



Sow Farm Filtering: Our Journey

Repeated PRRS breaks forced us into filtering sow farms.

*We didn't have filtration figured out—but we couldn't keep living with repeated breaks. **Hope that the breaks wouldn't continue wasn't a strategy.***

When break rate shifted

A Paradigm Shift in PRRS Movement

- ⚠ **Historical stability: decades with minimal disease interruptions.**
- 🕒 **2021 alarm: early breaks seen as isolated anomalies.**
- 📍 **2023–2025: repeated breaks across sites in North-central Ohio.**
- 🌐 **PRRS has changed and so has the regional landscape.**

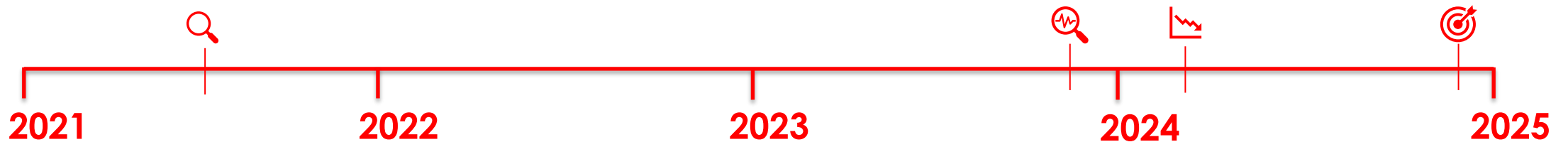
Lab Findings

Molecular

Specimen	Test Name	NA Result	NA Ct
1 - PORCINE - Pig - Mixed Breed Pig - 6 Months			
Oral Fluid - 1	Porcine Reproductive and Respiratory Syndrome PCR	Positive	33.03
2 - PORCINE - Pig - Mixed Breed Pig - 6 Months			
Oral Fluid - 2	Porcine Reproductive and Respiratory Syndrome PCR	Positive	34.44
3 - PORCINE - Pig - Mixed Breed Pig - 6 Months			
Oral Fluid - 3	Porcine Reproductive and Respiratory Syndrome PCR	Suspect	38.01
4 - PORCINE - Pig - Mixed Breed Pig - 6 Months			
Oral Fluid - 4	Porcine Reproductive and Respiratory Syndrome PCR	Positive	35.56
5 - PORCINE - Pig - Mixed Breed Pig - 6 Months			
Oral Fluid - 5	Porcine Reproductive and Respiratory Syndrome PCR	Positive	27.91
6 - PORCINE - Pig - Mixed Breed Pig - 6 Months			
Oral Fluid - 6	Porcine Reproductive and Respiratory Syndrome PCR	Positive	32.64

The Decision Point: 2021–2025

- 🔍 2021: breaks at 2 sites — seen as isolated. Implemented SalCurb 2022.
- 🔍 Late 2023: another break; First new-build fully filtered site starts construction.
- 📈 Early 2024: 2 more sites break — risk math changes.
- 🎯 Winter 2024–25: more breaks — decision for system-wide filtration.



Biosecurity Was Already Strong

Filtration did not fix a weak program. It was the last tool added to an already strong one.



Surveillance

Routine testing, monitoring and diagnostics already in place.



Gilt Sourcing

Internal gilt production and grow-out, tightly controlled for years.



Transportation

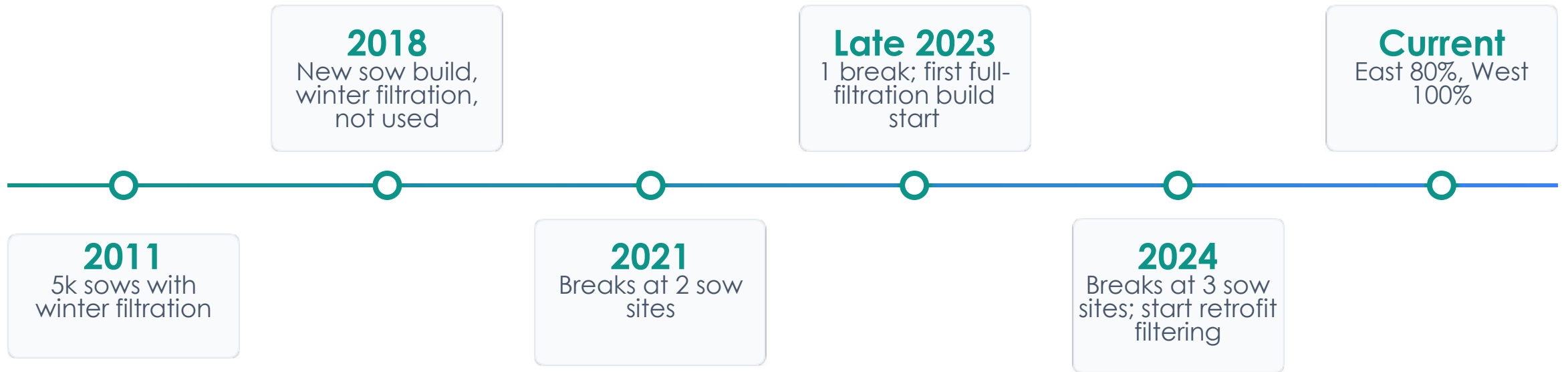
Established transport biosecurity: dedicated dirty / clean washes, Bio-dry bakes.



Sanitation

Traditional on-farm biosecurity already emphasized.

Our Break and Filtration Journey



Filtration Is a Numbers Game

Filtration Reduces Risk

- ↗ A game of probabilities: it lowers the odds of exposure, not the risk to zero.
- ⇒ Exposure windows: challenge may last hours — or all year in a continuously challenged region.
- ⚡ Every gap matters: unfiltered openings and small leaks dilute protection.



Positive Pressure

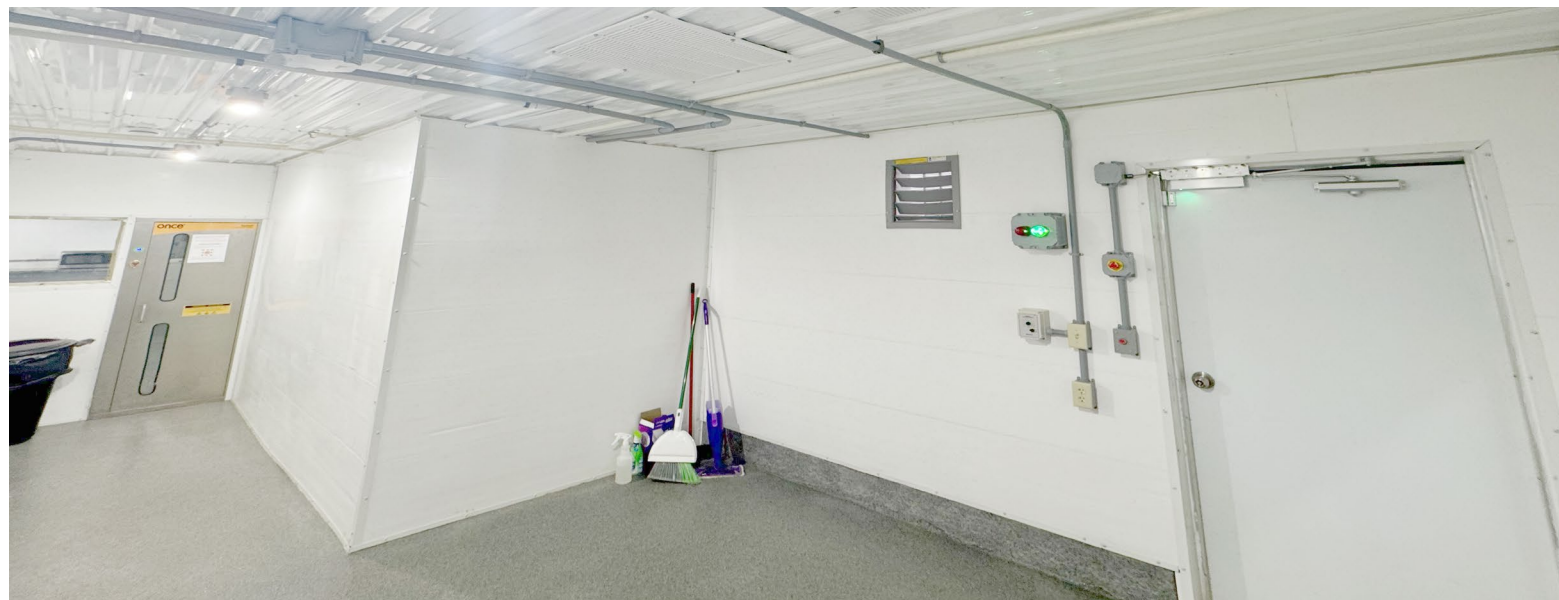
Why Positive Pressure Won

Sealing farms for negative pressure was hard. Positive pressure won — especially for retrofits.

- ✓ **Controlled air entry: positive air pushes filtered air out of gaps instead of pulling dirty air in.**
- 🕒 **Simpler verification: read room static pressure gauges; ensure room airflow.**
- 👤 **Less complexity: crews spend less time chasing where air gets in.**







Installing Filters Is the Easy Part

Filtration requires an ongoing operational culture. Construction is only the starting line.



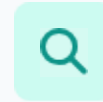
1. Build & Seal

Precise installation, envelope sealing, rigorous commissioning.



2. Train & Operate

Ongoing staff training on airflow and ventilation controls.



3. Inspect & Test

Routine pressure monitoring; find and repair leaks.



4. Maintain Culture

Fix every breach ASAP. Filtration is a protocol, not a project.

The Strategic Business Case

~\$1,000/sow space for positive pressure retrofit, including new fans/controllers, loadout room, dead room, exhaust louvers and wind wall boxes, etc.

~\$100/sow space for the actual M15 filters

Total Capital Cost: \$~\$1.1k/sow space



Beyond Capital Cost: Avoiding Disruption

Protects core pig supply and production continuity.

In high-PRRS years, having pigs to sell shortens payback.

Less PRRS in system = lower chances of breaking other sites. Compounding effect.

The real alternative isn't saved capital — it's low-quality pig flow, buying replacements, lost margin, team moral destruction, etc.

Less volatility. Better peace of mind.

Key Takeaways & Lessons



- ⚡ Act early: don't wait for certainty. We have learned a lot in a short period of time.
 - 🧩 Build for maintainability: team must monitor it daily, so don't take shortcuts.
 - 🔄 A filtered farm is never finished — it's a daily mindset.
 - 🛡️ Filtration changes the odds; it does not eliminate risk, and it is not a magic bullet.
 - 🧰 Filtration is just one tool — the rest of biosecurity matters just as much.
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