

DEPARTMENT OF WATER AND SANITATION

NO. 3139

10 March 2023


REVISION OF GENERAL AUTHORISATIONS IN TERMS OF SECTION 39 OF THE NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998) FOR WATER USES AS DEFINED IN SECTION 21(c) OR SECTION 21(i)

I, **Dr Sean Phillips**, in my capacity as Director-General of the Department of Water and Sanitation, and duly authorised hereby publish for public comments the revised General Authorisation for section 21(c) or section 21(i) water uses in terms of section 39 of the National Water Act, 1998 (Act No. 36 of 1998).

Members of the public are invited to submit written comments on the proposed notice to the Director General of, Water and Sanitation within sixty (60) days of publication of this notice in the following manner.

- (a) Post: Private Bag X313
PRETORIA
0001
- (b) E-mail: RoetsW@dws.gov.za

Comments must be marked for the attention of the Specialist Scientist: Water Abstraction and Instream Impact: Dr W Roets.


.....
DR SEAN PHILLIPS
DIRECTOR-GENERAL
DATE: *10/3/23*

SCHEDULE

IMPEDING OR DIVERTING THE FLOW OF WATER IN A WATERCOURSE

[Section 21(c)]

Or

ALTERING THE BED, BANKS, COURSE OR CHARACTERISTICS OF A WATERCOURSE

[Section 21(i)]

PURPOSE OF AUTHORISATION

1. This General Authorisation replaces the need for a water user to apply for a licence in terms of the National Water Act (NWA)(Act 36 of 1998) provided that the water use is within the limits and conditions of this General Authorisation.

DEFINITIONS

2. In this Notice any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned, with specific emphasis on the definitions for **'aquifer'**, **'borehole'**, **'estuary'**, **'instream habitat'**, **'person'**, **'pollution'**, **'resource quality'**, **'responsible authority'**, **'riparian habitat'**, **'waste'**, **'watercourse'**, **'water resource'**, and **'wetland'**, unless the context indicates otherwise.

"characteristics of a watercourse" means the resource quality of a watercourse within the extent of a watercourse;

"construction" means any works undertaken to initiate or establish impeding or diverting or modifying resource quality, including vegetation removal, site preparation and ground leveling;

"department" means the Department of Water and Sanitation (DWS);

"delineation of a wetland and riparian habitat" means delineation of wetlands and riparian habitat according to the methodology as contained in the Department of Water Affairs and Forestry, 2005 publication: A Practical Field Procedure for Delineation of Wetlands and Riparian Areas or amended version;

"diverting" means to, in any manner, cause the instream flow of water to be rerouted temporarily or permanently;

"emergency incident" means an unexpected, sudden and uncontrolled incident or accident in which a substance or activity:

- a) pollutes or has the potential to pollute a water resource, or
- b) has causes, or is likely to have, a detrimental effect on a water resource;

"emergency situation" means a situation that has arisen suddenly that poses an eminent and serious threat to the water resource, human life or property, including a disaster as defined in section 1 of the Disaster Management Act, 2002 (act No. 57 of 2002), but does not include an incident referred to in section 16 of this Act;

“extent of a watercourse” means:

- a) The outer edge of the 1 in 100 year flood line or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, lake or dam; and
- b) Wetlands and pans: the delineated boundary (outer temporary zone) of any wetland or pan

“flow-altering” means to, in any manner, alter the instream flow route, speed or quantity of water temporarily or permanently;

“hazardous” means as defined in the NEM:WA 58 of 2009;

“impeding” means to, in any manner, hinder or obstruct the instream flow of water temporarily or permanently;

“maintenance” means any works undertaken to repair or partially replace or clean an existing structure so as to keep it in working order and so as to prevent it from having detrimental impacts on a watercourse, which works may result in low risk (according to risk matrix) disturbance or impeding or diverting or alteration of the flow of water in a watercourse; but will not result in changes to the design or size of the structure that will alter the function of the structure, and/or the hydrological functionality or integrity of the watercourse;

“pans” any depression collecting water or that is inward draining or a flow through system with flow contributions from surface water, groundwater or interflow or combinations thereof;

“regulated area of a watercourse” means:

- a) The outer edge of the 1 in 100 year flood line or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, lake or dam; and
- b) In the absence of a determined 1 in 100 year flood line or riparian area as contemplated in (a) above the area within 100m distance from the edge of a watercourse where the edge of the watercourse (excluding flood plains) is the first identifiable annual bank fill flood bench (*subject to compliance to section 144 of the Act*);
- c) For a wetland: a 500 m radius around the delineated boundary (extent) of any wetland or pan;

“rehabilitation” means the process of reinstating natural ecological driving forces within part or the whole of a degraded watercourse to recover former or desired ecosystem structure, function, biotic composition and associated ecosystem services;

“reportable incident” means any incident, including leakages or spillages, at or near any existing structure, or that occurs during works performed at any structure, that cause or has the potential to have a detrimental effect on surface- and/or groundwater resources, including potentially harmful effects to humans, any aquatic biota, or the resource quality, or that can cause potential damage to property, as well as any incident that can lead to or cause any contravention of any of the provisions of this Notice.

“resource quality” of a watercourse means the quality of all the aspects of a water resource including -

- a) the quantity, pattern, timing, water level and assurance of instream flow;
- b) the water quality, including the physical, chemical and biological characteristics of the water;
- c) the character and condition of the instream and riparian habitat; and

d) the characteristics, condition and distribution of the aquatic biota;

“**responsible authority**” means the Regional Head (Chief Director) or Chief Executive Officer of the relevant Catchment Management Agency or as specified in the NWA;

“**river management plan**” means any river management plan or similar management plan developed for the purposes of river or storm water management or infrastructure management in any municipal/metropolitan area or described river section, river reach, entire river or sub quaternary catchment that considers the river in a catchment context and as approved by the Department;

“**the Act**” means the National Water Act, 1998 (Act No. 36 of 1998);

“**water user**” means any person who intends to use water in terms of section 21 (c) or (i) and has the responsibility to comply with the provisions of this Notice.

EXCLUSION TO THIS NOTICE

3. This Notice **does not apply**—

- (a) to the use of water in terms of section 21 (c) or (i) of the Act for the rehabilitation of a wetland as contemplated in General Authorisation 1198 published in Government Gazette 32805 dated 18 December 2009,
- (b) to the use of water in terms of section 21 (c) or (i) of the Act within the regulated area of a watercourse **where the Risk Class is Medium or High as determined by the Risk Matrix (Appendix A)**. This Risk Matrix must be completed by a suitably qualified SACNASP professional member;
- (c) in instances where an application must be made for a water use license for the authorisation of any water use as defined in section 21 of the Act that may be associated with a new activity;
- (d) where storage of water results due to the impeding or diverting of flow or altering the bed, banks, course or characteristics of a watercourse;
- (e) to any section 21 (c) or (i) water use associated with construction/installation or maintenance of main or bulk sewerage pipelines, pipelines carrying hazardous materials. ***Notwithstanding this requirement internal sewerage reticulation in residential developments including minor sewerage connections to main sewers are not excluded from this Notice provided that the flow in the pipelines are below the 120 l/s threshold;***
- (f) to any section 21 (c) or (i) water use associated with construction of water- and wastewater treatment works.
- (g) to any section 21 (c) or (i) water use associated with any hazardous material within the regulated area of a watercourse; and
- (h) to any section 21 (c) or (i) water use associated with mining activities and associated infrastructure unless it falls within appendix D2.

*Notwithstanding the abovementioned exclusions, **Emergency incidents or accidents** related to sewerage and hazardous material infrastructure or any of the abovementioned exclusions can be dealt with in terms of section 6 (vi) of this notice.*

Where the water use falls within paragraph 3 (b)-(h) a water use license will be required.

DURATION OF NOTICE

- 4. This Notice is valid from the date that this notice comes into effect for a period of 20 (twenty) years unless—
 - (a) it is replaced or amended by another general authorisation; or

- (b) the period is extended for a further period by Notice in the Gazette.

AREA OF APPLICABILITY OF NOTICE

5. This Notice applies throughout the Republic of South Africa to the use of water in terms of section 21 (c) or (i) within the regulated area of a watercourse as defined in this Notice.

To whom this Notice is applicable

Impeding or diverting the flow or altering the bed, banks, course or characteristics of a watercourse

6. (1) A person who –
- (a) owns or lawfully occupies property registered in the Deeds office as at the date of this Notice;
 - (b) lawfully occupies or uses land that is not registered or surveyed; or
 - (c) lawfully has access to land on which the use of water takes place;

May on that property or land –

- (i) exercise the section 21 (c) or (i) water use activities set out in Appendix D1 without being subject to the requirement of a Risk Matrix assessment in terms of this notice (**Appendix D1**);
- (ii) use water in terms of section 21(c) or (i) water uses if it has a LOW risk class as determined through the Risk Matrix (**Appendix A**). This Risk Matrix must be completed by a suitably qualified SACNASP professional member;
- (iii) do maintenance work associated with their section 21(c) or (i) Existing Lawful Use that has a LOW risk class as determined through the Risk Matrix (**Appendix A**),
- (iv) conduct rehabilitation of wetlands (read together with General Authorisation 1198 published in Government Gazette 32805 dated 18 December 2009) and/or rivers where such rehabilitation activities has a LOW risk class as determined through the Risk Matrix (**Appendix A**);
- (v) conduct river and storm water management activities including maintenance of infrastructure as contained in a river management plan or similar management plan (**Appendix B** contains minimum requirements for such a plan to be approved by the relevant regional office). Once approved by the regional operations these plans can be implemented in terms of this GA and be registered as such;
- (vi) conduct emergency work arising from an emergency situation and or incident associated with the persons' existing water use entitlement, provided that all work is executed and reported in the manner prescribed in the Emergency Protocol (**Appendix C**).

In the abovementioned instances referred to in section 6 (i), (v) and (vi) there is no requirement for compliance to the conditions of this notices other than section 8 -16 listed under section 7 of this notice.

- (2) All SOE's specified in **Appendix D2** having lawful access to that property or land may on that property use water in terms of section 21(c) or (i) as specified under each of the relevant institution without being subject to a Risk Matrix assessment and subject only to the conditions 8 - 16 listed under section 7 of this notice (**Appendix D2**).
- (3) A water user who used water in terms of General Authorisation 1 and 2 to the Schedules of Government Notice 398 published in Government Gazette 26187 dated 26 March 2004, General Authorisation 1199 published in Government Gazette 32805 dated 18 December 2009, and General Authorisation 509 published in Government Gazette 40229 dated 26 August 2016 may,

continue with such water use without the requirement of re-registering.

It is required that the following documents must be submitted as a minimum for the registration process:

- a) Master Layout plan indicating all proposed activities in relation to delineated watercourses
- b) Relevant registration forms
- c) Completed Risk Matrix (Appendix A of this Notice) signed off by suitably qualified SACNASP professional member
- d) Any applicable information to substantiated assessment

The following spread sheets and tools must be used during the Risk Assessment:

- 1 - A Practical Field Procedure for Delineation of Wetlands and Riparian Area (2005) which is available on the Department's website <http://www.dws.gov.za>, under section 21 (c) and (i) water use authorization.
- 2 - The Risk Matrix (Excel Spreadsheet) and information regarding the method used in the Risk Matrix is contained in the Department of Water and Sanitation 2015 publication: Section 21 c and l water use Risk Assessment Protocol, which is available on the Department's website <http://www.dws.gov.za>, under section 21 (c) and (i) water use authorization, or as amended from time to time.
- 3 - Guideline: Assessment of activities/developments affecting wetlands, which is available on the Department's website <http://www.dws.gov.za>, under section 21 (c) and (i) water use authorization.
- 4 - Guideline for the determination of buffer zones for rivers, wetlands and estuaries, which is available on the Department's website <http://www.dws.gov.za>, under section 21 (c) and (i) water use authorization.

CONDITIONS FOR IMPEDING OR DIVERTING THE FLOW OF WATER OR ALTERING THE BED, BANKS, COURSE OR CHARACTERISTICS OF A WATERCOURSE IN TERMS OF THIS NOTICE

7. (1) The water user must ensure that:
- (a) Impeding or diverting the flow and/or altering the bed, banks, course or characteristics of a watercourse do not detrimentally affect other water users, property, health and safety of the general public, or the resource quality.
 - (b) The water user must ensure that the existing hydraulic, hydrologic, geomorphic and ecological functions of the watercourse in the vicinity of the structure is maintained or improved upon.
 - (c) Upon written request of the responsible authority, the water user must implement any additional management measures and/or monitoring programmes that may be reasonably necessary to determine potential impacts on the water resource and/or management measures to address such impacts.
- (2) Prior to the carrying out of any works, the water user must ensure that all persons entering on-site, including contractors and casual labourers, are made fully aware of the conditions and related management measures specified in paragraph 7, 8 and 9 of this Notice.
- (3) The water user must ensure that –
- (a) any construction camp; any storage, washing and maintenance of equipment, and any storage of construction materials and/or chemicals; as well as any sanitation and waste management facilities ,
 - (i) is located outside the 1 in 100 year flood line or riparian habitat of a river, spring, lake or dam and or outside any drainage area feeding any delineated wetland or pan, and
 - (ii) must be removed within 30 days after the completion of any works.
 - (b) The water user must ensure that the selection of a site for establishing any impeding or diverting the flow or altering the bed, banks, course or characteristics of a watercourse works:
 - (i) is not located on a bend in the watercourse;
 - (ii) avoid high gradient areas, unstable slopes, actively eroding banks, interflow zones, springs, and seeps;
 - (iii) avoid and/or minimise realignment of the course of the watercourse;
 - (iv) minimise the footprint of the alteration, as well as the construction footprint so as to minimise the effect on the watercourse.

- (c) The water user must ensure that a maximum impact footprint around the works is established, clearly demarcated, that no vegetation is cleared or damaged beyond this demarcation, and that equipment and machinery is only operated within the delineated impact footprint.
- (d) The water user must ensure that measures are implemented to minimise the duration of disturbance and the footprint of the disturbance of the beds and banks of the watercourse.
- (e) The water user must ensure that measures are implemented to prevent the transfer of biota that is not indigenous to the environment at the site.
- (f) The water user must ensure that all works, including for emergency alterations and/or the rectification of incidents, start upstream and proceed in a downstream direction where feasible, to ensure minimal impact on the water resource.
- (g) The water user must ensure that all material excavated from the bed or banks of the watercourse are stored at a clearly demarcated location until the works have been completed, upon which the excavated material must be backfilled to the locations from where it was taken (i.e. material taken from the bed must be returned to the bed, and material taken from the banks must be returned to the banks).
- (h) The water user must ensure that adequate erosion control measures are implemented at and near all alterations, including at existing structures and/or activities, with particular attention to erosion control at steep slopes and drainage lines.
- (i) The water user must ensure that alterations and/or hardened surfaces associated with such structures and/or works –
 - (i) are structurally stable;
 - (ii) do not induce sedimentation, erosion or flooding;
 - (iii) do not cause a detrimental change in the quantity, velocity, pattern, timing, water level and assurance of flow in a watercourse;
 - (iv) do not cause a detrimental change in the quality of water in the watercourse;
 - (v) do not cause a detrimental change in the stability or geomorphological structure of the watercourse; and
 - (vi) do not create nuisance condition, or health or safety hazards.
- (j) The water user must ensure that measures are implemented at alterations, including at existing structures and/or activities, to –
 - (i) prevent detrimental changes to the breeding, nesting and/or feeding patterns of aquatic biota, including migratory species;
 - (ii) allow for the free up- and downstream movement of aquatic biota, including migratory species; and
 - (iii) prevent a decline in the composition and diversity of the indigenous and endemic aquatic biota.
- (k) The water user must ensure that no substance or material that can potentially cause pollution of the water resource is being used in works, including for emergency alterations and/or the rectification of reportable incidents.
- (l) The water user must ensure that measures including storm water measures are implemented to prevent increased turbidity, sedimentation and detrimental chemical changes to the composition of the water resource as a result of carrying out the works, including for emergency alterations and/or the rectification of reportable incidents.
- (m) During the carrying out of any works, the water user must take dated photographs before, during and after the completion of such works including for emergency structures and rectifications of reporting incidents.

REHABILITATION

8. (1) For rehabilitation as contemplated under paragraph 6(1)(iv); the rehabilitation must be conducted in terms of a rehabilitation plan and implementation of the plan must be overseen

- by a suitably qualified SACNASP professional member or SACLAP professional. This includes rehabilitation being done for emergency alterations and/or the rectification of reportable incidents.
- (2) For all other construction or maintenance activities upon completion of the construction activities related to the water use—
 - (a) systematic rehabilitation must be undertaken to restore the watercourse to its condition prior to the commencement of the water use;
 - (b) all disturbed areas must be re-vegetated with indigenous vegetation suitable to the area or according to a plant species plan;
 - (c) active alien invasive plant control measures must be implemented to prevent invasion by exotic and alien vegetation within the disturbed area; and
 - (d) *The Master Layout Plan as was used during the risk assessment must ensure "Design with nature" principles by excluding sensitive area, provide erosion protection, upkeep and maintenance of structures.*
 - (3) Following the completion of any works, or during any annual inspection to determine the need for maintenance at any impeding or diverting structure, the water user must ensure that all disturbed areas are –
 - (i) cleared of construction debris and other blockages;
 - (ii) cleared of alien invasive vegetation;
 - (iii) reshaped to free-draining and non-erosive contours, and
 - (iv) re-vegetated with indigenous and endemic vegetation suitable to the area.
 - (4) Upon completion of any works, the water user must ensure that the hydrological functionality and integrity of the watercourse, including its bed, banks, course (flow regime), riparian habitat and aquatic biota is equivalent to or exceeds that what existed before commencing with the works.

MONITORING AND REPORTING

9. (1) The water user must determine the in-stream baseline water quality for pH, EC, TDS, TSS, Turbidity, Temperature and Dissolved Oxygen ("DO") weekly for 1 month before commencement of the water use. This must include dated photographic records of all the sites. Thereafter in-stream water quality (same parameters) must be measured on a weekly basis during construction both upstream and downstream from the activities and continue until baseline values have been achieved. Baseline water quality levels and other resource quality characteristics must be reached and be maintained after construction and rehabilitation.
- (2) The water user must ensure the establishment and implementation of a monitoring program as required to measure the impacts on the resource quality as mentioned in 7(3)a-m.
- (3) Upon the written request of the responsible authority the water user must:
 - a. Ensure the establishment of any additional monitoring programmes or plan; and
 - b. Assess the water use measurements made in terms of this notice and submit the finding to the responsible authority for evaluation; and
 - c. Ensure environmental audits are conducted; and
 - d. Submit electronically as indicated under Record Keeping and Disclosure of Information under section 12 of this notice;
- (4) Upon completion of construction activities related to the water use, the water user must undertake an Environmental Audit by a suitably qualified person within 6 months of completion of the activities to ensure that the rehabilitation is stable. Should the Environmental Audit find that further remedial work is required to rectify any impacts it must be implemented.
- (5) Rehabilitation structures must be inspected monthly for the accumulation of debris, blockages, instabilities and erosion with concomitant remedial and maintenance actions until

it is stable.

- (6) Copies of all designs, method statements, rehabilitation and monitoring plans and any other relevant reports as considered in the Risk Matrix, must be made available to the responsible authority as per section 141 of the Act as per request under 9(3)(c).

BUDGETARY PROVISIONS

10. (1) The water user must ensure that there is a budget sufficient to complete, rehabilitate and maintain the water use as set out in this Notice.
- (2) The Department may at any stage of the process request proof of budgetary provisions.

REGISTRATION

11. (1) Subject to the provisions of this General Authorisation, a new water user must submit the relevant registration forms to the responsible authority.
- (2) **The responsible authority must provide confirmation of registration to the water user within 30 working days of the responsible authority being satisfied that the submission complies to all the requirements of this notice.**
- (3) On written receipt of a registration certificate/letter from the Department, the person will be regarded as a registered water user and can only then commence with the water use as contemplated in this Notice.

NOTE: Registration Forms can be obtained from DWS Regional Offices or Catchment Management Agency office of the Department or from the Departmental website: <http://www.dws.gov.za> and EWULAAs

RECORD-KEEPING AND DISCLOSURE OF INFORMATION

12. (1) Subject to paragraph 9(1) and 9(3) above, the water user must, for at least the first five years, keep a written record of monitoring results and any other supporting documents related to the activity and its related risks and must be made available upon inspection or written request.
- (2) Water users are further required to register on www.dws.gov.za/dir_ws/wsmenu and upload all documents applicable to the full project lifecycle including baseline water quality data and monthly monitoring data against baseline as required in terms of paragraph 9 on the departmental Integrated Regulatory Information System (see information box below).

NOTE: The water user shall register on the Integrated Regulatory Information System on <http://ws.dwa.gov.za/IRIS.aspx>

INSPECTION

13. Any property in respect of which a water use has been registered in terms of this Notice is subject to inspection as contemplated in sections 124 and 125 of the Act.

OFFENCES

14. A person who contravenes any provision of this authorisation is guilty of an offence as set out in section 151 (1) of the Act and is subject to the penalty set out in section 151(2) of the Act.

COMPLIANCE WITH THIS NOTICE, THE ACT, REGULATIONS UNDER THE ACT, AND OTHER LAWS

15. The responsibility for complying with the provisions of this authorisation is vested in the water user and not any other person or body.
16. This authorisation does not exempt a person who uses water from compliance with any provision of the Act unless stated otherwise in this Notice, or any other applicable law, regulation, ordinance or by-law.

APPENDIX A: RISK MATRIX (Based on DWS 2015 publication: Section 21 (c) and (i) water use Risk Assessment Protocol). To be completed by a suitably qualified SACNASP professional member. Risk is determined after considering all listed control/mitigation measures.

No.	Phases	Activity	Aspect	Impact	Severity						Severity
					Flow Regime	Physico & Chemical (Water Quality)	Geomorphology	Habitat	Biota		
1		Example: Clearing of vegetation in close proximity to or in a watercourse	Creating Access roads for infrastructure	Impact posed by damage to bank. Loss of biodiversity & habitat; impeding the flow of the watercourse							

Risk being posed to "resource quality" as defined in the Act must be scored according to the Risk Rating Table for Severity. A Severity score is then generated.

Severity	Spatial scale	Duration	Consequence	Frequency of activity	Frequency of impact	Detection	Likelihood	Significance	Risk Rating
									L

Consequence, Likelihood and finally Significance scores are automatically calculated with the rest of parameters according to respective Risk Rating Tables.

Risk Rating	Confidence level	Control Measures	PES AND EIS OF Watercourse
L			

RISK = CONSEQUENCE x LIKELIHOOD

CONSEQUENCE = SEVERITY + SPATIAL SCALE + DURATION LIKELIHOOD = FREQUENCY OF THE ACTIVITY + FREQUENCY OF THE IMPACT + DETECTION

ONLY LOW RISK ACTIVITIES located within the regulated area of the watercourse will qualify for a GA according to this Notice. Medium and High risk activities will require a Section 21 (c) and (i) water use licence.

RISK ASSESSMENT KEY (Based on DWS 2015 publication: Section 21 c and I water use Risk Assessment Protocol)

Negative Rating

TABLE 1- SEVERITY

Negative Rating

How severe does the aspects impact on the resource quality (flow regime, water quality, geomorphology, biota, habitat) ?

Insignificant / non-harmful	1
Small / potentially harmful	2
Significant / slightly harmful	3
Great / harmful	4
Disastrous / extremely harmful and/or wetland(s) involved	5
<p>Where "or wetland(s) are involved" it means that the activity is located within the delineated boundary of any wetland. The score of 5 is only compulsory for the severity rating NEGATIVE IMPACTS. However, notwithstanding this requirement, POSITIVE IMPACTS of activities that result in improvement of resource quality MUST be scored according to POSITIVE RATINGS below.</p>	

Positive Rating

How positive does the aspect impact on the resource quality in the long run?

Insignificant / uncertain positive	-1
Small / potentially positive	-2
Significant / slightly positive	-3
Great / positive	-4
Extremely positive / reinstating all functions	-5

TABLE 2 – SPATIAL SCALE

How big is the area that the aspect is impacting on?

Area specific (at impact site)	1
Whole site (entire surface right)	2
Regional / neighboring areas (downstream within quaternary catchment)	3
National (impacting beyond secondary catchment or provinces)	4
Global (impacting beyond SA boundary)	5

TABLE 3 – DURATION

How long does the aspect impact on the environment and resource quality?

One day to one month, PES, EIS and/or REC not impacted	1
One month to one year, PES, EIS and/or REC impacted but no change in status	2
One year to 10 years, PES, EIS and/or REC impacted to a lower status but can be improved over this period through mitigation	3
Life of the activity, PES, EIS and/or REC permanently lowered	4
More than life of the organisation/facility, PES and EIS scores, a E or F	5
PES and EIS (sensitivity) must be considered.	

TABLE 4 – FREQUENCY OF THE ACTIVITY

How often do you do the specific activity?

Annually or less	1
6 monthly	2
Monthly	3
Weekly	4
Daily	5

TABLE 5 – FREQUENCY OF THE INCIDENT/IMPACT

How often does the activity impact on the resource quality/environment?

Almost never / almost impossible / >20%	1
Very seldom / highly unlikely / >40%	2
Infrequent / unlikely / seldom / >60%	3
Often / regularly / likely / possible / >80%	4
Daily / highly likely / definitely / >100%	5

TABLE 6 – DETECTION

How quickly/easily can the impacts/risks of the activity be observed on the resource quality, people and property?

Immediately	1
Without much effort	2
Need some effort	3
Remote and difficult to observe	4
Covered	5

TABLE 7: RATING CLASSES

RATING	CLASS	MANAGEMENT DESCRIPTION
1 – 55	(L) Low Risk	Acceptable as is or consider requirement for mitigation. Impact to watercourses and resource quality small and easily mitigated.
56 – 169	(M) Moderate Risk	Risk and impact on watercourses are notably and require mitigation measures on a higher level, which costs more and require specialist input. Licence required.
170 – 300	(H) High Risk	Watercourse(s) impacts by the activity are such that they impose a long-term threat on a large scale and lowering of the Reserve. Licence required.

A low risk class must be obtained for all activities to be considered for a GA.

TABLE 8: CALCULATIONS

Consequence = Severity + Spatial Scale + Duration
Likelihood = Frequency of Activity + Frequency of Incident + Detection
Significance\Risk = Consequence X Likelihood

RISK ASSESSMENT MUST BE CONDUCTED BY A SUITABLY QUALIFIED SACNASP PROFESSIONAL MEMBER AND HE/SHE MUST:

- 1) **CONSIDER BOTH CONSTRUCTION AND OPERATIONAL PHASES OF PROPOSED ACTIVITIES;**
- 2) **CONSIDER RISKS TO RESOURCE QUALITY FOR BOTH PRE- AND POST MITIGATION LISTED IN TABLES PROVIDED;**
- 3) **CONSIDER THE SENSITIVITY (ECOLOGICAL IMPORTANCE AND SENSITIVITY – EIS) AND STATUS (PRESENT ECOLOGICAL STATUS - PES) OF THE WATERCOURSE AS RECEPTOR OF RISKS POSED;**
- 4) **CONSIDER POSITIVE IMPACTS/RISKS REDUCTION AS A VERY LOW RISK IN THIS ASSESSMENT;**
- 5) **INDICATE CONFIDENCE LEVEL OF SCORES PROVIDED IN THE LAST COLUMN AS A PERCENTAGE FROM 0 - 100%;**
- 6) **NAME AND REGISTRATION NUMBER OF SACNASP PROFESSIONAL MEMBER MUST BE PROVIDED ON EXCELL SPREADSHEET AND MUST BE SUBMITTED WITH REGISTRATION DOCUMENTATION.**

ON THE EXCELL SPREADSHEET POP-UP COMMENTS ARE AVAILABLE FOR ALL COLUMNS IN THE HEADINGS WHICH EXPLAINS THE PURPOSE OF EACH COLUMN!

APPENDIX B: Aspects that must be addressed in any RIVER MANAGEMENT PLAN or Similar Management Plan as specified under paragraph 6 (1) (v) of this Notice. (There is no requirement to comply with all the conditions of this notice for activities executed in terms of this plan except for section 8-16 which must be complied with).

River Management Plans for storm water and river management activities and maintenance management plans MUST:

Contain information on all the river and storm water management activities in terms of section 21(c) or (i) water uses of the Act with a section addressing all relevant supporting technical information used to ensure a LOW risk will be posed to the resource quality of the watercourses and that this management plan have been submitted to the relevant regional operations or Catchment Management Agency (CMA) office for APPROVAL. The report must include, but may not be limited to:

When developing a River Management Plan:

1. Identify River Management Plan domain, preferably from a whole-catchment perspective;
2. Identify an accountable, representative body that should take unbiased custodianship of the RMP and drive its implementation;
3. Identify key stakeholders;
4. Divide the river into useful management units;
5. Identify major drivers of river disturbance and instability – human and natural, and their primary and secondary effects;
6. Solicit input from stakeholders on their priorities and objectives;
7. Define best practice measures for rehabilitation and maintenance implementation;
8. Design a plan for ecological monitoring which is specifically linked to the stated objectives; and
9. Develop an implementation programme and review mechanism.

Report should contain supporting technical information used to ensure the low risk to resource quality like:

- a) Impact assessment and mitigation report completed by an independent consultant as required by NEMA EIA regulations and NWA section 21 and water use authorisation regulations;
- b) All the relevant specialist reports supporting the proposed mitigation measures;
 - Specialists Reports must address the level of modification/risk posed to resource quality ie: flow regime, water quality, geomorphological processes, habitat and biota of the watercourses and contain Present Ecological state (PES) and Ecological Importance and Sensitivity (EIS) data for relevant watercourses;
- c) Environmental management plan giving effect to all actions required to mitigate impacts (What, When, Who, Where and How);
- d) Best practices applicable to these activities, where applicable;

- e) Generic designs and method statements, where applicable;
- f) Norms and standards, where available;
- g) Maintenance plan for any work done;
- h) Monitoring programme that must include “present day” conditions to be used as base line values;
- i) Monitoring, auditing and reporting programme (reports must be send on request to the region or CMA); and;
- j) Internalized controls and auditing, where applicable.

PLEASE NOTE: Any activities outside the scope of the approved plan that is required for river – or storm water management (example: building of new gabion structures to stop bank erosion) must comply to all the provisions in **paragraph 6** of this notice.

APPENDIX C: EMERGENCY PROTOCOL as specified under paragraph 6 (1) (vi) of this Notice. (There is no requirement to comply to all the conditions of this notice for activities executed in terms of this plan except for section 11-16 which must be complied to).

Purpose of the “Emergency Protocol”

The purpose of this protocol is to set out the process to be followed and actions to be taken by any person to provide assurance to the DWS in ensuring emergency incidents and situations can be responded to, while at the same time ensuring compliance to the requirements of the National Water Act. Failure to comply to these requirements will be dealt with in terms of section 19 or 20 of the National Water Act (NWA)(Act 36 of 1998).

The agreement relates to situations where any person or entity is required to immediately respond by taking necessary action to an emergency situation or incident. It is noted that this does not include routine or planned maintenance or to deal with poor project planning.

Emergency Protocol:

This “Emergency Protocol” spells out what protocol needs to be followed to remedy “emergency situations and incidents”. In terms of Section 67 of the National Water Act” *Dispensing with certain requirements of Act*” the NWA states the following:

(1) In an emergency situation, or in cases of extreme urgency involving the safety of humans or property or the protection of a water resource or the environment, the Minister may

(a) dispense with the requirements of this Act relating to prior publication or to obtaining and considering public comment before any instrument contemplated in section 158(1) is made or issued;

(b) dispense with notice periods or time limits required by or under this Act;

(c) authorise a water management institution to dispense with

(i) the requirements of this Act relating to prior publication or to obtaining and considering public comment before any instrument is made or issued; and

(ii) notice periods or time limits required by or under this Act.

(2) Anything done under subsection (1)

(a) must be withdrawn or repealed within a maximum period of two years after the emergency situation or the urgency ceases to exist; and

(b) must be mentioned in the Minister's annual report to Parliament.”

(3) *An incident is an event that requires immediate attention that might lead to potential disruption of service delivery.*

Examples include the following:

Replacement of stolen or vandalised or damaged underground cables or, overhead power lines, burst pipelines, flooded or damaged bridges and /or related infrastructure, the replacement of/ or repairs to damaged infrastructure.

Described below is the process to be followed and definitions.

Process to respond to an Emergency that has a water use implication in terms of section 21 water uses of the NWA. Upon successful completion of the project in compliance with the protocol described below the region can register the General Authorisation in terms of this Notice.

Definitions:

Emergency incident and situations as defined in this notice read together with section 20 and 67 of the NWA.

PROTOCOL TO BE FOLLOWED:

Any person that must attend to an emergency must notify the regional office or CMA about the emergency immediately within 24 hours (as in 1 below). Continuous liaison with the regional office or CMA must be done to keep them informed. All required documents related to planned activities must be submitted to the region/CMA within 14 days of the Emergency. A final report on all executed activities to deal with the emergency must be provided to the relevant region/CMA within 3 month after the date of the emergency occurring and must be drafted in accordance with the specified protocol in this document. Should the incident take place over a weekend or public holiday (outside DWS working hours), the reporting can be forwarded to DWS/CMA and receipt be followed-up on the day after the weekend or holiday.

- 1) **Relevant DWS regional office to be notified about the** emergency incident or situation (hereafter referred to as an Emergency) by means of an email and or 24 hour hotline of DWS. The document emailed must as a minimum contain the following information:
 - a. Date of occurrence of the emergency;
 - b. Date at which any person became aware of the emergency;
 - c. Nature of emergency;
 - d. A motivation and definition of the emergency;
 - e. Description, location and receiving environment sensitivity of the emergency;
 - f. Description of short, medium and long term actions, environmental management and rehabilitation, and emergency plan required to be taken to respond to the emergency;
 - g. Date(s) when the actions will be taken (or have taken place);
 - h. Contract details of responsible persons.

- 2) The following is a list of the required information that must be submitted to the relevant CMA or regional office of DWS within 3 months following the Emergency response to enable the regional office or CMA to determine whether the activities qualifies for a GA in terms of this Notice or whether a *post facto* licence will be required.

Tabulated list of information required to be submitted within a maximum of 3 month after the occurrence of the "Emergency":

<p>Table of Contents</p> <p>List of Appendices</p> <p>List of Maps</p> <p>List of Tables</p> <p>1. DESCRIPTION OF Emergency situation, location, date, etc.</p> <p>1.1. Motivation that situation was an emergency</p> <p>2. EMERGENCY RESPONSE PROGRAMME</p> <p>3. METHODOLOGY FOLLOWED</p> <p>4. ENVIRONMENTAL MANAGEMENT STRATEGY</p> <p>4.1 Description of risks to resource quality and mitigation measures implemented to reduce risks (This report must be based on the Risk Matrix to be completed by SACNASP registered Professional).</p> <p>4.2. Environmental Impact Management + rehabilitation plan (what, where, when, who, how)</p> <p>4.3. Monitoring and Review Strategy</p> <p>5. RESPONSIBILITIES AND PRESCRIBED OCCUPATIONS</p> <p>6. DECLARATIONS</p> <p>6.1. Design Engineer</p> <p>6.2. Site Manager</p> <p>6.3. Environmental Practitioner / Environmental Control Officer (contact person)</p> <p>List of Appendices</p> <p>APPENDIX A: Design/CONSTRUCTION DRAWINGS</p> <p>APPENDIX B: ENVIRONMENTAL MANAGEMENT PLAN</p> <p>List of Maps</p> <p>Map 1: Site location</p> <p>Map 2: Location of watercourses affected</p> <p>Map 3: Master Layout Plan</p> <p>List of Tables</p> <p>Table 1: Schedule of Crossings</p> <p>Table 2: Programme (Start and Completion dates)</p> <p>Table 3: Risk Rating Matric (Impacts and Significance Ratings)</p> <p>Table 4: Mitigation Measures</p> <p>Table 5: Rehabilitation Measures including Plant Species Plan where necessary</p> <p>Table 4: Stormwater Management Plan</p>
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Table 6: Monitoring and Review Measures

Compliance to this Emergency Protocol does not absolve any person from complying with the requirements of any other laws and associated regulations.

APPENDIX D1: Activities listed that are generally authorized for any person subject only to compliance to conditions 8-16 of this Notice. (No requirement for a Risk Matrix Assessment)

Any person	ACTIVITY
Farmers and any other land owners	Emergency river crossings for vehicles to gain access to livestock, crops or residences etc.
Any landowner	Construction of a single residential house and associated infrastructure (including sewer connections below 120l/s, conservancy tanks or French drains provided the sewerage disposal infrastructure is at least 100 m from any watercourse)
Any landowner	Maintenance to private roads and river crossings provided that footprint remains the same and the road is less than 4 m wide.
Any landowner	Erection of fences provided that the fence will not in any way impede or divert flow, or affect resource quality detrimentally in the short, medium to long term.
Any person	Construction of Renewable Energy Projects Solar and Wind with a generating capacity of 100mW or below that: Will not result in any direct destruction of any watercourses and where the sewerage infrastructure are located outside the regulated area of a watercourse. <i>Where there will be any direct impacts/destruction of any watercourses the entire project must be subjected to a comprehensive Risk Matrix Assessment to determine the appropriate entitlement for the project.</i>
Any person	Mini-scale hydropower developments with a maximum capacity of 10kW – 300kW. <i>(Read together with General notice 665 of 6 Sept 2013 General Authorisation section 21 (e) or as amended)</i> These hydropower plants will provide basic, non-grid electricity to rural communities and agricultural land and must in no way affect the flow regime, flow volume and/or water quality including temperature.

APPENDIX D2: Activities listed that are generally authorized for institutions subject only to compliance to conditions 8-16 of this Notice. (No requirement for a Risk Matrix Assessment)

INSTITUTION	ACTIVITIES
ESKOM	Construction of new overhead transmission and distribution power lines outside the active channel of a river and/or outside the extent of a wetland, and minor maintenance of roads, river crossings, towers and substations where footprint will remain the same. The maintenance or replacement of existing overhead and underground cables where it is done in terms of the Emergency Protocol. However, New underground cables and underground and overhead cables within the extent of a wetland must be subjected to the Risk Matrix and are therefore excluded from this appendix.
SANPARKS and provincial conservation agencies	Construction and maintenance of all pipe lines (including sewerage) below 500 mm in diameter.
SANRAL	All maintenance of bridges over rivers, streams and wetlands and construction of bridges over non-perennial rivers done according to SANRAL Drainage Manual or similar norms and standards. <i>For these linear projects where any other part of the project constitute a section 21 (c) or (i) water use the Risk Matrix must be applied and could result in the entire project being authorised under one authorisation, either a GA or a WUL if "risks" are moderate or high, and are therefore excluded from this appendix.</i>
TRANSNET	All 1.5 meter diameter and smaller pipe lines (<i>except pipelines excluded in terms of this Notice - paragraph 3 (e)</i>) and maintenance of railway line crossings of rivers and wetlands outside the extent of a wetland which includes bridges, culverts and access roads as well as minor maintenance of bridges, culverts, access roads and pump stations where the footprint will remain the same. <i>For these linear projects where any other part of the linear project constitute a section 21 (c) or (i) water use the Risk Matrix must be applied and could result in the entire project being authorised under one authorisation, either a GA or a WUL if "risks" are moderate or high, and are therefore excluded from this appendix.</i>
Gautrain Management Agency	Maintenance of existing infrastructure and expansion to crossings of non-perennial rivers within the existing servitude. Bridges crossing any other watercourses must be subjected to a risk matrix to determine the appropriate entitlement. <i>For these linear projects where any other part of the project constitute a section 21 (c) or (i) water use the Risk Matrix must be applied and could result in the entire project being authorised under one authorisation, either a GA or a WUL if "risks" are moderate or high, and are therefore excluded from this appendix.</i>
TELKOM and all other communication companies	Installation of all cables where watercourses are crossed by Horizontal Directional Drilling or pipe jacking and/or conventional installation (trenching) of cables crossing rivers or passing through the regulated area of a wetland or pan but outside the extent of the wetland or pan. <i>However, conventional installation of cables through the extent of a wetland or pan must be subjected to the Risk Matrix and are excluded from this appendix.</i>
Rand water	All maintenance of existing water pipe lines and construction of new water pipe lines 1.5 meter diameter and smaller crossing non-perennial rivers and wetlands outside delineated wetland boundary or extent. <i>Pipelines crossing any other watercourses (within the extent/boundary of wetlands or pan) must be subjected to the Risk Matrix and could result in the entire project being authorised under one authorisation, either a GA or a WUL if "risks" are moderate or high, and are therefore excluded from this appendix.</i>

Lessee of state land around government waterworks (state dams)	Construction or maintenance of floating jetties (temporary and permanent) and slipways. <i>Constructed jetties other than floating are excluded from this appendix and must be subjected to the Risk Matrix.</i>
Control of alien invasive species or control of indigenous species encroachment	1) When the control will be executed, monitored and reported in terms of a control plan as approved by the relevant regional office or CMA. 2) Release of approved biological control agents for alien invasive aquatic weeds.

IMPORTANT NOTICE: Where infrastructure will be located inside the boundary of any wetland or pan it means that it cannot qualify for this Notice according to Appendix D2 but can still potentially qualify should the Risk Matrix indicate such.