eMdloti...
Jewel of the north coast, nestled between forest & sea.

Prepared by:
Pat Bean
Terry Rens
Tracey Simkiss
Our Vision

We envision the area, from the eMdloti river estuary to the uMhlanga river estuary, as an eco-tourist piece of heaven; nestled between two prime tourist nodes (uMhlanga and Ballito) and a rapidly developing urban jungle.

With the immanent Sibaya development to the west of eMdloti; a great strain will be put on the natural environment such as the rocky shores, the dunes and the forest. However, this too will bring opportunities to have these valuable natural resources protected and properly managed.

What makes this area so special?

- A proclaimed Marine Conservancy (6th Ave to ski boat club) - unique on the KwaZulu-Natal coast.
- Two Pilot Blue Flag beaches.
- The largest protected coastal forest in eThekweni.
- A unique stretch of undeveloped natural beauty between eMdloti and Peace Cottage/uMhlanga.
- The Tidal pool on North beach is unique in its size and its rock structure.
- The Sweetwater River flowing into eMdloti village.
- uMhlanga River estuary and eMdloti River estuary.

eMdloti UIP & Conservancy working together
A shared vision with our neighbours.

- uMhlanga UIP have planned a boardwalk and education centre for uMhlanga lagoon - see Appendix A.
- Tongaat-Hulett and the Sibaya Development will protect and manage the forest with the “establishment of a Conservation Trust, to be responsible for the rehabilitation, management and maintenance of the forest portions of the overall precinct, including the Hawaan forest, uMhlanga forest and Forest 31.”
- The Mt. Moreland Conservancy and Barn Swallow project is established and well managed (Rhino Award and IBA status)
- The municipality has recently announced that the Tidal Pool and Main Beach eMdloti have been awarded Pilot Blue Flag status, due to the good water quality and infrastructure.

The UIP & Conservancy Forum participation

- The eThekweni Resilient City program
- The eThekweni Conservancy Forum
- The KZNFNC (The KZN forest Networking Committee)

Keeping informed!

The UIP welcomes and keeps informed about academic projects being carried out in the area:

- The mussel bed monitoring project (ORI) – see Appendix B
- The Zoanthid Population Monitoring Project (UKZN and Enzemvelo) - see Appendix C
- Dune Rehabilitation Project (Allister Starke)
- Floristic survey of uMhlanga Forest (UKZN)
- The Effects of Climate Change on the Coastal Forest (UKZN)
- Citizen science (UKZN)
Watch what is proposed for this node
https://m.youtube.com/watch?v=ndpOxNhqFuE&feature=youtu.be
# eMdloti Improvement Programme

## Conservancy Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Details</th>
<th>Additional support required</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine conservancy (6th Ave- Ski boat club)</td>
<td>Ethekweni proclaimed marine conservancy (Christo Swart) ORI monitoring mussel bed (Erica Steyn) UKZN monitoring zooanthid population Muni litter pick up daily</td>
<td>Signage Permanent guard- policing/informing/security Dune rehabilitation Alien vegetation removal &amp; Endemic planting programme</td>
<td>Clansthal &amp; Cape Vidal</td>
</tr>
<tr>
<td>Green-Marine corridor (6th Ave- Peace Cottage/uMhlanga)</td>
<td>Forest studies by UKZN Forest managed by Tongaat-Hullett Muni litter pick up 1x month on beach</td>
<td>Permanent guard- security/policing/educating Fisherman education Forest edge monitoring-tree cutting Check for illegal inhabitants Guided walks between the towns along the beach or even through the forest is part of our long term dream. Supplementary litter pickup</td>
<td>Clansthal &amp; Cape Vidal</td>
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<tr>
<td>Main Beach -Ski boat club</td>
<td>Pilot Blue Flag Beach</td>
<td>Environmental management Staircase to be built on South side of parking lot Environmental education-signage Dune rehabilitation Alien vegetation removal &amp; Endemic planting programme</td>
<td></td>
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<tr>
<td>Tidal pool</td>
<td>Pilot Blue Flag Beach</td>
<td>Rubble removal from Tidal pool Removal of concrete pillars at mouth of tidal pool Environmental management</td>
<td></td>
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<tr>
<td>Sweetwater River</td>
<td></td>
<td>Alien vegetation removal &amp; Endemic planting programme Plant indigenous species Boardwalk Educational signage</td>
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<tr>
<td>eMdloti Lagoon</td>
<td></td>
<td>Alien vegetation removal &amp; Endemic planting programme Dune Rehabilitation</td>
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Opportunity to sponsor.

We are presenting a unique opportunity to be associated with the changes happening in and around eMdloti, in a positive and uplifting manor. This opportunity is perfectly timed with the signature Tongaat Hulett development. Establishing a strong presence within eMdloti, at a grass roots level, will ensure a long and prosperous relationship based on association.

see Appendix D – Social & Environmental Upliftment with Brand Awareness Opportunities.
Appendices

Appendix A - Proposed upgrade of uMhlanga Lagoon Nature Reserve
page 8

Appendix B - Mussel Bed Project (ORI)
page 9

Appendix C - Zoanthid Project (UKZN)
page 10 - 11

Appendix D - The Value of Place Making (Cara Reily)
page 12 - 15
1.1 frontal dune raised boardwalk
1.2 kiosk + wc + stair access to beach
1.3 viewing deck
1.4 main viewing deck
    overlooking the lagoon
2 existing boardwalk
    widening + safety upgrade
3 car park, fencing +
    turnstile
4 forest raised boardwalk
5 future environmental
    education centre

node legend
node 1.1
node 1.2
node 1.3
node 1.4
node 3
node 5

key
- frontal dune raised boardwalk - 252m
- existing boardwalk - 335m
- forest raised boardwalk - 460m

site plan

proposed upgrade of the umhlanga lagoon nature reserve

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elpick proome architects inc. • +27 31 275 5900 • info@eparch.co.za • www.eparch.co.za • durban south africa
PROTECTION OF MUSSEL BEDS AT UMDLOTI

Rock mussels are an important coastal asset in KwaZulu-Natal, not only as a part of ecosystems but also as a valuable resource for harvesting and food security. Over the years, conservation of mussel beds has relied mainly on the sale of permits and limiting daily bag levels. However, severe deterioration of mussel beds and other marine life in the 1980s justified the need for better protection of certain key mussel sites. This was especially the case for Umdloti Beach where, following consultation with residents, a specific area was closed for the collection of mussels, rock lobsters, crabs, mole crabs and redbait in 1998.

The Oceanographic Research Institute (ORI) has monitored the mussels at Umdloti since the 1980s and documented the recovery of the mussel beds. Over the past 12 years the mussel cover has more than doubled on the monitored reefs. Mussel cover is much higher at Umdloti than on nearby exploited reefs and Umdloti mussel beds are considered to be an important source of mussel spat for reseeding other reefs along the KZN coast.

Mussel beds are an integral part of the marine ecosystem at Umdloti. Mussels remove food particles from the water column by filter feeding. This improves water clarity, regulates phytoplankton blooms and promotes the growth of macro algae fed on by herbivores. Mussel beds also provide living space, protection and food for many marine organisms, including rock lobsters, octopus and fish such as Natal stumpnose, musselcracker, pompano and blacktail. The presence of mussel beds is known to increase the diversity and biomass of fish in an area; healthy mussel beds can thus improve fishing. The only other protected mussel beds along the KwaZulu-Natal North Coast are more than 200 kilometres north of Umdloti, in the iSimangaliso Wetland Park.

Umdloti Beach is also an important mussel nursery but also serves as a reference site against which the state of other exploited mussel beds can be measured. The continued protection of this area is thus justified and necessary as part of the overall mussel conservation plan.

The Director: Oceanographic Research Institute
Prof. Rudy van der Elst
ROCKY SHORE COMMUNITY DYNAMICS:
ZOANTHID COMMUNITIES.

Brief Summary

The aim of my research work is to quantify the abundance and distribution of Zoanthids at four Rocky Shore sites along the KwaZulu-Natal Coast by counting the number of Zoanthids present in 0.5x0.5m quadrants across shore along a transect that starts from the littoral zone to the low shore. This will be done to try and assist in fulfilling the broad objective of the rocky shore monitoring and other biodiversity programmes, which is to ensure that marine and coastal management decisions in KZN are based on sound ecological principles and are founded on the best available scientific information. At the moment the coastal zone is subjected to acute anthropogenic-related impacts as it is the most accessible part of the ocean to humans. The rocky shore systems, especially, are subject to immense pressures including harvesting, pollution and coastal development. Ezemvelo KZN Wildlife manages and conserves the biodiversity in the KZN province, for them to be able to effectively manage these areas, they need to know the condition of, and have a good understanding of the processes that affect its health and functioning. To collect this information, they established a long term monitoring programme to observe changes in order to understand natural or artificially-induced processes that may cause a shift in community composition or species diversity. The expected output is that the results produced will be useful in the detection of changes in the community structure over time and thus to influence management decisions that govern activities affecting the rocky shore.

Methods

Sampling will be done at spring low tide when most of the rock’s area is exposed. At the highest point in the littoral zone two holes are drilled into the rock, a wall plug is hammered into each hole, then a bolt with a washer and a colourful marker is fitted into each hole. 5m is measured from the bolt on the right (facing the ocean), the purpose is to move in a Straight line from the littoral zone to the mussel/algae beds but to avoid pools and contours a kinky line is made instead, which is a line that zigzags in order to get around structures that produce low quality images, at the 5m point another bolt marker is placed, this is repeated every 5m until the mussel beds/algae beds are reached. The line transect will be placed along the markers and the 0.5 m x 0.5 m quadrant will be placed on the right side (facing the ocean) of the transect at every meter and an image will be taken, between two markers 5 images are taken, at 0m, 1m, 2m, 3m, and 4m.

Philile Emelda Mvula
ROCKY SHORE COMMUNITY DYNAMICS: ZOANTHID COMMUNITIES.

Images

A Reference Bolt

Collecting Data

For any further information or queries please do not hesitate to contact us.

Dr Angus Macdonald
School of Life Sciences,
UKZN
031 260 8633
The eMdloti UIP: Place-Branding Opportunities

Purpose
The purpose of this document is to outline the place branding opportunities available within the eMdloti Urban Improvement Precinct (UIP) as they apply to a project sponsor looking for brand awareness in eMdloti.

Why eMdloti?

It is uniquely situated in the highly active Northern Growth Corridor with a number of major growth points right on its doorstep:
- King Shaka International Airport
- Dube Tradeport
- Cornubia - Cornubia is the first proposed sustainable and fully integrated human settlement in the region and has been declared a national priority project.

Sibaya Precinct – situated directly behind eMdloti is the latest in Tongaat Hulett’s housing development. Citing healthy demand for new coastal developments, Tongaat Hulett has released the first parcels of land for development within the eastern component of the Sibaya Precinct development, expecting the 750-ha development to effectively pump R8-billion into the local economy, create 7 000 permanent jobs and generate R100-million in yearly rates (650 sectional-title units and 28 exclusive half-acre stands of 2 000 m² each for the creation of new homes ranging between 1 000 m² and 1 500 m².). The residents of this node will most certainly use the 3.5km stretch of unusual and unspoilt beaches and promenade of eMdloti to recreate. It is this 3.5kms public open space area we are looking to improve as well as our very unique freshwater stream at eMdloti’s entrance.
The Role of the UIP

First and foremost eMdloti is a place, and thus the role of the UIP is to serve that place through the provision of services paid for by the stakeholders in eMdloti.

These services, including privately funded security, cleaning, maintenance, greening and marketing services, as well as those undertaken through the establishment of private sector / municipal partnerships, are all aimed at improving the experience of eMdloti, with key deliverables being to:

- Improve safety, the general environment and quality of life to the benefit of all public open space users
- Respond to the challenge of environmental sustainability (Currently the eMdloti UIP are participating in more than one project in the protected forest between eMdloti and uMhlanga. The eMdloti UIP are currently members of the ‘Forest Conservation Network’ which keeps up to date with forest happenings. UKZN and ORI are involved in monitoring the protected mussel beds off eMdloti. This bed of mussels forms a nursery for several fish species and plays a vital role in the rocky shore ecosystem off our coast.)

- Create an environment which supports vibrant and responsible business activity
- Support Blue Flag Beaches. The municipality has recently announced that the Tidal Pool and Main beach eMdloti have been awarded Pilot Blue Flag status (international recognised grading system), due to the good water quality and infrastructure.

The Value of Place-Making

As with most UIP’s, and other urban management models, the services chosen for the area are those that will best create an exceptional sense of that place. To do this, the physical space first needs to be managed and improved. As this is done, so the public begin to feel the difference in the place, improving their perception of it and starting a cycle of confidence in the place and trust in those responsible for turning it around.

This process helps drive place-making and while the end goal is to create a place that resonates with people, connects them to it, and instils a sense of ownership in it, this cannot be achieved without first physically changing what they see and experience on the ground.

Property values increase

In South Africa, with so little separating nodes, competition for commercial, residential, tourism and retail attention is strong. Therefore places that look to harness their best assets and use them to physically enhance spaces and user experiences, can trigger economic turnaround, increasing employment opportunities by bringing in more businesses and retaining those already there. Property and land values are strengthened, which translates in to a strong return on investments for commercial and mixed-use developers.
Urban Management Hierarchy

The urban management hierarchy, shown below, is one interpretation of how place-making fits in an urban management structure and shows the types of service offered in what order they are typically delivered. **Most importantly, this structure drives home the fact that no matter how far a place rises up the hierarchy, the base levels of services are those that have the most impact on public space and what people see, and as such require the most amount of attention.**

![Pyramid of Urban Management Hierarchy](image)

Role of the Sponsor

The eMdloti UIP is a voluntary structure with a number of projects that need to be implemented in order to have a positive impact on the physical space. These projects cannot be funded by member contributions alone and thus the support of a sponsor is critical.

In an area that has a mix of upper LSM property owners and holiday makers as well as a lower LSM day trippers and weekend visitors, benefits for a sponsor vary but it must be understood that the sponsorship of the eMdloti UIP **cannot be viewed as a traditional marketing opportunity.** Rather, this is a **social upliftment brand awareness opportunity** that will not necessarily translate into direct business for the sponsor.
Just as the role of the UIP is to affect positive change to eMdloti over time, so of the sponsor the role is to support the area by committing to eMdloti, its stakeholders and being associated with its’ regeneration and upliftment.

The sponsors’ fundamental benefit is the association it has with tangible improvements on the ground and the critically important feeling that “someone cares”.

While security is paramount, the cleaning and greening needs to be seen as equally important-as much as unsafe spaces become neglected, messy and unused, so messy, neglected, unused spaces become unsafe.....so critical to understand in urban management.

**Branding Guidelines**
- Branding to be **subtle & functional**
- Must drive home the **sponsors’ commitment to the area**
- Importantly, this branding must serve a purpose, telling the story of eMdloti’s improvements **rather than cluttering the area**.

**UIP Projects and Branding Opportunities**
Below is a list of projects the eMdloti UIP has earmarked for the area. The achievements of these projects will associate the sponsor with the areas’ improvements through the inclusion of branding opportunities that will be built into each project.

- **UIP Member boards** – placed on members walls and gates
  Welcome to eMdloti with information sign.
- **Work in progress signs** – Sandwich-frame boards used while work is in progress
  Signage for dog-poo bag dispensers
  Signage for dunes and green areas
  Distance markers for promenade users
- **Information boards at strategic spaces**
- **Telephone stickers with emergency numbers for all businesses and residents**
- **UIP security staff cards** – carried by members
- **Branded umbrellas for hire**
- **Social media updates**
- **Newsletter articles**
- **Website updates**
- **AGM promotional opportunity** – before and after pictures where relationship can be promote