



# ARABLE FARMING

## Water Resilience Guide



## **For farm owners water resilience is about Maximising Yields & Minimising Risk**

Welcome to your guide on Water Resilience for the Arable and Agriculture sector. Climate change is already presenting major difficulties in the agricultural world. With the wettest winters and driest summers on record, we are approaching a time when demand for water will dramatically outstrip supply. Farming is at the frontline of water challenges, from drought and abstraction restrictions to flooding and runoff. Reliable and efficient water management is not just about sustainability; it is about protecting crops, ensuring productivity, and maintaining profitability. This guide will help you understand your water footprint, identify risks, and put in place practical strategies to build resilience.



## Why Water Matters to Your Farm, Right Now:

- **Hidden Costs:** Inefficient irrigation and leaks waste huge volumes. Energy costs for pumping water add up too.
- **Regulatory Risk:** Abstraction licences and catchment rules are tightening. Don't risk non-compliance fines and restrictions.
- **Operational Security:** Droughts, floods, and unpredictable rainfall threaten yields and livelihoods.
- **Real Savings:** Smarter irrigation and rainwater storage can cut water costs by 10–20%, protecting margins.

*Water Abstractor Groups: Farmers are coming together to embrace collaborative approaches to improve water efficiency & potentially share water rights.*

## Your Water Footprint: Where It Goes & Why It Matters

- **Irrigation (60–80%):** Sprinklers, drip lines, pivot systems.
- **Crop Washing & Packing (10–20%):** High demand in horticulture.
- **Chemical Mixing (5–10%):** Fertilisers, pesticides, sprays.
- **Cleaning & Yard Washdown (5–10%):** Equipment, storage, and vehicle cleaning.

*Knowing the breakdown helps prioritise changes where water demand is highest.*

## Quick Wins: Immediate Savings, Minimal Effort

- **Check Irrigation Timing:** Water early morning/evening to cut evaporation losses.
- **Soil Moisture Monitoring:** Irrigate based on need, not habit.
- **Drip Irrigation:** Uses 30–50% less water than overhead.
- **Rainwater Capture:** Collect from barn roofs for spray tanks and washing.
- **Fix Leaks:** Pipes, troughs, and joints waste thousands if unchecked.

*Small changes reduce waste immediately, saving money and protecting yields.*



## Smart Investments: Future-Proofing for Long-Term Value

- **On-Farm Reservoirs:** Store winter rain for summer irrigation.
- **Precision Irrigation Systems:** Automated systems using soil, crop, and weather data.
- **Rainwater Harvesting Infrastructure:** Large-scale collection from roofs and yards. Both to capture more water but to potentially reduce increased risk of flooding.
- **SUDS for Farmyards:** Swales, buffer strips, and infiltration areas reduce runoff and pollution.
- **Managed Aquifer Recharge:** Divert Surplus water into recharge lagoons, create natural aquifer and raise groundwater levels.

*Long-term resilience depends on securing supply and reducing dependency on mains or abstraction.*

## Your Hidden Drain

- **Leaky Irrigation Lines:** Undetected leaks can waste tens of thousands of litres.
- **Over-Irrigation:** Not only wastes water but damages soil and yield.
- **Dirty Washdowns:** High-pressure washers are far more efficient than hoses.

*Spotting hidden inefficiencies protects water security and margins.*

## Engage Your Team: Build a Water-Wise Culture

- **Staff Training:** On irrigation scheduling, leak detection, and equipment use.
- **Shared Responsibility:** Workers encouraged to report issues early.
- **Catchment Partnerships:** Collaborate with local water authorities and other farmers.

*Cultural change across the farm ensures savings last.*

## Be Prepared: Manage Water Supply Risk

- **Know Your Risks:** Drought orders, abstraction limits, or flood damage.
- **Emergency Plan:** Backup sources (reservoirs, boreholes, stored rainwater). These extra storage could be critical in short term outage situations.
- **Infrastructure:** Keep pumps, pipes, and irrigation systems maintained.
- **Supplier Engagement:** Talk with us about redundancies and planning in order to strengthen resilience plans.

*Resilience planning protects crops and income when conditions shift.*



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## Next Steps: Your Action Plan

- **Baseline:** Review water bills and abstraction data.
- **Assessment:** Walk your site to spot inefficiencies.
- **Prioritise:** Quick wins first, long-term investments second.
- **Communicate:** Share progress with workers and buyers.
- **Investigate LRO:** Local Water Resource options funding. Keep an eye out for future rounds of funding from the Environment Agency & DEFRA.
- **Get Expert Help:** We can provide tailored audits and practical solutions.



# Need Support? Let's Talk

Want support improving your farm's water resilience?

We help farmers cut waste, secure supply, and save money,  
without disrupting operations.

**Email :**  
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