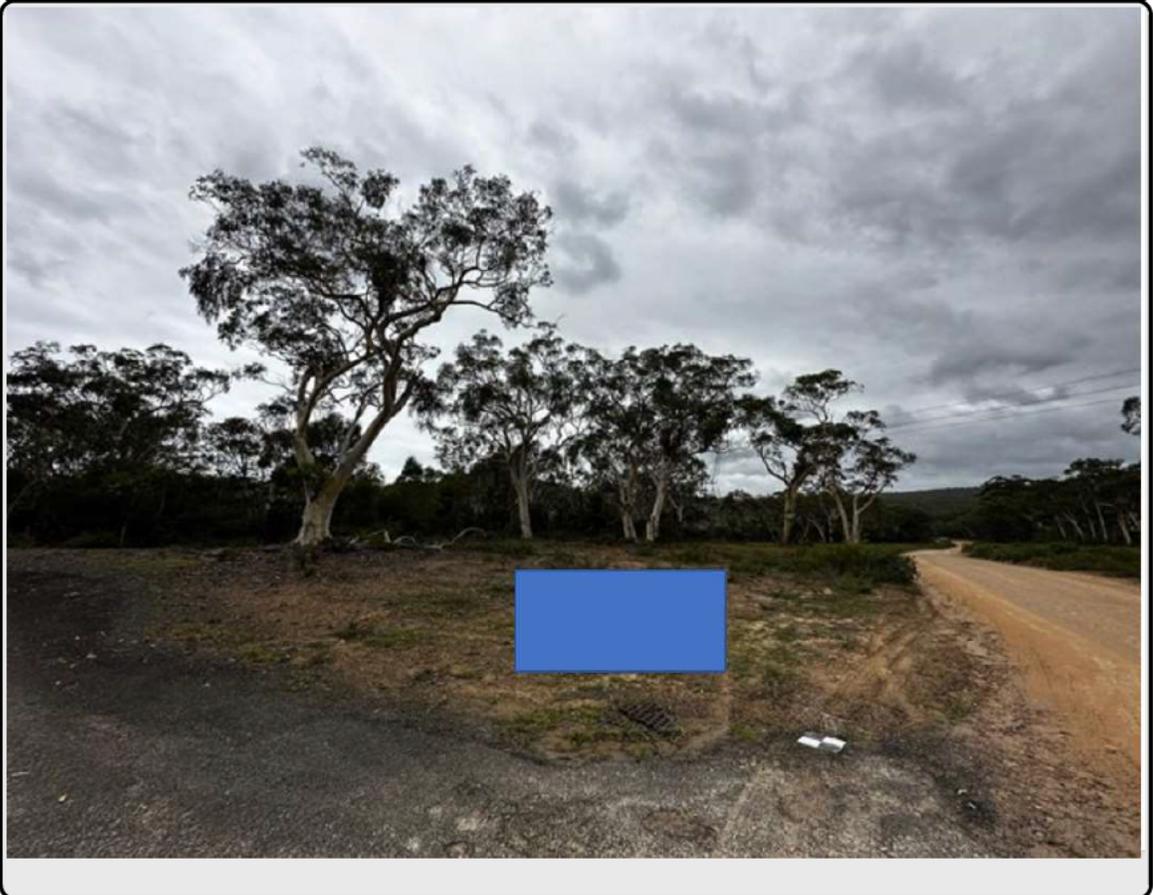
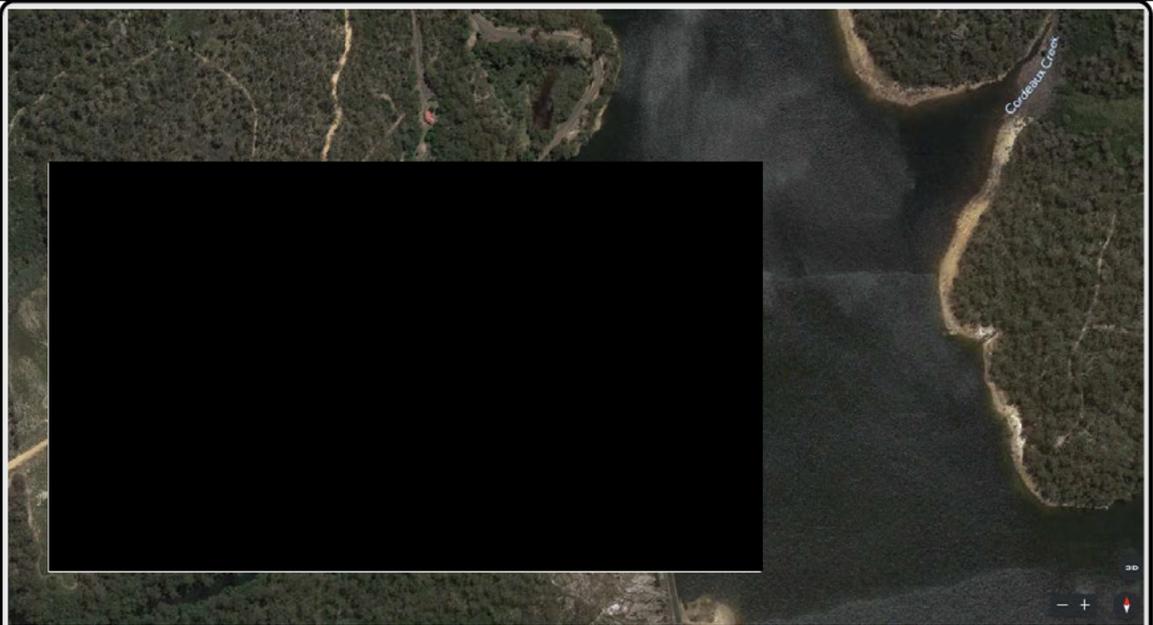


Minor Works Environmental Impact Assessment (EIA) /Minor Works Review of Environmental Factors(REF) Form

This EIA form is used by WaterNSW to assess and approve minor works that are either *Development Without Consent* or *Exempt Development*. It records & assesses activities or project works where environmental impacts are minimal or not likely to significantly affect the environment.
If you are unsure how to answer anything in this Form, please contact the Environmental Services Team for assistance and advice.

SECTION 1 PROJECT SCOPE

	QUESTIONS	ANSWERS	GUIDANCE
1.1	Organisation/Business Unit/Team	WaterNSW / Asset Delivery	
1.2	WaterNSW representative and contact details	[REDACTED]	
1.3	Has a site inspection been undertaken? If so by whom and when?	Yes, on 21st February with Contractor, subcontractors and WaterNSW project team.	<i>It is recommended the person undertaking site inspection should also complete this Form.</i>
1.4	ARK Reference – Project Folder/Work Folder	F2020/2049	<i>Save your work to ARK and include the ARK numbers here. Provide project/works folder for background information</i>
1.5	Project Number/Budget Code	[REDACTED]	<i>Environmental Services time taken to process this request will be assigned to the project. ①</i>
1.6	Project or Works Value	The installation and commissioning cost is around \$100,000.	
1.7	Project or Works Title	UN Dams Instrumentation Project (Cordeaux Dam Works)	<i>Include the full name for the project or work you propose undertaking.</i>
1.8	Scope of Works: What is to be undertaken and how?	<ol style="list-style-type: none"> 1. Replace existing V-Notch Weirs VG6, VG7 and VGALL including cabling. VG6 will require 150 mm deep x 300 mm long minor concrete cutting into the dam wall. 2. Install tiltmeters VD854, VF864, VG865, VB954, VD954, VF954, VH954, VJ954, V954 and VM954 including cabling. 3. Install PC1, PC2, PC3, PC4, PD1, PD2, PD3, PD4, PE1, PE2, PE3, PE4, PF1, PF2, PG1 and PG2 including cabling. 4. Install four strong motion sensors at dam crest, dam abutment (free standing), dam toe and free field (free standing) in dam downstream including cabling. 5. Install a data logger outside the top gallery northern entrance door. 6. Install four new pan tilt zoom (PTZ) CCTV cameras at the dam wall and downstream of the dam wall. 	<i>Clearly outline the full scope of work and activities, including equipment type, size, quantity; sequence and tasks involved including site establishment, stockpiles; temporary structures such as site sheds; any block banks and de-watering.</i>
1.9	Proposed Start Date and Expected Duration of works	The works will take approximately 8 weeks between June 2023 - August 2023.	
1.10	Planned Site Work Hours	Standard Hours Monday - Friday 7am-6pm and if necessary Sat 8am-1pm.	<i>Identify the planned site work hours. Standard Hours are : Mon-Fri 7am-6pm, Sat 8am-1pm, No work Sunday or Public Holidays. Non-standard hours may require additional noise assessments to be prepared</i>
1.11	One-off Project or Routine work	<input checked="" type="radio"/> One Off <input type="radio"/> Routine	
1.11.2	Options considered & justification for selecting the preferred option.	Option 1 - not installing new and replacement instruments. Option 2 - Installing and replacing instruments to monitor dam Preferred is option 2 as these instruments are the only way to obtain real-time, accurate and reliable data for a high risk dam.	<i>Describe all options that were considered and why the preferred option was selected.</i>
1.12	Location	Cordeaux Dam and downstream including the Dam Crest, Crest House and Galleries.	<i>Identify the location of the project or work (e.g. which asset). Be sure to include the access roads / route</i>
1.13	Site Plan / Photos / Aerial Photo: Add Figures or ARK reference to figures	Locations provided below with additional photos provided in Heritage Support Statement (D2022/75970). Second figure is showing the location of the isolated (solar) sensor.	
		<input type="button" value="Add Figure or Photo"/> <input type="button" value="Remove Figure or Photo"/>	



1.14	Is the land and/or asset owned by WaterNSW?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Site ownership details can be found at; Vested orders (DOC11/8076) Land Titles Office NULA ⓘ
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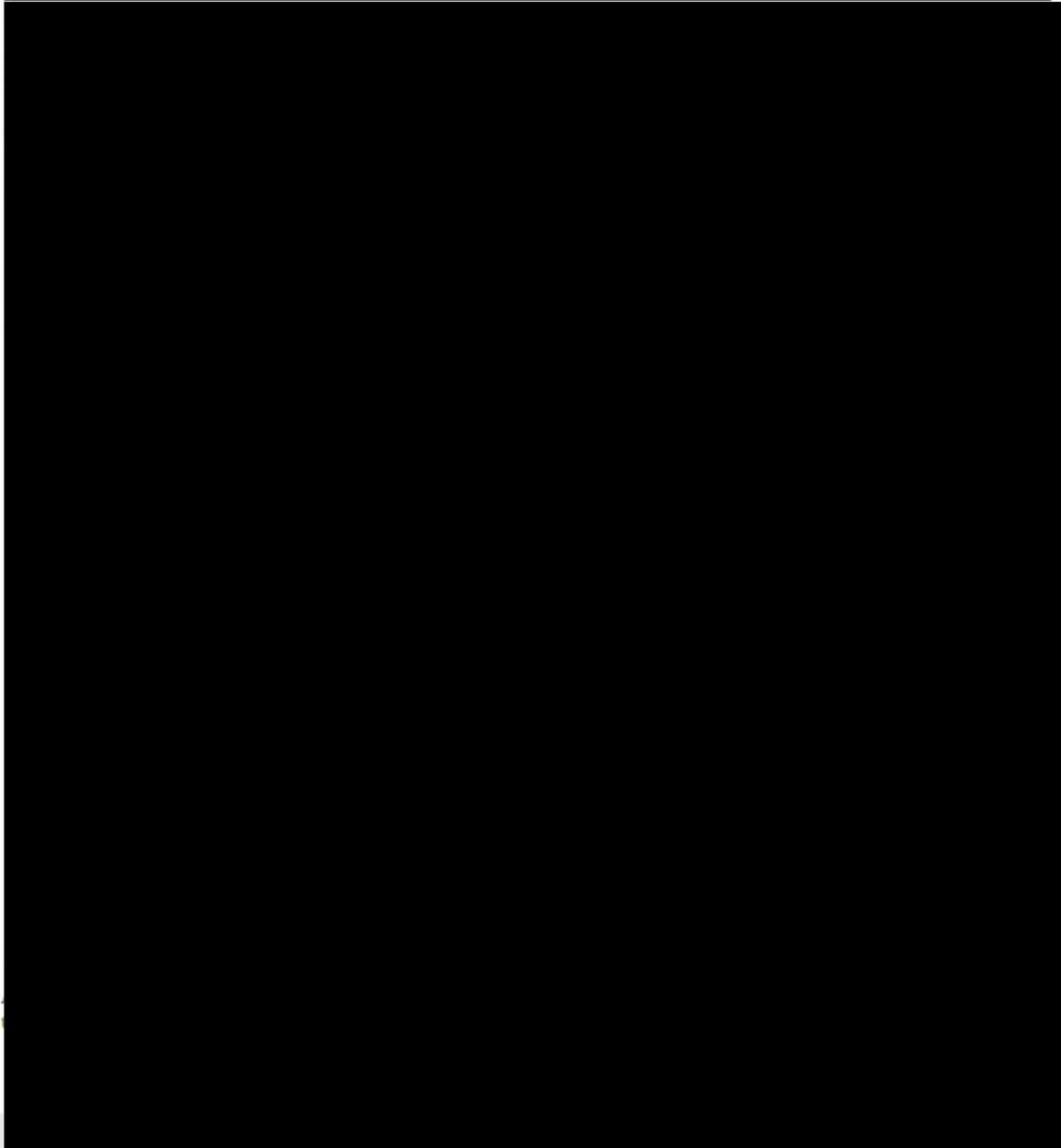
1.14.1	Provide evidence of ownership and detail what the land is used for	WaterNSW owns and operates the dam. Ownership identified in NULA.	Provide details of landuse e.g operational area, Special Area, Controlled Area, recreational area, agricultural area etc ⓘ http://www.watnsw.com.au/supply/Greater-Sydney/system NULA
1.15	Lot and DP	Lot14 DP1233164	Find a property using NULA, or the NSW Planning Portal
1.16	What is the Local Government Area (LGA)?	Wollondilly Shire Council	Use: 1. LPI SIX Maps or 2. NSW Planning Portal or 3. NULA
1.17	What is the zoning of the site?	SP2 - Infrastructure - Water Supply System (Wollondilly LEP 2011)	Provide details of the zoning from the relevant Local Environmental Plan(s) ⓘ
1.18	Will the project or work be within the Sydney Drinking Water Catchment and/or a Special Area / Controlled Area?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Check NULA to identify if the project or work is within the Sydney Drinking Water Catchment. For more information on undertaking a Neutral or Beneficial Effect Assessment refer to CD2016/89*
1.18.1	Are there any identifiable potential impacts on water quality?	<input type="radio"/> Yes <input checked="" type="radio"/> No	Potential pollutants are sediments (fine & coarse), nitrogen, phosphorus, pathogens and hazardous chemicals and contaminants such as oil/fuel.
1.18.5	Is it likely that a neutral or beneficial effect on water quality will occur? Why?	Neutral effect as the works do not require excavation.	
SPECIAL AND CONTROLLED AREAS			
Select the appropriate safeguards to manage the impacts			
SP1	Special & Controlled Areas	All activities or work undertaken in Water NSW Special / Controlled Areas shall be carried out in a manner that will prevent or minimise impacts on water quality, environmental damage and fire.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SP2	Special & Controlled Areas	Standard access requirements of Water NSW catchment lands shall be observed. This includes restricted access to the catchment after periods of significant rainfall (typically 10mm in a 24 hour period).	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SP3	Special & Controlled Areas	All gates and barriers shall be closed and locked at all times to prevent unauthorised access to the Special/Controlled Area	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SP4	Special & Controlled Areas	Any suspected unauthorised access to the area shall be reported to the WaterNSW Incident Number 1800 061 069 (24/7 Service)	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SP5	Special & Controlled Areas	All incidents, spills or fire sightings that occur in the WaterNSW Special / Controlled Area shall be immediately reported to the WaterNSW Incident Number 1800 061 069 (24/7 Service)	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SP6	Special & Controlled Areas	Works shall not be undertaken and vehicles shall not travel on unsealed roads in the Water NSW Special / Controlled Areas when road surfaces are saturated, water is flowing down table drains or the catchment has been closed by Water NSW.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SP7	Special & Controlled Areas	Portable fuel trailers shall be taken off catchment at the end of each working week.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SP8	Special & Controlled Areas	Any imported fill material shall be restricted to 'Virgin excavated natural material' (eg clay, gravel, sand soil and rock) that is not mixed with any other waste. Coal waste materials shall not be used in the construction or maintenance of trails.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SP9	Special & Controlled Areas	New gravel or borrow pits shall not be established within the Special Areas.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SP10	Special & Controlled Areas	In the event Water NSW fire roads are damaged as a result of the works, they shall be repaired as soon as practicable.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SP11	Special & Controlled Areas	All equipment transported to the site shall be thoroughly washed down, including underneath tractors and slashers, to remove mud, dirt and vegetative materials, prior to entering the Water NSW Special / Controlled Areas.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
1.19	Does the project or work require any vegetation to be cleared?	<input type="radio"/> Yes <input checked="" type="radio"/> No	Clearing means any one or more of the following: (a) cutting down, felling, thinning, logging or removing vegetation, (b) killing, destroying, poisoning, ringbarking, uprooting or burning native vegetation.
1.20	Is the project or work located on, in or adjacent to (within 40m) of a "water land" or waterway?	<input checked="" type="radio"/> Yes <input type="radio"/> No	'water land' means land submerged by water: (a) whether permanently or intermittently, or (b) whether forming an artificial or natural body of water, and includes wetlands and any other land prescribed by the

			regulations as water land to which this Division applies 
1.20.1	Provide details	Most of the work is on the dam crest and downstream of the dam wall. Location for the isolated sensor is over 200 metres from the Cordeaux River.	Details to be included; name of waterway / waterbody, the proximity of works to the waterway / waterbody
1.21	Is the project or work likely to result in any soil disturbance?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
1.22	Will the project or work require the stockpiling of any materials?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
SOIL AND WATER			
Select the appropriate safeguards to manage the impacts			
SW1	Soil and Water	All works shall be undertaken in a manner that will minimise site disturbance and avoids or minimises erosion and sedimentation.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SW2	Soil and Water	All areas disturbed during the works shall be protected by installing appropriate erosion and sedimentation control measures so that sediment-laden runoff does not enter any drainage line or wetland. Measures may include: <ul style="list-style-type: none"> o diverting any potential upslope runoff and stormwater away from the site; o installing temporary erosion control devices (eg sediment fencing, sand bags, sediment basins); o temporary surface protection (eg surface mulching, geotextile/erosion control matting). 	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SW3	Soil and Water	All erosion and sediment control measures shall be checked and maintained on a regular basis so that they work effectively at all times, including removing trapped sediment before or when 30% capacity is reached. Control measures shall not be removed before the ground surface is stabilised.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SW4	Soil and Water	A maintenance checklist shall be prepared for sites. Records shall be kept of all checks and maintenance and shall be provided to Water NSW on request. As a minimum this shall include a regular check of: <ul style="list-style-type: none"> o sediment fencing/bunding o any sign of erosion of the site or material o any impact on adjacent vegetation (material shall be kept outside the dripline of any tree) o the safe storage of any chemicals, fuels or lubricants o the height, gradient and stability of any stockpile (<2m high and 2:1 slope) 	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SW5	Soil and Water	Chemicals, fuels and lubricants shall be securely stored in approved containers and spill containment material shall be kept on site ready for immediate use. Bund capacity is to be at least 110 % of the largest container & 25% of the total stored volume	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SW6	Soil and Water	No chemicals, fuels and lubricants shall be stored overnight on site unless specifically approved by Water NSW. If approved, these materials shall be stored with bunding within an established site compound, on a level area clear of native vegetation and at least 40m from any natural or built drainage line or wetland.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SW7	Soil and Water	Plant and equipment shall not be refuelled within 20m of any natural or built drainage line or wetland. During any refuelling, spill containment material shall be on hand ready for immediate use.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SW8	Soil and Water	Weather forecasts shall be regularly checked so that expected storm events can be taken into account in project planning and erosion and sediment management.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SW9	Soil and Water	Temporary compounds and stockpiles shall be located: <ul style="list-style-type: none"> o at least 40m from natural or built drainage lines or wetland; o on areas previously disturbed and that do not require the clearing of native vegetation; o on level, hard ground wherever possible, and shall not be located on slopes steeper than 1(V):10(H); o beyond tree drip lines; o where there is no risk of impact on any indigenous or non-indigenous heritage site. 	<input checked="" type="radio"/> Yes <input type="radio"/> N/A

SW10	Soil and Water	Topsoil shall be stockpiled separately from general spoil and reused wherever possible.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SW11	Soil and Water	Concrete shall not be mixed within 20m of any natural or built drainage line or wetland. All concrete waste and any concrete washout shall be contained and removed for disposal off site at a lawful facility. Washout of trucks on site shall be minimised wherever possible.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
SW12	Soil and Water	Waste water generated during works shall be captured and: - tested and treated before release back into the environment ensuring all water quality criteria are met; - disposed offsite at a lawful receiving facility; - sediment laden waters can be discharged in a manner that prevents sediments entering natural or built drainage lines or wetlands.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SW13	Soil and Water	Silt booms shall be installed in the stream or water body around the work site, or immediately downstream. The silt booms shall be appropriately anchored to maximise the capture of any sediment laden water.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
SW14	Soil and Water	Any mixing of paints is to be carried out over a waterproof membrane of at least 4 square metres in area. The contractor is to take all reasonable steps to prevent spillage of paint.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
1.23	Will the project or work result in the generation of any waste materials?	<input checked="" type="radio"/> Yes <input type="radio"/> No	<i>This may include spoil, concrete, building materials, vegetation, wastewater, oil and grease. Will portable toilets be needed at the site?</i>
1.23.1	Provide details of the nature, amount of waste likely to be generated and proposed disposal	Packaging from new equipment, etc should be disposed of appropriately - recycled eg cardboard boxes or disposed as garbage. General rubbish from personnel to be removed from site daily.	Refer to Waste Classification Guidelines for classifying waste If the project or work involves the use and disposal of, or exposure to, contaminated/hazardous materials, dangerous goods or controlled chemicals, approval may be required from SafeWork NSW or EPA
WASTE			
Select the appropriate safeguards to manage the impacts			
W1	Waste	All working areas shall be maintained, kept free of rubbish and cleaned up at the end of each working day. Equipment and materials shall be securely stored.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
W2	Waste	If the contractor is working at the same location for more than one day, self-contained portable ablution and toilet facilities shall be provided, unless otherwise specifically negotiated with Water NSW. These facilities shall be located at least 20m from any natural or built drainage line or wetland.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
W3	Waste	The contractor shall be appropriately licensed to remove and dispose of all hazardous materials. Hazardous materials shall be handled and disposed in accordance with relevant Australian Standards, SafeWork NS and regulatory agency (EPA) guidelines.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
W4	Waste	All waste fluids generated during the works, including concrete wash, the washing of painting equipment and human effluent, shall be contained for proper disposal offsite in accordance with SafeWork NSW and NSW government guidelines.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
W5	Waste	All waste removal, transport and disposal, including excess spoil, shall be in accordance with the EPA current guidelines for waste. Materials shall be recycled wherever possible. Dockets or equivalent evidence shall be obtained for all recycling and waste disposal, detailing the weights, materials, time and date and waste facility used. These dockets shall be available onsite and submitted with monthly reports and placed in ARK folder F2018/3432.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
1.24	Will the project or work have an impact on members of the public or surrounding areas?	<input type="radio"/> Yes <input checked="" type="radio"/> No	<i>Types of impact may include noise, dust, access, visual amenity. Surrounding land uses may be agricultural/other rural land uses, residential, recreational etc.</i>
1.25	Will the project require new access tracks to be developed or fences to be installed?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
1.26	Are there any impacts on any utilities and/or roads?		<i>Carry out a dial-before-you-dig if necessary or conduct a survey to indicate if any underground infrastructure is present, eg, water,</i>

		<input type="radio"/> Yes <input checked="" type="radio"/> No	sewer, power, telecommunications, council roads, otherwise contact the supply authority or local Council (cl.13 ISEPP) ⓘ
1.28	Are there any post-construction rehabilitation or future maintenance requirements?	<input type="radio"/> Yes <input checked="" type="radio"/> No	Post rehabilitation may include replanting, rip rap and making good of a disturbed area.
1.29	Is a Construction Environmental Management Plan (CEMP) required?	<input type="radio"/> Yes <input checked="" type="radio"/> No	A CEMP demonstrates how & where site specific environmental controls or safeguards will be implemented at the project site. Not all projects or works need to have a CEMP prepared, for example small scale works with few potential impacts. The CEMP must address the safeguards identified in the EIA for the project. (refer to CD2015/188* - CEMP Condensed Template)
1.29.1	Explain why a CEMP would not be necessary for this project or work	The site work value is about \$100,000. Project will use Principal Contractor's agreed/approved WHSMP.	
1.30	Are there any special environmental safeguards, controls or mitigation measures that need to be implemented during this project or works?	<input type="radio"/> Yes <input checked="" type="radio"/> No	Minor and routine works not requiring a CEMP can still require specific mitigation measures.
	Thank you for completing Section 1 of this Minor Works Environmental Impact Assessment . Ensure you have saved this form to ARK and included the ARK reference number above. Go to myWaterNSW, click 'Request Something' & create a service request for Environmental Services.		Save to ARK and go to myWaterNSW to create a service request
<input checked="" type="radio"/>	Environmental Services Team - Once Section 1 has been submitted, check that all questions are completed. If Section 1 is incomplete refer back to the Project Manager with comments. Environmental Services will complete section 2 & 3 of the assessment.		

SECTION 2 ENVIRONMENTAL CONSIDERATIONS			
	QUESTIONS	ANSWERS	HERITAGE TO BE CHECKED
2.1	Will the project / work occur on a heritage item? Is the work site or asset identified on the WaterNSW s170 heritage register or the State heritage register or identified as a local heritage item on the LEP?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Heritage to be checked: 1. WaterNSW S170 Register (D2016/73126) 2. NSW Planning Portal ⓘ 3. Relevant Council LEP
2.1.1	Identify and describe the works with regard to the heritage significance.	Cordeaux dam is on the State Heritage Register (#01360). These works are described and their impacts assessed in D2022/75970 – Statement of Heritage Impact.	
2.1.2	Is the item identified on the LEP as locally significant?	<input checked="" type="radio"/> Yes <input type="radio"/> No	If yes notification to Council with provision of a heritage impact assessment for the works is required, and any comments received within 21 days must be considered. Consult the Heritage Specialist for advice ⓘ
2.1.3	Will the impacts be more than minor or inconsequential?	<input type="radio"/> Yes <input checked="" type="radio"/> No	If there is more than minor or inconsequential impact to a local heritage item, Council notification with provision of a heritage impact assessment for the works is required, and any comments received within 21 days should be considered.
To be Exempt Development – must involve no more than minimal impact on the heritage significance of the item or area [Refer SEPP Infrastructure cl20 (e) (e1) (e2)]			
2.1.5	Include details that support the above conclusions and outcomes of consultation with the heritage specialist.	Pursuant to section 63 of the Heritage Act 1977, approval granted by Heritage NSW on 15 December 2022.	
2.1.6	Detail specific requirements or measures that need to be included in the Environmental Approval.	Works to be undertaken in accordance with Section 60 Approval (15 December 2022) – D2022/174574 including: 1. All work shall comply with the information contained within: a) Report: Cordeaux Dam Instrumentation Upgrade Project Supporting Statement, prepared by WaterNSW, received 07/12/2022 (undated). 2. WaterNSW Heritage Officers are to inform tradespeople of the heritage nature of the work. work is to be undertaken to a high standard, with care taken to reduce potential visual and physical impacts as a result of the installations, as much as possible. 3. Significant built and landscape elements are to be protected during site preparation and the works from potential damage. Protection systems must ensure significant fabric, including landscape elements, is not damaged or removed. 4. If requested, the applicant and any nominated heritage consultant may be required to participate in audits of Heritage Council of NSW approvals to confirm compliance with conditions of consent. 5. This approval will lapse five years from the date of the consent unless the building works associated with the approval have physically commenced.	Any measures provided here are shown in the approval as project specific requirements.
2.2	Are there any: - relevant confirmed site records or other associated landscape feature information on AHIMS? and/or - other sources of information of which a person is already aware? and/or - landscape features that are likely to indicate the presence of Aboriginal objects? - ILUA in place?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Landscape features that indicate the likely existence of Aboriginal objects. <i>Is the proposed activity</i> - within 200 metres of waters - within sand dunes on a ridge top/ridge line/headland - within 200 metres of the top or bottom of a cliff face - within 20m of or within a cave, rock shelter ora cave mouth AND the land is NOT previously disturbed ⓘ An Aboriginal Heritage Information Management System (AHIMS) Web Services search must be undertaken using 200m buffer of the project or work and if positive undertake within 50m. ILUA - Indigenous Land Use Agreement search tool





2.2.1	Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Possible solutions may include reducing the footprint area, re-positioning elements, re-routing infrastructure trenching or incorporating a no-development area into the site design.
HERITAGE			
Select the appropriate safeguards to manage the impacts			
H1	Heritage	Site induction shall include awareness of the heritage significance of the site. This shall include the importance of preventing accidental damage to any structure or historical remnants such as roads, steps & stairs, curbing, footings & foundations and picnic area facilities or interfering with any material associated with the heritage item.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
H2	Heritage	All activities or work undertaken within the heritage precinct shall be carried out in a manner that will protect the fabric of the heritage item from damage or interference during the work.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
H3	Heritage	If problems are encountered that necessitate a major change in the work method, works shall cease until the significance of the change can be assessed. The Water NSW Environmental Services Team shall be contacted for advice. Note: the works may require re-approval prior to recommencing, depending on the changes.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
H4	Heritage	Replacement of missing, damaged or deteriorated fabric shall match existing fabric in appearance, material and method of fixing. If this is not possible, specific advice shall be obtained from the Water NSW Environmental Services Team before undertaking the replacement.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
H5	Heritage	Painting shall be done using the Water NSW approved colour scheme available from the Heritage Adviser. If any specified colour is not available, Water NSW Heritage Adviser approval shall be obtained before an alternative colour is used.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
H6	Heritage	If any items which have the potential to be of heritage significance are encountered, works shall cease until the significance of the item can be established. The Water NSW Environmental Services Team should be contacted for advice on the appropriate course of action to take.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
H7	Heritage	The Upper Canal is potentially fragile due to its age and is heritage listed. The works shall be designed and undertaken in such a way that the Upper Canal is adequately protected from ground vibration and structural damage.	<input type="radio"/> Yes <input checked="" type="radio"/> N/A
H8	Heritage	If any Aboriginal cultural material (e.g. relics such as stone tools, worked bone or fire hearths) is encountered within or immediately adjacent to the work area, work shall stop immediately until the significance of the item can be established. Water NSW Procedure CD2012/184* - Unexpected Aboriginal Objects Procedure should be followed.	<input checked="" type="radio"/> Yes <input type="radio"/> N/A
2.3	Is the project or work within or likely to affect any of the following? - Declared Wilderness Area - Declared Area of Outstanding Biodiversity Value - Critical habitat of an endangered species, population or ecological community	<input type="radio"/> Yes <input checked="" type="radio"/> No	There are 49 areas of Wilderness across NSW, 4 affecting the Sydney Drinking Water Catchments: Look up details using NULA. For land declared critical habitat, check: 1. OEH Critical Habitat Register 2. DPI Fisheries Register of Critical Habitat Exempt development cannot be carried out in critical habitat of an endangered species, population or ecological community (identified under the Biodiversity Conservation Act or the Fisheries Management Act) An Area of Outstanding Biodiversity Value is declared under the Biodiversity Conservation Act 2016 and includes critical habitat.
2.3.1	Add any information relevant to the searches undertaken.	Works to be undertaken on existing infrastructure with no vegetation clearance required. In addition, no threatened species identified close to work areas. Record for Vulnerable Rosenberg Goanna in the general area.	
2.4	Is the project or works within or likely to affect any of the following areas: - World Heritage Land or land to which SEPP (Coastal Management) 2018 applies - Wetlands and/or migratory birds - National Parks or Land covered by a Conservation Agreement	<input type="radio"/> Yes <input checked="" type="radio"/> No	The Warragamba Special Area is within the Greater Blue Mountains World Heritage Area . See SEPP (Exempt & Complying Development) 2008 Clause 1.5 for inclusions of environmentally sensitive areas, use hyperlink to check: - an aquatic reserve under the Fisheries Management Act 1994 or a marine park under the Marine Parks Act 1997 - A RAMSAR wetland or a World Heritage area declared under the World Heritage Convention ⓘ If works will impact on National Park or area with a conservation agreement consultation is required.

2.5	Are there any known contamination/hazardous materials issues?	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p>Examples may include asbestos, contaminated soil.</p> <p>NULA Contaminated Land Risk Register (D2016/135491) and Hazardous Materials Register (D2015/74763).</p> <p>Register - Gauging Stations, 26 November 2014 - Asbestos NSW Office of Water D2015/74762</p>
2.6	<p>Does the project or works require consent under State Environmental Planning Policy (Vegetation Non-Rural Areas) or the Local Land Services Act 2013?</p> <p>Note: Vegetation removal that is part of an activity that is assessed as development without consent is approved under Part 5 of the EP&A Act, removing the need for Council consent or LLS Act approval.</p>	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p>Vegetation clearing works are likely to be permissible as part of an activity that is being assessed under Part 5 of the EP&A Act or; as works under a WM Act approval or; as bush fire management activities and authorised by other legislation. Additional permissibilities under the LLS Act and State Environmental Planning Policy (Vegetation- Non-Rural Areas) 2017.</p> <p>Refer to the Local Land Services Act 2013 Section 60 O for a list of authorisations and permissibilities.</p> <p>Use the OEH Native Vegetation Regulatory Maps to determine vegetation category.</p>
2.6.1	Provide details	No vegetation clearance required. Isolated sensor to be located in a cleared area near access road and outside the dripline of nearby trees.	<p>Ensure no ancillary activities require clearing.</p> <p>Record justification if clearing can be undertaken without approval.</p> <p>Attach evidence of consultation where required.</p>



2.7	Is the project or work likely to have only a minimal impact on the environment?	<input checked="" type="radio"/> Yes <input type="radio"/> No	<p><i>A project is likely to have more than a minimal impact if for example:</i></p> <ul style="list-style-type: none"> • a license or permit is required • it is carried out in a waterway where flow interruptions are required • there is likely to be a community impact • it will result in the clearing of mature trees or a large area of understorey or native grasses • it will impact on an aboriginal heritage item • it will result in largescale soil disturbance • it will result in an increase in hard surfaces • it will result in the creation of new tracks, roads • it will result in more than minimal modifications / alterations to items of State or local significance ⓘ
2.7.1	Provide any additional information relevant to and that supports the above assessment.	<p>The works will upgrade and install instrumentation needed to monitor Cordeaux Dam.</p> <p>There will be no significant impact to Cordeaux Dam's heritage significance and works will be conducted in accordance with heritage approval (refer 2.1.5 and 2.1.6 above). The works are minor in nature and will not impact on the overall significance of Cordeaux Dam.</p> <p>Earthworks are not required.</p>	<p><i>Details here will not appear elsewhere on the approval</i></p>
2.7.2	Does the project or work fall within one of the development categories & associated exempt development types listed under SEPP (Infrastructure) 2007 Clause or Schedule 1 or alternative Environmental Planning Instrument?	<input checked="" type="radio"/> Yes <input type="radio"/> No	<p><i>If ISEPP clauses don't adequately describe the project or works including Schedule 1, consider State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 ⓘ</i></p>
2.7.3	Detail the planning instrument, development category and exempt development type that best describes the project or works?	<p>SEPP (Transport and Infrastructure) 2021 2.159 Development permitted without consent 2) Development for the purpose of water storage facilities may be carried out without consent if it is carried out by or on behalf of (b) Water NSW on land within the Sydney catchment area within the meaning of the Water NSW Act 2014.</p>	
2.8	Are there any special environmental safeguards, controls or mitigation measures that need to be implemented during this project or works?	<input type="radio"/> Yes <input checked="" type="radio"/> No	
2.9	Does the project or works require notification under the Fisheries Management Act ?	<input type="radio"/> Yes <input checked="" type="radio"/> No	<p><i>Activittes that could trigger requirement include:</i></p> <ul style="list-style-type: none"> • Dredging or reclamation on water land (S198A and C263) • Construction, alteration or modifications to a dam, weir or reservoir (S218) • Interruptions to water flows or does the project or work obstruct the passage of fish (S219) ⓘ
<p>Project or works can be approved as exempt development. Go to Section 4 Environmental Approvals</p>			

SECTION 4 ENVIRONMENTAL APPROVAL			
Project Details			
myWaterNSW Request #: RITM	RITM0452672	ARK Minor Works EIA Form #	D2023/8146[v1]
WaterNSW Contact	[REDACTED]	Project Location	Cordeaux Dam and downstream including the Dam Crest, Crest House and Galleries.
Project Title	UN Dams Instrumentation Project (Cordeaux Dam Works)		
Approved Activity	<ol style="list-style-type: none"> 1. Replace existing V-Notch Weirs VG6, VG7 and VGALL including cabling. VG6 will require 150 mm deep x 300 mm long minor concrete cutting into the dam wall. 2. Install tiltmeters VD854, VF864, VG865, VB954, VD954, VF954, VH954, VJ954, V954 and VM954 including cabling. 3. Install PC1, PC2, PC3, PC4, PD1, PD2, PD3, PD4, PE1, PE2, PE3, PE4, PF1, PF2, PG1 and PG2 including cabling. 4. Install four strong motion sensors at dam crest, dam abutment (free standing), dam toe and free field (free standing) in dam downstream including cabling. 5. Install a data logger outside the top gallery northern entrance door. 6. Install four new pan tilt zoom (PTZ) CCTV cameras at the dam wall and downstream of the dam wall. 		
Project Manager Responsibilities			
<p>In carrying out the project or works, it is the Project Manager's responsibility to ensure that the works are carried out as described within this assessment and that all safeguards listed within this approval are complied with. The Project Manager must also ensure that all licences, permits and approvals are obtained and maintained as required and that all statutory and regulatory requirements are complied with throughout the project or works. The Project Manager is also to ensure compliance with the Building Code of Australia and other relevant technical, manufacturer or industry standards.</p>			
Environmental Safeguards			
General			
G1	All WaterNSW Work Health and Safety requirements must be adhered to.		
G2	All complaints and compliments shall be directed to - feedback@watnsw.com.au or 1300 662 077.		
G3	All environment incidents shall be addressed in accordance with WaterNSW's Environmental Incident Management Procedure CD2016/6* .		
G4	If works have not commenced within 2 years of this approval, the EIA form must be re-submitted prior to the commencement of works, to ensure the controls remain in line with current legislation and internal procedures including re-approval by the Environmental Services team.		
G5	Site inductions shall include all aspects, impacts and controls identified in the EIA/REF and Environmental Approval.		
G6	For any shutdown, completion of Site Shutdown (RACS requirement) shall be completed at least 24 hours prior to shutdown commencing.		
G7	Approved Standard Hours are : Mon-Fri 7am-6pm, Sat 8am-1pm, No work Sunday or Public Holidays. For any proposed works outside approved standard construction hours, an Out of Hours Application CD2015/210* shall be submitted to the Environmental Services team, allowing 10 working days for approval.		
G8	If any items which have the potential to be of heritage significance are encountered, works shall cease until the significance of the item can be established. The Water NSW Environmental Services Team should be contacted for advice on the appropriate course of action to take.		
G9	If any Aboriginal cultural material (e.g. relics such as stone tools, worked bone or fire hearths) is encountered within or immediately adjacent to the work area, work shall stop immediately until the significance of the item can be established. Water NSW Procedure CD2012/184* - Unexpected Aboriginal Objects Procedure should be followed.		
G10	All sediment and erosion controls shall be installed according to the requirements of <i>Managing Urban Stormwater: Soils and Construction - Volume 1, 4th Edition 'Blue Book'</i> .		
G11	WaterNSW Tree Clearing Permit CD2021/110* must be completed and authorised by the works supervisor before vegetation removal activities commence.		
Community			
Traffic and Utilities			
Special and Contolled Areas			
SP1	All activities or work undertaken in Water NSW Special / Controlled Areas shall be carried out in a manner that will prevent or minimise impacts on water quality, environmental damage and fire.		
SP2	Standard access requirements of Water NSW catchment lands shall be observed. This includes restricted access to the catchment after periods of significant rainfall (typically 10mm in a 24 hour period).		
SP3	All gates and barriers shall be closed and locked at all times to prevent unauthorised access to the Special/Controlled Area		
SP4	Any suspected unauthorised access to the area shall be reported to the Water NSW supervisor and report in RACS system.		

SP5	All incidents, spills or fire sightings that occur in the WaterNSW Special / Controlled Area shall be immediately reported to the Water supervisor/Project Manager and reported in RACS system.
SP6	Works shall not be undertaken and vehicles shall not travel on unsealed roads in the Water NSW Special / Controlled Areas when road surfaces are saturated, water is flowing down table drains or the catchment has been closed by Water NSW.
SP11	All equipment transported to the site shall be thoroughly washed down, including underneath tractors and slashers, to remove mud, dirt and vegetative materials, prior to entering the Water NSW Special / Controlled Areas.
Soil and Water	
SW1	All works shall be undertaken in a manner that will minimise site disturbance and avoids or minimise erosion and sedimentation.
SW2	All areas disturbed during the works shall be protected by installing appropriate erosion and sedimentation control measures so that sediment-laden runoff does not enter any drainage line or wetland. Measures may include: <ul style="list-style-type: none"> o diverting any potential upslope runoff and stormwater away from the site; o installing temporary erosion control devices (eg sediment fencing, sand bags, sediment basins); o temporary surface protection (eg surface mulching, geotextile/erosion control matting).
SW3	All erosion and sediment control measures shall be checked and maintained on a regular basis so that they work effectively at all times, including removing trapped sediment before or when 30% capacity is reached. Control measures shall not be removed before the ground surface is stabilised.
SW4	A maintenance checklist shall be prepared for sites. Records shall be kept of all checks and maintenance and shall be provide to Water NSW on request. As a minimum this shall include a regular check of: <ul style="list-style-type: none"> o sediment fencing/bunding o any sign of erosion of the site or material o any impact on adjacent vegetation (material shall be kept outside the dripline of any tree) o the safe storage of any chemicals, fuels or lubricants o the height, gradient and stability of any stockpile (<2m high and 2:1 slope)
SW7	Plant and equipment shall not be refuelled within 20m of any natural or built drainage line or wetland. During any refuelling, spill containment material shall be on hand ready for immediate use.
SW8	Weather forecasts shall be regularly checked so that expected storm events can be taken into account in project planning and erosion and sediment management.
SW9	Temporary compounds and stockpiles shall be located: <ul style="list-style-type: none"> o at least 40m from natural or built drainage lines or wetland; o on areas previously disturbed and that do not require the clearing of native vegetation; o on level, hard ground wherever possible, and shall not be located on slopes steeper than 1(V):10(H); o beyond tree drip lines; o where there is no risk of impact on any indigenous or non-indigenous heritage site.
SW11	Concrete shall not be mixed within 20m of any natural or built drainage line or wetland. All concrete waste and any concrete washout shall be contained and removed for disposal off site at a lawful facility. Washout of trucks on site shall be minimised wherever possible.
Flora and Fauna	
Pest and Weed Control	
Air Quality	
Noise and Vibration	
Heritage	
H1	Site induction shall include awareness of the heritage significance of the site. This shall include the importance of preventing accidental damage to any structure or historical remnants such as roads, steps & stairs, curbing, footings & foundations and picnic area facilities or interfering with any material associated with the heritage item.
H2	All activities or work undertaken within the heritage precinct shall be carried out in a manner that will protect the fabric of the heritage item from damage or interference during the work.
H3	If problems are encountered that necessitate a major change in the work method, works shall cease until the significance of the change can be assessed. The Water NSW Environmental Services Team shall be contacted for advice. Note: the works may require re-approval prior to recommencing, depending on the changes.
Waste	
W1	All working areas shall be maintained, kept free of rubbish and cleaned up at the end of each working day. Equipment and materials shall be securely stored.
W5	All waste removal, transport and disposal, including excess spoil, shall be in accordance with the regulatory agency's (EPA) current guidelines for waste. Materials shall be recycled wherever possible. Dockets or equivalent evidence shall be obtained for all recycling and waste disposal, detailing the weights, materials, time and date and waste facility used. These dockets shall be available onsite and submitted with monthly reports.
Site Decommissioning and Restoration	

Fencing	
PROJECT SPECIFIC SAFEGUARDS	
STAKEHOLDER REQUIREMENTS	
SR2	<p>Works to be undertaken in accordance with Section 60 Approval (15 December 2022) - D2022/174574 including:</p> <ol style="list-style-type: none"> All work shall comply with the information contained within: <ol style="list-style-type: none"> Report: Cordeaux Dam Instrumentation Upgrade Project Supporting Statement, prepared by WaterNSW, received 07/12/2022 (undated). WaterNSW Heritage Officers are to inform tradespeople of the heritage nature of the work. work is to be undertaken to a high standard, with care taken to reduce potential visual and physical impacts as a result of the installations, as much as possible. Significant built and landscape elements are to be protected during site preparation and the works from potential damage. Protection systems must ensure significant fabric, including landscape elements, is not damaged or removed. If requested, the applicant and any nominated heritage consultant may be required to participate in audits of Heritage Council of NSW approvals to confirm compliance with conditions of consent. This approval will lapse five years from the date of the consent unless the building works associated with the approval have physically commenced.
SR9	Isolated sensor to be located in a cleared area near access road and outside the dripline of nearby trees.
DECLARATION AND SIGN-OFF	
<p>The proposed project/works described within this document are classified as 'exempt development' in accordance with the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act) and the <i>State Environmental Planning Policy (Infrastructure) 2007</i>. WaterNSW is satisfied that the proposed project/works:</p> <ul style="list-style-type: none"> will have no more than a minimal impact on the environment, will not significantly impact critical habitat of an endangered species, population or ecological community, or a wilderness area, satisfy the requirements of clause 20 of the <i>State Environmental Planning Policy (Infrastructure) 2007</i>; and do not involve the removal of asbestos unless that removal is undertaken in accordance with <i>Working with Asbestos: Guide 2008</i> published by the WorkCover Authority. <p>If the scope of work or work methods described in this report change either prior to or during works, additional Environmental Impact Assessment must be undertaken.</p>	
Approval ARK # ⓘ	[REDACTED]
Environmental Adviser Approval Environmental Impact Assessment for Minor Works was approved/endorsed by	[REDACTED]