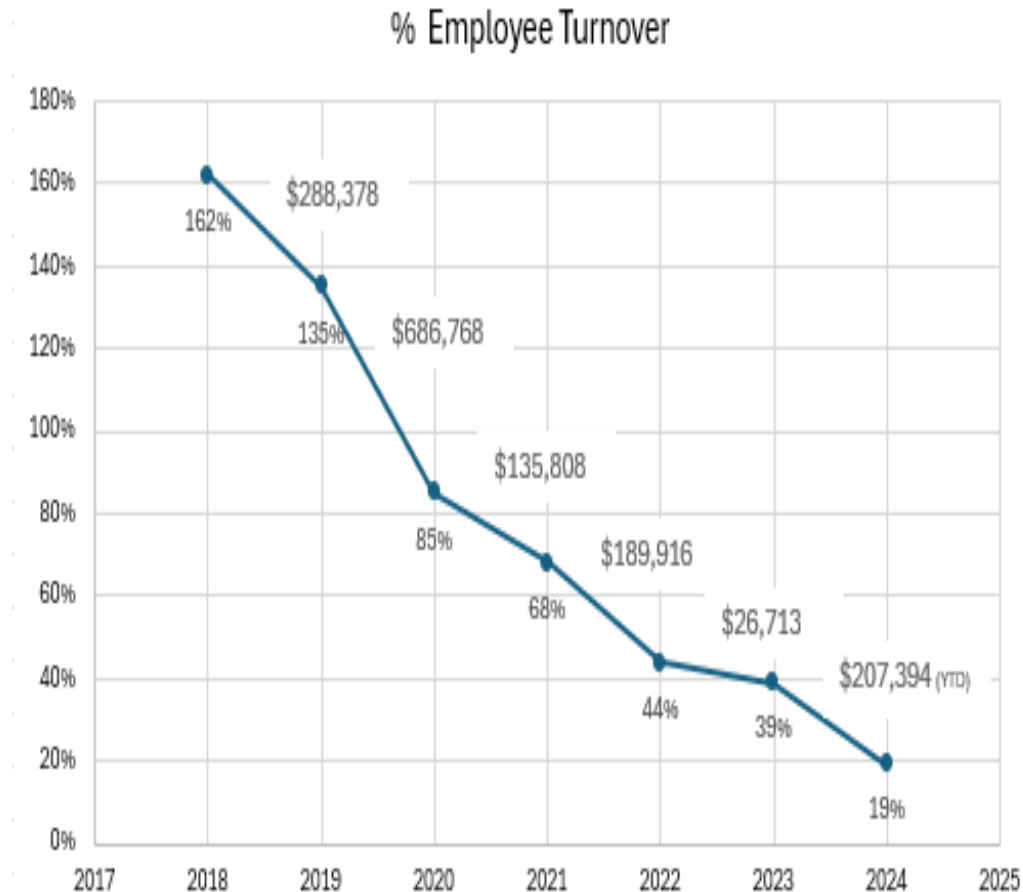PQA and Animal Behavior

Career Path

Certifications

# Largest Resource <u>AND</u> Biggest Asset

- Team Member Onboarding
- Safety
- Fire Safety
- PQA and Animal Behavior
- Biosecurity Training
- Career Path
- Certifications

## % Employee Turnover

162%
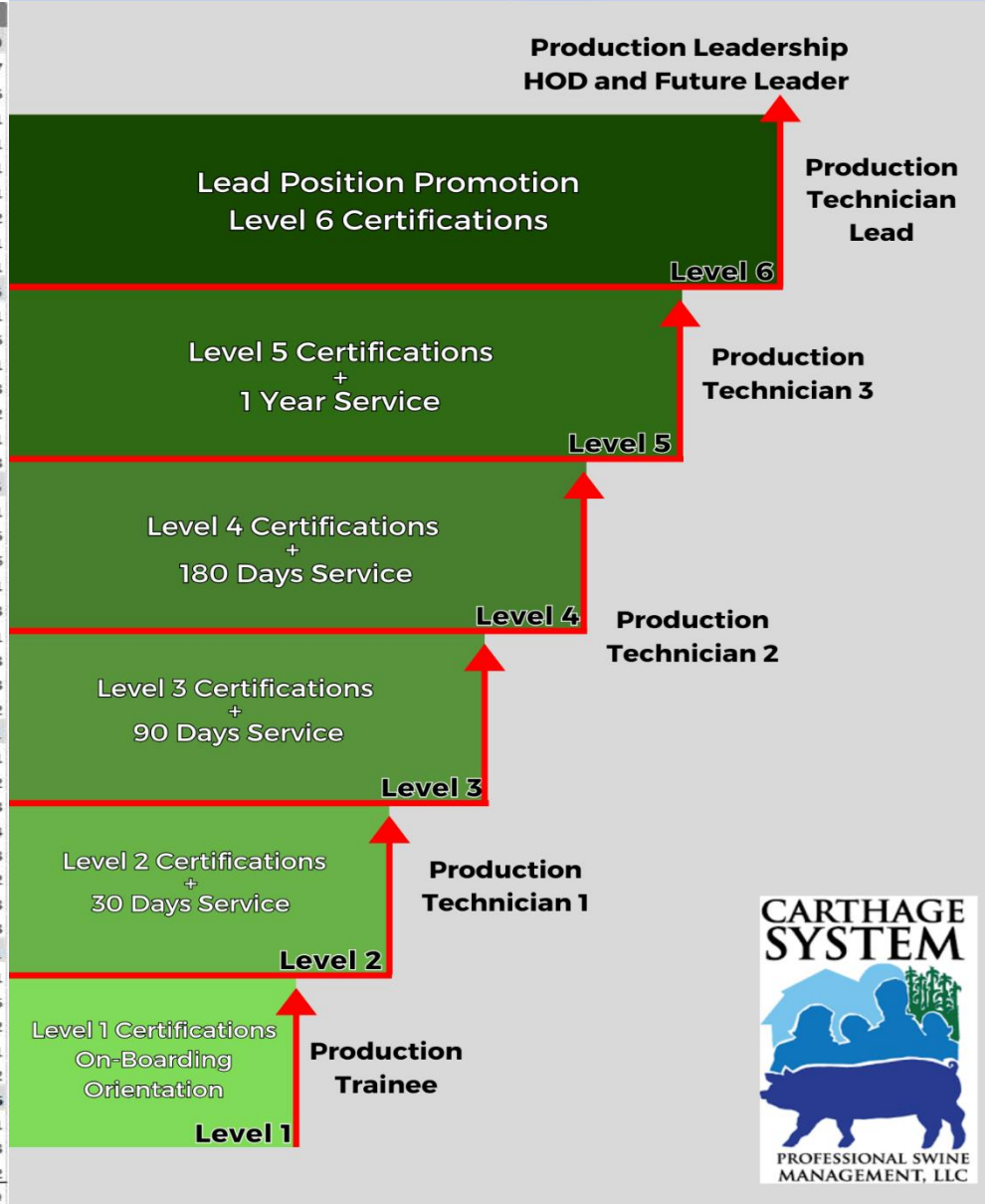$288,378

135%
$686,768

85%
$135,808

68%
$189,916

44%
$26,713

39%
$207,394 (YTD)

19%

2017  2018  2019  2020  2021  2022  2023  2024  2025

### Total Savings of $1,504,976
*(first 10 days of employment)*

# Onboarding

| TimeFrame | Section | Count of Certifications |
|---|---|---|
| **Onboarding** | | **20** |
| | 1. Biosecurity | 7 |
| | 2. Feeding and Water | 5 |
| | 3. Environmental | 1 |
| | 4. Breeding | 1 |
| | 5. Farrowing | 1 |
| | 6. Animal Movement | 1 |
| | 8. Health | 2 |
| | 10. Records and Record maintenance | 1 |
| | 11. Herd and Facility Management | 1 |
| **30 days** | | **16** |
| | 1. Biosecurity | 1 |
| | 2. Feeding and Water | 5 |
| | 4. Breeding | 1 |
| | 5. Farrowing | 3 |
| | 6. Animal Movement | 2 |
| | 7. Culling, Euthanasia, and Morality Removal | 1 |
| | 9. Sanitation | 3 |
| **90 days** | | **25** |
| | 3. Environmental | 1 |
| | 4. Breeding | 5 |
| | 5. Farrowing | 6 |
| | 6. Animal Movement | 1 |
| | 7. Culling, Euthanasia, and Morality Removal | 3 |
| | 8. Health | 1 |
| | 9. Sanitation | 3 |
| | 10. Records and Record maintenance | 3 |
| | 11. Herd and Facility Management | 2 |
| **180 days** | | **21** |
| | 1. Biosecurity | 1 |
| | 2. Feeding and Water | 2 |
| | 3. Environmental | 3 |
| | 4. Breeding | 4 |
| | 5. Farrowing | 3 |
| | 7. Culling, Euthanasia, and Morality Removal | 2 |
| | 8. Health | 3 |
| | 11. Herd and Facility Management | 3 |
| **1 year +** | | **11** |
| | 1. Biosecurity | 1 |
| | 3. Environmental | 5 |
| | 4. Breeding | 2 |
| | 8. Health | 1 |
| | 10. Records and Record maintenance | 2 |
| **Promotion to Lead** | | **6** |
| | 8. Health | 1 |
| | 10. Records and Record maintenance | 3 |
| | 11. Herd and Facility Management | 2 |
| **Grand Total** | | **99** |



PRODUCTION TECHNICIAN CAREER PATH

CAREER PATH PROGRESSION IS DRIVEN BY TIME AND CERTIFICATIONS

Production Leadership HOD and Future Leader

Lead Position Promotion Level 6 Certifications — Level 6 — Production Technician Lead

Level 5 Certifications + 1 Year Service — Level 5 — Production Technician 3

Level 4 Certifications + 180 Days Service — Level 4 — Production Technician 2

Level 3 Certifications + 90 Days Service — Level 3

Level 2 Certifications + 30 Days Service — Level 2 — Production Technician 1

Level 1 Certifications On-Boarding Orientation — Level 1 — Production Trainee
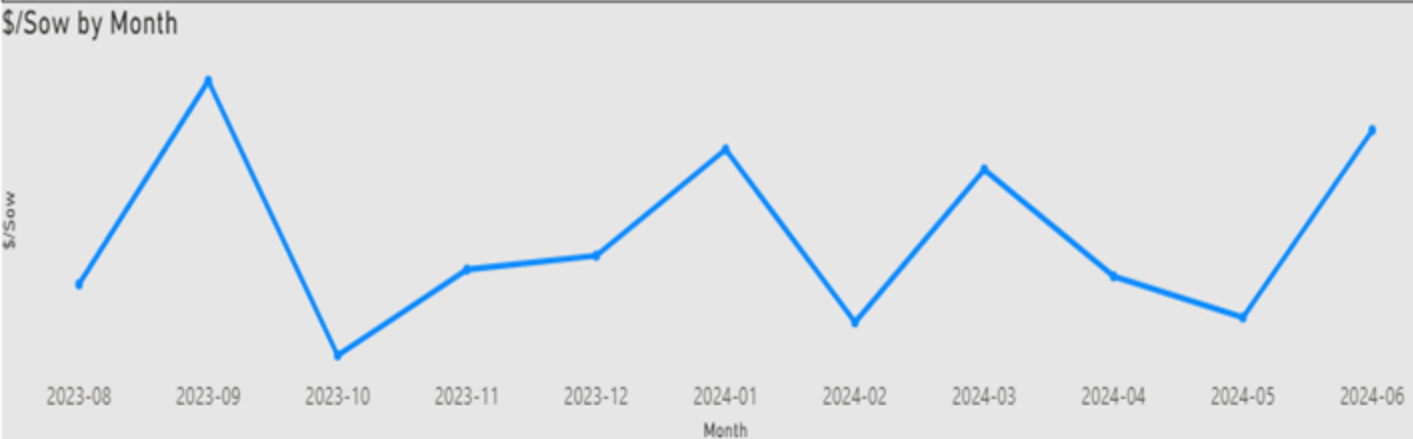
CARTHAGE SYSTEM
PROFESSIONAL SWINE MANAGEMENT, LLC

# Cost Control Dashboard

| Total | per Sow | per Pig | Budgets | Safety | Turnover | R&M |
|-------|---------|---------|---------|--------|----------|-----|

| SOW INVENTORY | 6197 | 6076 | 6016 | 5971 | 6112 | 6198 | 6221 | 6222 | 6258 | 6329 | 6233 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2023-08 | 2023-09 | 2023-10 | 2023-11 | 2023-12 | 2024-01 | 2024-02 | 2024-03 | 2024-04 | 2024-05 | 2024-06 |

Biologicals
Electricity
Feed
Freight Net
Fuel/Oil
Labor
LP/Nat Gas
Lvstk Supplies
Manure
Misc Expense
Pharma
Piglet Vaccines
Production Records
R & M
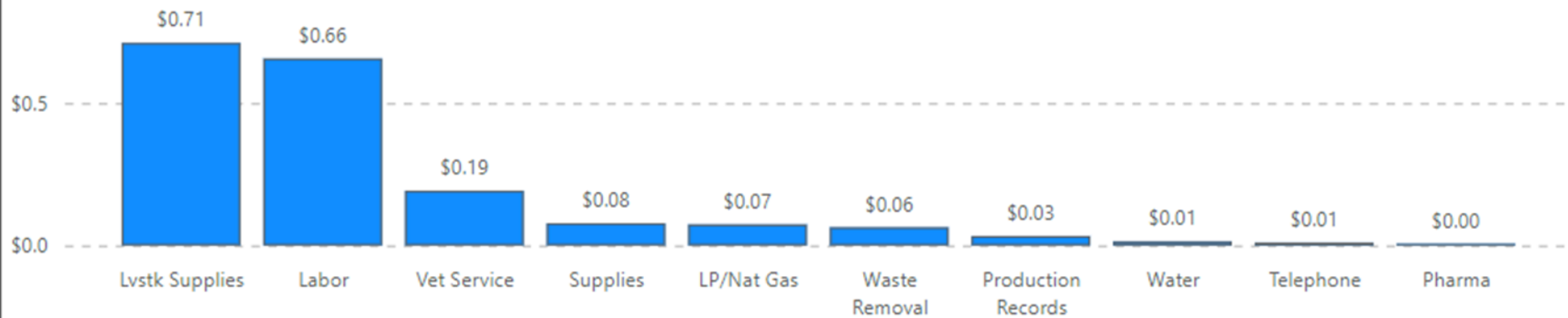Semen
Supplies
Telephone
Vet Service
Waste Removal
Water

## Top 5 Categories- $/Sow



## Top 5 Categories- $/Sow



## $/Sow by Month
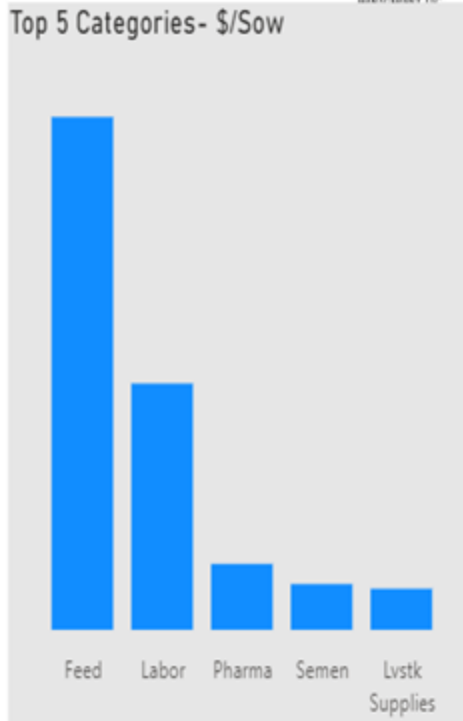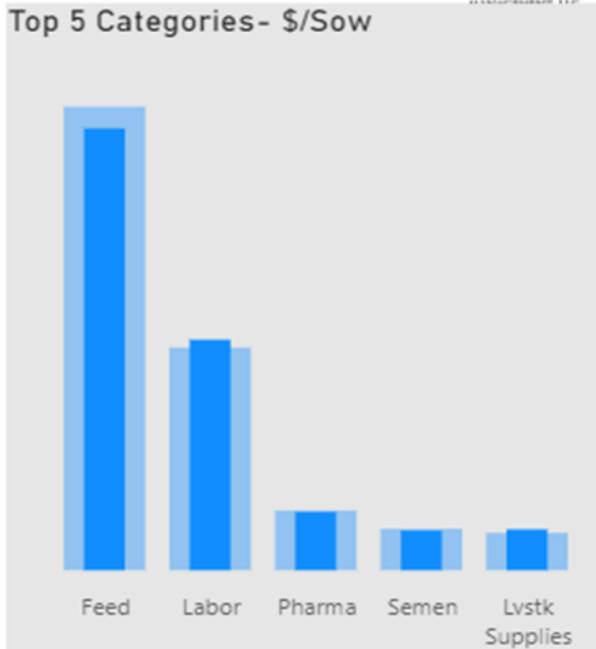


## AI Generated Insights

# Over Budget Areas



Bar chart showing Over Budget Areas by category: Feed, Labor, Lvstk Supplies, Pharma, LP/Nat Gas, R & M, Manure, Electricity, Semen, Vet Service, Production Records, Supplies, Telephone, Water, Fuel/Oil.

# Over Budget Areas



Bar chart showing Over Budget Areas values:
- Lvstk Supplies: $0.71
- Labor: $0.66
- Vet Service: $0.19
- Supplies: $0.08
- LP/Nat Gas: $0.07
- Waste Removal: $0.06
- Production Records: $0.03
- Water: $0.01
- Telephone: $0.01
- Pharma: $0.00
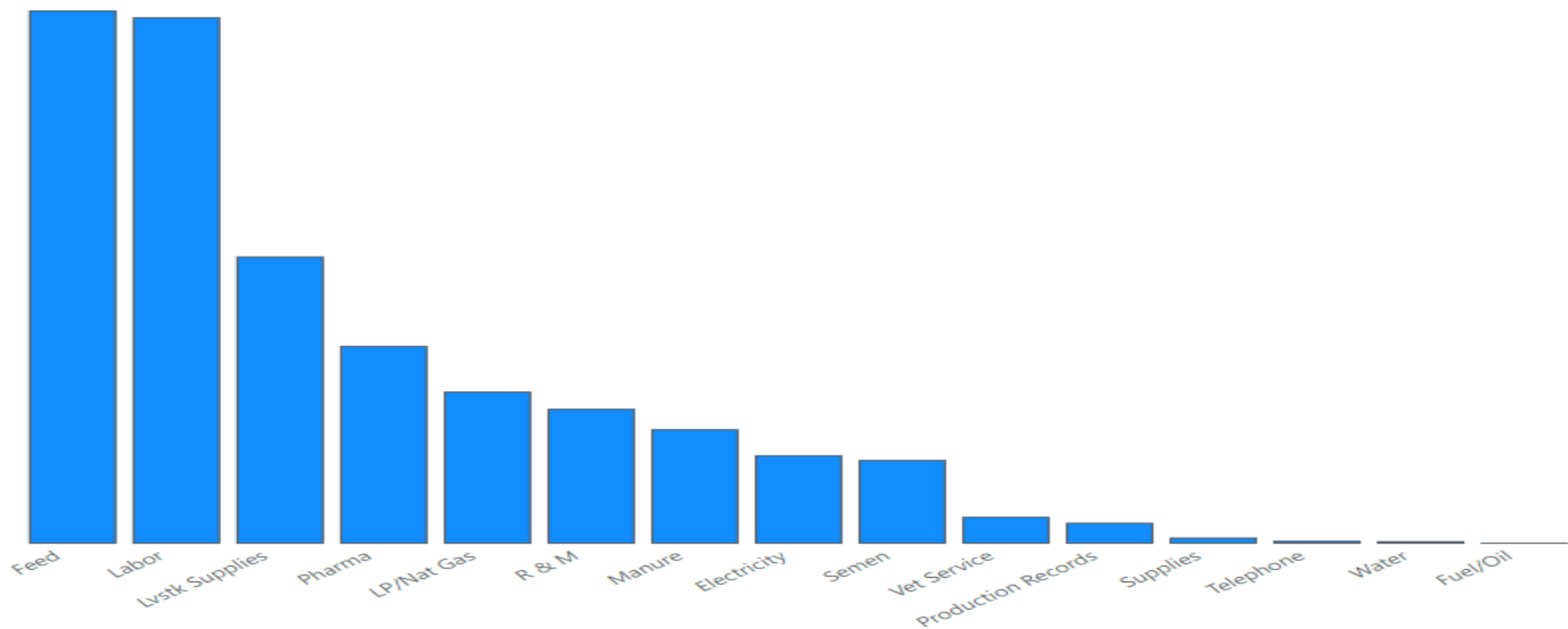
# Supply Approval and Options

```
┌──────────────────────┐      ┌──────────────────────┐      ┌──────────────────────┐
│                      │      │       Creates        │      │                      │
│   Order Approvals    │ ──▶  │ Collaboration and    │ ──▶  │  Preferred Products  │
│    by Production     │      │  Streamlines the     │      │    by the System     │
│                      │      │      Process         │      │                      │
└──────────────────────┘      └──────────────────────┘      └──────────────────────┘

┌──────────────────────┐      ┌──────────────────────┐      ┌──────────────────────┐
│                      │      │   Mobile Ordering    │      │                      │
│   Product Change     │ ──▶  │   Enhancements-      │ ──▶  │    Visibility to     │
│  Trial and Approval  │      │  Pics and Product    │      │  Backordered Items   │
│                      │      │      Changes         │      │                      │
└──────────────────────┘      └──────────────────────┘      └──────────────────────┘
```
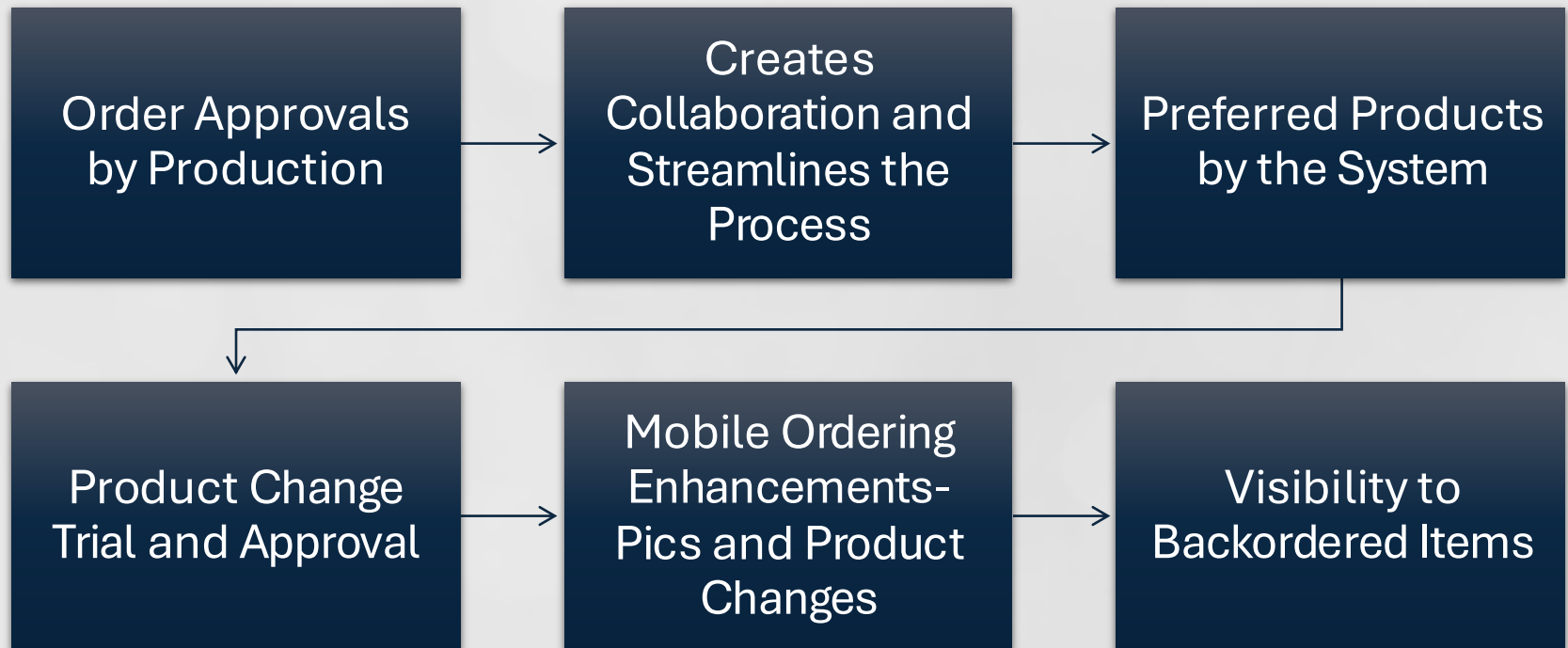
# Heat Lamp Bulbs   Spend Per Sow
## Rolling 12-Months

**2022**

**2023**

16.1%

**2024**

-59.4%
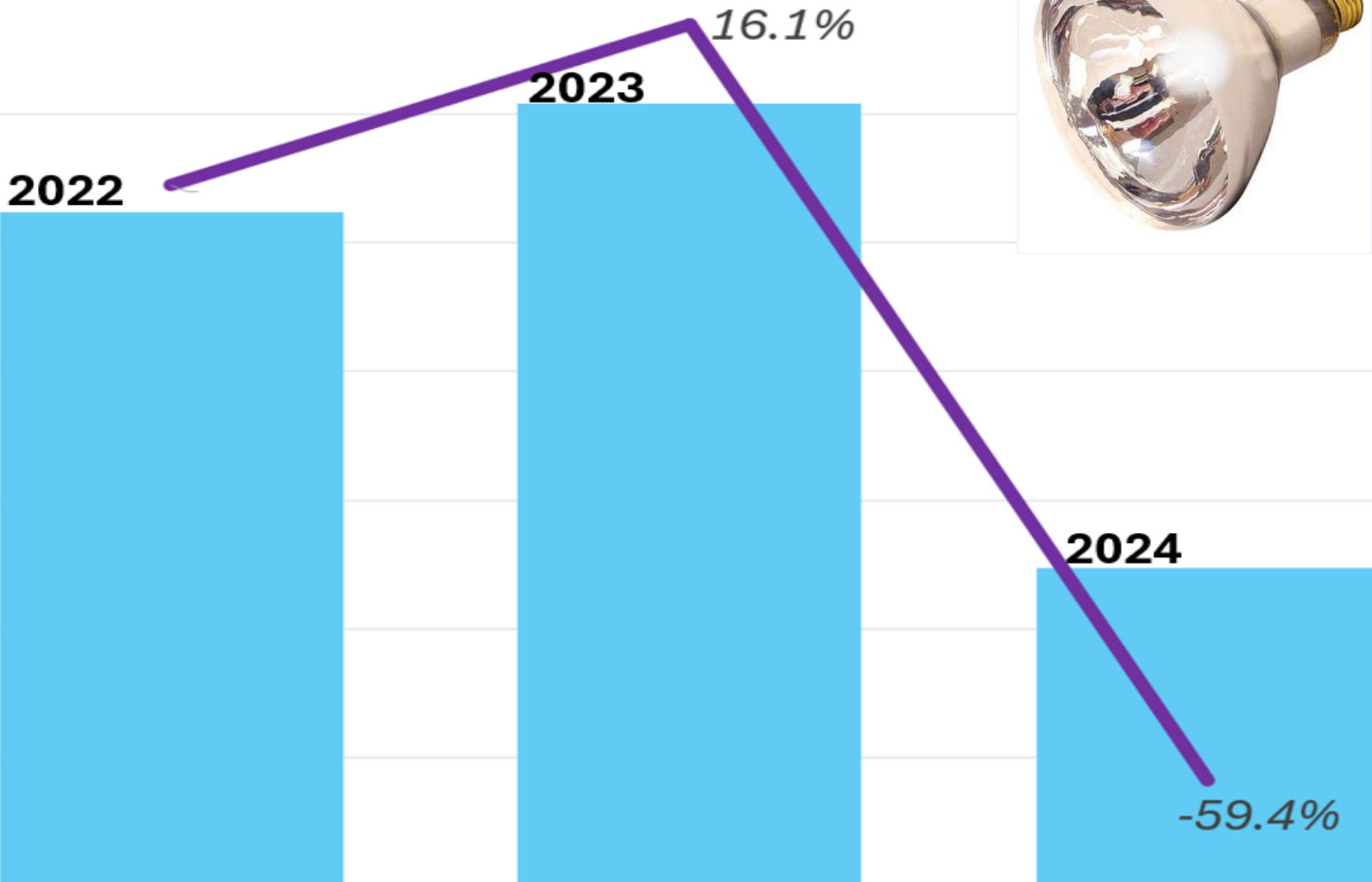
# Heat Lamp Bulbs   Qty Purchased
## Rolling 12-Months

**2022**

**2023**

**2024**

33%

4%
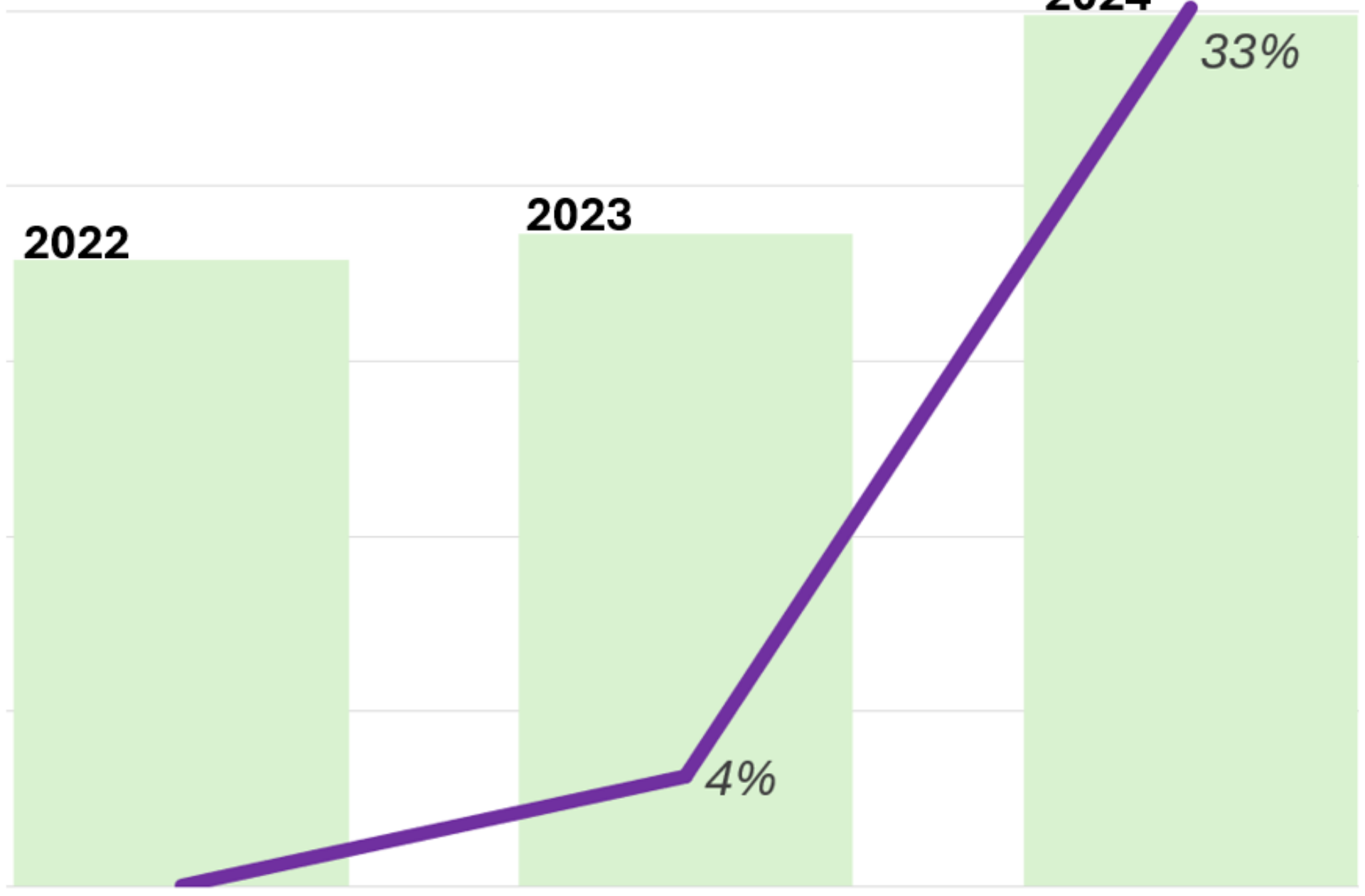
# Drying Agents   Spend Per Sow
## Rolling 12-Months

**2022**

**2023**   13%

**2024**

-54%
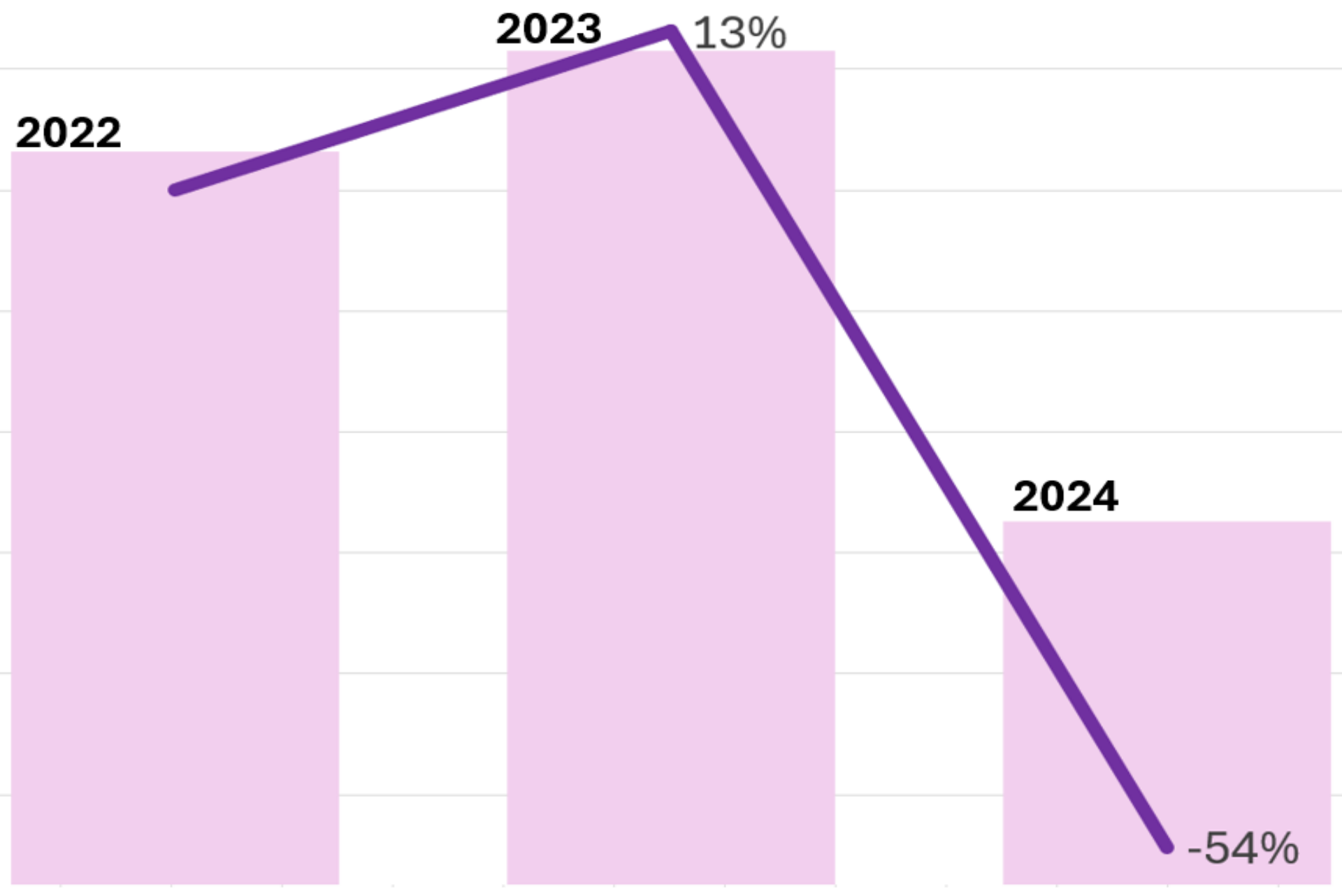
# Water Audit Program

- Farm teams can get "barn blind" to small leaks
- Expect to fix water use by turning off a fire hose
- Unfortunately, it is usually many small things that run 24/7

- Created a water audit program to give guidance on everything that needs checked
- Documented EVERYTHING that is leaking/running over
- Then we quantify to determine if you have found the fix or not

# Water Audit Example

- Water use is tracked weekly by farm and charted against the system average
- We had a farm that was 4 gallons/sow/day above system average
- Had water meters in every barn. We knew issue was in farrowing house
- Focused the water audit on the farrowing house

# Farrowing House Water Audit

| Room | Leaking Piglet Nipples | Feeders Overflowing | Incoming Water Pressure | Other |
|------|------------------------|---------------------|-------------------------|-------|
| 1 | 11 | 1 | 16 | |
| 2 | 9 | 0 | Gauge Broken | |
| 3 | 16 | 0 | 16 | |
| 4 | 11 | 2 | 20? | |
| 5 | 16 | 1 | 20 | |
| 6 | 19 | 1 | 16 | |
| 7 | 9 | 1 | Forgot to read | |
| 8 | 8 | 0 | 17 | Lost Notes |
| 9 | 3 | 20 | Forgot to read | Room Empty |
| 10 | Washing at the time—did not go in | | | |
| 11 | 22 | 1 | Could not read | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | 10 | 0 | 14 | Broken fitting spraying |
| 17 | 4 | 0 | 12 | |
| 18 | 9 | 2 | 15 | |
| 19 | 0 | 0 | 13 | |
| 20 | 2 | 0 | 14 | |
| Total | 150 | 29 | | |

# Quantifying The Audit

Approximately 250 water nipples running out

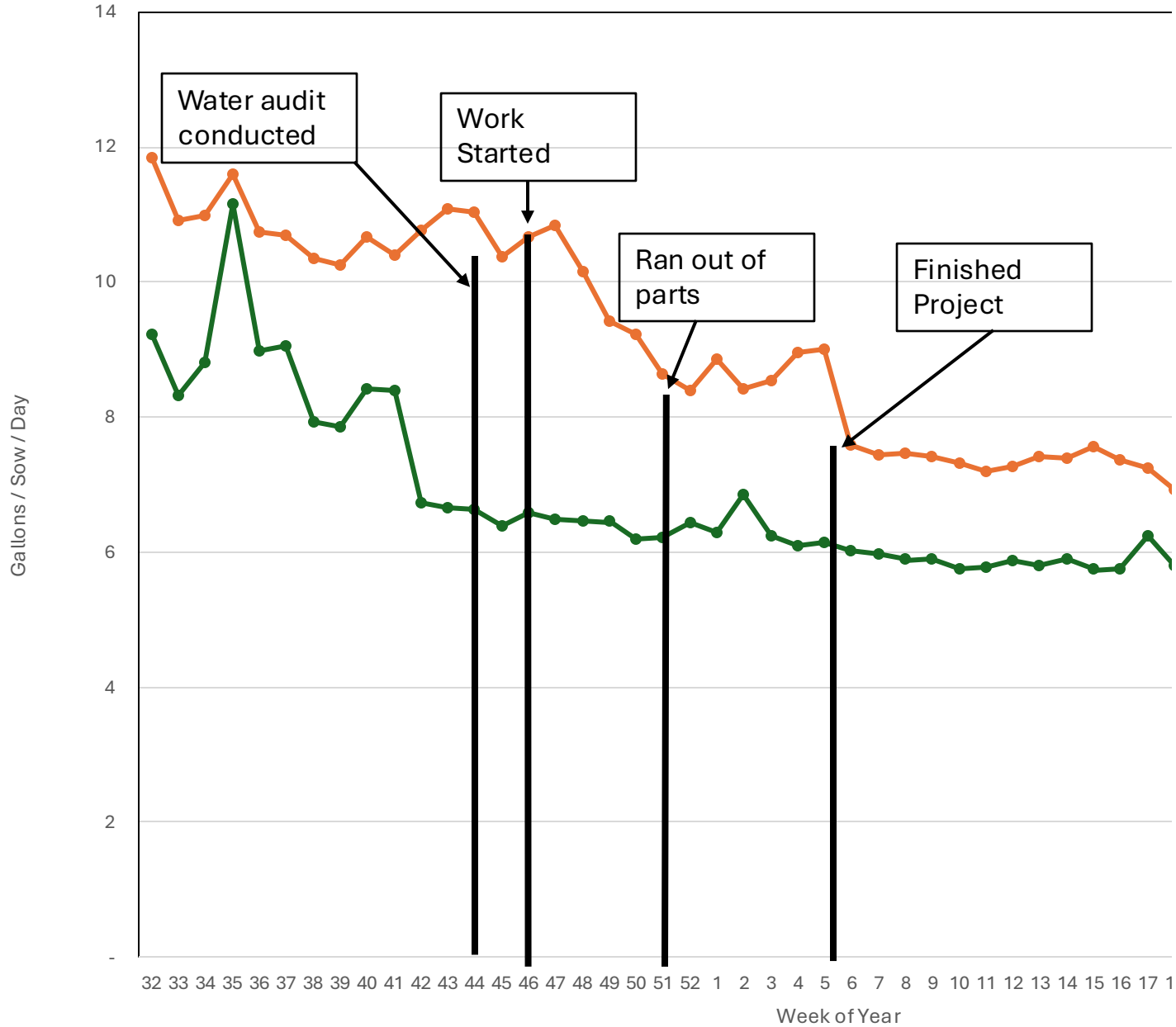10 oz per minute flow estimated by comparing flow to kitchen sink

250 nipples x 10 oz per minute x 1440 minutes per day

=28,125 gallons per day or 4.7 gallons per sow per day

Did we find the whole problem???

Do the work and see what happens...

# Farm vs SYS 52 Weeks

Water audit
conducted

Work
Started

Ran out of
parts

Finished
Project

Gallons / Sow / Day

14

12

10

8

6

4

2

-

Week of Year

32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 1

# Results

Went from ~11 gallons/sow/day to 7.5 gallons/sow/day

3.5 gallons x 6000 sows = 21,000 gallons/day

= ~7.5 million gallons/year

7.5 million gallons x $0.018 per gallon manure pumping cost

- = **$135,000 savings per year**

# Final Thoughts

Get team members started off "RIGHT"

Lay out the career path

Add visibility to cost to create ownership

Best products at the best price

Auditing best processes

Create **accountability** and the tools to achieve targets

CARTHAGE
SYSTEM
PROFESSIONAL SWINE
MANAGEMENT, LLC

# That's all Folks!!!