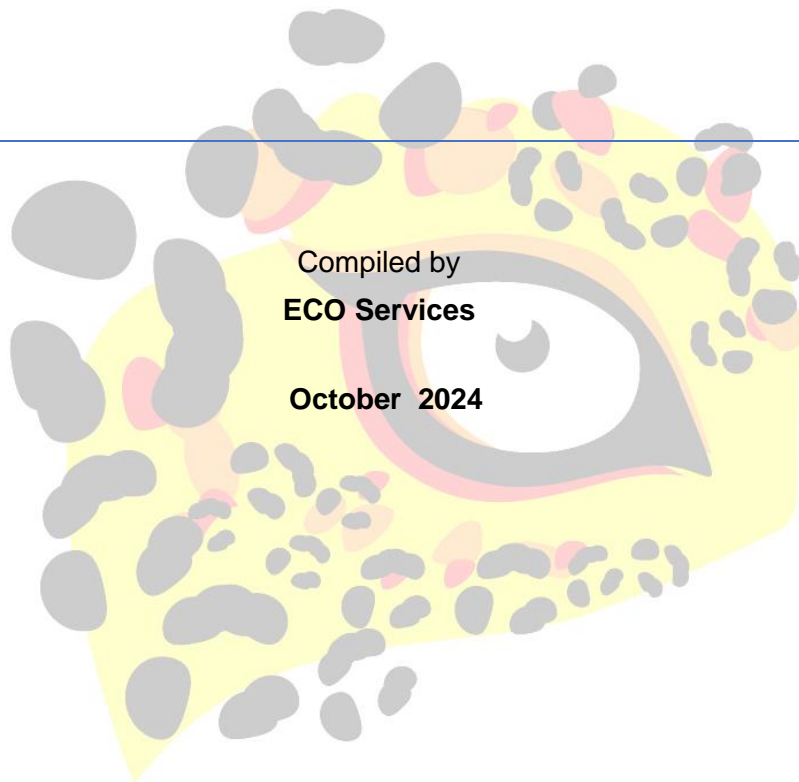


# Environmental Management Plan for the Somerset West Pistol Club



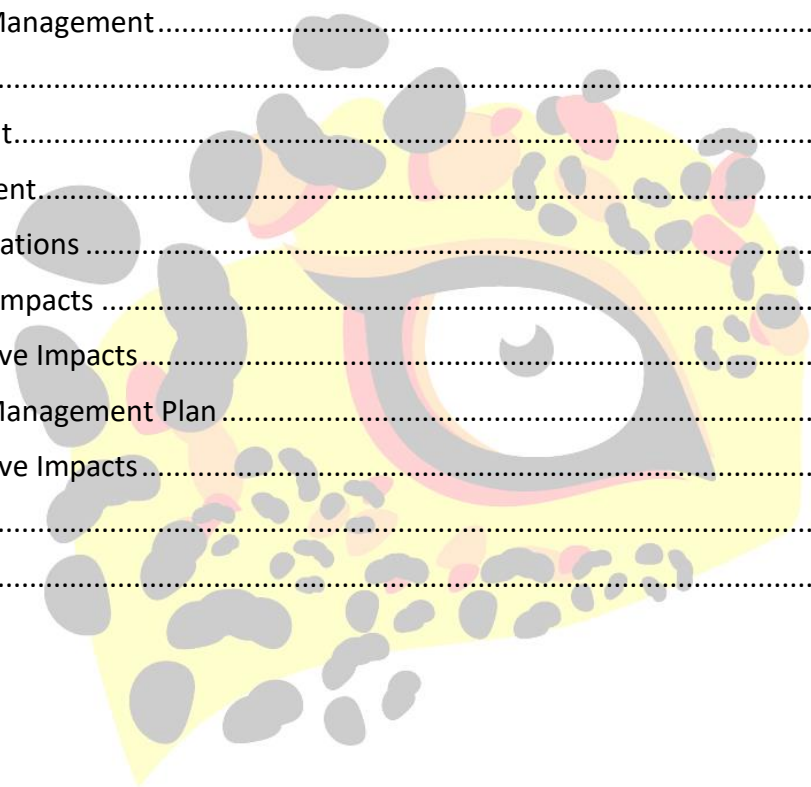
Compiled by  
**ECO Services**

October 2024

# ECO SERVICES

# Table of Contents

Introduction .....	2
Legislation .....	4
Environmental mission statement.....	5
Description .....	6
Contamination Management Plan.....	12
Erosion/Water Management.....	13
Alien Clearing .....	16
Fire Management.....	17
Noise Management.....	20
Wildlife considerations .....	21
Socio Economic Impacts .....	22
Predicted Negative Impacts.....	23
Environmental Management Plan.....	40
Predicted Negative Impacts.....	41
Implementation .....	42
Approval.....	43



# ECO SERVICES

# Introduction

Somerset West Pistol Club, located near the Sir Lowrys village has renewed its lease from the City of Cape Town of the range premises for the continuation of shooting sports. A condition of this lease is the compilation and implementation of an Environmental Management Plan (EMP) for the site. This document includes all day-to-day management of such activities, access to the range for such users and the continued management, maintenance and repair of all such associated infrastructure. These activities have a long legacy within SWPC and are hugely valued by the local community and businesses of the Somerset West, Helderberg and surrounding region.

This site is owned by the City of Cape Town (CoCT) and leased by the SWPC on a long-term basis with options for lease extension or renewal. Consequently, permissions for these activities have been granted by the City and relevant statutory departments.

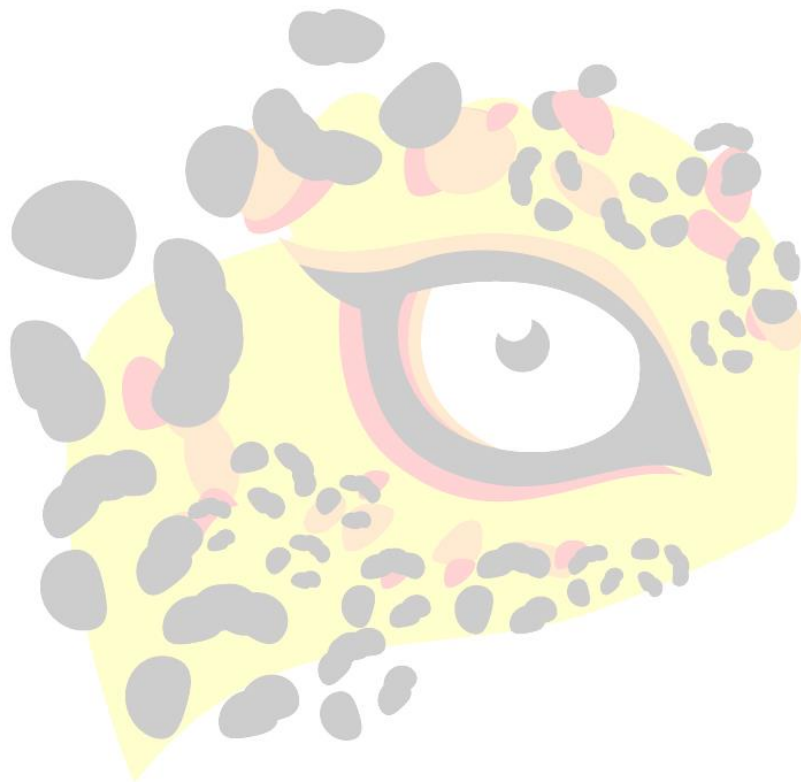
SWPC has strong commitment to environmentally sustainable land use practices and conservation ethics. As a result, hereof a structured Environmental Management Plan (EMP) needs to be put in place and approved by SWPC and the CoCT. The purpose of this document is to clearly outline the potential environmental impacts and the management practices in order to mitigate such negative impacts.

Subsequently this document will form part of the basis of general site operation of the facility and will be included into the general Range Management Plan.

Somerset West Pistol Club has contracted the services of ECO Services to ensure that a basic assessment of the location is completed and the relevant Environmental Management Plan (EMP), is compiled. This document will clearly outline environmental concerns and the prescribed management practices in order to mitigate/ minimize such impacts. Furthermore, this document will provide the general environmental management framework for all operations on site by Somerset West Pistol Club, including construction and general shooting/commercial practices for the duration of all such activities on this site into the future. This Document will be

reviewed regularly and amended as needed and new potential concerns addressed accordingly.

Furthermore, an Environmental Control Officer (ECO) also supplied by ECO Services, will conduct site inspections at a regular interval during all activities related to the construction of the facility to ensure full compliance with this document and all applicable legislation.



# ECO SERVICES

# Legislation

As per the National Environmental Management Act (NEMA), key principals need to be applied when decisions that could significantly impact the environment are considered. Such principles stipulate that these activities/actions, if approved by the state, must be sustainable, economically, socially and environmentally. Furthermore, it is essential that the needs of the people are a primary concern and that these needs are suitably met.

Key environmental legislation that could be applicable to the operation of the Somerset West Pistol Club includes:

- Constitution of South Africa Act No. 108 of 1996;
- National Environmental Management Act No. 107 of 1998;
- Environment Conservation Act No. 73 of 1989;
- National Environmental Management Protected Areas Act No. 57 of 2003;
- National Veld and Forest Fire Act No. 101 of 1998;
- Noise Control Regulations GN R154 in Government Gazette No. 13717 of 10 January 1992 (made in terms of Section 25 of the Environment Conservation Act of 1989 (Act No. 73 of 1989));
- National Environmental Management Biodiversity Act (Act No. 10 of 2004);
- The Conservation of Agricultural Resources Act No 43 of 1983;
- Natural Heritage Resources Act No 25 of 1999;
- Occupational Health and Safety Act (Act no. 85 of 1993)
- Firearms Control Act (Act no. 60 of 2000)

# Environmental Mission Statement

Somerset West Pistol Club (client) and all of its committee members, volunteers, contractors and representatives undertake to have absolute minimal negative impacts on the environment, be it directly or indirectly as a result to their actions and activities. This includes all aspects of the environment, natural, historical, cultural and aesthetic.

This undertaking binds the client to execute all activities related to this project in a safe and responsible manner with key focuses on:

- Minimal negative impact on the environment directly or indirectly related to actions and activities
- Disturbing any historical, cultural or archaeological sites in the area.
- Adhering to principles that conform with safety standards appropriate to Environmental conditions
- Keeping within the realms of concern of all parties involved
- Ensuring and sustaining a positive working relationship between all state officials, departments and NGO's involved in the management of this range
- Adapting the EMP, where needed to suit specific needs, as they arise, keeping within the working nature of this document and review the efficiency of such adaptations.
- Ensuring complete compliance with all specifications set out within the EMP, including rules and regulations of the National Environmental Management Act , where such rules and regulations will be published and distributed to all contractors
- Rehabilitation of all areas that have sustained significant negative impact as a result of such activities, be it direct or indirect from the activities.

# Description

Somerset West Pistol Club has a well-established multisport shooting range on the fringe of Somerset West, Cape Town. The range will consist of various ranges including, handgun, rifle and shotgun ranges ( fig 1-2).

This range is for public and club members, however the intention is to increase its user influx so as to become an economic contributor the area. This facility is frequently used by local security business for practice and assessment purposes and thus highly valued by this sector The activities and precinct will remain strictly within the areas indicated and applied for. Thus, the impact on the local environment is considered to be minimal to medium, with minimal permanent damage envisaged.

This facility will be constructed primarily of wooden decking, soil berms and shipping containers with a vision of emphasizing the natural aesthetics of the surrounding ecology and scenery. Infrastructure will be limited to shooting facilities and safety essentials; the rest of the site will remain unchanged.



Figure 1.) Proposed site, current (actual, Google Earth)



Figure 2.) Site plan overview (Google Earth)

## Structures

This range facility will generally consist of prefabricated steel structures ie shipping containers and shooting cubicles (*fig:3*) . These structures are non-permanent in design and can thus easily be moved or relocated in the future if needed. Permanent structure are site are limited to a single cement building, a few cast cement slabs and preformed concrete walls. These features are minimal and have been established on site for decades.



Figure 3 .) Structures on site current- containers (actual)



Figure 4.) Structures on site current- Clubhouse and main range (actual)

Shooting cubicles will be placed on concrete blocks and secured. No uncontained cement or concrete of any kind may be introduced into the soil substrate.

Berms / embankments are to be erected in specific strategic positions in order to act as safety backstops for projectiles. This will consist of local soil material from the range stockpile and will be brought into site and bumped in position. It is recommended that on the handgun range area some of this material will be bagged into sandbags and the interior face of the berm will be lined with a layer of these sandbags. The rest of the berm will then be filled in behind. These sandbags will greatly assist in maintain the structural integrity of the berms and protect them from potential damage by various forms of erosion. Alternatively these berms can be stabilised with the propagation of *Carpobrotus spp* which will greatly reduce erosion potential and improve soil stability without ricochet risk

A key feature widely utilised is that of “tyre walls” consisting of old vehicle tyres filled with sand. These are excellent barrier and bullet traps. These tyres also protect the berms or embankments from impact damage as well as provide superb erosion stability



# ECO SERVICES



Figure 5.) Structures on site current- tyre wall (actual)



Figure 6.) Structures on site current (actual)

Further stabilisation of the berms will be achieved through the propagation of indigenous endemic plant species on the rear and side surfaces of the berms. Plant species growing on the top or shooting face surfaces of the berms may not be woody in nature and it is recommended that grass or fleshy plants such as Carpobrotus spp. be used as these will not pose any risk of ricochet and is excellent at binding the soil (fig 7).

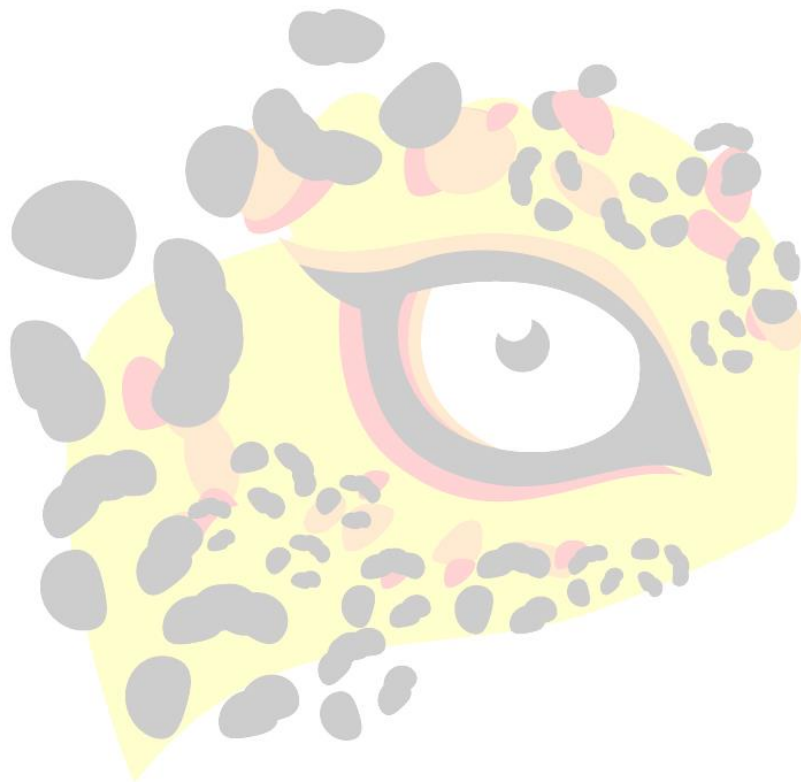
Such specimens are already well established on the main handgun range and proven highly effective. Further propagation of this species is exceptionally easy and low maintenance with a good stock to propagate from already available on site.



Figure 7.) Main range- note tyre walls, preformed concrete deflections walls and Carpobrotus spp (actual)

The access route is to be further clarified by cordoning off no go areas with hazard tape illustrating this route to all contractors clearly. All contractors and future

visitors/shooters are to be briefed as to the sensitive nature of the surrounding ecology and such notification to be further published in writing on in house communication and, documents, prior to arrival on this location. At no stage may vehicles or any personnel deviate from the prescribed public access route nor enter any vegetated areas other than those that form part of the site works plan. Strictly no vehicles will be permitted in the indigenous Fynbos veld type or off of any existing roads or tracks.



# ECO SERVICES

# Contamination Management

Painting is envisaged, where possible the majority of this must be done off site if possible and only the essential blending and touch ups are to be done on site. At all times suitable plastic lined hessian drop sheets must be placed under all structures during painting so as to avoid spillage or paint contamination of the soil substrate. All waste must be stored in sealed barrels on level ground which is placed on the specified drop sheets. Such barrels must be removed from site and emptied when a maximum of half capacity is reached.

Shooting ranges, by virtue of their intended purpose typically generate vast quantities of spent cartridges varying in shape, size design and material, typically consisting of brass, plastic, steel or a combination of these materials. Such waste is to be collected and suitably disposed of or recycled upon completion of daily shooting activities. Due to the cost, value and ability to reuse these cartridges shooters typically readily collect them and keep them. These factors result in this “waste” generation, albeit unsightly during actual shooting, presenting a very minimal potential negative impact on both the local and general environment.

Other general waste and refuse is collected and removed from site weekly following activities.

Hydrocarbon contamination from the use of vehicles and machines must be avoided. All such vehicles and machines must be free from any leaks and frequently checked. Should leaks arise, drip trays must be put in place and contractors be notified that the vehicles must be repaired or removed from site and replaced with a substitute. Furthermore, refuelling must be done at a single dedicated area that will be suitably prepared for this purpose and have drip trays, plastic sheeting and spill absorbent on hand. Sufficient in-service fire extinguishers must be on hand during all refuelling activities

# Erosion control / water management

With the site located on the foothills of the Hottentots Holland Mountains, drainage is a concern, however the majority of the site is on a very moderate slope that is not considered to have any significantly negative impacts on the general ecology, run off or storm water management of the site or range. The overall drainage and runoff stability is clearly evident as the facility sustained minimal erosion damage following the severe 2024 storms and flooding in the region as well as locally.

In order to ensure that the site does not contribute to any erosion or increased negative impacts from run off the following features are to be introduced on the site.

- Brush material removed from the site during alien clearing operations to be chipped into mulch and spread across all exposed soil surfaces to a minimum thickness of 50mm

This will greatly reduce the hydrodynamic potential of rain water and facilitate the infiltration of such water into the soil substrate. This mulch ground cover will also serve as a barrier for potential erosion by high wind speeds as a result of exposure.

- Simple water bars, these will be strategically position within all foot paths and will consist of timber poles staked into the soil with a moderate angle thus directing water off the path and into an area that has been prepared to facilitate and encourage infiltration. Such soak away areas will consist of mulch and plant material, rock beds or both depending on severity of the slope.

These features will manage and direct water movement to reduce potential erosive forces.

- Water bars, large, compacted soil water bars to be constructed at regular intervals on road surfaces with a gradient. These features will also be angled to channel water to soak away features as with “simple water bars”

- Stabilizing berms, safety berms created by earth works, will contain endemic topsoil from the site and stockpiles on the range. Such topsoil will carry rich seed loads which will germinate with time. Furthermore endemic wildflowers and fynbos species sourced locally to be planted on the berms to further assist in binding this soil structure
- Under no circumstances may any Category 1 invasive alien plant species be introduced into this location.
- A detailed plant list must be submitted for approval
- Regular maintenance of drainage features , including cleaning or clearing of vegetation where such feature may become blocked or flooded as a result of over restricted water movement.



Figure 8.) Drainage on existing road during heavy rainfall -current (actual)

*Note recommended positioning of water bars*



Figure 9.) Drainage on existing road during heavy rainfall -current (actual)

*Note recommended positioning of water bars*

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Figure 10.) Drainage soak away area current (actual)

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# Alien Clearing

As noted previously, the site is covered in an extremely high concentration of Eucalyptus trees and saplings. These are category 1 invasive species and thus the removal and clearing of such specimens is considered a benefit to the range and as having a positive legacy on the site. Such alien clearing practices must however be conducted with very specific protocols. The following practices have been prescribed.

- All alien plants that are cut, are to be cut to approximately ankle height.
  - Cuts plants to be treated with suitable herbicide immediately after cutting.
  - Herbicide to be mixed with the appropriate dyeing agent to indicate which stumps have been treated
  - Brush material to be stockpiled and once an adequate volume has been collected, such material must be placed in a chipper and chipped into fine mulch
  - Such mulch to be stockpiled on site and kept to be utilized for soil stabilization.
- ECO SERVICES
- Continued follow up removals of invasive seedlings that sprout in areas where mulch has been placed as ground cover
  - Continued follow up removals of invasive seedlings that sprout in areas where vegetation was trimmed to ankle height

# Fire Management

## BEST OPERATING PRACTICES

### Fire Danger Ratings

The sole purpose of any fire danger rating system is to attempt to indicate with a rating on how things will burn or will burn in the future.

The South African Weather Services (SAWS) each day develops a rating for the day and a prediction for the following day. This is in the form of a number and associated colour coding.

Due to the chance or likelihood of a fire occurring as a result of an increase in the FDI, the following activities should not be allowed on the, range, estate, site, etc. when the FDI exceeds 60, i.e. on Orange and Red days.

These activities include (although not limited to) the following:

1. Controlled burning or the burning of brush piles and waste.
2. The use of brush cutters for bush clearing or maintenance of fire breaks as this can result in sparks igniting the vegetation.
3. The use of chainsaws for tree felling/vegetation clearing as this can result in sparks igniting the vegetation - sparks are usually caused due to poor maintenance of the machine.
4. The use of angle grinders for cutting causing sparks.
5. The use of welding equipment that can also cause sparks.
6. Any other ancillary equipment which is likely to cause ignition to the vegetation.

General rules to be observed:

1. No open fires, gas fires for cooking should be allowed outside of the dedicated fireplace or braai structure.
2. No smoking other than in designated areas determined by the responsible person.
3. No burning of rubbish or any other material even in containers should be allowed.

**Other recommended actions:**

1. All fire tenders filled with water to the required levels, fuel and oil for pumps and vehicles at the correct levels. Spare pump fuel, starter ropes and fan belts should be available.
2. Staff activities limited to areas where they can be accessed in the event of a fire.
3. Essential vehicles and equipment to always be on hand e.g. don't send your vehicle with the only fire extinguisher to the post office to collect post!!!!
4. Staff safety equipment on hand in the event of a fire.
5. Firefighting equipment serviced and accessible.
6. Inform staff and visitors of the FDI, explaining what it means.
7. Inform all staff to be observant and report ANY smoke/flames immediately.  
Respond with all your resources even if it is an over kill – rather safe than sorry.

INDICATIVE COLOUR	BLUE	GREEN	YELLOW	ORANGE	RED
DANGER RATING	Insignificant	Low	Moderate	High	High - Extreme
FIRE PREVENTION AND PREPAREDNESS MEASURES	No precaution is needed	Fires including prescribed burns may be lit, used or maintained in the open air on the condition that persons making fires take reasonable precautions against the fires' spreading.	No fires may be allowed in the open air except those that are authorised by the Fire Protection Officer where a Fire Protection Association exists, or elsewhere, the Chief Fire Officer of the local fire service, or fires in designated fireplaces.	No fires may be allowed under any circumstances in the open air.	No fires may be allowed under any circumstances in the open air and Fire Protection Associations and municipal Disaster Management Centres must invoke contingency fire emergency and disaster management plans including extraordinary readiness and response plans. All operations likely to ignite fires halted. Householders placed on alert.
APPLICATION OF THE ACT			Above precautionary measure to be prescribed and made applicable nationally on days rated moderate.	Section 10(1)(b) applies: no person may light, use or maintain a fire in the open air.	Section 10(1)(b) applies: no person may light, use or maintain a fire in the open air.
RELATIONSHIP WITH DISASTER MANAGEMENT				The threat of disastrous wildfires exists at municipal level under these conditions. Municipal Disaster Management Centres must invoke contingency plans and inform National and Provincial Disaster Management Centres. (Section 49 of the Disaster Management Bill).	The threat of disastrous wildfires at provincial level exists under these conditions. Municipal Disaster Management Centres must invoke contingency plans and inform National and Provincial Disaster Management Centres. (Section 49 of the Disaster Management Bill).
FIRE BEHAVIOUR	Fires are not likely to ignite. If they do, they are likely to go out without suppression action. There is little flaming combustion. Flame lengths in grassland and plantation forest litter lower than 0.5 m and rates of forward spread less than 0.15 kilometres per hour.	Fires likely to ignite readily but spread slowly. Flame lengths in grassland and plantation forest litter lower than 1.0 m and rates of forward spread less than 0.3 kilometres per hour.	Fires ignite readily and spread rapidly, burning in the surface layers below trees. Flame lengths in grasslands and plantation forests between 1 and 2m, and rates of forward spread between 0.3 and 1.5 kilometres per hour.	Fires ignited readily and spread very rapidly, with local crowning and short-range spotting. Flame lengths between 2 and 5 m, and rates of forward spread between 1.5 and 2.0 kilometres per hour.	Conflagrations are likely in plantation forests, stands of alien invasive trees and shrubs, sugar cane plantations, and fynbos. Long range fire spotting is likely in these fuel types. Rates of forward spread of head fires can exceed 4.0 kilometres per hour and flame lengths will be in the order of 5 – 15 m or more.
FIRE SUPPRESSION DIFFICULTY	Direct attack feasible: one or a few field crew with basic fire fighting tools easily suppresses any fire that may occur.	Direct attack feasible: fires safely approached on foot. Suppression is readily achieved by direct manual attack methods.	Direct attack constrained: fires not safe to approach on foot for more than very short periods. Best forms of control should combine water tankers and back burning from fire control lines.	Direct attack not feasible: fires cannot be approached at all and back burning, combined with aerial support are the only effective means to combat fires. Equipment such as water tankers should concentrate efforts on the protection of houses.	Any form of fire control is likely to be precluded until the weather changes. Back burning dangerous and best avoided.

Figure 11: Fire Danger Index

Somerset West Pistol Club has indicated that an irrigation system is on the site in order to irrigate the landscaped areas and encourage the growth of the indigenous plants that will be introduced. It has been recommended and accepted that this system can be used and adapted in such a manner so as to double as a fire suppression system for the site. This system will store approximately 10 000L in tanks on site with sufficient pipes and pumping capacity to utilize this for fire suppression in the event of a fire.

# Noise management

As can be expected shooting ranges generate a significant amount of noise as a result of gunfire during shooting activities. This site has a long-standing history of such activities and a legacy of noise exemption approvals are in place.

The facility incorporates numerous features to aid in the deflection and absorption of sound origination from gunfire. Such feature includes high soil berms covered in vegetation, tyre walls, precast concrete walls and the orientation of such features to effective channel sound away from the neighbouring residential estates.

Some concern has been raised about the introduction of a new rifle range on the upper northern fringe of the precinct. This facility is still in a development phase and under construction. Installation of the soil berms is already well under way but not complete as yet.

As forementioned, shooting cubicles will be placed in position on this range on order to further absorb and channel sound generated from gunfire. Such cubicles may be lined absorptive material to reduce acoustic properties of these cubicles. It has been discussed that it may be a condition of this range that only firearms with sound suppressors may be used , however this has not been confirmed or finalized as yet.

Following engagement with the competent authority in the City of Cape Towns environmental health department- Noise Control Unit, it has been determined that once this range is completed a new sound / noise study will need to be completed specifically for this new rifle range before it may officially become operational.

This study will determine the specification which may need to be implemented in order to be granted the noise exemption approvals for this range.

# Wildlife Considerations

The rural location of the proposed shooting range site greatly adds to the element of splendour to the potential “guest” at the site however this also place it in an area where potential interactions with wildlife may occur.

As a result, certain measures and regulations must be put in place.

- Strictly no firing at any animals of any sort at any time
- All bins must be monitored and frequently emptied, at a minimum weekly
- Physical interactions are strictly limited to the safe capture and local relocation of species that may be at risk of injury (tortoises) or pose a safety risk (venomous snakes) by straying into the range precinct
- No feeding of any animals or placing of any food sources for any animal species including birds

As noted in previous reports and studies, concern has been raised about the potential negative impacts on the local wildlife species because of the noise of gunfire. Somerset West Pistol Club has under the guidance and recommendation from the City of Cape Town, initiated a monitoring programme.

This programme will be of a voluntary basis and based on direct shooter or visitor interactions or sighting. In order to achieve this, a register is to be kept in the clubhouse whereby members, shooters or visitors are requested to log sightings of wildlife or birds. This log must include the species or description date, time and location of the sighting. It has been discussed to implement this on a digital platform (whats app group). This data is then readily accessible and can be easily collated and verified. All shooter, visitors, volunteers or contractors are urged to make use of this system and report any sightings or birds or wildlife species on site. If possible a photograph is highly recommended and the metadata will automatically capture the date and time of the sighting

## Socio-economic Impacts

Somerset West has an existing, well established tourism industry which includes a multitude of activities such as mountain biking, wine tasting, dining and more.

Somerset West Pistol Club has been a longstanding addition to this portfolio in the future, adding further diversity to the tourism offerings of the estate.

Currently there are no similar operations in the immediate Helderberg area, and it is believed that this facility in the future will further increase visitor influx into the area. Naturally in time this will add to the general greater economy of the district. The vision is for this facility to provide the visitors with a unique experience of international standard and encourage foreign visitors to the area as well and servicing shooting enthusiast in the greater Somerset West and Strand area.

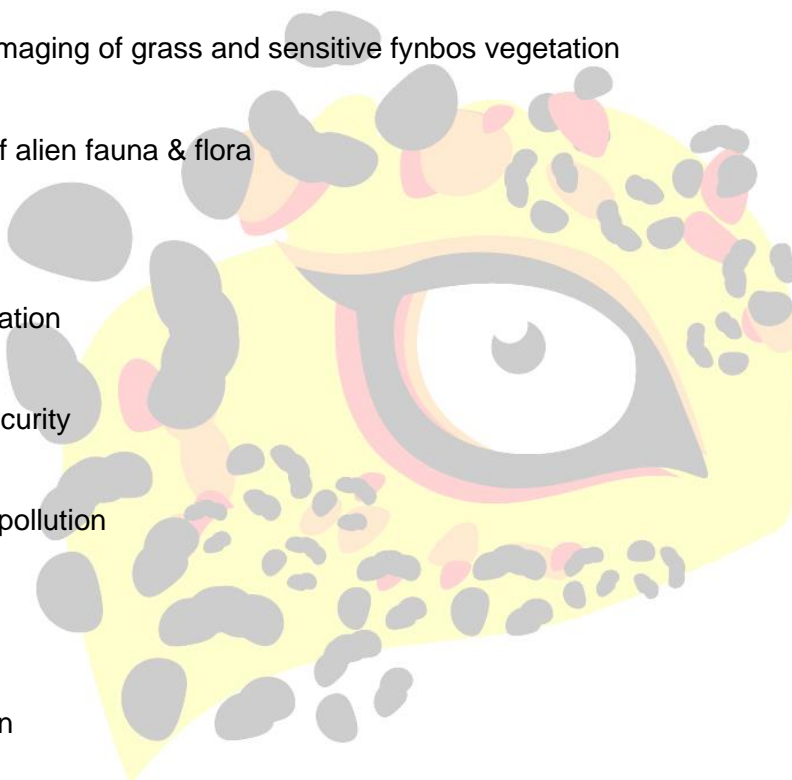
The construction SWPC rifle range will potentially increased employment opportunities for members of the local community albeit temporary. This facility is frequently used by various security companies for additional training and assessment, including highly specialised highly specialised techniques, therefor skills development opportunities through this special on-site training will further benefit such personnel and the operational capabilities of such security companies .

As a result of current invasive alien plant infestation and the proximity to the large *Eucalyptus spp* forest, alien clearing management and re-propagation are crucial in maintaining this site. To date alien clearing teams from the local community have been contracted to implement such operations. Annual follow up clearing practices are vital and thus extent the positive economic benefit on the local economy and community. Somerset West Pistol Club have indicated that an Environmental Control Officer (ECO) will be present during construction activities and occasional site visits thereafter. In this sensitive environment it is highly recommended that these activities on this location be closely supervised and monitored by this ECO to ensure complete compliance with this document and all statutory legislatures. ECO SERVICES has been contracted to fulfil this requirement.

## Predicted negative impacts

Because the site is situated within a natural eucalyptus “forest” and surrounded by both fynbos and pine plantations, possible negative impacts affecting this area will be strictly managed; these impacts have been identified as:

- Possibility of uncontrolled fire
- Removal / damaging of grass and sensitive fynbos vegetation
- Introduction of alien fauna & flora
- Soil erosion
- Soil contamination
- Safety and security
- Hydrocarbon pollution
- Littering
- Noise pollution
- Air pollution
- Potential destabilizing damage to road surfaces
- Wildlife disturbances
- Environmental damage due to vehicle usage



# Environmental Management Plan

Activity	Potential Environmental Impacts	Time Period	Mitigation	Monitoring Standard	Compliance
<p><b>Potential vegetation damage due to the establishment and operation of the site</b></p>	<ul style="list-style-type: none"> <li>• Potential damage to existing indigenous vegetation</li> <li>• (Impact low)</li> <li>• The site has been previously disturbed and consists of existing infrastructure such as a single cement building, a few cast cement slabs and preformed concrete slabs.</li> <li>• Prefabricated steel structures (Shipping containers) and shooting cubicles which are non-permanent in design and can be easily relocated will be brought onto site and placed in a non-vegetated area.</li> <li>• The wooden decking, soil berms and</li> </ul>	<p>During the establishment and operation of the site</p>	<p>Existing infrastructure will be used, and new infrastructure will be situated in a previously disturbed vegetation free zone.</p> <p>Ensure that sensitive areas are properly marked out and that there is a minimum impact on indigenous vegetation.</p> <p>Contractors and visitors to be briefed with regards to indigenous vegetation</p> <p>Paths and sensitive areas to be demarcated using danger tape and signage from arrival on location</p> <p>Use of set "paths" when</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

	<p>shipping containers will be placed in a site that has been previously disturbed and does not contain any indigenous vegetation</p>		<p>working within sensitive areas</p> <p>No indigenous vegetation to be removed/trimmed</p>		
<p><b>The Possible spread of invasive species</b></p>	<ul style="list-style-type: none"> <li>• The possible spread of invasive species (Low)</li> <li>• The current site is surrounded by invasive species (Eucalyptus trees)</li> <li>• The current site will be planted with indigenous vegetation (Parts of the shooting range)</li> </ul>	<p>During the establishment of the site</p>	<p>Ensure flora brought onto site doesn't have seed and imported soil to be contained.</p> <p>Plants to be checked by ECO and Range personnel</p> <p>Certain species of flora listed under Conservation of Agriculture Resources Act may have restrictions applicable, ECO to confirm use of any species for dressing and rehabilitation</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

			<p>All foreign plant material to be sterile (no fruits or flowers)</p> <p>All foreign plant material to be stored on plastic sheeting</p> <p>Non-endemic flora brought on site to be checked for seeds and managed to prevent spread of seeds</p>		
<p><b>Possible soil contamination due to the establishment and operation of site</b></p>	<ul style="list-style-type: none"> <li>Possible soil contamination (Impact low)</li> </ul>	<p>During the establishment and operation of the site</p>	<p>Shooting cubicles will be placed on concrete blocks and secured</p> <p>No uncontained cement or concrete of any kind may be introduced into the soil substrate</p> <p>Painting needs to be done off site whenever possible, only essential blending and touch-ups</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

			<p>must be done on site</p> <p>Plastic lined hessian drop sheets must be placed under all structures during painting to prevent spillage and paint contamination of the soil substrate</p> <p>Spent cartridges must be collected and suitably disposed of, or recycled upon completion of daily shooting activities</p>		
<p><b>Possible soil erosion due to the establishment and set-up of the site</b></p>	<ul style="list-style-type: none"> <li>Possible impact on soil erosion (Low)</li> </ul>	<p>During the establishment and operation of the site</p>	<p>Berms and embankments need to be erected in specific and strategic positions to act as safety backdrops for projectiles, local soil material from the range will be used, as well as</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

sandbags, which will help maintain the structural integrity of the berm and protect them from erosion.

Tyre “walls” will protect berms and embankments, and provide erosion stability

Indigenous endemic vegetation such as *Carpobrotus* spp. will be propagated and used to stabilise the berms, and to bind soil to prevent erosion.

Brush material that is removed from the site during alien clearing must be chipped into mulch and placed across exposed soil surfaces to a thickness of 50mm

			<p>Water bars need to be placed within footpaths, and constructed on road surfaces</p> <p>Stabilizing berms (Safety berms) that contain endemic topsoil and fynbos should be placed on site to help bind soil structure.</p>		
<p><b>The possible disturbance of wildlife during the set-up and operational phase</b></p>	<ul style="list-style-type: none"> <li>• The potential disturbance of wildlife (impact medium)</li> <li>• The disturbance of animals due to noise (Impact possibly high)</li> <li>• The disturbance of animals due to construction work (Impact medium)</li> <li>• The disturbance of wildlife due to daily activities (possibly high)</li> </ul>	<p>During the establishment and operation of the site</p>	<p>Contractors and visitors to be briefed prior to commencing activities, to stay on designated areas.</p> <p>Contractors and visitors to be briefed on not disturbing or injuring any wildlife within the estate or localised environment</p> <p>No fauna and flora without</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

			<p>all relevant statutory permits</p> <p>Strictly no hunting or shooting of any wildlife on site</p>		
<p><b>Vehicle management during the establishment and operation of the site</b></p>	<ul style="list-style-type: none"> <li>Potential environmental damage due to the use of vehicles (Medium)</li> </ul>	<p>During the establishment and operation of the site</p>	<p>To provide safe access for vehicles in the approved parking areas and to manage traffic flow</p> <p>There needs to be safe management of all vehicles related activities</p> <p>Parking for visitors in designated parking areas in a manner that does not obstruct traffic flow</p> <p>Site to be accessed via existing roads</p> <p>No vehicles to park within sensitive areas</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

			<p>Parking areas near site to be demarcated</p> <p>Access roads should be kept open at all times to allow for emergency response vehicles</p> <p>Somerset West Pistol Club to provide adequate signage, "including shooting in progress" signs is safety warnings</p> <p>No vehicles to access vegetated areas</p>		
<p><b>Possible environmental damage due to wind</b></p>	<ul style="list-style-type: none"> <li>The potential environmental impact of wind damage to site (Low)</li> </ul>	<p>During the establishment and operation of the site</p>	<p>Prevent damage done to environment by wind as a result of operations</p> <p>Ensure that the</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

infrastructure and associated by-products are secure during the construction phase

Somerset West Pistol Club needs to brief contractors and visitors about ensuring that construction related equipment is securely anchored so that they do not blow away and create a litter problem

All litter that accumulates needs to be collected in black bags daily and disposed of accordingly

Non-endemic flora brought on site to be checked for seeds and managed to prevent spread of seeds

<p><b>Prevent hydrocarbon pollution during the establishment and operation of the site</b></p>	<ul style="list-style-type: none"> <li>Possible environmental contamination due to hydrocarbon pollution (Low)</li> </ul>	<p>During the establishment and operation of the site</p>	<p>Minimize the risk of potential spillage of hazardous substances</p> <p>Only blimped (quiet) generators may be used</p> <p>Area where fuel is stored should be demarcated and applicable safety signage displayed</p> <p>Spill sorb kit on site in the event of a fuel spillage at all times</p> <p>Portable generators to be sealed units with built in drip trays and placed on level area devoid of moribund material</p> <p>When refuelling, fuel container should have plastic bag to prevent spillage, and</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>
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			<p>a funnel should be used</p> <p>Any refuelling to be strictly done off site and outside of the immediate catchment area</p> <p>No vehicles permitted into the catchment area.</p> <p>CO<sub>2</sub> Fire extinguisher to be kept in close proximity to generators at all times</p>		
<p><b>Fire risks associated with the operation of the site</b></p>	<ul style="list-style-type: none"> <li>• Potential impacts due to fire</li> <li>• (Medium) The current site is situated in a high fire risk zone but with adequate fire prevention methods this risk can be substantially reduced</li> </ul>	<p>During the establishment and operation of the site</p>	<p>Provide adequate fire prevention methods and services during operations</p> <p>There is a moderate to high risk of fire as some of the activities are to take place near fire</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

prone  
vegetation

Somerset  
West Pistol  
Club is to  
ensure that  
adequate  
measures  
are in place  
in the event  
of a fire

Designated  
smoking  
areas are to  
be assigned  
by the ECO,  
these areas  
are to have  
ash trays and  
a (preferably)  
CO<sub>2</sub> Fire  
extinguisher  
at hand.  
Relevant and  
adequate  
dedicated  
smoking area  
signage to be  
clearly visible

No open  
flames to be  
permitted in  
close  
proximity to  
vegetation

Sufficient fire  
extinguishers  
on site,  
serviced and  
in date

Access roads  
to be kept  
clear at all  
times to allow  
easy access  
in case of an

			<p>uncontrolled wildfire</p> <p>Certain activities should not occur on site when the Fire Danger Index (FDI) exceeds 60(Orange and Red days, See fire management practices)</p>		
<b>Noise pollution</b>	<ul style="list-style-type: none"> <li>Possible impact of noise (High)</li> </ul>	During the operational phase	<p>To work within local authorities' noise regulations with regards to use of firearms</p> <p>Apply for exemption if special effects discharge loud noise</p> <p>Conditions and requirements stipulated in noise exemption must be adhered to</p>	An ECO from eco-services will monitor the layout and set-up of the site	The ECO will take appropriate action if there is non-compliance
<b>Littering</b>	<ul style="list-style-type: none"> <li>Possible impacts associated with littering (Medium)</li> </ul>	During the establishment	No foreign material of	An ECO from eco-services will monitor the layout and	The ECO will take appropriate action if

		and operation of the site	any kind to be left on site	set-up of the site	there is non-compliance
			<p>Members to be informed through adequate signage and pre-brief that littering is not permitted, it is recommended that this is also done by in a brief document given to all members or visitors prior to arrival at the range</p>		
			<p>Dustbins with windproof lids to be placed strategically at location.</p>		
			<p>Dustbins to be serviced regularly so to prevent overflowing</p>		
			<p>All accumulated Litter to be disposed of at a municipal landfill site</p>		
			<p>All litter and waste materials produced by and</p>		

			associated with operations to be removed daily from site to reduce potential of further litter due to wind, animals and humans		
<b>Health and safety on site</b>	<ul style="list-style-type: none"> <li>• Possible impacts associated with health and safety (High)</li> <li>• Due to the nature of what the site is being used for.</li> </ul>	During the establishment and operation of the site	<p>Ensure Health and safety measures are in place and abided by.</p> <p>Correct protective gear to be worn at all times</p> <p>Qualified and competent workforce</p> <p>Structures need to be adequately secured</p> <p>Controlled access to work area</p> <p>Medical personal to be suitably equipped.</p> <p>Proper disposal of waste daily</p>	An ECO from eco-services will monitor the layout and set-up of the site	The ECO will take appropriate action if there is non-compliance

			<p>Firearm and shooting range regulations and safety measures need to be adhered to at all times</p> <p>The public needs to be made aware of the possible dangers via communication, adequate signage, and regulations need to be strictly adhered too.</p>		
<p><b>The management of toilets and waste on site</b></p>	<ul style="list-style-type: none"> <li>The possible impact of environmental contamination due to sewerage waste (Medium)</li> </ul>	<p>During the establishment and operation of the site</p>	<p>Self-contained toilets to be made available and serviced regularly after use activities</p> <p>Defecating and urinating strictly forbidden anywhere other than the toilets provided.</p>	<p>An ECO from eco-services will monitor the layout and set-up of the site</p>	<p>The ECO will take appropriate action if there is non-compliance</p>

			Toilet to be free from any form of leakage		
<b>The possible rehabilitation of the site</b>	<ul style="list-style-type: none"> <li>• Potential risk of environmental damage that would lead to possible rehabilitation (Low)</li> </ul>	During the establishment and operation of the site	<p>Repair of potential impact on access routes and substrate due to intensified traffic (if needed)</p> <p>In the event of any accidental large scale hydrocarbon contamination, such contamination to be cleared by a licensed hazardous materials company at the expense of site management</p> <p>All materials, products and litter are to be removed from site upon completion of daily site activities</p> <p>Areas with significantly</p>	An ECO from eco-services will monitor the layout and set-up of the site	The ECO will take appropriate action if there is non-compliance

exposed soil need to be stabilized and anti-erosion measures put in place.

ECO Services will ensure and implement suitable rehabilitation of the site once ECO Services will ensure and implement suitable rehabilitation of the site once all materials and structures are removed

# ECO SERVICES

## Implementation

The Client will appoint an ECO during construction activities to oversee the implementation of the EMP. The Site will be frequently inspected and monitored to ensure compliance and assist in the adaptation of this EMP should the need arise.

ECO will also assist Somerset West Pistol Club in the wildlife monitoring programme and data analysis.

# Approval

Signed \_\_\_\_\_ for Somerset West Pistol Club on \_\_\_\_\_

at \_\_\_\_\_

Signed \_\_\_\_\_ for City of Cape town on \_\_\_\_\_

at \_\_\_\_\_

*See approval letter attached.*



ECO SERVICES



CITY OF CAPE TOWN  
ISIXEKO SASEKAPA  
STAD KAAPSTAD

**SPATIAL PLANNING AND ENVIRONMENT  
ENVIRONMENTAL MANAGEMENT DEPARTMENT**

**Lauren King**

SPO: Environmental and Heritage Management Branch

T: [REDACTED] M: [REDACTED]  
E: [REDACTED]

2025/03/07

Mr Louis Botha  
Chairman: Somerset West Pistol Club

Attention: Mr Louis Botha

**APPROVAL OF ENVIRONMENTAL MANAGEMENT PLAN FOR SOMERSET WEST PISTOL CLUB, FARM 820/1,  
SOMERSET WEST**

With reference to the document titled Environmental Management Plan for Somerset West Pistol Club compiled by Eco Services dated October 2024, approval is hereby granted for the document as an Environmental Management Plan by the Branch: Environmental & Heritage Management. All recommendations and conditions as included in the Environmental Management Plan should be adhered to.

Please take note that no construction work may commence without Building Plan Approval being granted by the City of Cape Town.

Yours sincerely

[REDACTED]

Lauren King  
SPO: Environmental and Heritage Management Branch (Eastern Region)