

"Driftwood and drama flow down the Orange River to the very end."

Lawrence G Green

THE PLAN



4 THE PLAN

Within this section of the LORMP the following is addressed:

- *Subsection 3.1* addresses the overall and specific management objectives as envisaged for the area;
- *Subsection 3.2* provides insight into the process used to compile the Concept Master Plan, addressing aspects such as the current environmental character, based on the existing audio-visual intrusions, and the impact that the planning parameters will have on this character, culminating in a future desired state;
- *Subsection 3.3* provides details for each river section addressing the Integrated Concept Proposals, the environmental sensitivities affecting the concept, and Concept Development Plans and details for each of the 12 river sections;
- *Subsection 3.4* proposes an Operational Framework based on process based management system principles, for addressing the action projects identified during this planning process and the detailed planning of each river section; and,
- *Subsection 4.5* proposes an institutional model for managing the relationship between the various role players and stakeholders affected by the LORMP.

4.1 MANAGEMENT OBJECTIVES

4.1.1 Overall Objective

The overall objective with the LORMP is to unlock the ecotourism potential of the river in a sustainable and equitable manner.

4.1.2 Specific Objectives

The specific objectives with the LORMP are:

- Creating an environment in which the impact of decisions on the biodiversity of the region, as well as its natural and cultural resources can be measured, and decision-makers held accountable;
- Creating a conducive investment and operational environment attractive to ecotourism companies;
- Ensuring equitable benefits flow to the respective communities of interest; and,
- Creating a transparent environment that promotes the formation of Community Public Private Partnerships (CPPP), leads to accountable decision-making, and active community participation in the field of ecotourism development and operation.

4.2 CONCEPT MASTER PLAN

4.2.1 Planning Process

The planning framework for the LORMP is based on the framework designed by Bewsher and Van Riet (2008) which guided the Integrated Development Planning for the Zambian Component of the Kavango Zambezi TFCA. The planning framework is designed to ascertain the current environmental character of the study area by analyzing the audio and visual impacts, and then apportioning attributes to the area based on the character. After addressing aspects such as access, use, development and infrastructure, and assessing the impact of the recommendations against the environmental character it is possible to take informed decisions regarding the Concept Development Master Plan, which will allow a future desired state to be achieved.

The objective of the planning framework is to allow for informed decisions to be made without being subjectively influenced regarding any specific developmental agendas or objectives. By remaining objective it is possible to remain accountable throughout the process. (Refer Figure 17.)

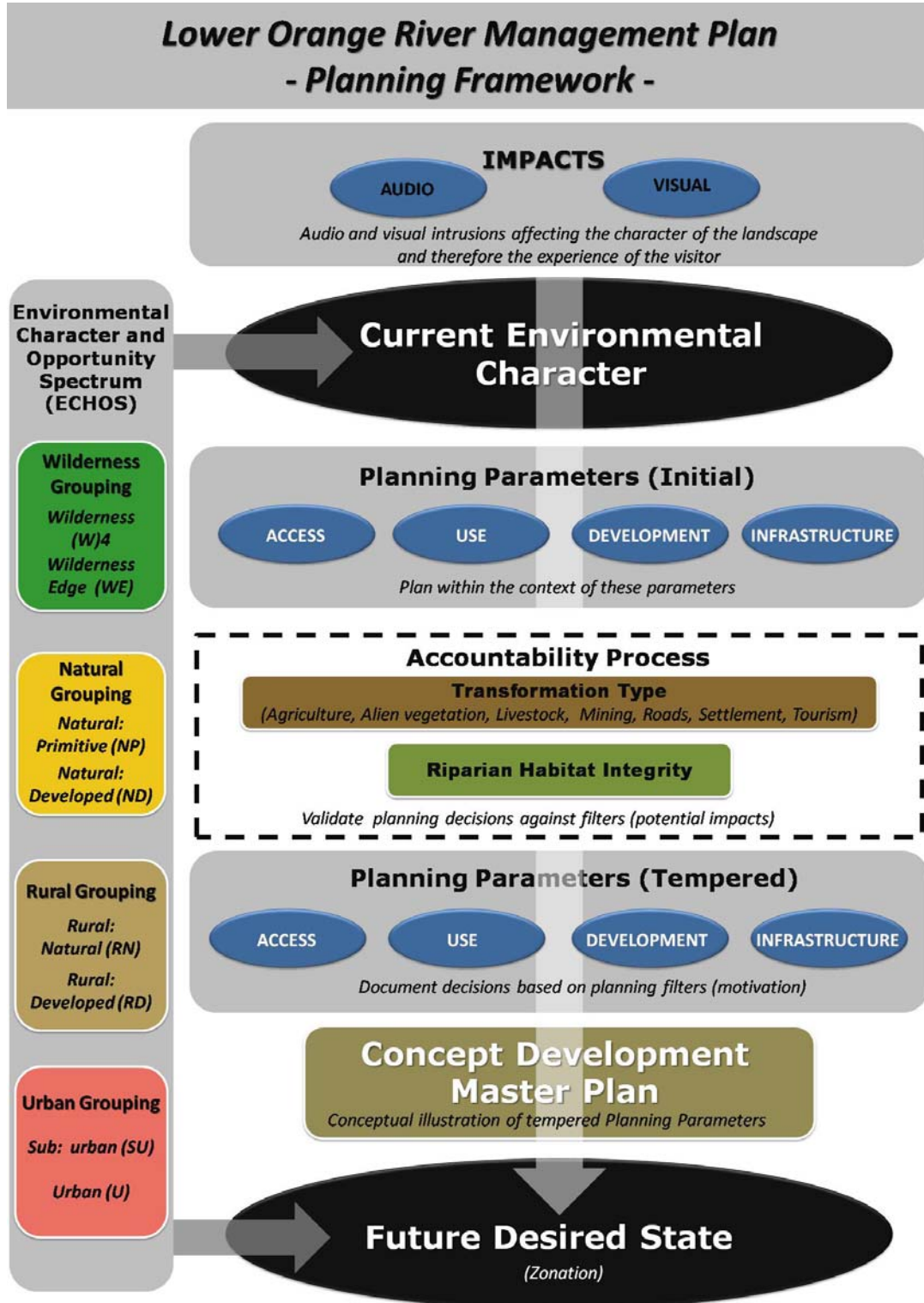


Figure 17: Planning Process

4.2.2 Current Environmental Character

The environmental characteristics of a place influence the experience that guests have of that specific place in that the character creates the sense of place. Along the LOR this character is influenced by settlements, agriculture – both irrigation and stock farming; mining; and areas set aside due to their beautiful landscapes, such as Augrabies, or protected because of their unique natural and cultural assets. This character changes over time due to changes in land use practices, values and infrastructural changes.

By ascertaining the Current Environmental Character (CEC) of a place it is possible to evaluate the impact of decisions on this character. If an objective of stakeholders is to maintain the current state, or even improve the character, then decisions that detract from retaining the current character, or that do not contribute to an improvement, can be informed. Wilderness areas, or areas with pristine habitat, devoid of human intrusions, both visually and audibly, are becoming extremely scarce, and along the LOR, an area perceived as being wild and pristine, these areas are isolated and rare. Only a small portion of the river still retains this character, and it is imperative that these areas are formally protected.

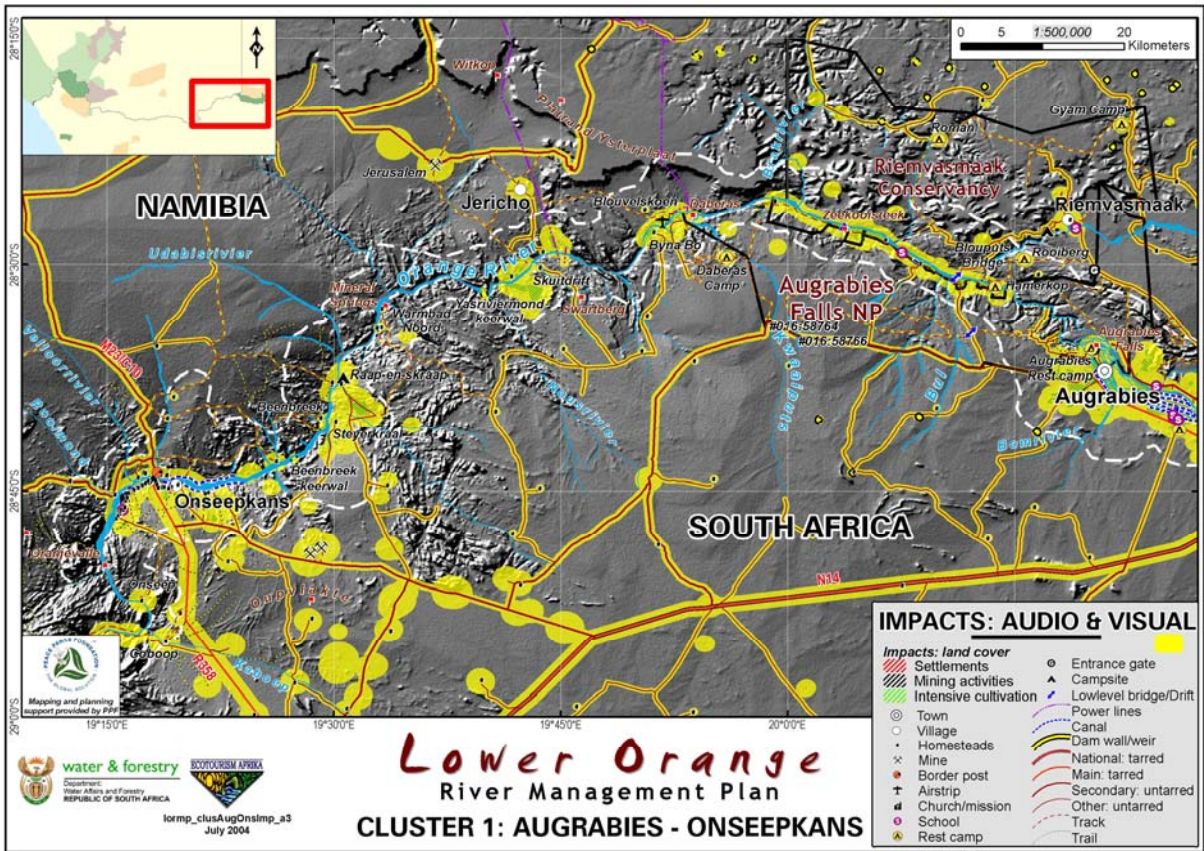
Within the Augrabies – Onseepkans Cluster (refer Maps 42 and 43) the main audio-visual intrusions along the river occur close to the Augrabies Falls National Park, at the Blouputs farms and the scattered agricultural developments along the river, and at Onseepkans. Due to the unproclaimed status of most of the land outside the national park, the environmental character for this cluster is mostly rural undeveloped with a few areas that are rural developed in character. Within the protected area the character is natural undeveloped with a few small areas being natural developed around the camps and related infrastructure.

The second cluster, Onseepkans – Noordoewer (refer Maps 44 and 45), has numerous small audio-visual impacts typically scattered across the entire area in a regular pattern, resulting in the environmental character mostly being rural undeveloped with a few portions classified as rural developed. No area within the shared resource area is has a natural, developed or undeveloped, character due to the lack of formal proclamation status.

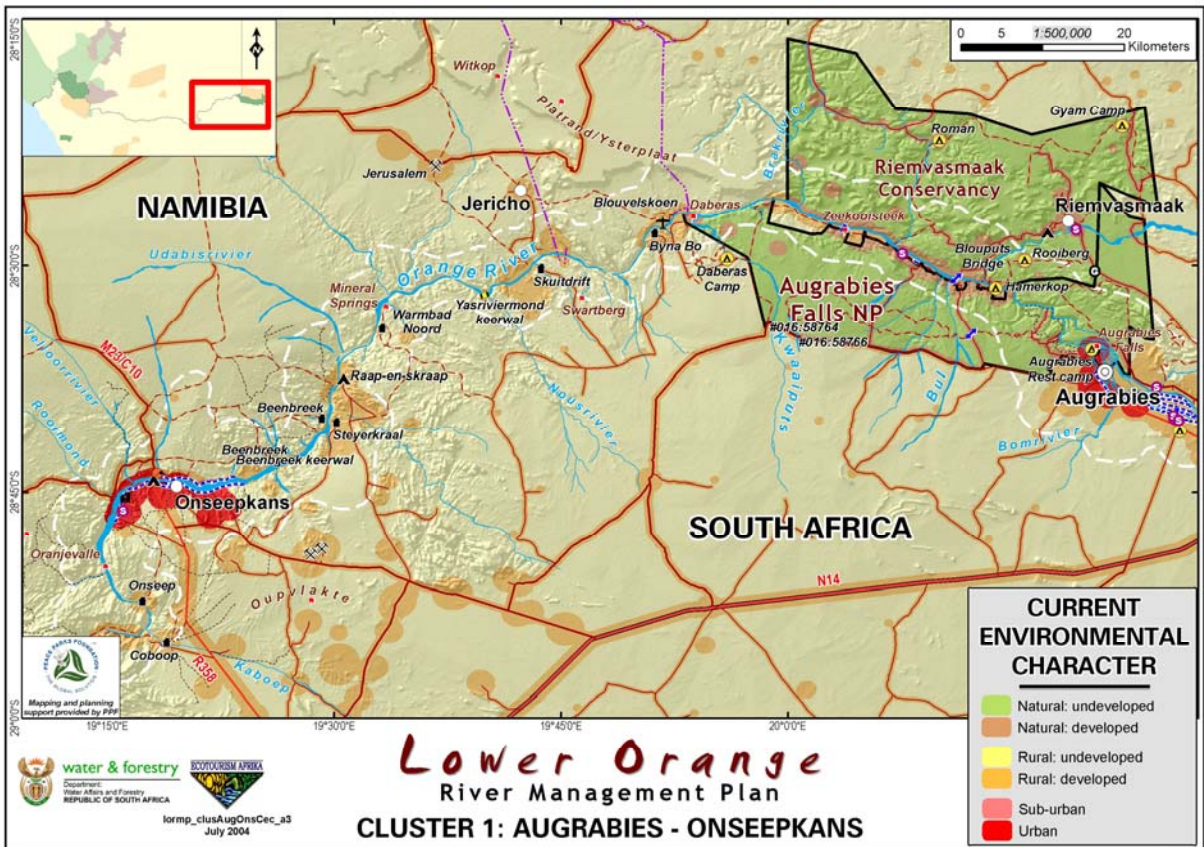
Within the third cluster, Noordoewer – Oranjemund (refer Maps 46 and 47), large areas have a natural undeveloped character, with small areas natural developed in character. Due to the presence of formal proclamation status for the NNR, the RNP, the Richtersveld WHS, the Ai-Ais Hot Springs Game Park, the Sperrgebiet and the ANP this character can be afforded to these areas.

Despite this status, certain areas such as the Aussenkehr and Nooroewer/Vioolsdrift farming areas and the Sendelingsdrift, Sanddrift, Alexander Bay and Oranjemund areas, are urban and suburban in character, with certain portions being rural developed or undeveloped.

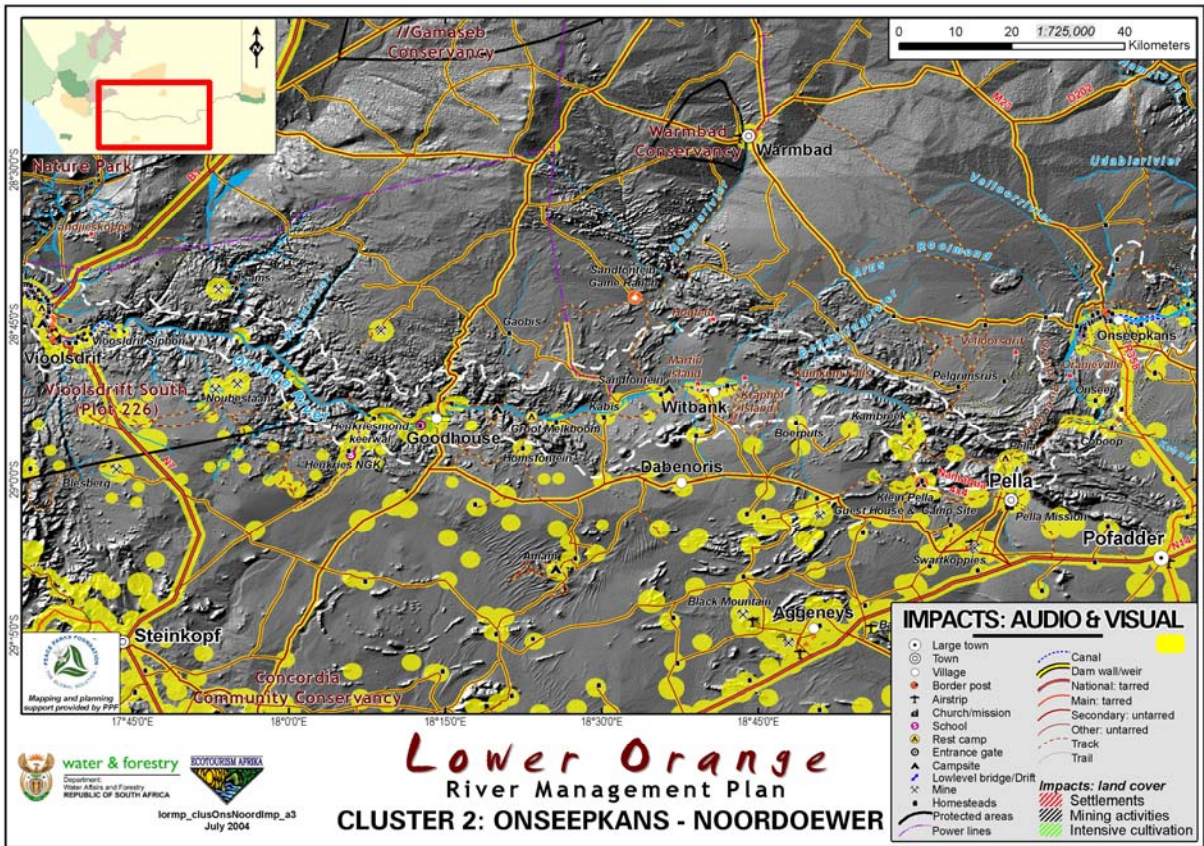
The environmental character that has been apportioned to these clusters will be used as planning input throughout the detailed planning for each river section. The objective is to enhance, or at least not detract from the existing character, and where necessary or appropriate seek formal proclamation status for areas that have the potential to achieve a status that reflects the inherent character of the area. An example will be the area between Henkries and Vioolsdrift where the state land could be proclaimed as a protected area, either side of the river, providing recognition for the undeveloped areas worthy of conservation.



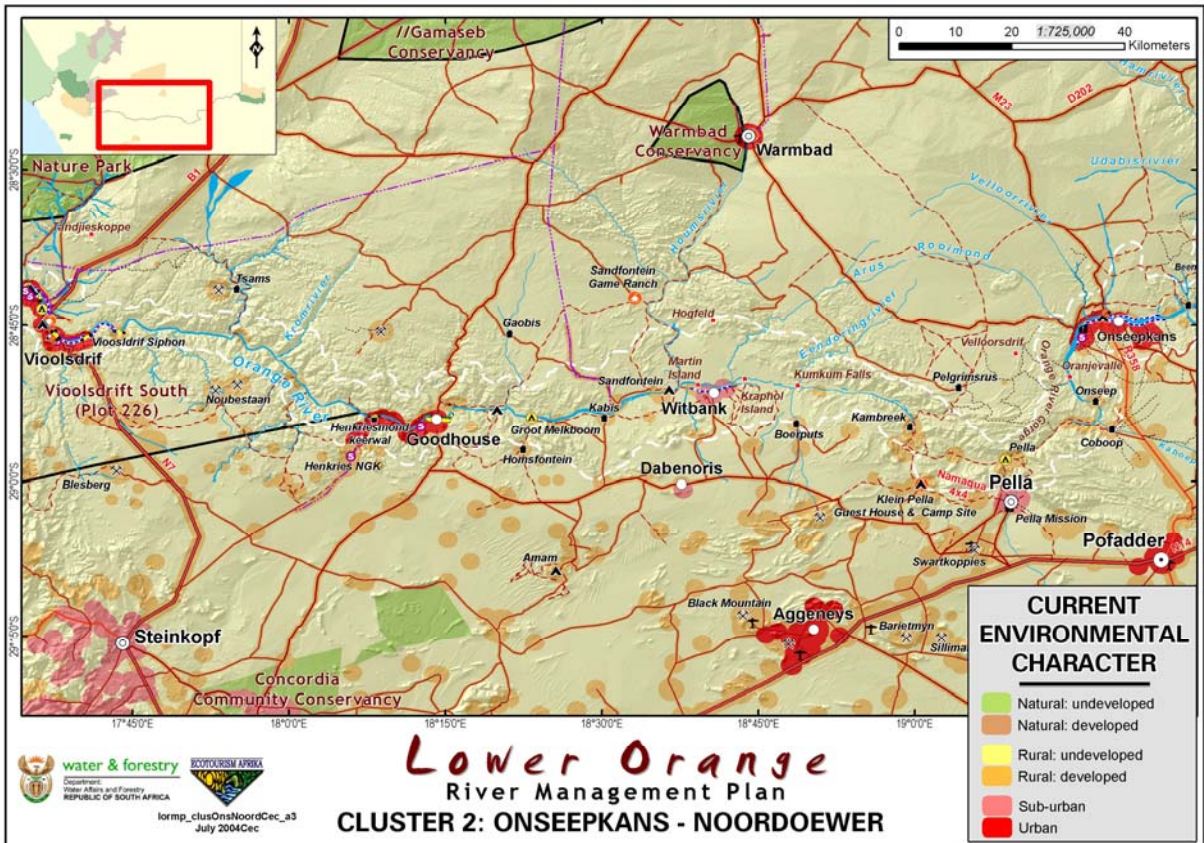
Map 42: Audio-visual Impacts – Cluster 1, Augrabies to Onseepkans



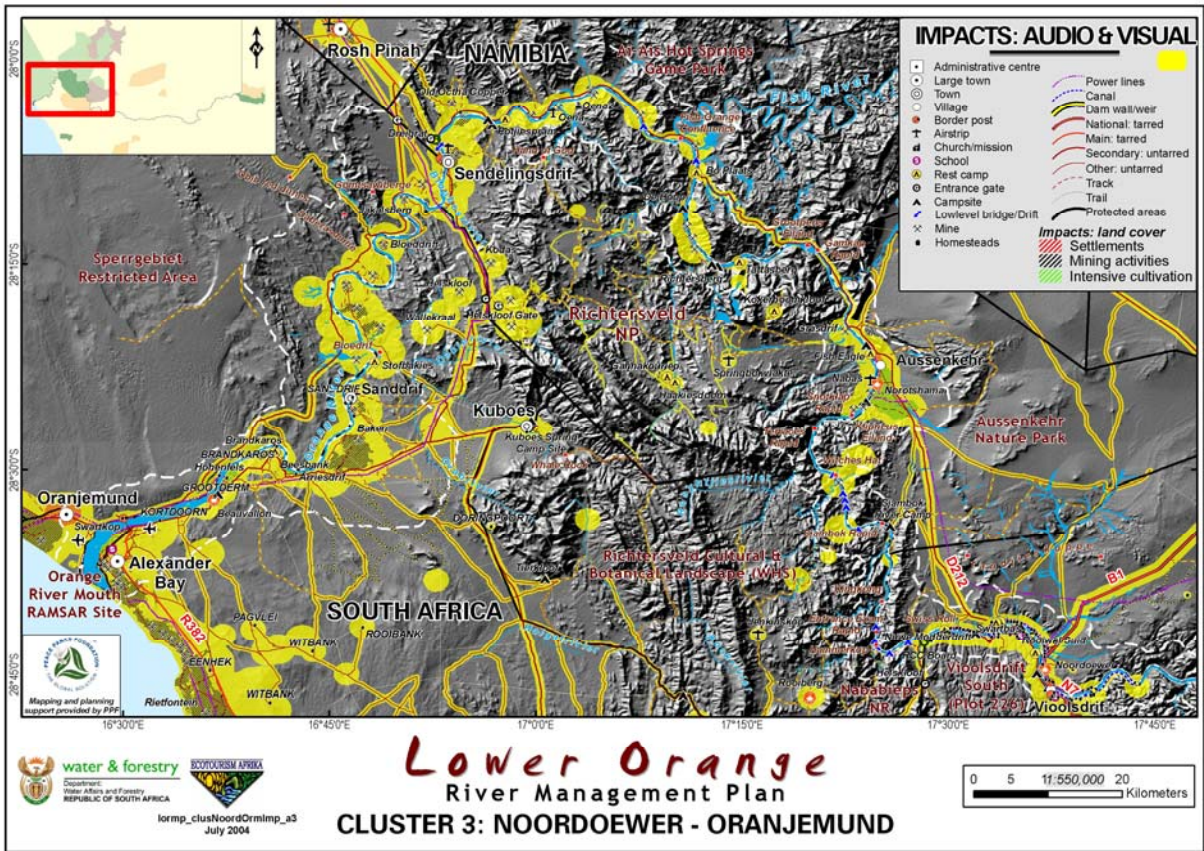
Map 43: CEC – Cluster 1, Augrabies to Onseepkans



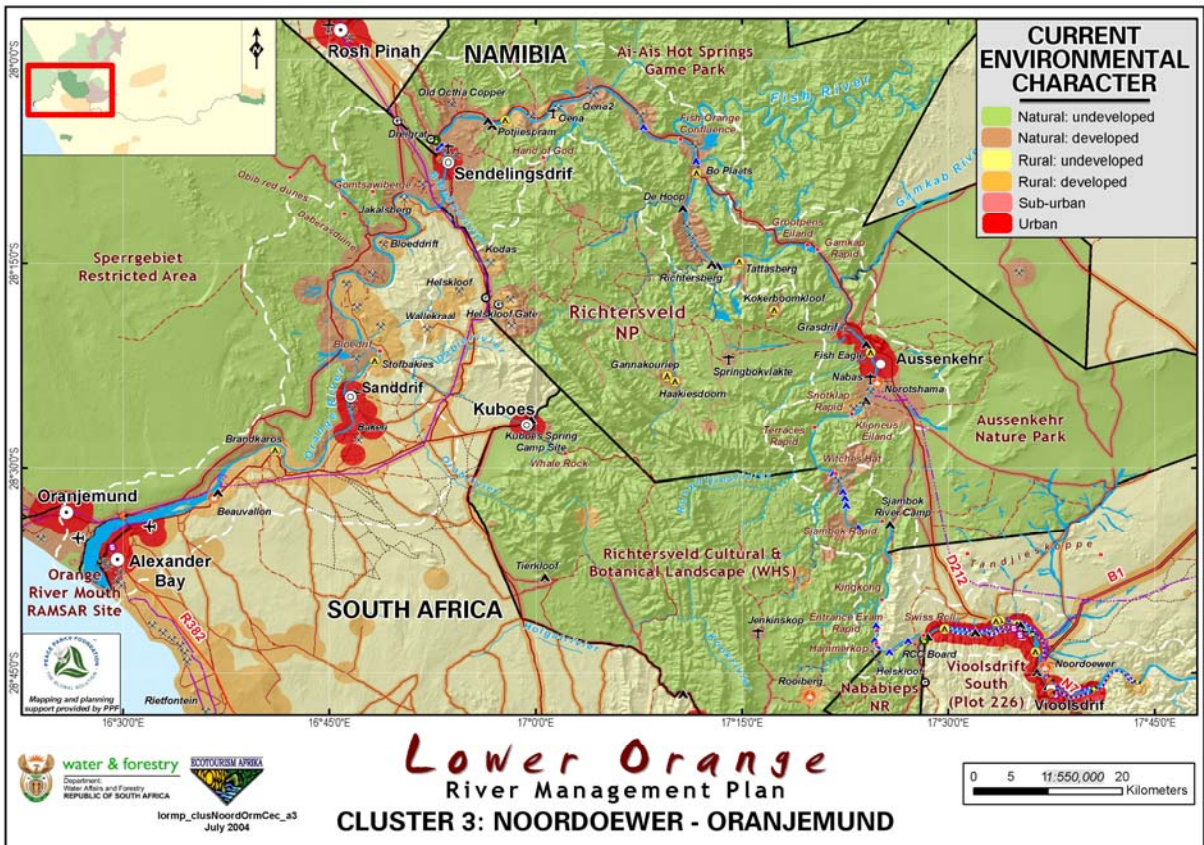
Map 44: Audio-visual Impacts – Cluster 2, Onseepkans to Noordoever



Map 45: CEC – Cluster 2, Onseepkans to Noordoever



Map 46: Audio-visual Impacts – Cluster 3, Noordoewer to Oranjemund



Map 47: CEC – Cluster 3, Noordoewer to Oranjemund

4.2.3 Future Desired State

Throughout the fine scale planning for each river section the impact of access controls such as trailheads, as well as adventure hubs, concessions areas, development nodes and requisite infrastructure are assessed against the CEC and the relevant contribution that these developmental decisions will have on the future desired state for the area.

This Future Desired State (refer Map 48) will be a guide for the management of the area, and serve as a zonation plan that can be incorporated into other planning initiatives such as the Land Use Management Systems within the local municipalities, and the zonation plans for the protected areas.

<Add Map once the river section proposals have been accepted.>

Map 48: Future Desired State

4.3 CONCEPT MASTER PLAN: DETAILED RIVER SECTION DESCRIPTIONS

To allow for effective fine scale planning the LORMP has, after consultation with the affected stakeholders and role players, specifically resource managers, landowners and communities, as well as white water rafting, canoeing, and kayaking operators, been divided into 12 detailed river sections (refer Map 49), namely:

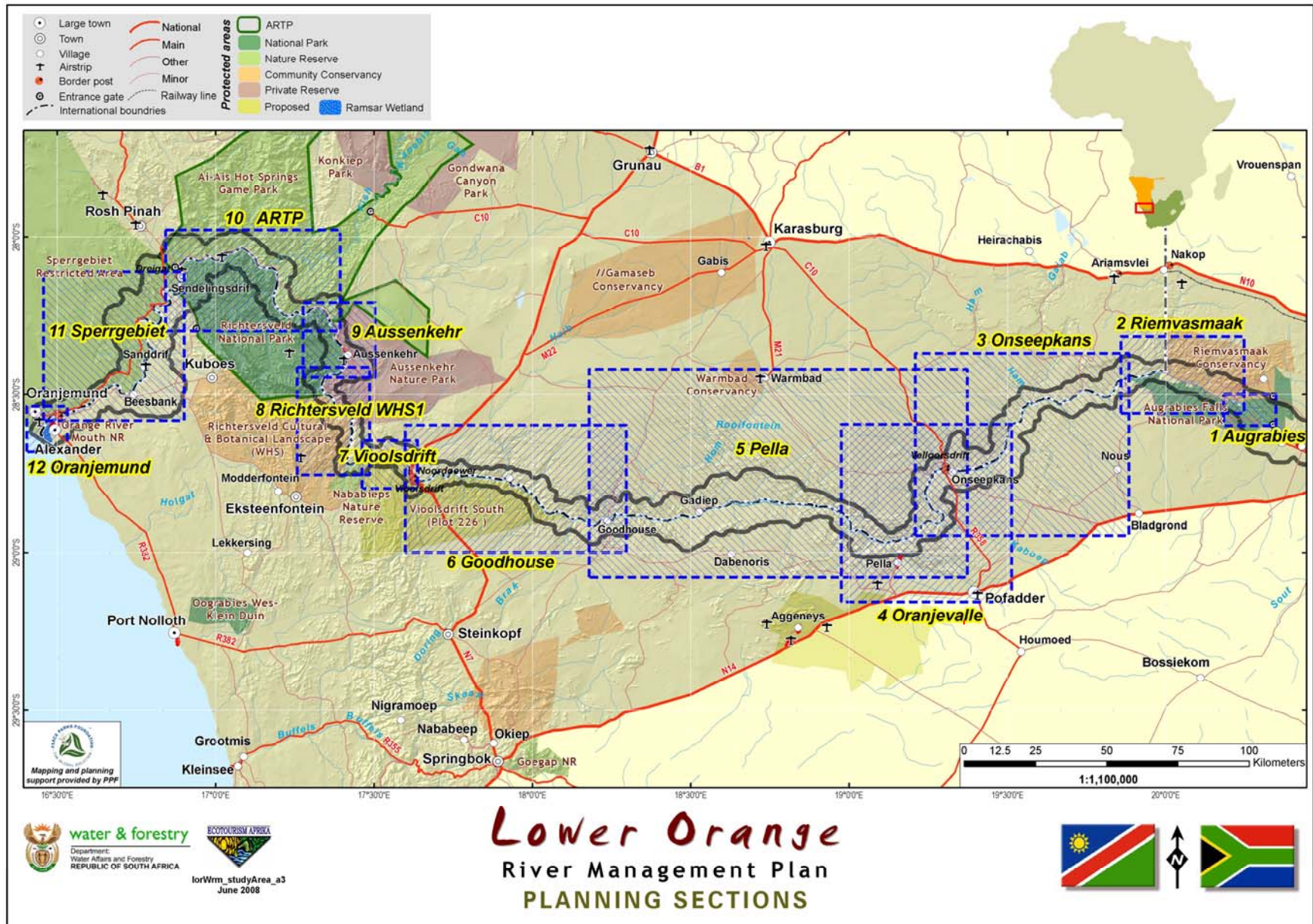
- **Augrabies Falls National Park:** effectively incorporating the entire Augrabies Gorge,
- **Riemvasmaak:** incorporating the common boundary along the river of the Augrabies Falls National Park and the Riemvasmaak community land, as well as the Blouputs Farms;
- **Onseepkans:** incorporating the private farms between the Augrabies Falls National Park and Onseepkans;
- **Oranjevalle:** incorporating the communal and private land either side of the Oranjevalle;
- **Pella:** incorporating communal land from Pella to Goodhouse on the South African side and the Sandfontein farms on the Namibian side;
- **Goodhouse:** incorporating the communal, private and state land from Goodhouse to Noordoewer/Vioolsdrift;
- **Vioolsdrift:** incorporating the various irrigation farms on either side of the river, upstream of the Nababeep Nature Reserve boundary;
- **Richtersveld:** incorporating the Richtersveld World Heritage Site, a portion of the Richtersveld National Park, Aussenkehr Nature Park and a small portion of the Noordoewer farms;
- **Auussenkehr:** incorporating the irrigation farms in Namibia and a small portion of the Richtersveld National Park;
- **ARTP:** incorporating the core section of the ARTP between Gamkab and Sendelingsdrift,
- **Sperrgebiet:** incorporating the area between Sendelingsdrift and the Orange River Mouth; and,
- **Oranjemund:** incorporating the Orange River Mouth Ramsar Site.

Each of these sections can operate as a single management unit, possibly as a concession area, similar to the block concessions used within other TFCAs and protected areas. This will allow for responsibility to be allocated to individual operators, benefits to be managed equitably, and resource management to be handled within specific formally proclaimed protected areas.

Some of the management units are divided such as the RNP, where portions fall within three river sections despite being one management unit. However it is believed that this would be necessary given the functional river sections within which the specific area falls.

The aspect of private individuals and groups utilising the river specifically requires attention. When groups or individuals wish to utilise a specific section or sections of the river authorisation regarding access will be required from the specific concessionaire responsible, for that section of the river, since their access would affect the operational aspects and safety of users along that section of the river. All the concessionaires will be allocated the responsibility for maintaining river registers pertaining to access. Non-compliance with the access protocols and records would be deemed awful access and subject to prosecution.

Until the concessions are allocated as part of the planned measures required to unlock the ecotourism potential of the LOR, common law prevails necessitating lawful access, permission from landowners regarding access and overnight camping and compliance with the sovereign rights of the countries pertaining to border control and immigration measures.



Map 49: River Planning Sections

4.3.1 River Section 1 (Augrabies)

4.3.1.1 Integrated Concept Proposal

Situated entirely within the AFNP, this river section offers exceptional scenery and the opportunity to develop a world class river product based on the product currently offered by SANParks, yet adapted to ensure the legality of the operation and an improvement in both the product and experience.

It is recommended that the adventure product be repackaged to allow for high adventure based on access to a longer stretch of the river within the gorge, that the experience be guided by well trained and accredited practitioners, and that the product be packaged as a concession. Undertaken in this way the option of a single or 2 day experience can be offered, where the single day package includes a walk into the gorge, possibly linked to an abseil, followed by a kayaking or rafting trip along the entire length of the gorge. Guests opting for an overnight experience would complete most of the single day trip, yet stopping at a wilderness style stop-over close to the boundary on the northern side of the river. The second day would entail an easy paddle out of the gorge to the pick up point. (Refer Figure 18.)

This style of product requires minimum infrastructure negating the necessity for permanent infrastructure to be placed in the gorge (such as the boathouse currently utilised), yet does require qualified, well trained, and competent guides, good equipment, and a well designed product which encompasses both a sense of adventure, as well as a good interpretation of natural and cultural heritage resources within the AFNP.

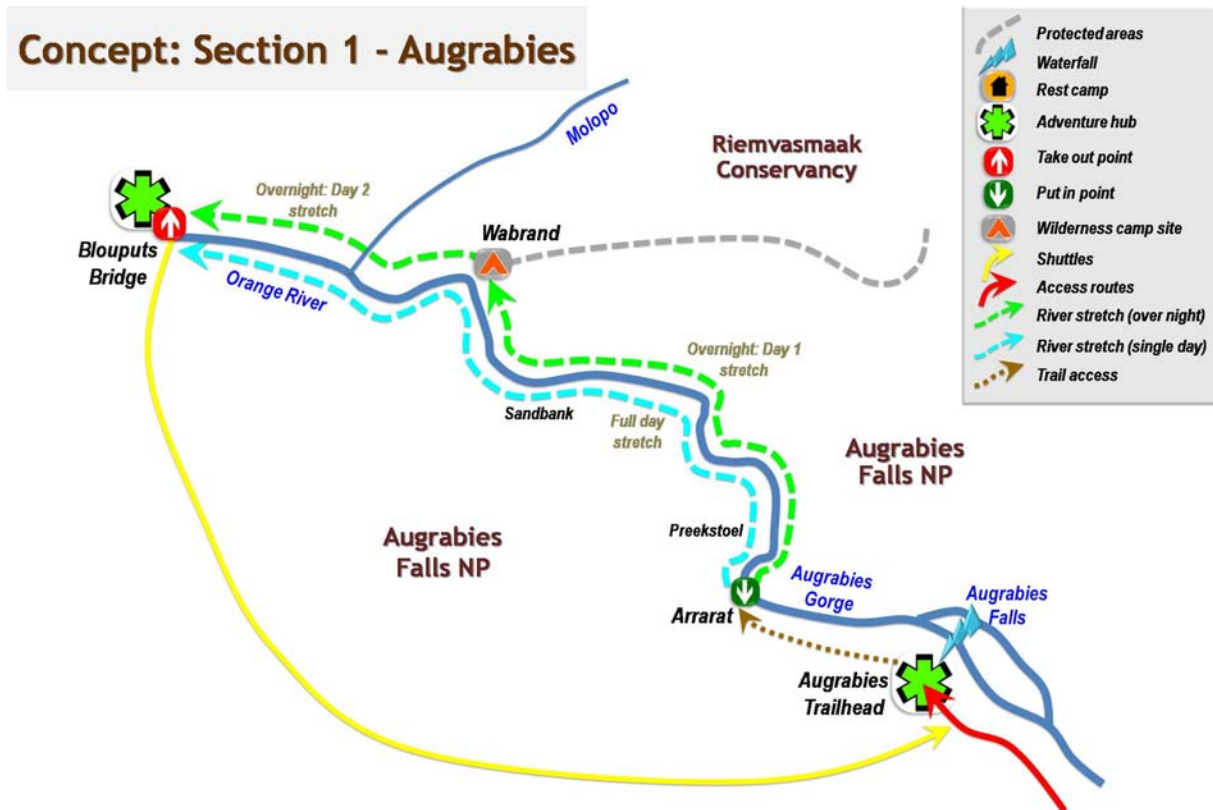


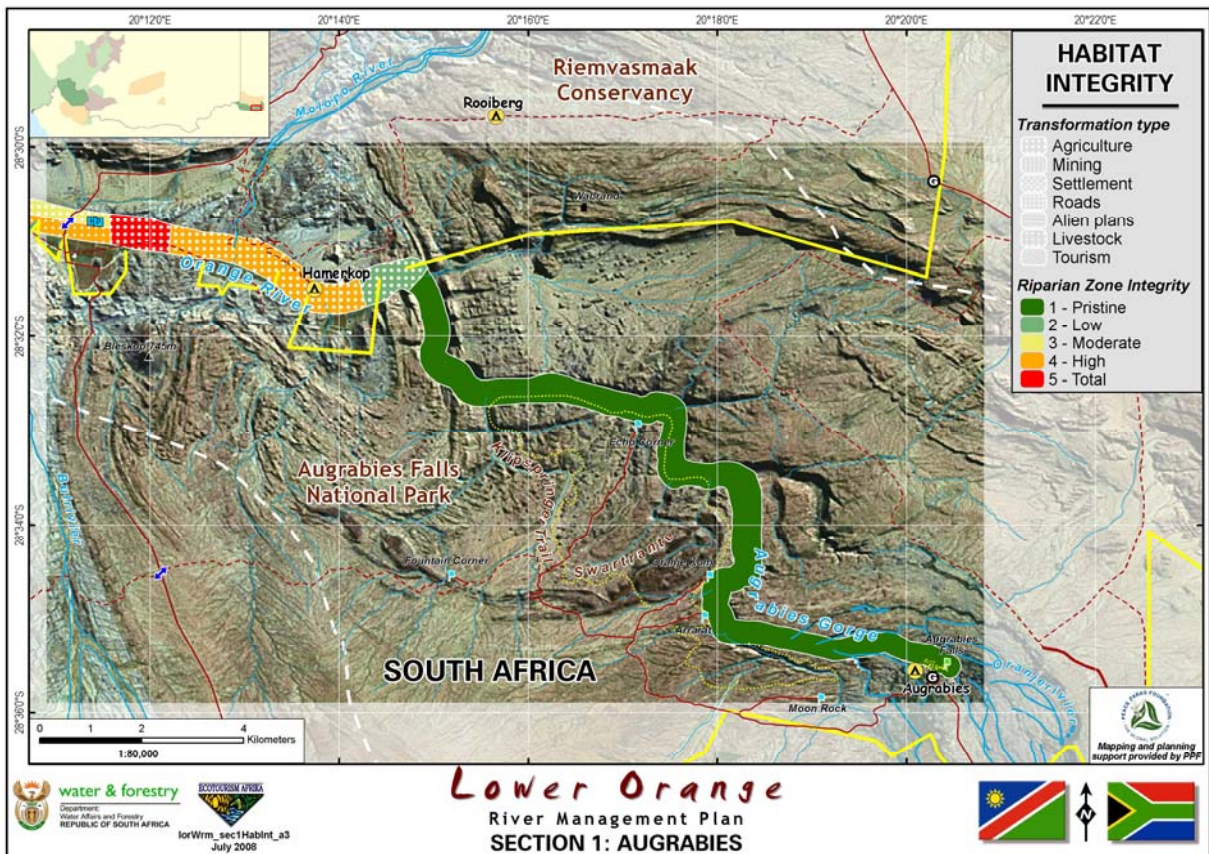
Figure 18: Integrated Concept Proposal, Section 1 (Augrabies)

4.3.1.2 Sensitivities

The pristine nature of the Augrabies Gorge is the single largest influencing factor along the upper reaches of this river section, limiting the use of permanent infrastructure. To further enhance this characteristic it is recommended that the boathouse and equipment store, as well as the motorised boat currently used in the gorge be removed. The transition from pristine to high and even total impacts does change the quality of the experience, yet this transition can be managed as part of the river experience, by providing insight into the value of the alluvial terraces to agriculture in the region, and the value of pristine areas for wilderness experiences. Beside the impact of irrigation farming, the impacted area also has influences from stock farming, specifically from goats and sheep within the Riemvasmaak area. Interpreting these impacts, both from a cultural as well as from a human settlement perspective will be necessary to correctly portray these impacts. Guides should be sensitive to these issues, and be trained to correctly interpret these impacts, due to the huge contrast between the experience in the Augrabies Gorge and that of the area needed to exit the gorge.

The environmental character of the area proposed to serve as overnight stop varies between pristine and low impacts, thus necessitating the provision of wilderness style camping, based on the principle of “pack it in, pack it out”. This will allow for ecotourists to experience the tranquillity of the gorge, yet the positioning of the overnight stop should be peripheral to the sensitive area, the pristine river section, thus not negatively impacting on the integrity of the section, while still providing a high value experience, not influenced by agriculture, settlements or livestock.

An additional sensitivity that should be addressed is the need for the Riemvasmaak Community to be actively involved in, and participate in, tourism development within this and the following river section. Undertaken in this way, this community could provide the trailhead which serves as exit, and become an equitable development partner to SANParks. This should contribute to the development of a conducive relationship being established between the State and the Riemvasmaak Community. (Refer Map 50.)



Map 50: Habitat Integrity, Section 1 (Augrabies)

4.3.1.3 *Concept Development Plan (CDP)*

Even though this river section is relatively short, only 18km, due to the ruggedness of the terrain, and the unique beauty of the gorge, this is deemed ample for either a single day high adventure, or a two day overnight river experience.

To facilitate this it is recommended that the AFNP Rest Camp be used as an Adventure Hub (refer Maps 51 and 52) due to the availability of infrastructure. This Hub could also serve as an Information Centre for the entire TFCA proposed for the region. This would be the eastern access to the TFCA. At this Hub, the concessionaire or river operator can brief guests regarding the experience, safety, natural and cultural resources of significance, effectively, psychologically preparing guests for a high adventure experience in a beautiful and remote environment, worthy of its national park status.

Following the briefing, guests will embark on a 4km hike into the Augrabies Gorge, utilising the existing Klipspringer Hiking Trail, a product that is compatible with the river trail. Depending on the experience levels of the group, a portion of this hike could include an abseil of varying lengths into the chasm of the gorge. This will add significantly to the value of the experience, without detracting from the environmental value of the site.

After reaching the river, guests will be able to transfer either to rafts or kayaks, and depending on the flow level of the river, explore the 18km of canyon and the various rapids, stopping at suitable sites for refreshment. Since this river section is aimed at providing access to a remote and pristine portion of the river, the concessionaire will be responsible for removing all packaging and waste.

Additionally, to improve the aesthetic value and pristine nature of the gorge, it will be necessary to remove the existing infrastructure in the gorge, consisting of a boathouse, storage facility, and power boat. Since the put-in and take-out points are 18km apart within an inaccessible gorge, there will be no need for this infrastructure, yet the concessionaire will need to portage the vessels into the gorge, and transport both guests and vessels back to Augrabies after completion of the experience. The operations on the Zambezi, at Victoria Falls have proven that this can be done sustainably and effectively, and even though it is difficult, it does create additional employment opportunities.

The Wabrand overnight stop has been selected since it is both peripheral to pristine portion of the gorge, and on the edge of the protected area. The site can be service by boat from the put-in point at Hamerkop on the next section of the river experiences, or utilised as a wilderness style camp where everything is brought in and taken out, leaving nothing but footprints.

From the Wabrand overnight stop (refer Maps 51 and 53) guests will have a short paddle of 6.7km to the take-out at Blouputs bridge (refer Map 54) before returning to the Augrabies Falls Hub by late morning. This will leave overnight guests sufficient time to continue with their journeys during the afternoon.

Due to the technical and dangerous nature of this river section and the necessity for qualified and well trained guides it is recommended that this be packaged and promoted as a concession in terms of the Public Private Partnership (PPP) Toolkit for Tourism, the South African National Treasury's Guideline for this type of product in a protected area. Based on the sensitivity analysis regarding the relationship between SANParks and the Riemvasmaak Community, it is further recommended that this PPP become a Community Public Private Partnership (CPPP), discussed along the lines of the Namibian Concession Policy, an excellent tool for ensuring equitable communal access to high value tourism resources.

Since not all the land is within the National Park, it is critical that an agreement regarding revenue sharing be completed between the State, the Riemvasmaak Community, and the relevant Blouputs farmers/landowners. This will enable a degree of control over the riparian vegetation and the impacts emanating from these properties.

When river levels are high, or linked to planned water releases, this section could be utilised for world class white water rafting competitions, and these could be used to ensure that the entire LOR river experiences remain visible as an international destination, similar to what the Batoka Gorge on the Zambezi does for the entire river, both upstream and downstream.

Below Table 1 summarises the distances of the various trail components, albeit the full day or two day high adventure experience.

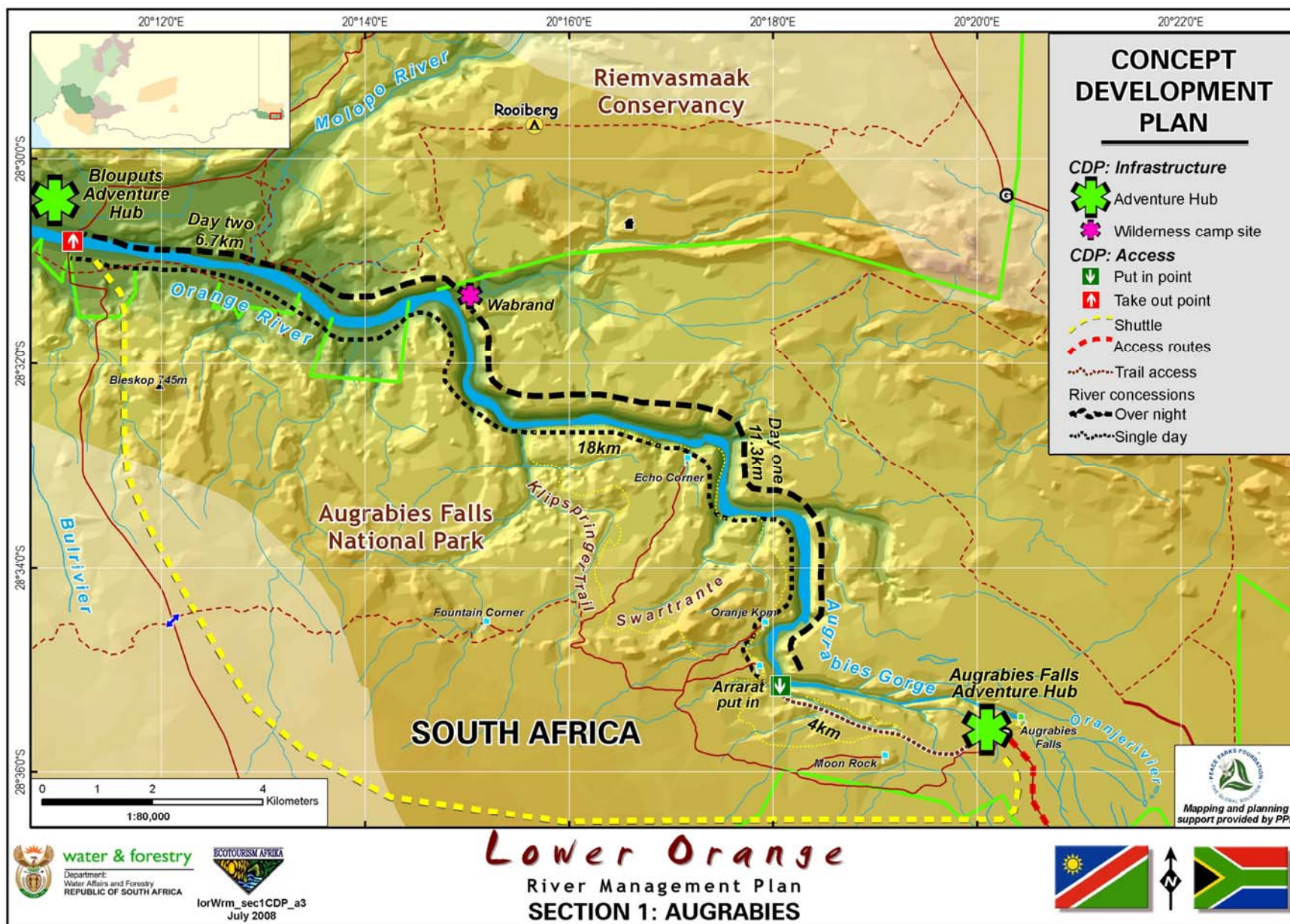
Table 1: River Distances (Augrabies)

Section	Product	Activity	From	To	Km	Total distance
1	a. Full day high adventure	Hiking	Augrabies Rest Camp	Arrarat	4.00	4.00
		Rafting	Arrarat	Blouputsbrug	18.00	18.00
	b. Two day river safari	Hiking	Augrabies Rest Camp	Arrarat	4.00	4.00
		Rafting	Arrarat	Wabrand Vallei	11.30	18.00
Wabrand vallei	Blouputsbrug		6.70			

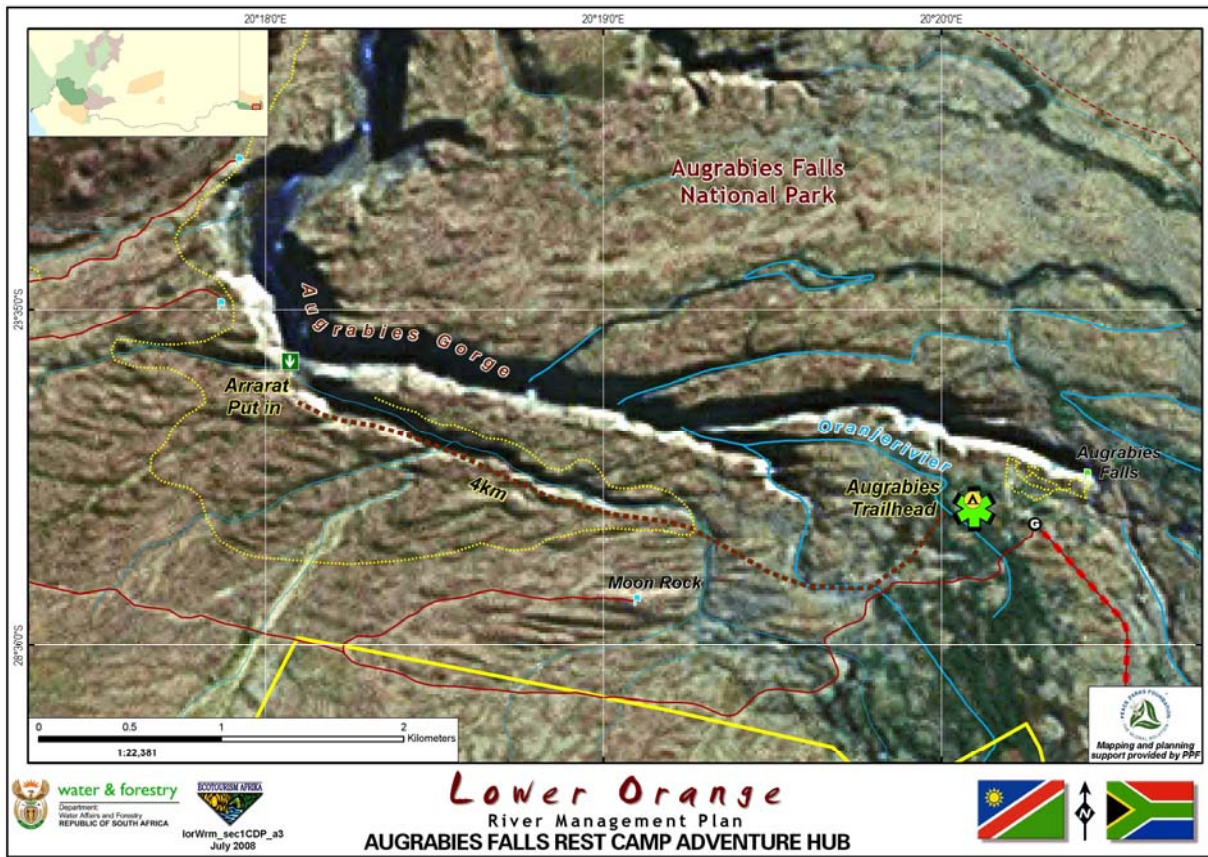
4.3.1.4 Requisite Actions

The following actions are required to ensure that the CDP for this river section can be achieved:

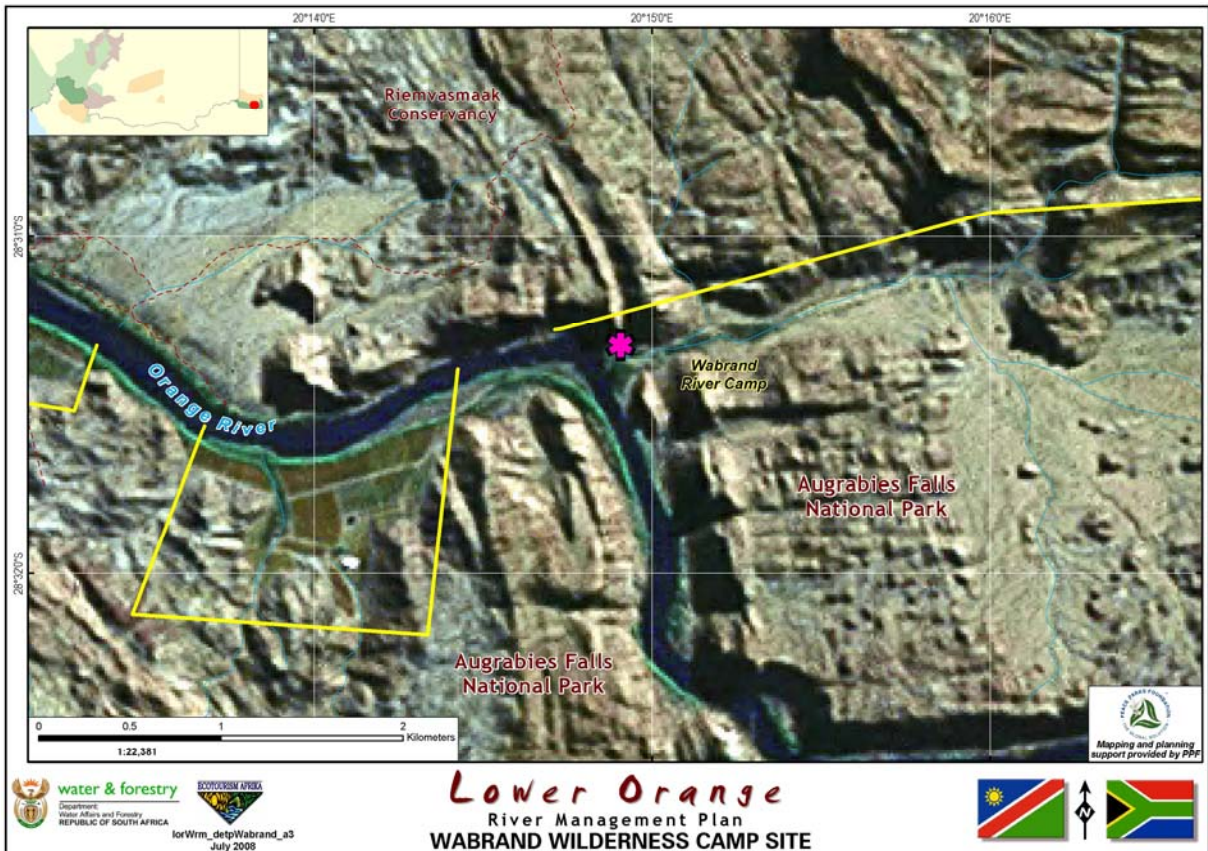
- Discussions with SANParks to change the product, removal of existing infrastructure in the Gorge, and ensure compliance with industry norms and standards;
- Discussions with the Riemvasmaak Community regarding the development of the Blouputsbrug Trailhead, and their participation in a CPPP;
- Prepare a concession agreement based on the South African PPP Toolkit for Tourism and principles contained in the Namibian concession model, between SANParks, the Riemvasmaak Community, and a Private sector operator, with financing through the Community; and,
- Conclude a revenue sharing agreement with the relevant property owners.



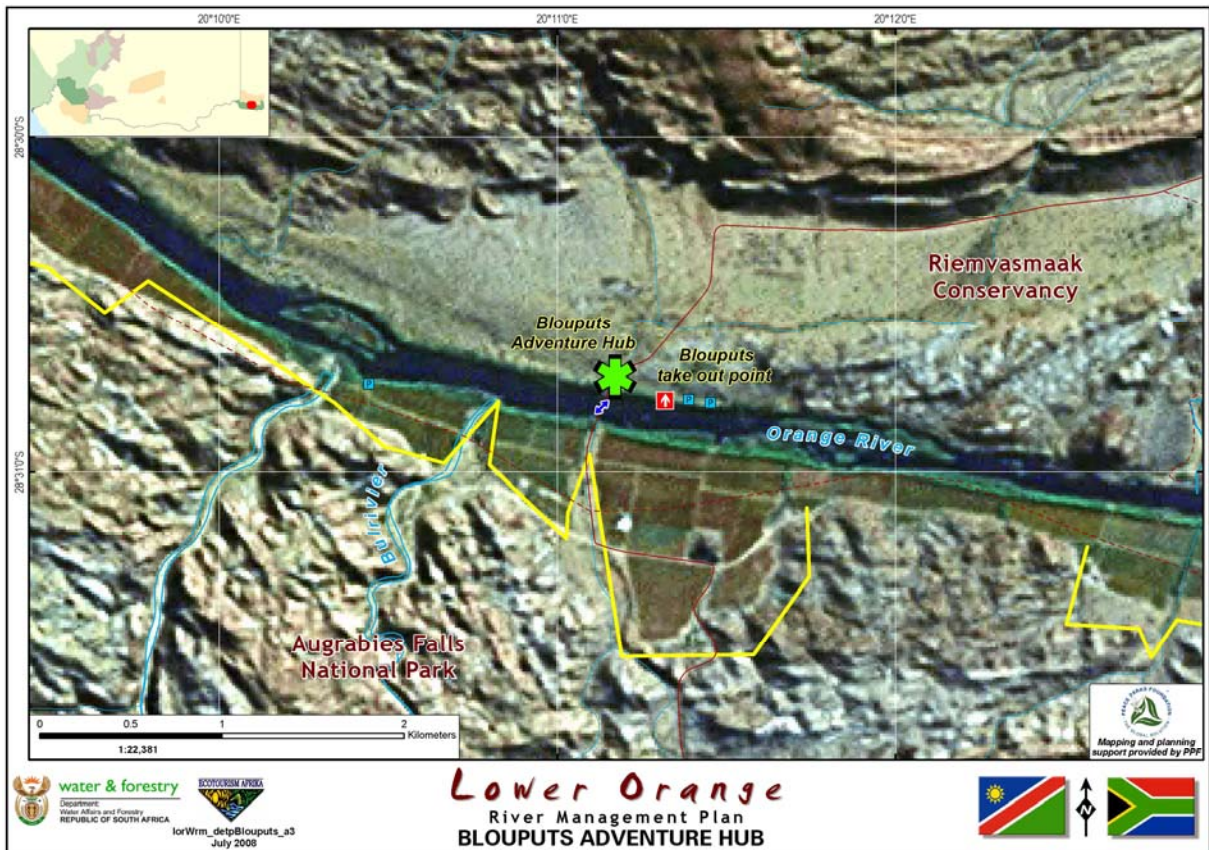
Map 51: CDP, Section 1 (Augrabies)



Map 52: CDP, Section 1 (Augrabies Falls Rest Camp Adventure Hub)



Map 53: CDP, Section 1 (Wabrand Wilderness Camp Site)



Map 54: CDP, Section 1 (Blouputs Adventure Hub)

4.3.2 River Section 2 (Riemvasmaak)

4.3.2.1 Integrated Concept Proposal

As part of South Africa’s land restitution programme, the community of Riemvasmaak has received title to and ownership of their land. As part of their viable land use options, the Trustees have used tourism as one of the options on which to base income generating opportunities. Except for one campsite along the river, these tourism options have however not included river based operations, and have been limited to 4x4 routes and camps, as well as a self-catered camp and campsite at the mineral spring close to the Riemvasmaak settlement at Sending.

Options exist to use the river along the Riemvasmaak section of the river, for either single or multi day river trips. Access to the river is via the southern side of the river, along an excellent tar road, or along the northern side, yet this requires a descent via a mountain pass, not ideal for vehicles with low ground clearance.

Single day trips will entail an orientation at the trailhead close to the Blouputs Bridge, and a start at the Molopo Mouth, an important landmark along this section of the river, ending at the Daberas farm. A two day trip will include an overnight stop along the river with an exit/take out at Kwaaiputs in the Augrabies Falls National Park, returning to the Blouputs trailhead. This product should be attractive to an investor or operator, since it builds forth on the high adventure activity within the gorge, but is a lot more accessible to the general public, and can attract visitors from both the AFNP and from the Riemvasmaak area.

As a CPPP, where the Trust makes the concession available, finances the operation, yet allows the operator to assume operational risk, not only will this enable the Riemvasmaak Trust to become an equity shareholder in a river based operation but also enable a co-management agreement between the Riemvasmaak Community as landowner and manager, and SANParks as manager and custodian of South Africa’s natural and cultural heritage. (Refer Figure 19.)

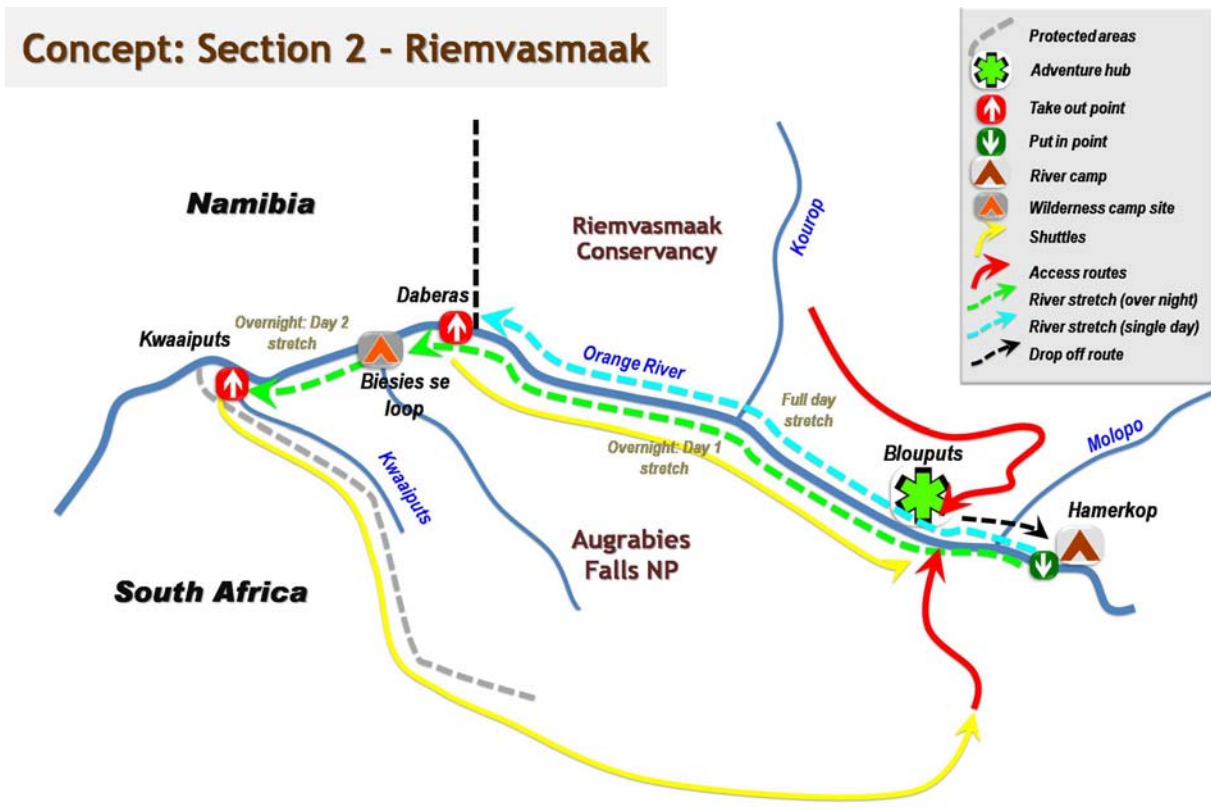


Figure 19: Integrated Concept Proposal, Section 2 (Riemvasmaak)

4.3.2.2 Sensitivities

Agriculture, specifically irrigation and livestock, together with limited settlement impact, influence the character of this section of the river, with most of this section’s riparian integrity ranging from moderately to totally impacted, with only small portions being classified as low impacts or pristine, and these within the Daberas portion of the AFNP.

The easy access along the Blouputs tar road and bridge, as well as the high levels of impact, make this section ideal for larger groups, using the river for soft adventure trips. By linking this to tour groups visiting the Park, or the Riemvasmaak area, this section could offset restrictions placed on visitors within the Gorge, the previous river section.

Critical to unlocking the ecotourism potential of this section is the addressing of social sensitivities associated with the Riemvasmaak Community, the Blouputs farming community, and SANParks. By forming a three way partnership, it would be possible to overcome these sensitivities and establish an environment conducive for investment and operation.

Additionally, concerns by the farming community pertaining to aspects such as people accessing their properties from the river, walking through the vineyards etc., are local sensitivities that must be addressed.

The pristine nature of the river within the Daberas section of the Park would also restrict developments and limit these to wilderness style camping, with no permanent infrastructure or development. (Refer Map 55.)



Map 55: Habitat Integrity, Section 2 (Riemvasmaak)

4.3.2.3 CDP

Targeting a market that is vastly different to that of the previous section, these river trips are accessible to a wide range of visitors, since the river is not technical, the scenery beautiful, and logistics easy. Guests can either meet at the Blouputsbrug Trail Head (refer Maps 56 and 57), or at the Augrabies Falls Hub for the safety briefing and predeparture orientation. A wide variety of vessels could be used, yet the safest option is canoes, probably stable Mohawk style canoes, or inflatable rafts.

From the trailhead guests need to be shuttled to the put-in point at Hamerkop Camp. For guests starting directly from Riemvasmaak this river camp could be used as an optional overnight point prior to the river trip, thereby increasing the occupancy and value of this site. The shuttle from Augrabies to the trailhead and from the trailhead to the put-in point could serve as part of the interpretative experience, providing guests with insight into the natural and cultural diversity of the area, the role that the alluvial deposits play in agricultural development, early prospecting stories, and insight into the colonial struggles that have taken place here over the past century, including the various rebellions and uprisings.

From the put-in point guests will be able to paddle past various landmarks such as the Molopo Orange River confluence, under the Blouputs Bridge, past the various irrigation farms, stopping to take in the scenery visually or photographically, enjoying some of the small rapids along the way. Below the bridge the north bank provides beautiful scenery, while the south bank is characterised by the Blouputs irrigation farms.

A total distance of 26.5km would be available to single day guests, yet due to the easy access from the road through the Blouputs farms, and depending on the level of the river, as well as other aspects such as temperature, wind, fitness levels and focus of the group etc. it would be possible to exit earlier if required, yet ideally guests should experience the full length of this stretch of the river.

Single day guests would be required to exit at the last farm along this section, returning, by use of the operator's shuttle, to the trailhead at the bridge, before continuing with their journey, while overnight guests will continue on to the Biesies se Loop River Camp, a wilderness style campsite along the river within the Daberas section of the AFNP (refer Map 58). The second day would encompass a short paddle to the Kwaaiputs Take-out Point prior to shuttling the guests back to the trailhead from where they can either continue their journey or return to the AFNP Rest Camp, their starting point. The total distance available for the overnight paddling experience would be 35.5km, with the first day consisting of a 29.5km section and the second day only 6km.

This dual starting point opens two direct markets for the concessionaire, and will increase the viability of the operation, and if developed as a CPPP, along the lines of the Namibian concessioning policy, this will significantly increase the benefit flow from the region to, not only the Riemvasmaak Community, but also for the SANParks, and the Blouputs farmers. This approach will also broaden the equity opportunities for the Riemvasmaak Community.

No additional infrastructure, other than the Blouputsbrug Trailhead would be required along this section, unless the concessionaire opts to establish some infrastructure at the Daberas take-out for single day trips, infrastructure that could include a toilet and some shade for guests while the equipment is being loaded.

Due to the environmental sensitivity and character of the Daberas section of the AFNP the overnight stop would not be developed and the concessionaire would need to provide all facilities based on wilderness style camping, bought in by canoe and removed at the end of each trip. The exit at the Kwaaiputs Take-out (refer Map 59) point should remain as remote as possible with only the vehicles required to shuttle guests back waiting for the guests. These vehicles can provide the facilities such as mobile toilets (Port-a-Pottie) and shade through the use of awnings. This will enhance the short bit of wilderness experienced by guests followed by effectively a game drive back to the trailhead.

Interpretation of the landscape, need for conservation and protection, and the history of human settlement is critical, and should form part of the concessioning contract. By managing this as an effective block concession, the various landowners can be assured that access is controlled, and that no guests will get uncontrolled access from the river to their farms, vineyards and properties.