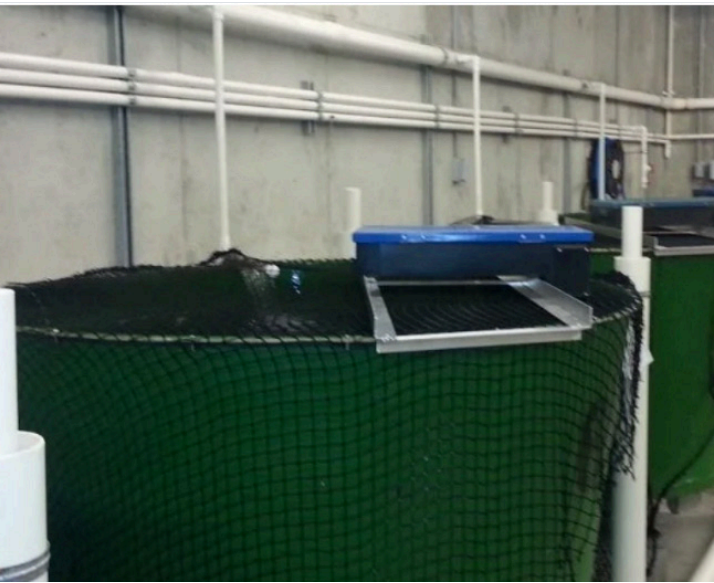




• AQUACULTURE

AquaVet Fish Disinfection Lab Report

HydroFLOW® treatment improved tilapia survival to 74% during a 90 day aquaculture trial while reducing pathogen transmission, mortality and bacterial infection.

74% Treated Tank Survival	32% Higher Survival	90 Days Clinical Evaluation	↓ Lower Infection
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BEFORE & AFTER

● BEFORE

- Disease spread through recirculated water
- Fish exposed to bacterial pathogens
- High mortality in untreated tanks

● AFTER

- ✓ Survival reached 74% in treated tank
- ✓ Pathogen transmission reduced
- ✓ Fish health visibly improved



OVERVIEW

AquaVet Technologies conducted a 90 day evaluation of HydroFLOW® in a recirculating aquaculture system. The trial assessed whether treating incoming water could reduce the transmission of bacterial, fungal and parasitic diseases, improving fish survival and overall health.



CHALLENGE

Recirculated aquaculture systems can spread bacterial, fungal and parasitic disease between tanks.

- Disease reservoir tanks contained infected tilapia
- Bacterial, fungal and parasitic pathogens spread through water
- Untreated tanks suffered higher mortality
- Chemical treatments increase cost and environmental impact

SOLUTION

HydroFLOW® was installed on the incoming water supply to the healthy control tank, treating recirculated water before it reached the fish.

UNIT INSTALLED

1x HydroFLOW® unit

TRIAL DURATION

90 days

TANK VOLUME

4× 10 cubic metre tanks

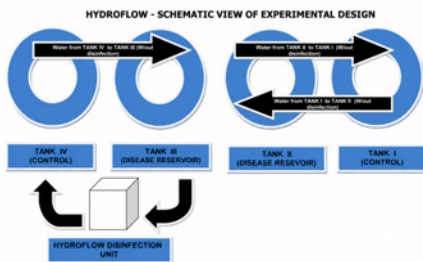
FISH STOCKED

300 hybrid tilapia per tank



INSTALLATION

HydroFLOW® unit on Tank IV inlet



DIAGRAM

Experimental water flow design



MONITORING

Clinical fish evaluation

RESULTS

74% Survival Rate

Tank IV achieved the highest survival rate after 90 days.

32% Higher Survival

Survival was 32% higher than in the untreated control Tank III.

Pathogen Control

Treatment helped prevent bacterial, fungal and parasitic transmission.

Lower Bacterial Counts

Tank IV showed lower bacterial counts than other tanks.

Improved Fish Health

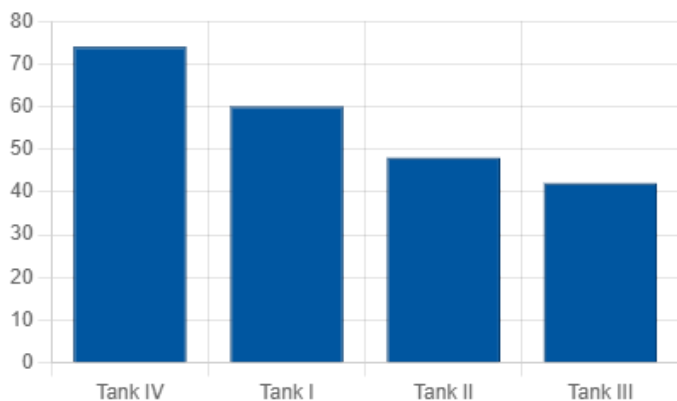
Tilapia showed better feeding and fewer infection symptoms.

Lower Mortality

Mortality was significantly lower in the treated tank.

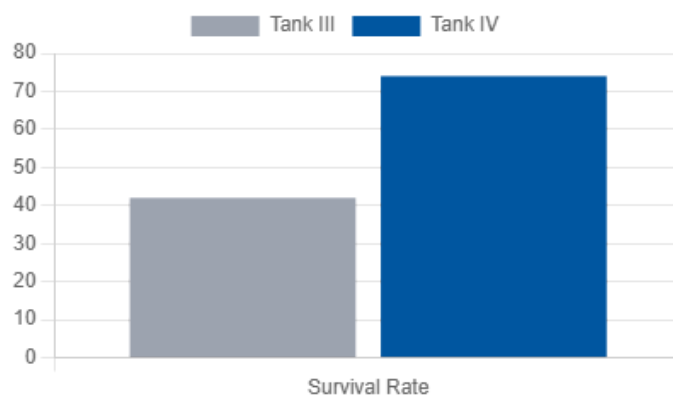
GRAPHS

Survival Rate at Day 90



HydroFLOW® Treated Tank IV achieved the highest survival rate after 90 days.

Tank IV vs Tank III Survival



HydroFLOW® treated Tank IV achieved 74% survival compared with 42% in Tank III.

KEY TAKEAWAY

Summary

AquaVet Technologies evaluated *HydroFLOW*® in a 90 day recirculated aquaculture trial using four 10 cubic metre tanks stocked with 300 hybrid tilapia. The treated tank achieved the highest survival rate at 74%, with lower bacterial counts, mortality and infection symptoms.

74%

SURVIVAL RATE

32%

HIGHER SURVIVAL

90 Days

TRIAL DURATION



ADDITIONAL PHOTO EVIDENCE



MONITORING

Microscopic examination during the trial



MONITORING

Water samples for bacterial analysis



INSPECTION

Tilapia from Tanks II & III with severe gill rot



INSPECTION

Gram (-) bacterial infection in tilapia



INSPECTION

External lesions caused by Gram (-) infection



INSPECTION

Morbid tilapia from Tank II (disease reservoir)



INSPECTION

Morbid tilapia from Tank III (disease reservoir)

HYDROPATH

The Forefront of Sustainable Water Treatment

HydroPath Technology is a world leader in sustainable water treatment solutions, providing chemical-free alternatives for industrial and commercial applications across more than 50 countries.

50+

COUNTRIES

30+

YEARS EXPERIENCE

1M+

UNITS INSTALLED

RELATED CASE STUDY

Civitavecchia Fish Farm UV Replacement Case Study

Civitavecchia, Italy

Civitavecchia Fish Farm replaced costly, energy intensive UV systems with HydroFLOW® units across its hatchery and main hall. The installation improved water quality, eliminated bacterial and viral infection problems, enhanced fish growth and saved around €1,100 per month for each UV system while de

No Infections 2.5+ Years

No bacterial or viral infections reported for more than two and a half years after installation.

€1,100 Monthly Savings

Each replaced UV system saved approximately €1,100 per month in electricity, plus lower maintenance costs.

Healthier, Faster Growth

Fish health and growth exceeded previous UV treatment performance with clearer, higher quality water.

HYDROPATH 

Ready to improve aquaculture water quality?

Contact HydroPath to discuss pathogen control in recirculated aquaculture systems.

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✓ GREENPRO

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