



Information Paper - Virtual Fencing

Background: WA's current regulatory position

- Western Australia amended the Animal Welfare (General) Regulations 2003 in 2022 to permit the commercial use of virtual fencing, but only by specifically naming the eShepherd system (now owned by Gallagher) as the approved device.
- Section 7 of the Regulations lists prohibited devices and exemptions; virtual fencing was added as an exemption by referring to a single, named product, rather than setting performance or welfare standards that any compliant device could meet.
- The original rationale for naming one product was that, at the time, robust welfare and safety data (shock intensity, duration, frequency, cue hierarchy) were only available for that system.

Problem: anti-competitive and non-alignment with other states

- The current approach effectively grants Gallagher/eShepherd a monopoly in WA for virtual fencing, as other systems (e.g. Halter) cannot be used without a further regulatory change, even if they meet or exceed equivalent welfare standards.
- Producers report that while Gallagher collars have been useful, competing systems such as Halter offer additional functionality (heat detection, health monitoring, automated shifting, pasture growth analysis) at similar price points, meaning WA producers are denied choice and innovation.
- Victoria has now given “green light” to virtual fencing under the Prevention of Cruelty to Animals Act 1986 via regulations that establish safeguards and an approval pathway for **any** manufacturer that meets specified standards, with products to be approved by Agriculture Victoria.
- New South Wales has similarly amended the Prevention of Cruelty to Animals Regulation 2025 to legalise virtual fencing for cattle, adopting a **NSW Guide to Animal Welfare for Virtual Fencing of Cattle** that sets clear operational and welfare requirements rather than naming specific brands.
- Other jurisdictions (e.g. Queensland, Tasmania, NT, NZ) are moving to, or already operate, principles-based frameworks that focus on animal welfare outcomes and responsible use rather than locking in a single commercial product.

Technology overview and benefits

- Virtual fencing systems use GPS-enabled collars and a software/app interface to create “invisible” boundaries and manage livestock location without physical fences.
- As animals approach a virtual boundary, they receive an audio cue (and in some systems vibration), and only if they continue do they receive a short, low-energy electric pulse, typically less intense than a conventional electric fence.
- Gallagher’s eShepherd system has been trialled in Australia for environmental outcomes such as excluding cattle from riparian zones, reducing erosion, sedimentation and water contamination, and protecting sensitive habitats.
- Halter’s system combines virtual fencing with continuous monitoring of behaviour (grazing, resting, rumination) and heat detection, enabling early identification of health issues, improved reproductive management and optimisation of pasture use.
- This conclusion is supported by independent scientific reviews commissioned by governments in New Zealand and Norway, which found that virtual fencing can achieve welfare outcomes similar to physical electric fencing when key design and management protocols—such as audio cue hierarchies, electrical pulse limits, and structured animal training—are followed (Anderson & Dickson, 2023; VKM, 2020). These reviews, along with others, also document the significant labour, safety, and environmental advantages of the technology (Anderson & Dickson, 2023; McIntosh & Green, 2020).

Key policy issues for WA

- **Competition and innovation:** Naming a single product in regulation is analogous to specifying that only one tyre brand may legally meet a minimum tread standard; this is difficult to justify under competition and consumer policy and risks complaint to the ACCC.
- **Regulatory flexibility:** The current framework is embedded in regulation rather than primary legislation, meaning Section 7 can be updated more readily to shift from brand-specific approval to standards-based approval.
- **Animal welfare safeguards:** Any amended regulation should explicitly define acceptable parameters for virtual fencing devices, including:
 - Maximum shock intensity, duration and frequency
 - Requirement for audio/vibration cues before any electric pulse
 - Automated safety cut-outs if animals repeatedly contact boundaries or if connectivity is lost
 - Mandatory training for users and ongoing monitoring/record-keeping, as per NSW’s Guide.
- **Product approval pathway:** Regulations can specify that any virtual fencing system that meets the defined specifications and provides supporting welfare data can be approved administratively by the relevant authority (e.g. DPIRD/Director General), avoiding the need for further regulatory amendment for each new product.

PGA request

- **Amend Section 7 of the Animal Welfare (General) Regulations 2003:** The goal is not to remove safeguards, but to amend Section 7 so that it:
 - Removes the exclusive reference to Gallagher/eShepherd, and
 - Inserts device performance and welfare specifications, along with an approval process for compliant systems.
 - Presents the opportunity for WA to:
 - Support innovation and productivity in livestock systems.
 - Improve environmental and animal health outcomes.
 - Align with national regulatory trends and avoid an increasingly anomalous, brand-specific rule.

This information paper can be used as the basis for a position statement and briefing note to initiate a review and amendment of the virtual fencing provisions in the Animal Welfare (General) Regulations 2003.