

06 July 2026

Field Report: Findings from a brief field assessment of selected wetlands within a 500m radius of the N2 Wild Coast Toll Highway Project between the Msikaba and Mthentu bridges.

Compiled by Steven Ellery (Pr.Sci.Nat – Ecology, MSc - Geography)

Declaration of Independence

I declare that this compliance assessment was undertaken independently and objectively. The findings, observations, interpretations, and conclusions presented in this report are based on a review of the available project documentation, field observations recorded during the site assessment, and the professional judgement of the author.

Throughout the assessment, every effort was made to remain impartial and evidence-based. Observations and conclusions have been developed solely from information available at the time of the assessment and have been evaluated against the applicable environmental authorisations, approved management plans, and relevant legislative requirements. Where uncertainty exists, this has been explicitly acknowledged within the report, and findings have been presented accordingly.

I confirm that I have no personal or financial interest in the outcome of this assessment that would compromise my professional independence or objectivity.

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Date: 06 July 2026

1. Project Background

GroundTruth were contacted by the technical team associated with the Khanyayo Crisis Committee (KCC) and the Amadiba Crisis Committee (ACC) to assist them with an objective assessment of impacts to freshwater ecosystems along the N2 Wild Coast Toll Highway Project between the Msikaba and Mthentu Bridges (also known as the Greenfield portion). The KCC and ACC believe that the construction of the N2 Toll Highway and associated infrastructure have had a multitude of detrimental impacts on the surrounding environment, livelihoods and lived experience of community members living in Khanyayo and surrounding areas. The impacts raised by the ACC and KCC that will be addressed in this report include:

- 1) A noticeable and unacceptable reduction in the *quantity* and *quality* of water within local watercourses (wetlands, rivers and springs) that are used as critical water supply resources by the surrounding communities.
- 2) Rapid and reactive construction practices along the N2 which have resulted in unnecessary, preventable and unacceptable impacts to the surrounding environment which include:
 - a. Extensive and unnecessary destruction of watercourses during the construction of road crossings.
 - b. Extensive sedimentation of watercourses due to poor stormwater and runoff management along the road reserve and other ancillary roads and stockpiles.
 - c. Inappropriate dumping of rock and spoil material in watercourses and surrounding grasslands.
- 3) The construction of access roads through watercourses that do not have any publicly available authorisation information associated with them. Therefore, until such authorisations are presented, they are deemed to be unauthorised road crossings.

The above-mentioned issues form the basis of this report and will be addressed in detail. However, it is acknowledged that the ACC and KCC have raised additional concerns relating to:

- the lack of communication between the South African National Roads Agency Limited (SANRAL) and their implementing contractors with local communities,
- the lack of a complete and publicly available Relocation Action Plan and the associated inappropriate relocation of community members,
- the paucity of communication with community members about where roads will be constructed, where construction camps will be erected and where other infrastructure such as stockpiles will be sited,

- the lack of regard for important cultural and ancestral sites such as graves, with a number of graves having reportedly been destroyed with no communication with or consent from the community,
- the damage caused to houses by the blasting associated with the road reserve and the large crusher quarry.

These additional concerns are not the focus of this report, and should form part of an extended interview and survey process with the community members.

2. Legal Context

There are two legislative frameworks which are triggered by the environmental related issues mentioned in 1), 2) and 3) above, namely the National Environmental Management Act (National Environmental Management Act 107 of 1998) and the National Water Act (National Water Act 36 of 1998). It is acknowledged that SANRAL have authorisation to build infrastructure associated with the N2 Wild Coast Toll Highway Project within watercourses, both in terms of the NEMA and their associated environmental impact assessment (EIA) and the NWA and their associated water use license (WUL) and general authorisations (GA). SANRAL are legally required to adhere to the environmental authorisation conditions which are set out in the Record of Decision document as well as their Environmental Management Programmes. Furthermore, SANRAL do not have ‘blanket’ authorisation to undertake construction activities in all watercourses within 500m of the N2 Toll Highway, and still require specific WULs or GAs which legally entitle them to modify or destroy watercourses.

Documents Reviewed

Multiple documents were reviewed to understand the authorisation landscape of this N2 project and whether SANRAL are in possession and make publicly available all relevant and necessary authorisations for this construction process. Table 1 contains the title and report code or document number associated with each document reviewed in detail.

Table 1 List of documents reviewed to inform the field assessment

Number	Document Title	Report Code/ Document Number	Reference
1	Confirmation of Water Use Authorised in Terms of the General Authorisation Published in Terms of Section 39 of the National Water Act, No 36 of 1998: Proposed N2 Wild Coast Toll Highway: Greenfields Portion Haul Roads for Msikaba & Mthentu Bridges	27/2/2/T360/2/4	(Department of Water and Sanitation, 2016a)
2	Confirmation of Water Use Authorised in Terms of the General Authorisation Published in Terms of Section 39 of the National Water Act, No 36 of 1998: Proposed Construction of N2 Wild Coast Toll Highway (Greenfield Portion) (River Crossings)	27/2/2/T236/7/4	(Department of Water and Sanitation, 2016c)
3	Confirmation of Water Use Authorised in Terms of the General Authorisation Published in Terms of Section 39 of the National Water Act, No 36 of 1998: Wild Coast Toll Highway: Greenfields Portion Ndwalane to Mzamba River (Wetlands)	27/2/2/T540/4/4	(Department of Water and Sanitation, 2016b)
4	SANRAL N2 Wild Coast Toll Highway: Specialist Aquatic Assessment Report (Version 1.1, Feb 2016)	EP98-01	(Macfarlane et al., 2016b)
5	SANRAL N2 Wild Coast Toll Highway: Specialist Aquatic Assessment Report – Annexures (Version 1.1, Feb 2016)	EP98-01 (Annexures)	(Macfarlane et al., 2016a)
6	Record of Decision for the Proposed N2 Wild Coast Toll Highway	12/12/20/701	(Department of Environmental Affairs, 2010)
7	Annexure 11: Supplementary Environmental Management Programme (EMPr) for Aquatic Ecosystems (Version 1.2, Feb 2016)	EP 98-03	(Texeira-Leite & Macfarlane, 2016)
8	Environmental Management Programme for the N2 Wild Coast Toll Highway (June 2016)	NRA01N2WC/EMP (DEA Ref: 12/12/20/701)	(Fredericks, 2016)
9	Feedback to Environmental Concerns on N2 Wild Coast Toll Highway Project in the Eastern Cape	14/7/6/2/5/1/596	N/A
10	National Environmental Management Act (as amended to 1 April 2025)	Act 107 of 1998 (NEMA)	(NATIONAL ENVIRONMENTAL MANAGEMENT ACT 107 OF 1998, 1998)
11	National Water Act (as amended)	Act 36 of 1998 (NWA)	(National Water Act 36 of 1998, 1998)

Most documents included in Table 1 were obtained from the SLR Consulting website where all documents and authorisations for the Greenfield segment of the N2 Wild Coast Toll Highway Project are published. In addition to reading these documents, the coordinates from the publicly available general authorisation documents (documents 27/2/2/T360/2/4,

27/2/2/T236/7/4 and 27/2/2/T540/4/4) were extracted and imported into a geospatial information system (GIS) to cross check these authorisations with work occurring on the ground.

3. Methods

A desktop review of all relevant project documentation was undertaken prior to the field assessment. This included a review of the environmental authorisations, water use authorisations, specialist aquatic studies, the EMPr's, and relevant legislative frameworks.

A field assessment was subsequently conducted on 21 June 2026 to verify on-site conditions and assess potential compliance concerns associated with construction activities along the N2 Wild Coast Toll Highway Greenfields section. Approximately 13 km of the road reserve and associated watercourses within the surrounding area were assessed during the site visit (Figure 1).

At each site visited, detailed field observations were recorded, including written field notes, georeferenced photographs, and GPS coordinates of key observations. Particular attention was given to potential impacts on watercourses, wetlands, riparian areas, and other environmentally sensitive features. Where possible, informal interviews were conducted with local community members to gather additional context regarding site history, observed construction activities, and perceived environmental impacts.

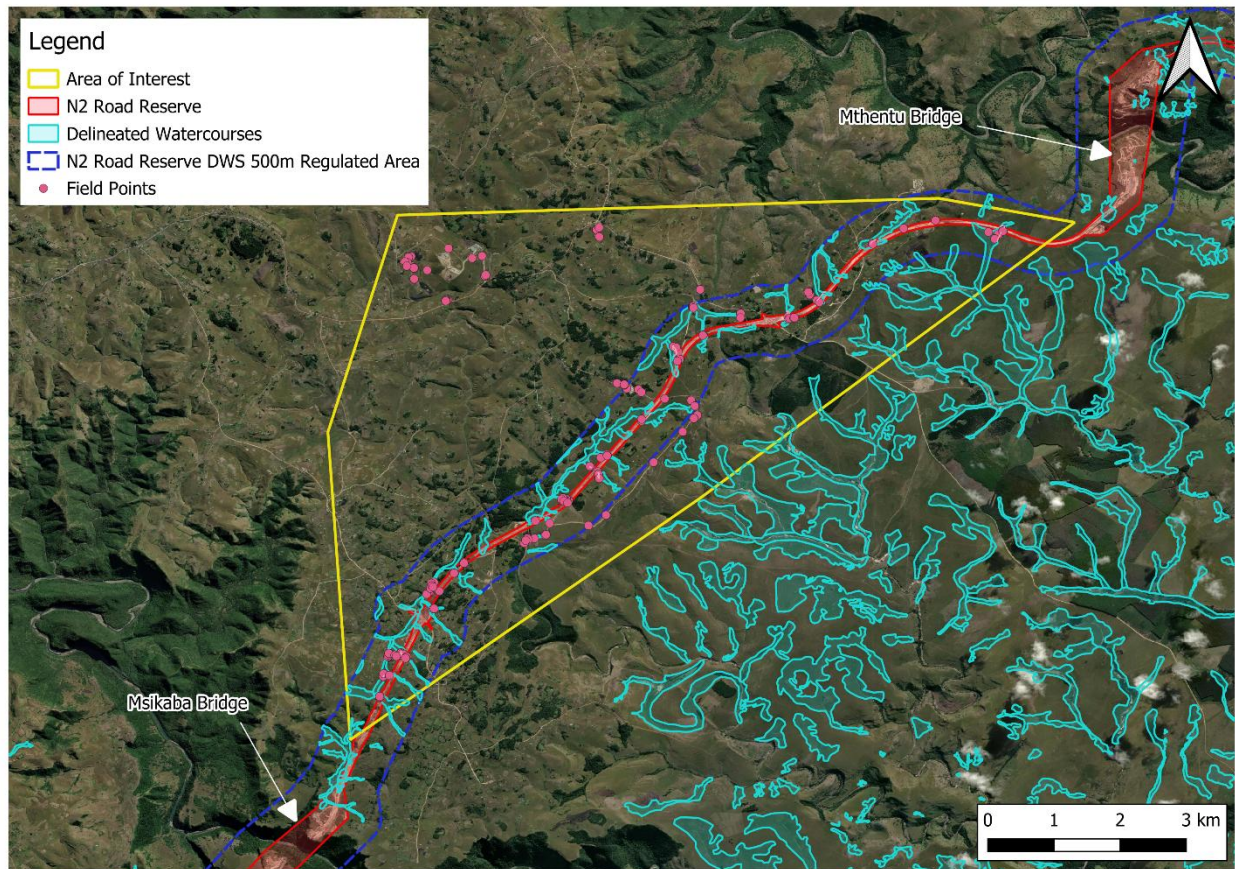


Figure 1 Extent of the field visit on 21 June 2026, showing GPS data collected during the field visit.

4. Findings

The findings from the field visit are initially categorised by their ‘type’ of impact, and then specific examples of these impacts are documented in more detail below. There are three potential compliance issues (CI’s) that were noted within the study area with a total of 15 noted instances of CI-01, 13 noted instances of CI-02 and three noted instances of CI-03 (Table 2 and Figure 2). The main claim associated with each CI is documented below:

- CI-01: Sedimentation of watercourses due to inadequate stormwater and erosion control** - Extensive sedimentation of watercourses was observed downstream of active construction areas as a result of inadequate stormwater management, insufficient erosion control measures, and poor runoff containment. These impacts have degraded aquatic habitat, increased turbidity, and reduced the ecological condition of affected aquatic ecosystems.
- CI-02: Excessive and unnecessary disturbance of wetlands and watercourses during construction** - Significant disturbance of watercourses was observed during construction activities, including stockpiling of excavated and imported material

within or adjacent to watercourses, heavy machinery operating within intact wetland areas, and unnecessary vegetation clearing in sensitive aquatic habitats. The extent of disturbance appears to exceed the minimum footprint reasonably required for construction and has caused substantial ecological degradation.

- **CI-03: Potential unauthorised access road crossings through watercourses** - GIS analysis identified several smaller access road crossings through watercourses that do not correspond with the publicly available environmental and water use authorisations reviewed. While this finding remains subject to verification against the complete authorisation record, it raises concerns regarding the possible construction of unauthorised crossings and associated unlawful disturbance of aquatic ecosystems.

Table 2 Summary table of all potential compliance issues that were noted during the study, with coordinates

Number	CI Type	Latitude	Longitude
1	CI-01	-31.1955	29.90804
2	CI-01	-31.1931	29.89258
3	CI-01	-31.2045	29.88042
4	CI-01	-31.2076	29.87487
5	CI-01	-31.2078	29.86721
6	CI-01	-31.2118	29.86215
7	CI-01	-31.2154	29.85665
8	CI-01	-31.2319	29.84333
9	CI-01	-31.2369	29.83876
10	CI-01	-31.2438	29.83333
11	CI-01	-31.2504	29.81862
12	CI-01	-31.2614	29.81346
13	CI-01	-31.1944	29.90497
14	CI-01	-31.2017	29.82666
15	CI-01	-31.2031	29.82098
16	CI-02	-31.194	29.90887
17	CI-02	-31.2051	29.8799
18	CI-02	-31.2078	29.86735
19	CI-02	-31.2069	29.85972
20	CI-02	-31.2321	29.84354
21	CI-02	-31.2337	29.84482
22	CI-02	-31.2371	29.83944
23	CI-02	-31.2437	29.83351
24	CI-02	-31.2466	29.82272
25	CI-02	-31.2509	29.8184
26	CI-02	-31.2518	29.81791
27	CI-02	-31.2621	29.81136
28	CI-02	-31.2653	29.81059
29	CI-03	-31.2426	29.83639
30	CI-03	-31.2065	29.85972
31	CI-03	-31.2079	29.86708

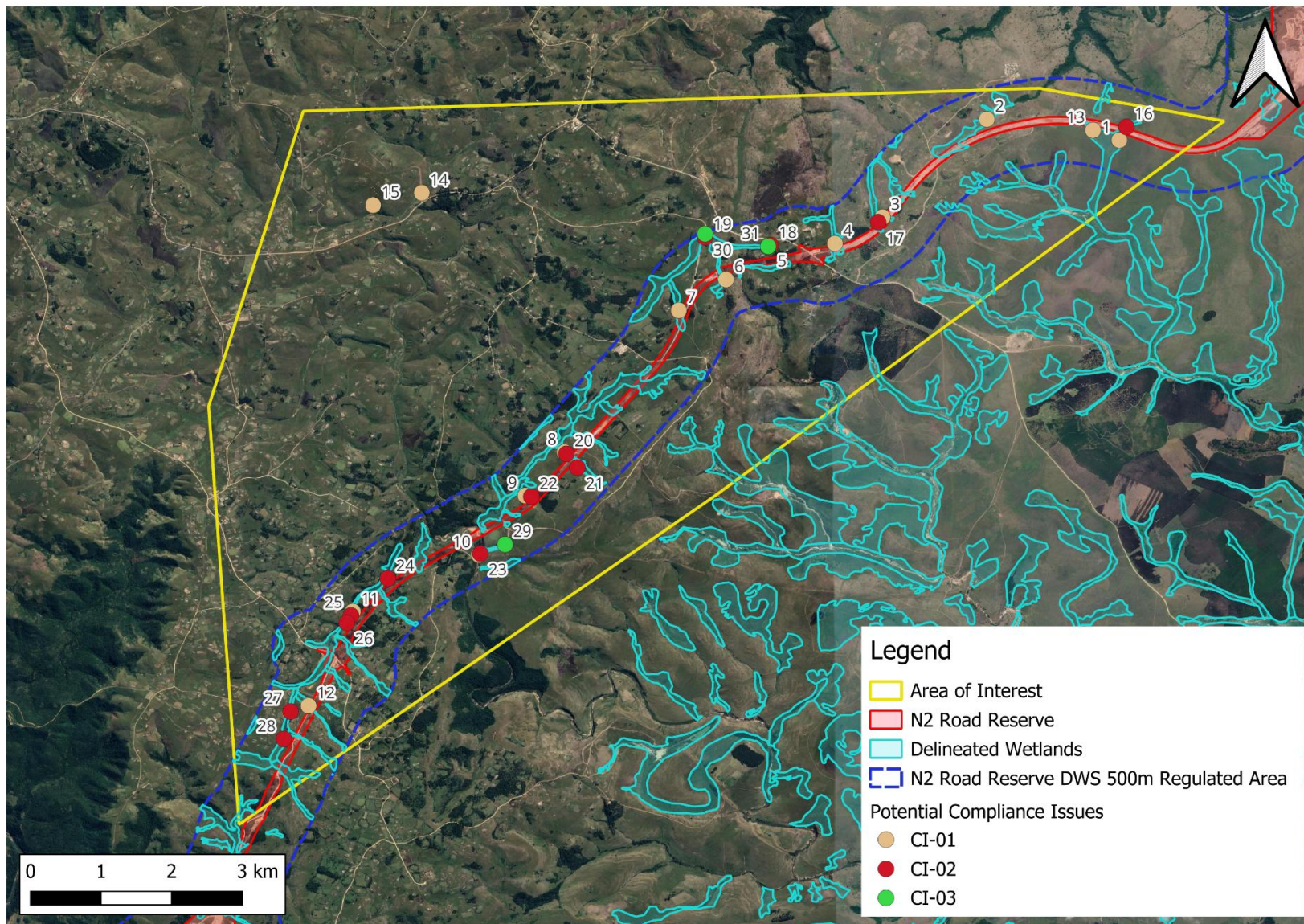
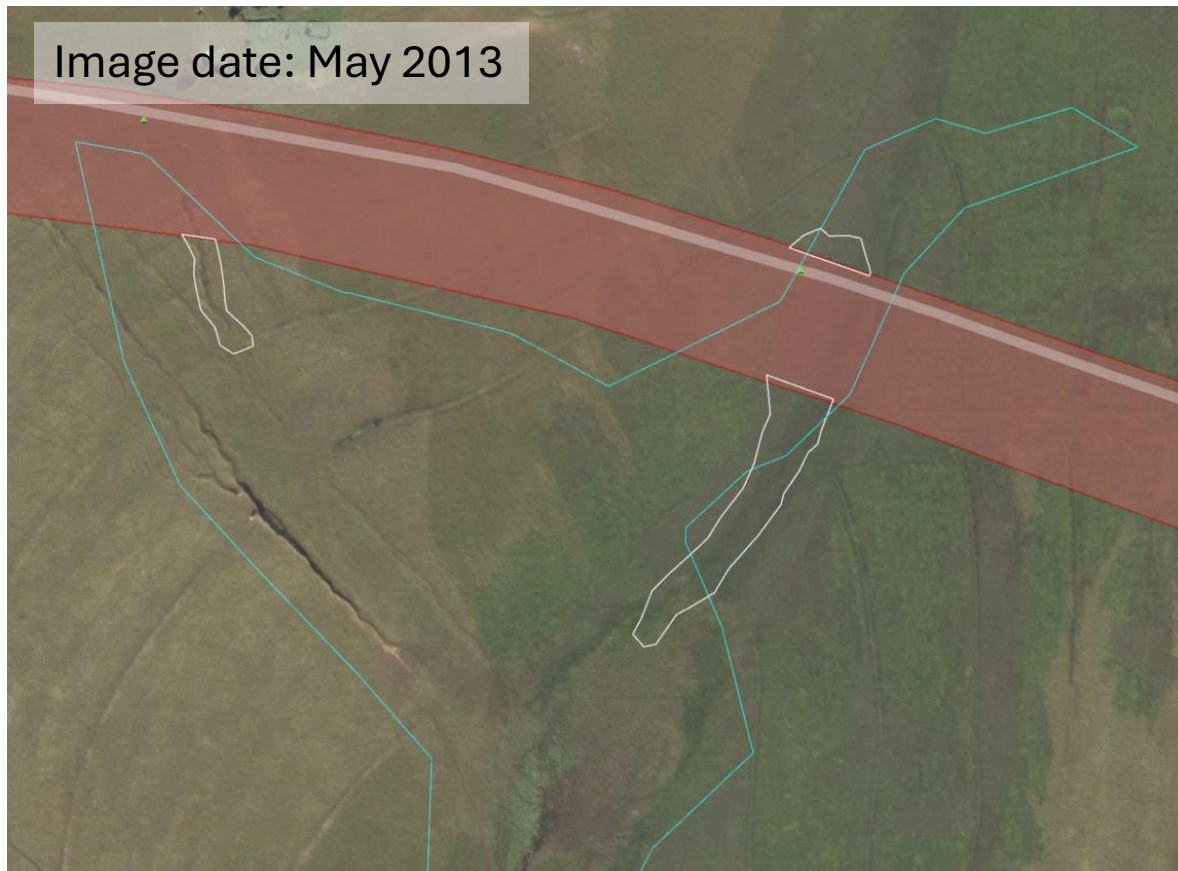


Figure 2 Potential compliance issues in relation to the development and associated wetlands. The numbers correspond to the numbers in Table 2 above.

Potential non-compliance issue 1: Sedimentation of watercourses from construction runoff

A total of 15 instances of sedimentation within watercourses were observed downstream of active construction areas associated with the N2 Wild Coast Toll Highway development. Sediment-laden runoff from exposed and disturbed construction surfaces appears to have entered multiple aquatic ecosystems as a result of inadequate stormwater management, insufficient erosion control, and poor runoff containment. An example of this is shown in Figure 3 below, illustrating CI numbers 1 and 13. The first map shows an image of the wetlands (outlined in blue) in May of 2013, prior to the development of any N2 related infrastructure (shown in the red polygon). The second map shows the same area, but in November of 2025. The white outlines indicate the approximate extent of the sediment deposition, which amounts over 5000 square meters or half a hectare.



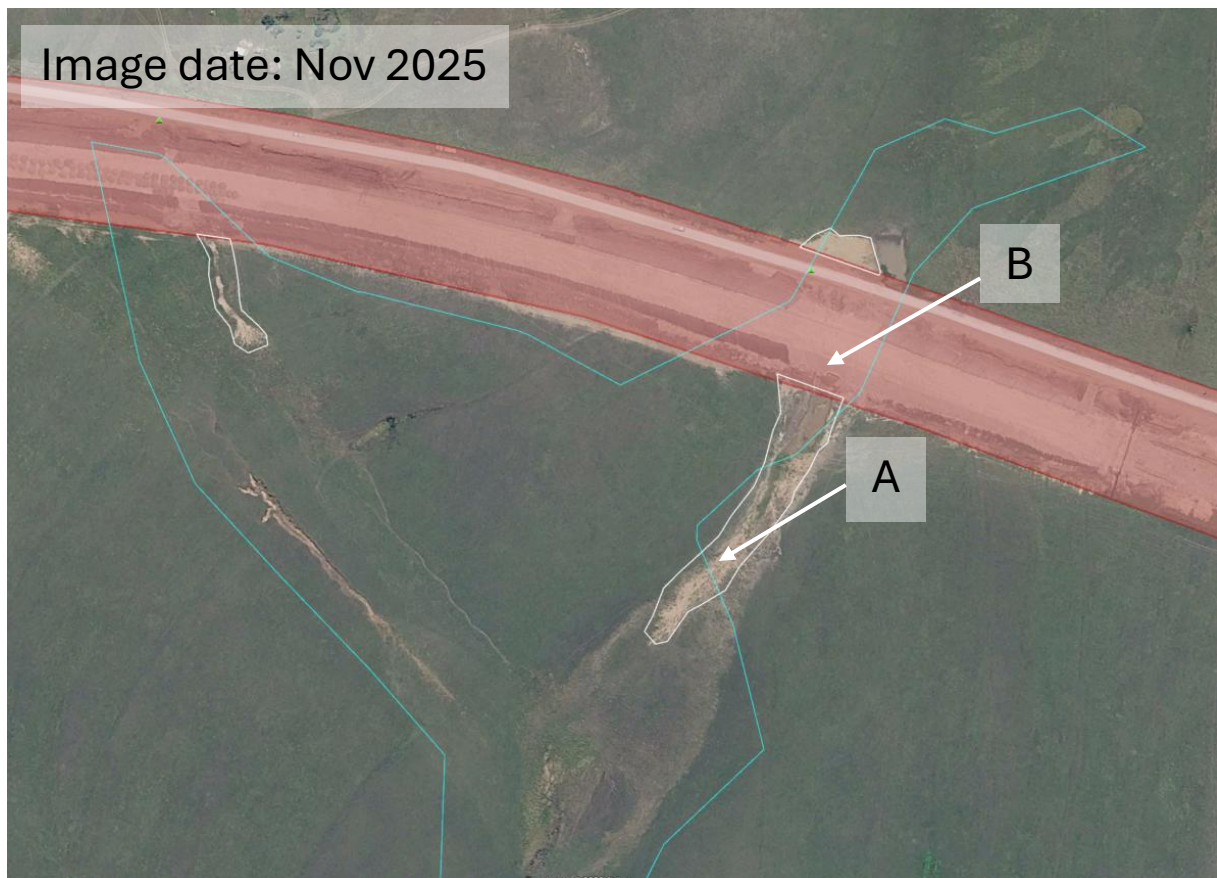


Figure 3 Comparison of a headwater seep and unchannelled valley bottom wetland in May 2013 and November 2025. The blue outlines illustrate the extent of the wetlands, the red polygon illustrates the N2 road reserve and the white polygons illustrate the approximate extent of the sediment deposition. The labels of A and B in the second map correspond to the location where photos A and B in Figure 4 below were captured from.

Observed impacts include significant sediment deposition within watercourses and wetlands, elevated turbidity, smothering of instream habitat (Figure 4B), and degradation of aquatic ecosystem condition. In several locations, sediment deposition appears sufficiently severe to have altered channel morphology and reduced habitat quality for aquatic biota (Figure 4).



Figure 4 A) Extensive sediment deposition captured from the N2 road reserve (CI number 1), shown in Figure 3. B) Close up view of the large sediment plume shown in Figure 3, illustrating the extent to which wetland vegetation has been buried by the sedimentation. C) Source of CI number 12, with the white arrows indicating the path that water takes as it enters the wetland as shown in D). D) Impact of sediment within the wetland. Note some sediment control structures have been constructed, but they have been bypassed, or were constructed after the sedimentation event occurred. Find coordinates of all photographs in Appendix A.

These observations raise serious concerns regarding compliance with Clause 26 of the project EMP, which specifically addresses erosion and sediment control during construction. Clause 26 requires the Contractor to protect erosion-prone areas through the installation of temporary and permanent drainage works as soon as possible and to implement measures necessary to prevent surface water from concentrating into streams or scouring slopes, banks, and other vulnerable areas. The clause further requires the development of a dedicated Method Statement addressing erosion control prior to the commencement of bulk earthworks. In addition, erosion channels developing during construction are required to be backfilled and restored, exposed areas must be stabilised, and movement over stabilised areas must be restricted and controlled.

The observed sedimentation indicates that one or more of these requirements were either inadequately implemented, not maintained, or absent altogether.

The Aquatic EMPr further identifies sedimentation as a key construction-related risk to aquatic ecosystems and prescribes detailed mitigation measures to prevent sediment mobilisation and downstream transport. These measures include the installation and maintenance of sediment barriers at all wetland and watercourse crossings, construction of temporary sediment traps downstream of excavations, prevention of soil deposition into watercourses, rapid stabilisation and revegetation of disturbed areas, protection of soil stockpiles from erosion, and implementation of appropriate dewatering measures to prevent heavily silt-laden water from entering downstream aquatic ecosystems.

It is acknowledged that some attempts to manage sediment have been undertaken by the contractors on site. However, in many cases, these sediment control interventions appear to have been implemented only after sedimentation events had already occurred, indicating a reactive rather than preventative approach to sediment management (Figure 5A and B). Furthermore, several of the installed controls appear to be inadequately keyed into the surrounding ground or insufficiently designed for site-specific conditions, reducing their effectiveness during high-flow events (Figure 5C and D). This is of particular concern, as the greatest risk of sediment mobilisation and downstream transport occurs during intense rainfall and peak flow conditions, when sediment control measures are required to perform most effectively.





Figure 5 A) A sediment control structure that is completely ineffective or was installed after the sedimentation event occurred as indicated by the white lines. B) Is the downstream portion of the river channel that has been buried with sediment (CI number 11). C) A sediment control structure that has been completely bypassed by sediment washed from the road works and is now sitting within a wetland (CI number 2). D) A sediment control structure that has been completely bypassed by sediment washed from the road works and is now sitting within a river channel (CI number 6). Find coordinates of all photographs in Appendix A.

The significance of the observed sedimentation is further reinforced by provisions in the main EMPr, which explicitly state that, in compliance with ROD item 6.2.11.4, all wetlands within the Greenfields section were delineated by a suitably qualified wetland specialist and that wetland-specific mitigation measures were compiled in the Supplementary EMP for Aquatic Ecosystems. The EMP further states that these mitigation measures are to be implemented as appropriate to the construction phase of the project.

This establishes a direct compliance link between the Record of Decision, the main EMP, and the Aquatic EMPr, indicating that the aquatic mitigation measures contained within the Aquatic EMPr form an integral part of the project's environmental management obligations rather than optional best-practice guidance. Failure to implement these measures therefore raises concerns not only regarding non-compliance with the Aquatic EMPr itself, but also potential non-compliance with the broader environmental authorisation conditions applicable to the project.

The observed sedimentation may further constitute non-compliance with Section 28 of the National Environmental Management Act (Act 107 of 1998), which imposes a duty of care to prevent environmental degradation, and Section 19 of the National Water Act (Act 36 of 1998), which requires reasonable measures to prevent pollution of water resources. Where sediment deposition has materially altered the bed, banks, flow, or characteristics of affected watercourses, the impacts may additionally constitute unauthorised water use in terms of Sections 21(c) and 21(i) of the National Water Act (Act 36 of 1998).

Potential non-compliance issue 2: Unauthorised physical disturbance of watercourses during construction activities

Field observations identified extensive and, in several instances, seemingly unnecessary disturbance of watercourse areas associated with the construction of road crossings along the project footprint. The scale and nature of the disturbance raise serious concerns regarding compliance with applicable environmental management obligations and water use authorisations.

A key concern relates to the stockpiling of excavated spoil material and imported construction material within watercourses and directly adjacent to wetland and riparian areas. In multiple locations, stockpiled material was observed within sensitive aquatic environments without evidence of adequate erosion protection or containment measures (Figure 6). This is of particular concern given the increased risk of sediment mobilisation during rainfall events and the resulting downstream degradation of aquatic ecosystems.

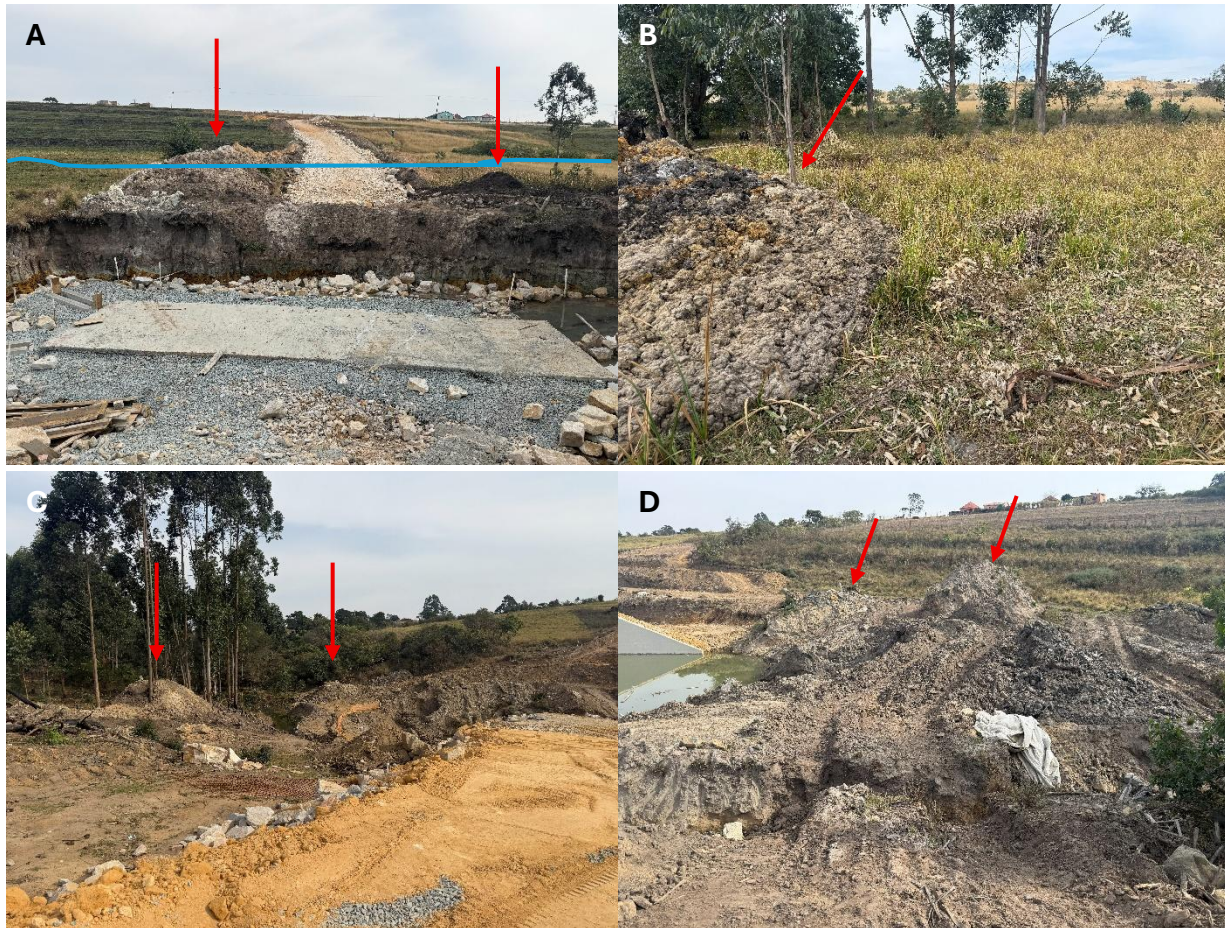


Figure 6 A) An access road crossing a channelled valley-bottom wetland. The blue line indicates the approximate boundary of the wetland and the red arrows indicate stockpiles located within the wetlands (CI number 28). B) Also shows CI number 28, although indicating another stockpile dumped within sensitive wetland vegetation such as *Dissotis canescens*, *Phycnostachys* sp, *Cyperus latifolius* and other species. C) An access road crossing a riparian habitat with extensive stockpiling of material within the riparian corridor with little to no sediment control measures (CI number 25). D) Downstream of CI number 25 is CI number 26 as depicted in this photograph. Find coordinates of all photographs in Appendix A.

The observed stockpiling appears inconsistent with multiple provisions of the project Environmental Management Programme (EMP). Clause 20 explicitly states that no construction camps, dumping, or stockpiling of construction material shall be allowed in or close to wetlands and other watercourses, while Clause 8 further states that no materials shall be stockpiled in any wetland areas. Clause 5 additionally requires all temporary stockpile areas to be approved and demarcated, and stipulates that stockpiles must be constructed and maintained to avoid erosion and contamination of the surrounding environment, including preventing material from spilling into rivers and drainage lines.

Further concerns arise from evidence of heavy construction vehicles, including tracked excavators, moving through intact wetland areas beyond the immediate crossing footprint. This activity has caused substantial physical disturbance, including vegetation destruction,

soil compaction, rut formation, and surface deformation (Figure 7). Such disturbance has the potential to impair wetland hydrological functioning by reducing infiltration, altering surface flow pathways, increasing runoff concentration, and reducing the natural buffering capacity of wetlands.

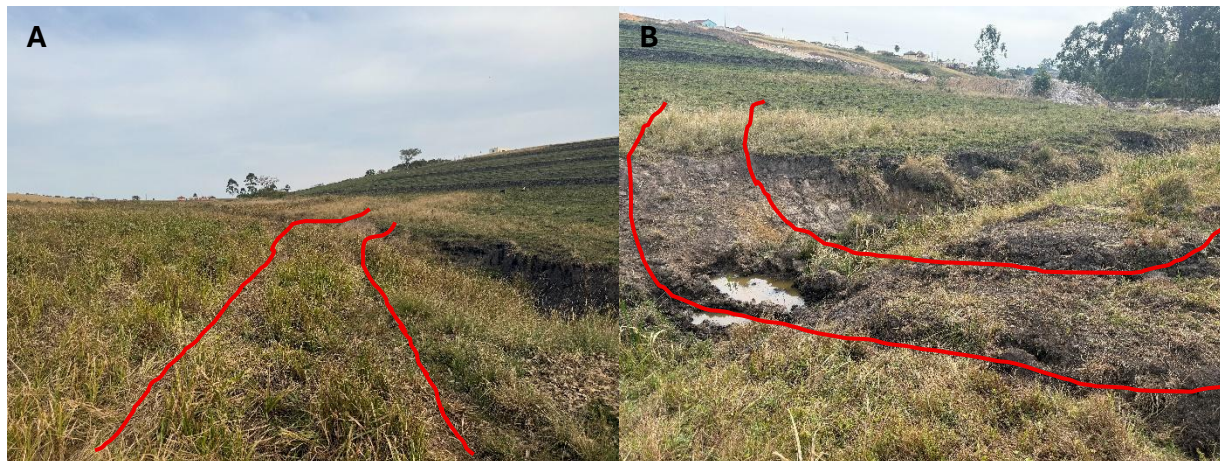


Figure 7 A) Red lines indicate the path taken by a large tracked vehicle (likely an excavator) through an intact portion of wetland to cross the channel pictured in B) (CI number 28). B) Red lines indicate the path taken by the large tracked vehicle across the channel. Not extensive disturbance and vegetation removal as a result of the excavator having to turn to cross the channel at right angles. Find coordinates of all photographs in Appendix A.

This disturbance appears inconsistent with Clause 20 of the EMP, which explicitly states that no activities shall take place outside demarcated construction areas and that disturbance to environmentally sensitive areas must be avoided. The clause further requires that the construction servitude through wetland areas be kept to a minimum. Based on site observations, the extent of disturbance in certain areas appears to exceed the minimum footprint reasonably required for crossing construction.

The Supplementary Environmental Management Programme for Aquatic Ecosystems (Aquatic EMP_r), incorporated into the EMP through ROD Item 6.2.1.1, further requires that excavated material not be stockpiled within areas subject to inundation, that infrastructure crossing watercourses must not cause erosion, sedimentation, instability, or degradation of watercourse structure, and that disturbance to wetland and riparian habitats be minimised through controlled construction access and implementation of erosion control measures.

A further concern relates to the unnecessary clearing of natural vegetation within sensitive aquatic habitat. In one observed instance, a large area of vegetation was cleared on a steep slope within a seep wetland for no apparent or clear construction-related purpose (Figure 8). The extent and location of this clearing raise significant concerns regarding whether disturbance was appropriately minimised and restricted to the footprint strictly required for construction activities. The location of the clearing within a steep seep wetland is of

particular concern due to the ecological sensitivity of these systems and their susceptibility to hydrological disturbance, erosion, and channelization (Figure 9A). Vegetation removal in such areas may reduce slope stability, increase runoff concentration, accelerate sediment mobilisation, and impair the wetland's natural hydrological functioning (Figure 9B). Where such clearing was not strictly necessary or appropriately authorised, it may constitute further evidence that the construction footprint has not been adequately minimised in accordance with EMP and Aquatic EMPr requirements.

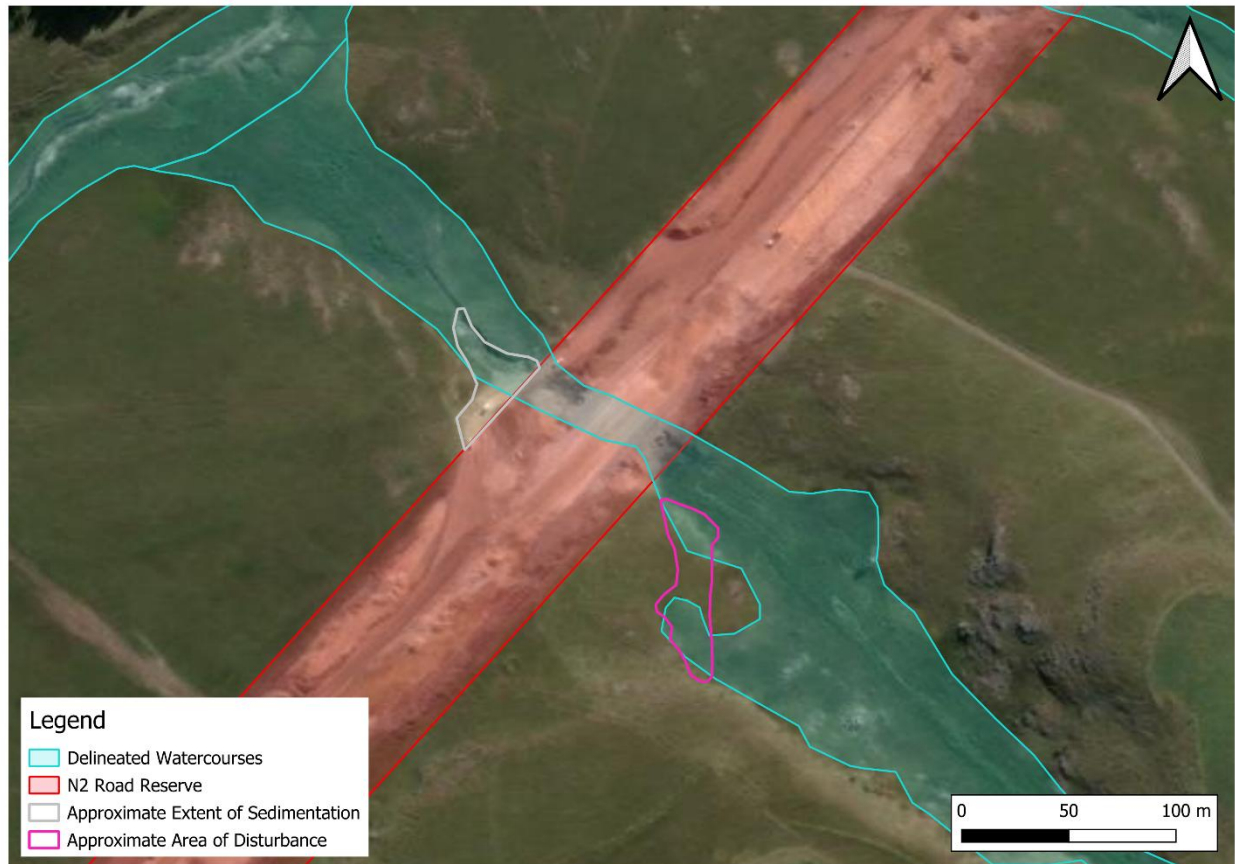


Figure 8 CI number 21 is indicated by the pink polygon and CI number 8 is indicated by the grey polygon. The area within the pink polygon has been completely cleared, with no further work done on it.

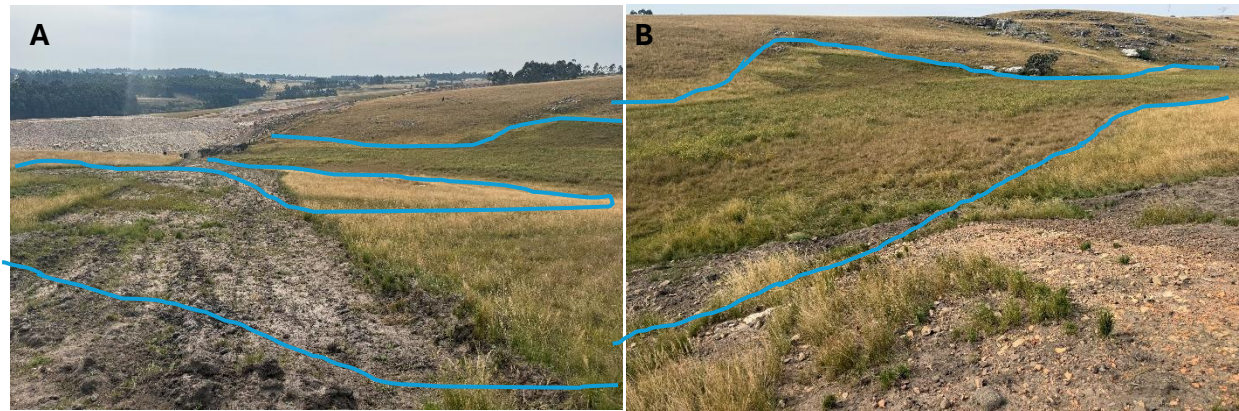


Figure 9 Photographic evidence of CI number 21 as shown in Figure 8. A) Shows the cleared area from the south looking towards the valley bottom wetland, with the approximate wetland extent shown by the blue lines. B) The valley bottom wetland shown by the blue lines with some sediment having washed from the cleared area into the valley bottom. Find coordinates of all photographs in Appendix A.

This clearing appears inconsistent with several provisions of the project Environmental Management Programme (EMP). Clause 2 (Design Phase: Sensitive Areas) requires that vegetation clearing be minimised and restricted to the area required for road construction purposes only. Clause 10 (Design Phase: Access/Haul Roads) further states that, where access roads are required outside the road reserve, vegetation clearing may only occur following written approval from the Engineer, with input from the Project Environmental Manager (PEM) and/or Environmental Control Officer (ECO). Clause 3 (Construction Phase: Site and Construction Camp Clearing) additionally requires that, prior to clearing natural vegetation, the Contractor submit a plan of action and Method Statements to the Engineer, PEM, and ECO for approval.

The observed impacts may indicate non-compliance with the EMP, the Aquatic EMP, and associated environmental authorisation conditions. The impacts may further constitute potential contraventions of Section 28 of the National Environmental Management Act (Act 107 of 1998), which imposes a duty of care to prevent environmental degradation, and Sections 19, 21(c), and 21(i) of the National Water Act (Act 36 of 1998), relating to pollution prevention and the unlawful impeding, diversion, or alteration of watercourses.

Potential non-compliance issue 3: Potential unauthorized access road crossings through watercourses

A GIS-based review was undertaken to assess the spatial alignment between known authorised access and haulage road crossings and the current road network associated with construction activities. Publicly available environmental and water use authorisations relating to access and haul roads crossing watercourses were digitised and overlaid with observed construction infrastructure.

In addition, a map of planned access roads for the Greenfields section, obtained from an Environmental Management Committee (EMC) meeting presentation dated February 2025, was reviewed to provide additional context regarding planned construction access routes (Figure 10). While this map provides useful insight into project planning, it is acknowledged that inclusion of an access road within the EMC presentation does not constitute regulatory authorisation and should therefore not be interpreted as evidence of lawful approval.



Figure 10 Map obtained from the Environmental Management Committee meeting from February 2025 (Accessible at: <https://cdn.sanity.io/files/b0ecix6u/production/190ae19440835959b4195df247e4d717b6722e39.pdf>), showing the planned access roads through the Greenfields section. The roads largely correspond to those observed on the ground, barring two access roads through watercourses as elucidated on in Figure 11 and 12.

The spatial assessment identified several smaller access roads that appear to cross watercourses but do not correspond with the currently available authorised crossing locations. Of particular concern, two access roads crossing watercourses were identified that are not reflected in either the publicly available authorisation documents or the February 2025 EMC access road map, suggesting that these crossings may represent previously unidentified or unplanned access routes. As shown in Figure 11, an access/haulage road has been constructed through a small seep wetland and a larger river. Cross referencing this location with the coordinates contained within the General Authorisations documents, the authorisation states that the wetland is 'Not Crossed'. Furthermore, this access road is not shown on the access road map in Figure 10, meaning that, as far as the public knows, there is no authorisation for this road through these watercourses. It is noted that this road did not exist in May of 2022, but it appears in the Google Earth image from March of 2024.

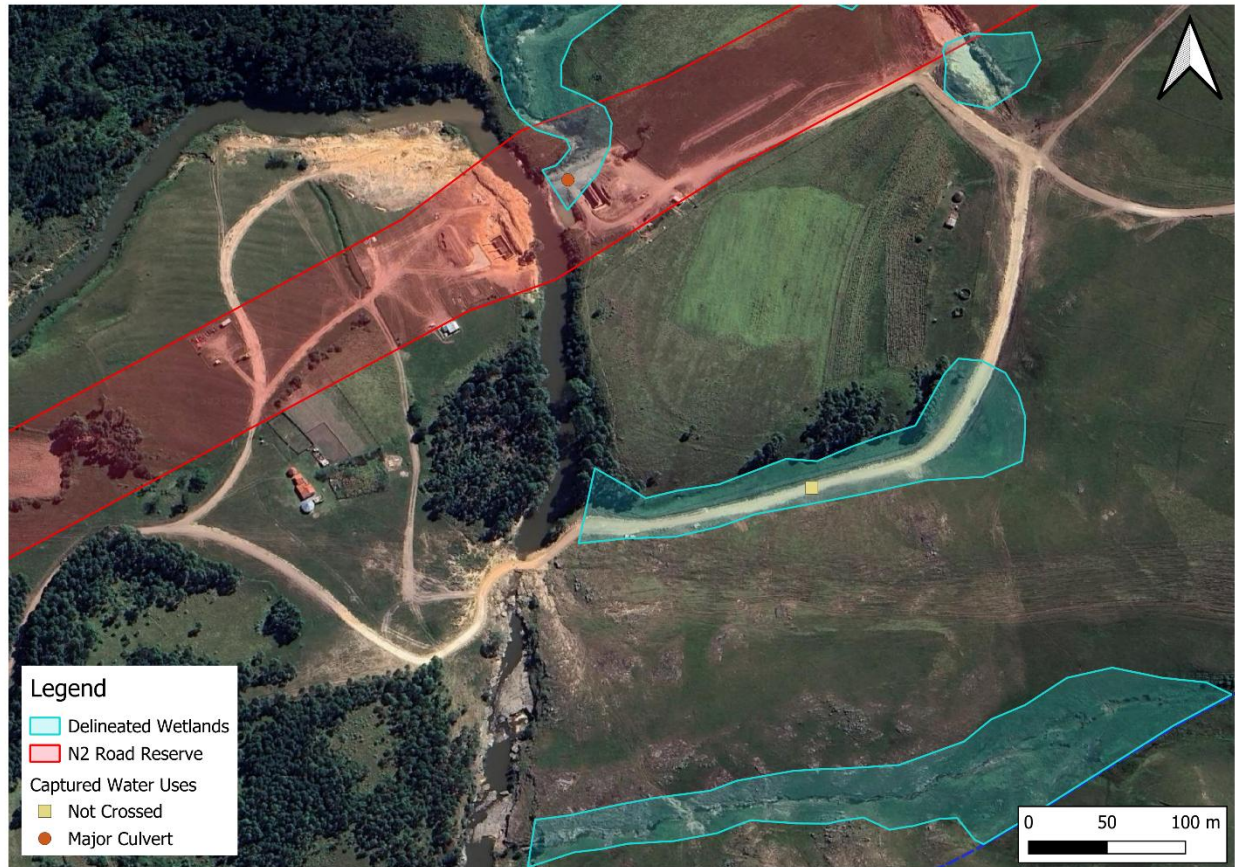


Figure 11 The captured water uses overlaid with the delineated wetlands. Note the general authorisation for the wetland in the centre of the map states that it is 'Not Crossed'. However, as seen in the map, there is a large road directly through the wetland (CI number 29).

Figure 12 highlights a second instance where there is no known authorisation for the road that has been constructed, and the road is similarly not reflected on the access road map shown in Figure 10. It appears that this road has been constructed as a shortcut, so that vehicles can drive directly south to the road reserve as opposed to driving east before the existing road joins with the road reserve. It is noted that this road did not exist in its current extent in May of 2022, but it appears in the Google Earth image from March of 2024. It is noted that a small track does appear in the Google Earth image in May of 2022.

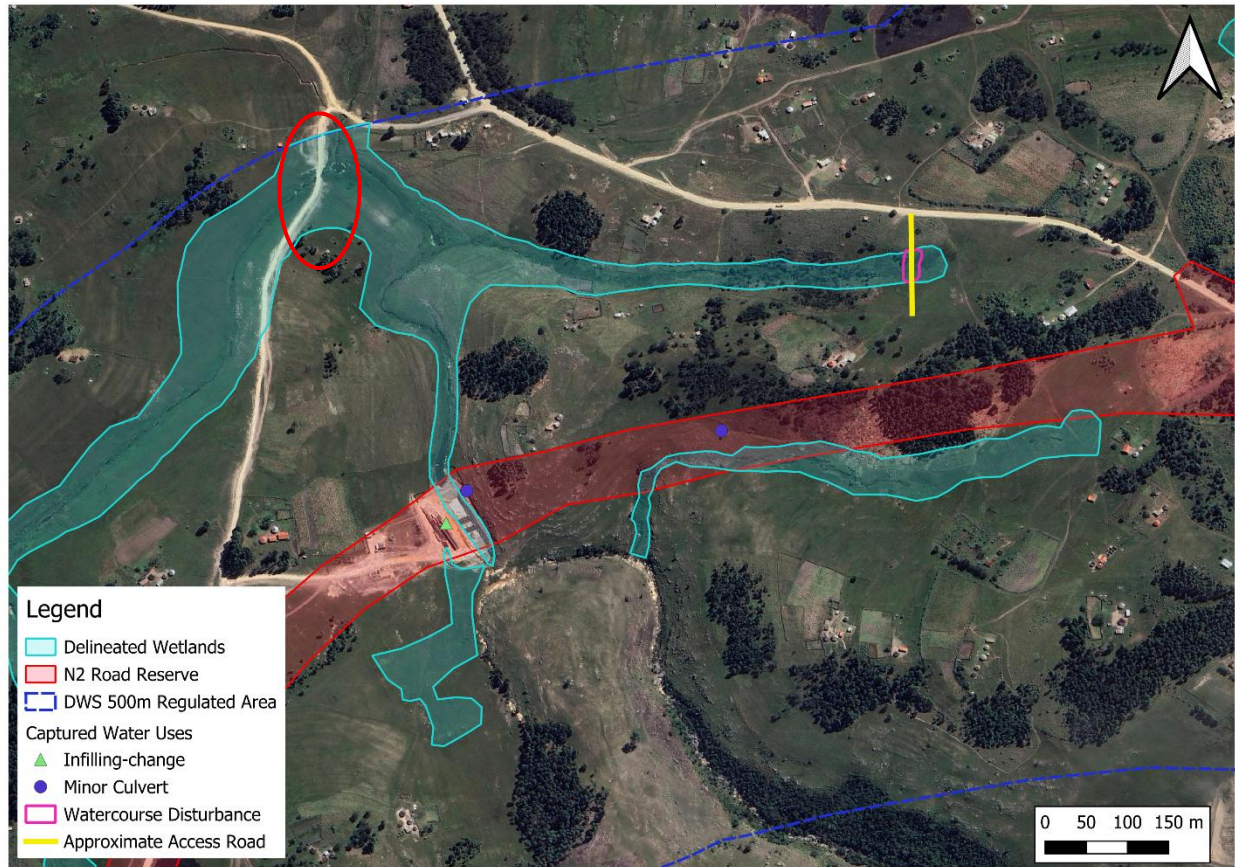


Figure 12 The captured water uses overlaid with the delineated wetlands. Note that there is no authorisation at the location where the road crosses this wetland highlighted by the red oval (CI number 30). An additional access road and associated disturbance is shown by the yellow line and pink polygon (CI numbers 5, 18 and 31).

Furthermore, several access roads shown on the EMC planning map appear to have unclear construction-related objectives and, in certain instances, may represent unnecessary disturbance, particularly where they involve additional crossings through wetlands or watercourses (as represented by the yellow line and pink polygon in Figure 12 and shown in Figure 13). The road crossing appears to lead to a household and has not yet been linked in any clear way to the construction site. While this road is shown on the EMC map in Figure 10, the questions regarding 1) the necessity of the road and 2) why the road was placed through a wetland in the first place are raised. If this road had been planned appropriately, and had been appropriately checked by the resident engineer and environmental compliance officer, simply moving the road 30m upslope would have been sufficient to minimise damage to the wetland. This raises concerns not only regarding possible authorisation gaps, but also whether the project has adequately minimised the number and extent of access routes through sensitive aquatic ecosystems.



Figure 13 Road crossing through the head of a wetland. The road crossing appears to lead to a household and has no clear link to the N2 Road Construction site. Find coordinates of all photographs in Appendix A.

The apparent presence of unauthorised or unnecessary road crossings through watercourses raises significant compliance concerns. The construction of access roads through aquatic ecosystems commonly involves disturbance of channel beds and banks, alteration of flow paths, infilling, excavation, and vegetation clearance, all of which may constitute regulated water uses. Such activities may require authorisation in terms of Sections 21(c) and 21(i) of the National Water Act (Act 36 of 1998), relating to the impeding or diversion of flow in a watercourse and the alteration of the bed, banks, course, or characteristics of a watercourse.

Where such crossings have been established without the necessary authorisation, this may constitute unlawful water use and potential non-compliance with the National Water Act. Depending on the nature and extent of the associated disturbance, the activities may also trigger listed activities requiring environmental authorisation in terms of the National Environmental Management Act (Act 107 of 1998).

Given the potentially serious implications of unauthorised or unnecessary watercourse crossings, further verification is recommended to confirm whether additional approvals, amendments, or site-specific authorisations exist for the identified access roads, and to assess whether all constructed or planned access routes are demonstrably necessary for construction purposes.

5. Conclusion and Recommendations

The findings of this assessment indicate repeated and significant compliance concerns associated with construction activities along the N2 Wild Coast Toll Highway Greenfields section, particularly in relation to the management and protection of aquatic ecosystems. The observed impacts include extensive sedimentation of watercourses, excessive and unnecessary disturbance of wetlands and riparian areas, and the possible construction of unauthorised access road crossings through watercourses.

Collectively, these findings suggest that the observed impacts are not isolated incidents, but rather indicative of broader and potentially systemic shortcomings in environmental management, construction footprint control, erosion prevention, and implementation of aquatic mitigation measures. Of particular concern is the extent to which disturbance appears, in several instances, to exceed the minimum footprint reasonably required for construction activities within sensitive aquatic environments.

The observed impacts appear inconsistent with multiple provisions of the EMPr, the Aquatic EMPr, and relevant conditions contained within the ROD (Table 3). In addition, several observed impacts may constitute potential contraventions of the National Environmental Management Act (Act 107 of 1998) and the National Water Act (Act 36 of 1998).

In light of these findings, the following actions are recommended:

- **Immediate compliance audit:** Conduct a comprehensive regulatory compliance audit of all active construction areas, with particular focus on watercourse crossings, erosion control measures, and construction footprint management.
- **Verification of authorisations:** Verify the complete set of environmental and water use authorisations, including amendments and contractor-specific approvals, to confirm whether all active access roads and watercourse crossings are lawfully authorised.
- **Immediate corrective action and rehabilitation:** Require the implementation of urgent corrective measures at high-risk sites, including removal of inappropriate

stockpiles, improved sediment and erosion control, and rehabilitation of disturbed wetlands and watercourses.

- **Strengthened environmental oversight:** Increase the frequency and independence of environmental monitoring, including enhanced oversight by the Environmental Control Officer (ECO), Project Environmental Manager (PEM), and relevant regulatory authorities.
- **Monitoring and follow-up assessments:** Undertake follow-up inspections to assess whether corrective measures are effectively implemented and whether impacted aquatic ecosystems are showing signs of recovery.

Given the ecological sensitivity of the affected wetlands and watercourses, timely intervention will be essential to prevent further degradation and to ensure compliance with the environmental obligations applicable to the project.

Table 3 Summary of the compliance issue along with the relevant RoD and EMPr clauses that are contravened, along with other potential legislative contraventions and recommended corrective actions.

Issue ID	Compliance Issue	Observation/ Evidence	Relevant RoD Clauses from document 12/12/20/701	Relevant EMPr/Aquatic EMPr Clauses	Potential Legislative Contravention	Severity	Recommended Corrective Action
CI-01	Sedimentation of watercourses due to inadequate stormwater and erosion control	Extensive sediment deposition observed in multiple watercourses and wetlands downstream of construction areas. Elevated turbidity, burial of instream habitat, and reduced ecological condition observed. Some sediment control measures were present but appeared reactive and/or poorly installed, reducing effectiveness during high-flow events.	6.1.1: Authorisation does not exempt SANRAL from compliance with other legislation. Relevant to NEMA/NWA breaches. 6.2.11.3: No trenches may be dug in wetland areas for stormwater disposal. 6.2.11.4: Wetlands in Greenfields sections must be delineated and class-specific mitigation measures drawn up before construction (link to EMPr's) 6.2.16.1(f): EMP must include measures to reduce soil erosion.	EMPr Clause 26: Erosion and sediment control; drainage works required; erosion prevention measures required; erosion method statement required. Aquatic EMPr: Sediment barriers required at crossings; temporary sediment traps downstream of excavations; no soil deposition into watercourses; stabilisation and revegetation of disturbed areas; stockpile erosion protection.	NEMA s28; NWA s19; potentially NWA s21(c) and s21(i)	High	Audit erosion controls at all active sites; install/upgrade stormwater diversion and sediment containment measures; rehabilitate affected watercourses and wetlands; assess whether sediment removal is required in severely impacted reaches.
CI-02	Extensive and unnecessary disturbance of watercourses and wetlands during crossing construction	Excavated and imported material stockpiled within or directly adjacent to watercourses and wetlands. Little or no erosion protection observed around stockpiles. Heavy machinery, including tracked excavators, observed operating through intact wetland areas beyond the apparent minimum construction footprint. Disturbance includes vegetation destruction, soil compaction, rutting, and channel/bank disturbance. Additional unnecessary vegetation clearing observed on steep slopes within seep wetlands.	6.1.1, Authorisation does not exempt SANRAL from compliance with other legislation. Relevant to NEMA/NWA breaches. 6.2.11.1: No construction camps, dumping or stockpiling of construction material allowed in or close to wetlands and watercourses. 6.2.11.2: Disturbed wetland areas must be re-vegetated using appropriate indigenous seed mix or wetland vegetation. 6.2.11.4: Wetlands in Greenfields sections must be delineated and class-specific mitigation measures drawn up before construction (link to EMPr's) 6.2.12.1: Vegetation disturbance must be restricted to the absolute minimum and rehabilitated as soon as possible.	EMPr Clause 20: No activities outside demarcated construction areas; wetland construction servitude must be minimised; no dumping or stockpiling in/near wetlands or watercourses. EMPr Clause 8: No materials stockpiled in wetlands. EMPr Clause 5: Stockpiles must be approved, demarcated, and erosion protected. EMPr Clause 2: Vegetation clearing must be minimised. EMPr Clause 10: Clearing for access roads requires written approval. EMPr Clause 3: Clearing requires approved method statement. Aquatic EMPr: Vehicles and stockpiles outside floodable areas; no spoil in inundation zones or stream channels; disturbance outside primary work area must be minimised; disturbance footprint must be physically marked.	NEMA s28; NWA s19; NWA s21(c); NWA s21(i)	High–Critical	Cease unnecessary disturbance immediately; remove spoil from watercourses and wetlands; verify construction footprint against approved drawings; rehabilitate disturbed wetlands; confirm approvals for vegetation clearing and access routes; strengthen ECO oversight.
CI-03	Potential unauthorised access road crossings through watercourses	GIS comparison between publicly available authorisations and observed road network indicates several smaller access roads crossing watercourses that do not correspond with known authorised crossing locations. However, assessment is limited by the possibility of additional approvals or amendments not available in the public domain.	6.1.1 Authorisation does not exempt SANRAL from compliance with other legislation. Relevant to NEMA/NWA breaches. 6.2.11.5: All necessary DWA/DWS measures must be implemented where watercourses are crossed.	Potential non-compliance with approved access/haul road footprints and watercourse crossing authorisations. EMPr Clause 10 relevant where new access roads require approval and should preferably remain within road reserve.	Potential NWA s21(c), s21(i), and s22; potentially NEMA s24F	High (potentially Critical)	Verify full authorisation set, including amendments and contractor approvals; audit all active access roads and crossing points; confirm whether each crossing is authorised under EA, WUL, or GA.

6. References

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- National Water Act 36 of 1998 (1998).
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7. Appendices

Appendix A: Photograph references with longitude and latitude information

Figure Reference	Latitude	Longitude	Direction (degrees)
Figure 4A	-31.1946416	29.9088527	233.6009999
Figure 4B	-31.1952222	29.9082611	221.3180000
Figure 4C	-31.2618305	29.8134755	213.9389999
Figure 4D	-31.2618305	29.8134755	353.7760000
Figure 5A	-31.2507722	29.8184416	225.0769999
Figure 5B	-31.2507722	29.8184416	359.3620000
Figure 5C	-31.1966888	29.8881584	330.5360000
Figure 5D	-31.2111916	29.8612833	89.9800000
Figure 6A	-31.2647583	29.8108083	284.5740000
Figure 6B	-31.2649138	29.8107277	113.6929999
Figure 6C	-31.2517111	29.8194777	241.4989999
Figure 6D	-31.2510333	29.8184916	259.5690000
Figure 7A	-31.2650027	29.8107666	226.8530000
Figure 7B	-31.2652694	29.8105361	349.2049999
Figure 9A	-31.2338277	29.8448166	2.4580100
Figure 9B	-31.2331638	29.8447222	91.9142999
Figure 13	-31.2084000	29.8672472	0.1984560