

Priorities for saving the environment of Fisherhaven.

Vision

To clean up the environment of Fisherhaven and create a stable, sustainable, ecologically balanced environment within the town limits of Fisherhaven.

Mission

To coordinate the somewhat disjointed efforts that have been made in Fisherhaven to save the environment and to have a firm plan that we can all work from, to achieve real progress with rehabilitating the environment at minimal cost.

History

In the original demarcation of Fisherhaven streets and plot boundaries, 13 areas were mapped as green areas within the township area of Fisherhaven. These were zoned as Open space 2: Public open space, no areas were zoned as Open space zone 1: Nature reserve or Open space zone 3: Private open space. Table 1 shows the erven numbers, area and a brief comment of these 13 green areas.

In addition an area south of China Marais and Farm Road was declared a green buffer zone between Fisherhaven and Hawston. Two additional areas north of Riverside Road and stretching to the water's edge of the Afdaks estuary section of the Bot River Lagoon were zoned Agricultural zone 1: Agriculture. Both these areas have been partly disturbed in the past and were used as grazing areas. They are extremely sensitive areas from an ecological point of view and for decades have been periodically cleared of invasive species and are in reasonable shape now with Fynbos growing on them and are reasonably stable, albeit without the correct species mix. They have not been rezoned as green areas.

In addition four large plots were listed as Community zone 1: Communal facilities. The two larger ones are reserved for schools and two others are in private ownership but with conditions attached to any building to be done on them. An area which includes Erf 130 Business zone 3 and an unzoned area up to, but excluding Erf 131, has been maintained as a Public open space.

These additional areas are included in table 2.

In general all these areas have had erratic attempts to keep them clean of invasive species often incorrectly done and often with a lack of timely follow-ups.

The edge effects on all these relatively small separate pieces of land are quite large. This is primarily because the roads have been built which because they have changed the local environment drastically have effects many metres into the edge of each plot. The water environment has been changed and especially where drainage ditches drain onto the plots, this can significantly change the environment and cause some Fynbos species to die out altogether.

The soil profile changes such as digging up the soil, mixing the subsoil with the topsoil or dumping other soil onto the plots causes very long term changes. The layers in the soil have developed over

hundreds of years and can take as long again to settle back to what the indigenous plants are accustomed to.

The mowing of plots is usually extremely detrimental to the Fynbos. Even though Fynbos is adapted to getting burnt clean periodically, this is usually a long cycle (10 to 30 Years). Mowing every year changes the species to invasive grass species and annual type shrubs.

The planting of various plants on some of the plots, especially exotic plants but even indigenous plants which do not normally occur in this area, can be very detrimental to the local indigenous plants.

The biggest problem however is the invasion of introduced exotic species such as Port Jackson, Bloukrans, Myrtle, pine species and eucalyptus species. All these species outcompete indigenous species and use much more water (3 to 10 times as much), severely changing the water regime in this low rainfall area. The leguminous species (such as Port Jackson) change the nitrogen status of the soils as well which leads to a lack of germination in many of the Fynbos species, this then leads to the exotics been better able to outcompete the Fynbos species. Most of these invasive species have very much higher flammable oils which increases the fire hazard. This operates through increasing the fire intensity by as much as three to five times. The huge damage and loss of life in the Knysna fires could have been reduced by 60 to 90% if, in the last decade, the invasive species had been controlled.

All of these exotic invasive species produce very large quantities of seed, even with the biological control methods in place, for some of these species, and these seeds are easily dispersed over large distances. Therefore one seeding exotic tree, growing on a plot, can cause severe invasion to many plots around it and for many years.

The removal of well established exotic species on a plot can become expensive, and the re-invasion from surrounding areas can be a major problem. The timely follow-up is much easier and also much less expensive. The laws governing the removal of many species of invasive plants were introduced for very good reasons and to attempt to correct the mistakes we made in the past. We cannot, however, decide to do nothing. Ignoring the problem will lead to almost irreversible changes in the environment which will have severe and costly effects on every plot owner in Fisherhaven.

The first step is to re-establish and clean up the demarcated green areas of Fisherhaven. A plan and recommendations will be made and reassessed yearly with progress made and the necessary adjustments made, as this is a dynamic system which needs to be adjusted often. We have people within Fisherhaven who have the knowledge to provide guidance.

The second step is to exercise some control on the infrastructure development within Fisherhaven such that we limit irreversible damage to the environment by the OSM and private land owners without unduly impeding the development of infrastructure which is necessary for the future development of Fisherhaven. There has been much talking about this but with no plan of action. A plan will be drawn up with recommendations which need to be debated and begin being put into action as this has a large effect on the success of the first step.

The third step is to expand the efforts to the areas surrounding Fisherhaven. This will include

- The Bot River Lagoon- a reassessment of the present regulations pertaining to the artificial opening of the lagoon.
- The areas towards Hawston, Meerenbosch and the rest of the Fisherhaven ecosystem which directly affect Fisherhaven. This is a subset of the Paddavlei Ecosystem Rehabilitation project which we can integrate with.

It bears noting here that there has been a decrease in the life around the edges of the Lagoon, in the past year there has been a significant decrease in any signs of life especially in the Afdaks area. Bird numbers seem to have decreased; there are hardly any signs of insects or any other life on the south bank, insects been the primary food source for most of the bird species. Even the invasive reeds are looking in very poor shape.

Privately owned plots in Fisherhaven

Many of the plots in Fisherhaven are well maintained and looked after. However, many plots are badly looked after and are full of exotic invasive species which creates a huge seed bank that spreads onto many other plots including the green areas. This makes the maintenance of these areas very much more difficult and expensive.

It is proposed to produce a separate pamphlet with brief descriptions of the invasive species of note for Fisherhaven with pictures for easy identification and the appropriate control measures as recommended by the NEMA guidelines. These can be distributed around Fisherhaven and could be handed out by every estate agent selling plots in Fisherhaven.

Road verges

In many areas of Fisherhaven the road verges have good stands of Fynbos. These should be noted and protected. Many road verges have deteriorated, some to the point that they are unlikely to recover any sort of fynbos although many of these areas do still have many small flowering bulbs and do give a spring show. Mowing of these areas should be controlled and not mowed in the spring when most of the flowers are out. Cognisance needs to be taken of the desire of many residents to have regularly mowed verges adjoining their properties.

Trees in Fisherhaven

Most of the trees in Fisherhaven are exotics. A few of them are indigenous but not to this area. The trees grow well where they get additional water and nutrients. Many of the trees whether they are exotics or indigenous from other areas of South Africa are not a problem as they do not spread readily and are therefore not considered to be invasive. However, some of the trees are classified as invasive species and by law should be removed. It is illegal to have classified invasive plants growing on public or private land, primarily because they provide a seed source to extensive surrounding areas. The development of thickets or dense patches of invasive species are usually controlled on private land by the landowners. However, there are many empty plots and public land which includes the green areas and road verges where continuous reinvasion is occurring from well established invasive trees on privately owned land. This ends up being expensive and time consuming to clear. Part of the problem is land owners been unaware of these problem trees and they need to be educated and encouraged to remove these invasive species.

Lastly the residents who have spent time and money on clearing public areas need to be recognised.

Map of Fisherhaven with erven from table 1 &2



Table 1 Erven in Fisherhaven zoned public open space, demarcated green space

Table 2 Additional erven in Fisherhaven, open areas not zoned green space

ERVEN IN FISHERHAVEN ZONED PUBLIC OPEN SPACE DEMARCATED GREEN AREAS

TABLE 1

h = high m = medium l = low BB - Bruce Beyers, MA - Mike Austin

PJ=Port Jackson

ERF NO	DESCRIPTN	AREA ha	RATING	PRIORITY	WORK REQD	WORK DONE	Comments
			STATUS				
769	Miramar /Broadway	2.6	h	1	maintenance clearing of regrowth PJ	cleared by BB Jul-Oct 17 Followed by OSM with random spraying	
774	Broadway - riverside	0.17	l	7	clear, mainly PJ	? Very little for years	Bad edge effects
772	Crescent	0.6	h	2	maintenance clearing of regrowth	Cleared, other species planted	
770	Service/Link	1.4	m	5	clear PJ	Not great in the recent past	
753	Protea park	1	h	3	Needs rehabilitation by planting, control of Buffalo and kikuyu and control of porcupines. Very good tortoise (padloper) population and habitat	cleared about 2 yrs ago; no maintenance Clearing by BB Nov-Dec 2017	
765	Recreation	1.7	l	9	clear PJ	intermittent clearing , dumping soil disturbance OSM cut off PJ, no stump treatment, Random spraying	
758	Sharpie/China Marais	0.6	h	1	maintenance	good growth of Fynbos but impacted by beekeeper, recently by fire and needs removal of aliens and rehabilitation of soil dumps	
757	Farm/China Marais	0.6	h	1	maintenance	good growth of Fynbos	
752	Stormalong/Trimaran	0.8	m	5	Area a and b -a east of Trimaran extraordinarily rich in bulbs, worth rehabilitating	intermittent clearing in past. Recent very poor lopping and weed killer spraying	
	& extension	0.3	m	5	Area b has 'good wetland' and is invaded by grass on		

Table 1 2nd page

								the SW end		
776	Farm/Lagoon ext.	4.5 l	7				Burn then follow by clearing and maintenance		Severely invaded mature PJ, fire hazard	
751	Sprog	2.5 h	2				clear PJ and Myrtle Manage spider gum		Bad past, chemical damage	NB entrance to FH
750	Sprog	4.5 h	2				clear PJ Rehabilitation		Bad past, chemical damage	NB entrance to FH
775	Riverside/Waters edge	2.7 nil	10				Centre section, clear PJ, nil on rest		Centre section severely disturbed	Problem of designation
		3.7 h	7				Western section clear PJ, maintenance		Eastern section some severely disturbed, dumping of soil in the past, Bottlebrush invading	
	Seaway to waters edge	h	2				Clear PJ and Invading Bottlebrush		Some planted Bottlebrush	
		2.8 m	3				Eastern section, Maintenance PJ, clear Buffalo & reeds		Western section, slowly recovering, cleared of PJ	

ADDITIONAL ERVEN IN FISHERHAVEN, OPEN AREAS NOT ZONED GREEN

TABLE 2

h = high m = medium l = low BB - Bruce Bayers, MA- Mike Austin, VM- Vernon McKechnie

ERF NO	DESCRIPTN	AREA	RATING	PRIORITY	WORK REQD	WORK DONE	COMMENTS
			STATUS				
573	Between Riverside & Lagoon	8.62	1	h	Maintenance of Port Jackson Other exotic species e.g. Bottlebrush needs to be looked at but especially proliferation of Buffalo grass, Phragmites and Kikuyu Management of Sharpie Rd runoff is needed	Cleared by BotFriends, MA and BB amongst others	zoned agricultural, should rezone
7/575	Below Riverside cnr. Riverside & Stormalong	5.23	1	h	Maintenance of Port Jackson Other exotic species e.g. Bottlebrush and Buffalo needs to be looked at. The management of Stormalong runoff is needed	Cleared by BotFriends, MA and BB amongst others	zoned agricultural, should rezone
279	School bordering on Lagoon	3.96	1	h	Cleared of Port Jackson with poisoning of the stumps	Some mowing in the past, Port Jackson cut but stumps not poisoned	unique species of Fynbos, should rezone
634	School on Bolero	2.67	3	l	Mowing by OSM a total disaster	Mowed in the past	Very shallow soils, very rich bulb flora
505/395	Either side of China Marais Private Ownersh	0.817 & 0.653	5	l	Owners to clear	Some clearing in the past	
136/135	Cnr. China Marais & Lagoon	0.4695 & 0.3678	4	m	Zoned Special Use OSM to decide	Some clearing in the past, badly done	
729	Sprog Zoned Business	0.0729	5	m	clear PJ	Not much done in past	Near entrance should at least be cleared
RR Road Reserve	Triangle at end of Church Street	0.3	1	h	Maintenance, potentially very good stand of Fynbos Needs removal of foreign ornamentals and rehabilitation by removal of moribund and weedy	Maintained by private property owners	

Table 2 2nd Page

							Indignant				
749	South of China Marais & Farm Road	115	3 h				Needs fire then maintenance clearing				Severely invaded with mature PJ, Myrtle and Pine Mowed fire break, grass and PJ remaining
131	Erf 131 & adjoining unzoned area	0.2977 1.4	4 m 4 m				maintenance				cleared by VM
21/575	adjoining Afdaks	31	4 h				need to get 'not for development' area declared green Severely invaded by PJ, Needs burn then follow up				privately owned, Afdaks Trust
											NB includes Afdaks river and part of Lagoon