

Strategic Plan for a Wildlife
Emergency Response Unit (WERU)

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Executive Summary

This comprehensive strategic plan establishes an integrated framework for developing and operationalizing the Wildlife Emergency Rescue Unit (WERU) for Game Rangers International (GRI) in Zambia. This document synthesizes multiple planning efforts to create a unified, actionable roadmap for establishing Zambia’s first mobile, multi-species wildlife emergency response system.

Wildlife emergencies in and around Kafue National Park (KNP) including snare injuries, human–wildlife conflict, poisoning, and orphaning are increasing in frequency and severity. Current response is fragmented, largely species-specific, and constrained by limited mobile veterinary capacity.

The Solution: WERU

The Wildlife Emergency Rescue Unit (WERU) will provide rapid, coordinated, multi-species emergency response grounded in the 4Rs framework: Rescue, Rehabilitation, Release, and Research. WERU will operate across Kafue National Park and surrounding Game Management Areas (GMAs), providing rapid triage, veterinary care, and transport for injured or displaced wildlife while fostering community collaboration and generating data to inform conservation policy.

Background & Justification

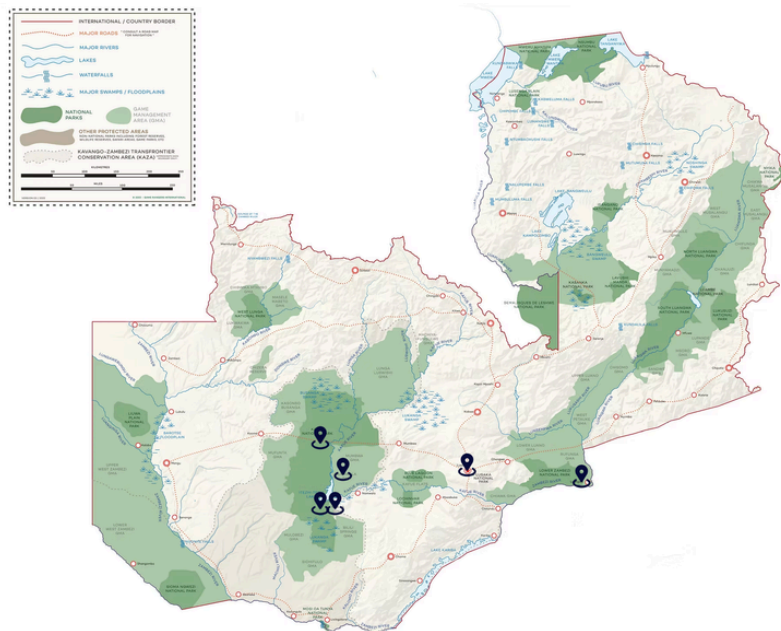
Zambia's protected areas, including Kafue National Park, support elephants, carnivores, pangolins, antelope, birds of prey, and many other species now under pressure from:

- Snaring for bushmeat and commercial poaching
- Human-wildlife conflict (crop raiding, livestock predation)
- Poisoning events targeting carnivores and scavengers
- Habitat loss and fragmentation
- Climate-related stressors (drought, fire, reduced forage)

While organizations like GRI, DNPW, and other NGOs already respond to some emergencies, interventions are often:

- Reactive rather than proactive
- Limited to certain species (e.g., elephants)
- Hampered by slow response times and long distances

A dedicated WERU offers a way to centralize coordination, improve field decision-making, and build a coherent national model for wildlife rescue.



Strategic Framework

The 4R's Framework:

WERU operations are grounded in the internationally recognized 4Rs framework, which integrates individual welfare with population-level conservation:

Rescue - Rapid response to wildlife emergencies - Ethical triage and intervention decisions - Safe capture and stabilization protocols - Minimizing stress and additional harm

Rehabilitation - Species-appropriate medical treatment and care - Behavioral conditioning for wild release - Psychological well-being and social development - Nutrition and health management

Release - Careful site selection based on habitat suitability - Soft-release techniques when appropriate - Behavioral readiness assessment - Timing to optimize survival (seasonal considerations)

Research - Systematic data collection at all stages - Post-release monitoring and survival analysis - Contribution to conservation science and policy - Adaptive management based on evidence

This framework ensures that every intervention serves both immediate welfare needs and long-term conservation objectives.



Purpose of the Wildlife Emergency Rescue Unit

The primary purpose of WERU is to:

Provide timely, ethical, and coordinated emergency response for injured, orphaned, or at-risk wildlife in Zambia, with a focus on Kafue National Park and its buffer zones.

WERU will:

- Respond to emergencies in the field
- Provide on-site triage and stabilization
- Coordinate transport to appropriate facilities
- Support rehabilitation and release decisions
- Maintain a centralized database for learning and prevention



Vision, Mission, and Values

Vision

A Zambia where wildlife emergencies are met with rapid, ethical, and science-based response, supporting both individual animal welfare and long-term ecosystem resilience.

Mission

A Zambia where wildlife emergencies are met with rapid, ethical, and science-based response, supporting both individual animal welfare and long-term ecosystem resilience.

Values

- Compassion – every intervention respects the welfare of the animal.
- Evidence-Based Practice – decisions are guided by current veterinary and conservation science.
- Collaboration – work in partnership with DNPW, communities, and other NGOs.
- Respect – for wildlife, human communities, and local knowledge.
- Transparency & Accountability – clear documentation, reporting, and ethical standards.



Strategic Objectives

OBJECTIVE 1: OPERATIONAL CAPACITY

- **Goal:** Establish and maintain a fully operational, mobile multi-species wildlife emergency response unit

OBJECTIVE 2: PROTOCOL STANDARDIZATION

- **Goal:** Develop and implement evidence-based, species-specific emergency protocols aligned with international best practices

OBJECTIVE 3: STAKEHOLDER INTEGRATION

- **Goal:** Build and maintain collaborative networks with DNPW, communities, and conservation partners

OBJECTIVE 4: RESEARCH & MONITORING

- **Goal:** Generate high-quality data to inform adaptive management, conservation policy, and scientific knowledge

OBJECTIVE 5: FINANCIAL SUSTAINABILITY

- **Goal:** Diversify funding streams and demonstrate conservation return on investment

OBJECTIVE 6: COMMUNITY ENGAGEMENT

- **Goal:** Empower local communities as partners in wildlife emergency detection and response

OBJECTIVE 7: CONSERVATION IMPACT

- **Goal:** Demonstrate measurable contribution to wildlife population recovery and human-wildlife coexistence

Core Components & Operational Framework

Response Workflow

The WERU response workflow follows a systematic, standardized process from initial report to post-release monitoring:

PHASE 1: DETECTION & REPORTING

Community/Ranger Detection: - Wildlife emergency hotline (toll-free number accessible 24/7) - Community scout network trained in wildlife emergency recognition - Ranger patrols reporting via radio/mobile - Partner organization referrals

Incident Logging: - All reports logged in digital database with timestamp, location, species, and situation description - GPS coordinates captured for rapid response - Initial triage assessment conducted remotely when possible

PHASE 2: RAPID ASSESSMENT

Remote Triage (within 1 hour of report): - WERU coordinator assesses urgency and feasibility - Determines if immediate response is warranted - Assigns response team and resources - Notifies DNPW and relevant partners

Decision Criteria: - Animal welfare (suffering, survival probability) - Conservation value (species status, population significance) - Human safety (conflict risk, public health) - Feasibility (accessibility, resources, expertise) - Ethical considerations (quality of life post-intervention)

PHASE 3: MOBILIZATION & RESPONSE

Team Deployment (target: within 4 hours): - Response team mobilized with appropriate equipment - GPS navigation to incident location - Communication maintained with WERU coordination center - DNPW informed and involved as appropriate

Field Assessment: - On-site evaluation of animal condition - Environmental and safety assessment - Decision on intervention approach (capture, field treatment, transport, monitoring, euthanasia) - Documentation (photos, video, field notes)

PHASE 4: INTERVENTION

Capture & Stabilization: - Species-specific capture protocols - Chemical immobilization when required (veterinary oversight) - Physical restraint for smaller species - Vital signs monitoring - Initial treatment and stabilization

Field Treatment: - Wound cleaning and treatment - Snare removal - Rehydration and nutrition support - Pain management - Antibiotic administration when indicated

Transport Decision: - If animal requires intensive care: transport to rehabilitation facility - If field treatment sufficient: monitor and release on-site - If prognosis poor and suffering severe: humane euthanasia

PHASE 5: REHABILITATION (when required)

Facility-Based Care: - Species-appropriate housing and husbandry - Veterinary treatment and monitoring - Behavioral assessment and conditioning - Nutrition management - Psychological well-being support

Social Considerations: - Social species housed with conspecifics when possible - Minimization of human contact for wild release candidates - Enrichment appropriate to species natural history

Release Readiness Assessment: - Physical health and mobility - Behavioral competence (foraging, predator avoidance, social skills) - Age and developmental stage - Seasonal timing

PHASE 6: RELEASE

Site Selection: - Habitat suitability assessment - Prey/forage availability - Conspecific presence - Human activity levels - DNPW approval

Release Protocol: - Hard release: immediate release for competent individuals - Soft release: gradual acclimatization with provisioning for social species - Timing: optimal season, weather, time of day - Monitoring equipment fitted (GPS collar, camera trap deployment)

PHASE 7: POST-RELEASE MONITORING

Short-Term (0-3 months): - Daily GPS tracking (if collared) - Camera trap monitoring - Community scout observations - Survival, movement, and behavior assessment

Long-Term (3-12+ months): - Weekly/monthly GPS checks - Seasonal camera trap surveys - Integration with broader monitoring programs - Population-level outcome assessment

Data Integration: - All monitoring data entered into WERU database - Analysis of survival, reproduction, and population contribution - Adaptive management: refine protocols based on outcomes

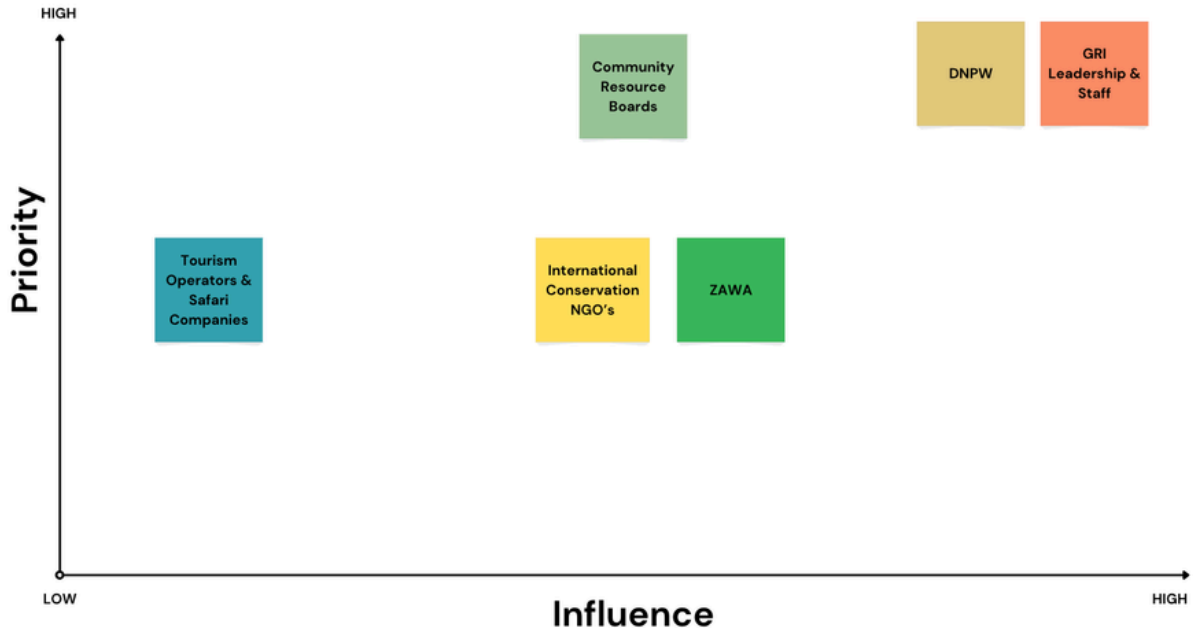
Organizational Assessment (SWOT Analysis)

STRENGTHS	WEAKNESSES
<p>Established GRI infrastructure and DNPW partnership</p> <p>Experienced veterinary and ranger staff</p> <p>Strong donor and conservation networks</p>	<p>Limited species-specific rescue capacity</p> <p>Need for specialized transport and field equipment</p> <p>Inconsistent data collection and record-keeping</p>
OPPORTUNITIES	THREATS
<p>Rising donor interest in animal welfare and rapid response systems</p> <p>Use of mobile technology for field data</p> <p>Potential for regional training hub</p>	<p>Poaching and human-wildlife conflict escalation</p> <p>Funding instability</p> <p>Climate-driven habitat changes</p>

WERU Operational Structure

LEVEL 1: LEADERSHIP	LEVEL 2: CORE TECHNICAL TEAM
<p>WERU Director</p> <p>Overall WERU operations and strategy Stakeholder coordination and partnership management Fundraising and donor relations Reporting to GRI leadership and Advisory Board Policy development and advocacy</p>	<p>Senior Wildlife Veterinarian</p> <p>Clinical leadership for all veterinary interventions Protocol development and training Drug and equipment management Ethical decision-making oversight</p> <p>WERU Operations Coordinator</p> <p>Day-to-day operational coordination Incident response management and team dispatch Database management and reporting Equipment and vehicle maintenance Community liaison</p>
LEVEL 3: FIELD RESPONSE TEAM	LEVEL 4: SUPPORT STAFF
<p>Wildlife Response Officers</p> <p>Field response and emergency interventions Animal capture and handling Transport and field treatment Rehabilitation support Community engagement and training</p> <p>Veterinary Technicians</p> <p>Veterinary support in field and facility Medication administration and wound care Health monitoring and record keeping Laboratory sample processing Equipment sterilization and maintenance</p>	<p>Rehabilitation/Keepers</p> <p>Daily husbandry and animal care Feeding and enclosure maintenance Behavioral observation and reporting Enrichment provision Facility maintenance</p> <p>Community Liaison Officer</p> <p>Community engagement and outreach Scout training and coordination Conflict mitigation support Reporting system management Cultural mediation</p>

Stakeholder Identification & Mapping



Stakeholder	Role/Contribution	Engagement Strategy
Department of National Parks and Wildlife (DNPW)	Legal authority, permits, enforcement support	Formal MOU, joint patrol coordination
Local Communities and Chiefs	Early incident reporting, traditional knowledge	Training workshops, community incentive programs
Veterinary Council of Zambia	Professional oversight	Continuous professional development accreditation
International Partners (GRI, Born Free, ZAWA, VulPro)	Funding, technical expertise, data exchange	Cross-training programs and shared reporting
Academic Institutions	Research collaboration	Joint studies and student placements

Community Engagement Model

Local communities living in the buffer zones around Kafue National Park are critical partners in wildlife emergency response. These communities:

- **Experience Human-Wildlife Conflict:** Crop raiding by elephants, livestock predation by carnivores, property damage
- **Are First Responders:** Often first to encounter injured or displaced wildlife
- **Have Traditional Knowledge:** Deep understanding of local wildlife behavior and ecology
- **Face Economic Constraints:** Limited livelihood options, dependence on agriculture
- **Have Mixed Perceptions of Wildlife:** Value for tourism and cultural reasons, but also source of conflict and loss

Community Engagement Goals:

1. Build trust and genuine partnerships
2. Establish early warning and reporting systems
3. Reduce human-wildlife conflict
4. Provide local employment and capacity building opportunities
5. Foster pride in wildlife conservation



Equipment, Vehicles & Infrastructure

Mobile Response Vehicles

- Heavy-Duty 4x4 Truck - Purpose: Large animal transport (elephants, buffalo, eland)
- Standard 4x4 Pickup Trucks (2 units) - Purpose: General response, medium animal transport, field operations
- Motorcycle/Quad Bikes (2 units) - Purpose: Rapid response in difficult terrain, community liaison

Immobilization & Veterinary Equipment

- Dart Rifles and Darting Equipment
- Immobilization Drugs
- Veterinary Field Kits (3 units): Surgical instruments, wound care supplies, Diagnostic tools, Medications, IV fluids and administration sets

Capture & Restraint Equipment

- Physical Restraint: Nets, ropes and straps, protective gloves and sleeves
- Transport Crates: Large mammal crates (elephants, buffalo), Medium mammal crates (carnivores, primates), Small mammal/bird carriers

Monitoring Equipment

- GPS Collars: Satellite GPS collars, VHF collars
- Camera Traps: Camera traps, SD cards and batteries, Mounting hardware
- Telemetry Equipment: VHF receiver and antennas, Handheld GPS units



Communication Equipment

- Radios: VHF radios, Base station
- Mobile Phones: Smartphones for staff and scouts, Satellite phone for remote areas, airtime and data subscriptions

Safety Equipment

- Personal Protective Equipment (PPE): Protective clothing, boots and gloves
- First Aid: - Human first aid kits, Emergency medical supplies
- Field Support: Tents and camping gear, Lighting equipment, Tool kits and repair equipment

Ethical & Welfare Guidelines

WERU operations are guided by a comprehensive ethical framework that prioritizes animal welfare, conservation outcomes, and transparent decision-making.

Core Ethical Principles

- Animal Welfare Priority - Physical and psychological well-being of the animal is paramount - Interventions must reduce suffering, not increase it - Quality of life considerations guide all decisions - Humane euthanasia when recovery and acceptable quality of life are not achievable
- Conservation Justification - Interventions should contribute to population-level conservation outcomes - Resources allocated to maximize conservation impact - Individual welfare balanced with population and ecosystem considerations - Precautionary approach when conservation benefit is uncertain
- Evidence-Based Decision Making - Decisions informed by scientific evidence and best practices - Systematic data collection to evaluate outcomes - Adaptive management based on results - Transparency in decision-making processes
- Do No Harm - Interventions should not cause additional harm to the animal - Consideration of broader ecosystem impacts (e.g., disease transmission, genetic issues) - Respect for natural processes (predation, natural mortality) - Avoiding habituation or dependency on humans
- Respect for Wildlife - Recognition of intrinsic value of wildlife - Minimization of stress and human contact - Preservation of natural behaviors - Cultural and traditional values respected



Risk Assessment & Mitigation

Operational Risks:

- Staff Safety - Field staff face risks from wildlife, vehicle accidents, environmental hazards, zoonotic diseases
 - Mitigation: Comprehensive safety training for all staff - Personal protective equipment (PPE) provided and required - Vehicle safety standards and maintenance - Communication protocols (check-ins, emergency contacts) - Zoonotic disease prevention (PPE, hygiene, vaccination) - Insurance coverage for staff - Emergency response procedures - Psychological support for traumatic incidents
- Animal Welfare Failures - Poor outcomes due to inadequate care, protocol failures, resource constraints
 - Mitigation: Evidence-based protocols and adherence - Veterinary oversight and expertise - Staff training and competency assessment - Ethical guidelines and decision-making frameworks - Monitoring and evaluation of outcomes - Adaptive management based on results - Transparent reporting of failures and learning
- Slow Response Times - Inability to respond rapidly due to distance, resources, communication failures
 - Mitigation: Strategic positioning of response vehicles - 24/7 emergency hotline and communication systems - Community scout network for early detection - Pre-stocked field kits for rapid deployment - Coordination with DNPW and partners for support - Realistic expectations and communication about response limitations
- Equipment Failure - Vehicle breakdowns, equipment malfunction, drug supply issues
 - Mitigation: - Regular vehicle and equipment maintenance - Spare parts inventory - Backup equipment (e.g., multiple vehicles, radios) - Reliable drug suppliers and inventory management - Contingency plans for equipment failure

Implementation Timeline

Q1 (January - March)

- Governance & Planning: Finalize WERU strategic plan and secure GRI Board approval, Develop detailed operational plans and budgets
- Partnerships & Agreements: Draft MOU with DNPW - Initiate discussions with conservation partners, Engage community leaders and traditional authorities
- Staffing: Recruit WERU Director, Senior Wildlife Veterinarian, Operations Coordinator, Veterinary Technician, Rehabilitation Keepers
- Infrastructure: Begin facility construction/renovation (enclosures, treatment area), Procure vehicles, Order field equipment and veterinary supplies

Q2 (April - June)

- Partnerships: - Finalize and sign MOU with DNPW
- Protocols: Develop species-specific protocols, Develop triage framework, Develop Standard Operating Procedures (SOPs) for all operations
- Training: Intensive staff training on protocols, equipment, safety - Veterinary team training on immobilization and field procedures - Safety and first aid training
- Infrastructure: Complete facility construction (Phase 1) - Vehicles operational and equipped - Communication systems established (radios, hotline setup)

Q3 (July - September)

- Operations Launch: WERU officially operational (soft launch) - Emergency hotline activated - First emergency responses conducted - Protocols tested and refined
- Community Engagement: Community meetings in 10 target villages - Begin community scout recruitment - Establish reporting networks
- Technology: WERU database operational - Staff trained on data entry and use - GIS systems established

Q4 (October - December)

- Operations: Full operational capacity - 24/7 emergency response capability
- Community: First community scout training cohort (25 scouts) - Hotline promoted in communities - Community reporting network active
- Monitoring: First releases with post-release monitoring - GPS collar and camera trap deployment, Monitoring data collection initiated
- Reporting: First quarterly report to DNPW and stakeholders, Annual report, Donor reporting and engagement operational

Budget Framework

Budget Category	Year 1	Year 2	Year 3
Personnel	\$180,000	\$280,000	\$300,000
Operations	\$120,000	\$140,000	\$150,000
Equipment & Vehicles	\$250,000	\$80,000	\$30,000
Infrastructure	\$150,000	\$70,000	\$20,000
Community Engagement	\$40,000	\$60,000	\$65,000
Research & Monitoring	\$30,000	\$50,000	\$60,000
Administration & Overhead	\$50,000	\$70,000	\$75,000
Contingency (10%)	\$8,000	\$75,000	\$70,000
ANNUAL TOTAL	\$600,000	\$750,000	\$770,000

Monitoring & Evaluation Plan

Purpose: Systematic monitoring and evaluation to assess WERU performance, inform adaptive management, demonstrate impact, and ensure accountability to stakeholders.

Monitoring Levels

- Input Monitoring: Resources invested (funding, staff, equipment) - Activities conducted (responses, training, meetings)
- Output Monitoring: Number of emergency responses - Number of animals treated and released - Community scouts trained - Protocols developed
- Outcome Monitoring: Response times - Post-release survival - Community engagement quality - Stakeholder satisfaction
- Impact Monitoring: Population-level conservation outcomes - Human-wildlife conflict trends - Policy influence - Model replication

Evaluation Schedule

- Ongoing Monitoring: Daily: Incident reports, field operations, animal health - Weekly: Team meetings, data review, operational adjustments - Monthly: Budget review, DNPW coordination, data summary
- Quarterly Reviews: Quarterly reports to stakeholders - KPI tracking and analysis - Advisory Board meetings (review of progress and challenges) - Adaptive management decisions
- Annual Evaluation: Comprehensive annual report (operations, outcomes, finances) - Annual KPI assessment against targets - Staff performance reviews - Community satisfaction surveys - Donor reporting - Strategic planning for next year
- Mid-Term Evaluation (Year 3): Comprehensive external evaluation - Assessment of progress toward 5-year goals - Stakeholder consultations and feedback - Strategic plan review and adjustment - Lessons learned and best practices documentation
- Final Evaluation (Year 5): Comprehensive external evaluation - Assessment of 5-year outcomes and impact - Stakeholder consultations - Model documentation for replication - Next 5-year strategic plan development

Conclusion & Vision for 2030

This comprehensive strategic plan establishes a clear, evidence-based roadmap for developing and operationalizing the Wildlife Emergency Rescue Unit (WERU) for Game Rangers International in Zambia. By integrating the 4Rs framework: Rescue, Rehabilitation, Release, and Research - WERU will address critical gaps in wildlife emergency response while building upon GRI's established foundation in elephant rescue and rehabilitation.

Vision for 2030:

By 2030, the Wildlife Emergency Rescue Unit will be a recognized center of excellence for wildlife emergency response in Africa, demonstrating measurable conservation impact through:

- Operational Excellence
- Conservation Impact
- Community Partnership
- Knowledge & Leadership
- Financial Sustainability
- Recognition & Influence

Wildlife in Zambia and across Africa face unprecedented threats. Snaring, human-wildlife conflict, poisoning, habitat loss, and climate change are causing avoidable suffering and mortality. While these threats require large-scale, systemic solutions, wildlife emergency response provides a critical safety net, reducing individual suffering, contributing to population recovery, fostering community engagement, and generating data to inform conservation policy.

The Wildlife Emergency Rescue Unit is more than a rescue program. It is a model for integrating animal welfare and conservation, for genuine community partnership, for evidence-based practice, and for ethical, transparent decision-making.

This strategic plan is a living document, subject to adaptive management based on implementation experience, research findings, and evolving conservation priorities. Regular review and stakeholder engagement will ensure WERU remains responsive, effective, and aligned with GRI's mission to protect Zambia's wildlife for generations to come.