KADATHINNI 2D SEISMIC SURVEY

ENVIRONMENTAL PLAN SUMMARY

KAD-HSE-PLN-001-SUM

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Document Control

The HSEC Manager - Operations is the custodian of this document and is responsible for ensuring the approval and management of this document including any revisions.

Document Details

Operator Name	Strike North West Pty Ltd [operator of EP 504, EP 505 and all access authorities] and Strike South Pty Ltd [operator of EP 503], (collectively referred to as **Strike** in this document), both fully owned subsidiaries of Strike Energy Limited
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1	11/04/2024	Document updated to reflect DEMIRS feedback

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Term Definitions and Abbreviations

Term	Definition
2D	Two-dimensional
AA 31-36	Access Authority 31, 32, 33, 34, 35 and 36 as granted by the Department of Energy, Mines, Industry Regulation and Safety to Strike North West Pty Ltd
ALARP	As Low As Reasonably Practicable
Cth	Commonwealth jurisdiction
CAMBA	China Australia Migratory Bird Agreement
DBCA	Department of Biodiversity, Conservation and Attractions (WA)
DEMIRS	Department of Energy, Mines, Industry Safety and Regulation (WA), formerly DMIRS
DMIRS	The former Department of Mines, Industry Safety and Regulation (WA)
EP 503	Petroleum Exploration Permit EP 503, registered to Strike South Pty Ltd
EP 504	Petroleum Exploration Permit EP 504, registered to Strike North West Pty Ltd
EP 505	Petroleum Exploration Permit EP 505, registered to Strike North West Pty Ltd
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)
ERP	Emergency Response Plan
IUCN	International Union for Conservation of Nature
JAMBA	Japan-Australia Migratory Bird Agreement
km	kilometre
L	litre
m	metre
mbgl	metres below ground level
mg	milligrams
mm	Millimetre
OSCP	Oil Spill Contingency Plan, also referred to as an Oil Spill Response Plan
PGER Act	Petroleum and Geothermal Energy Resources Act 1967 (WA)
PGER(E)R	Petroleum and Geothermal Energy Resources (Environment) Regulations
Project	Kadathinni 2D Seismic Survey
Project Area	Area in which the Project activities will occur, as shown in Figure 1.1
Seismic lines	As this a 2D survey, seismic lines will contain both the receiver points and source points
Strike	Strike South Pty Ltd and Strike North West Pty Ltd, both fully owned subsidiary of Strike Energy Limited
WA	Western Australia

1 Introduction

Strike South Pty Ltd and Strike North West Pty Ltd (referred to collectively as **Strike** in this document), both fully owned subsidiary of Strike Energy Limited, are proposing to undertake a two-dimensional (2D) seismic acquisition survey in the Shires of Three Springs and Carnamah, in the Mid West region of Western Australia (WA) (Kadathinni 2D Seismic Survey; the Project).

The purpose of the Project is to map the sub-surface geology of the area, enabling the identification of petroleum reservoir rocks for potential future conventional resource extraction. The Project involves the acquisition of 2D seismic data only and does not include any drilling, hydraulic fracturing or extraction activities.

1.1 Project Summary

The seismic lines have been aligned to utilise previously cleared areas to undertake the Project. No clearing of or access to native vegetation is required.

The Project will be conducted within Petroleum Exploration Permits EP 503, EP 504, and EP 505 and Petroleum Access Authorities AA 31, AA 32, AA 33, AA 34, AA 35, and AA 36 (AA 31 – 36).

The Project comprises approximately 484 line km of seismic lines to be undertaken within the north Perth Basin (the Project Area). The Project Area is approximately 15 km west of Three Springs and 20 km east of Eneabba at its closest point (Figure 1.1).

The Project is proposed to be undertaken over a total activity period of 11 weeks, including mobilisation and demobilisation. No clearing of native vegetation is required to facilitate the Project.

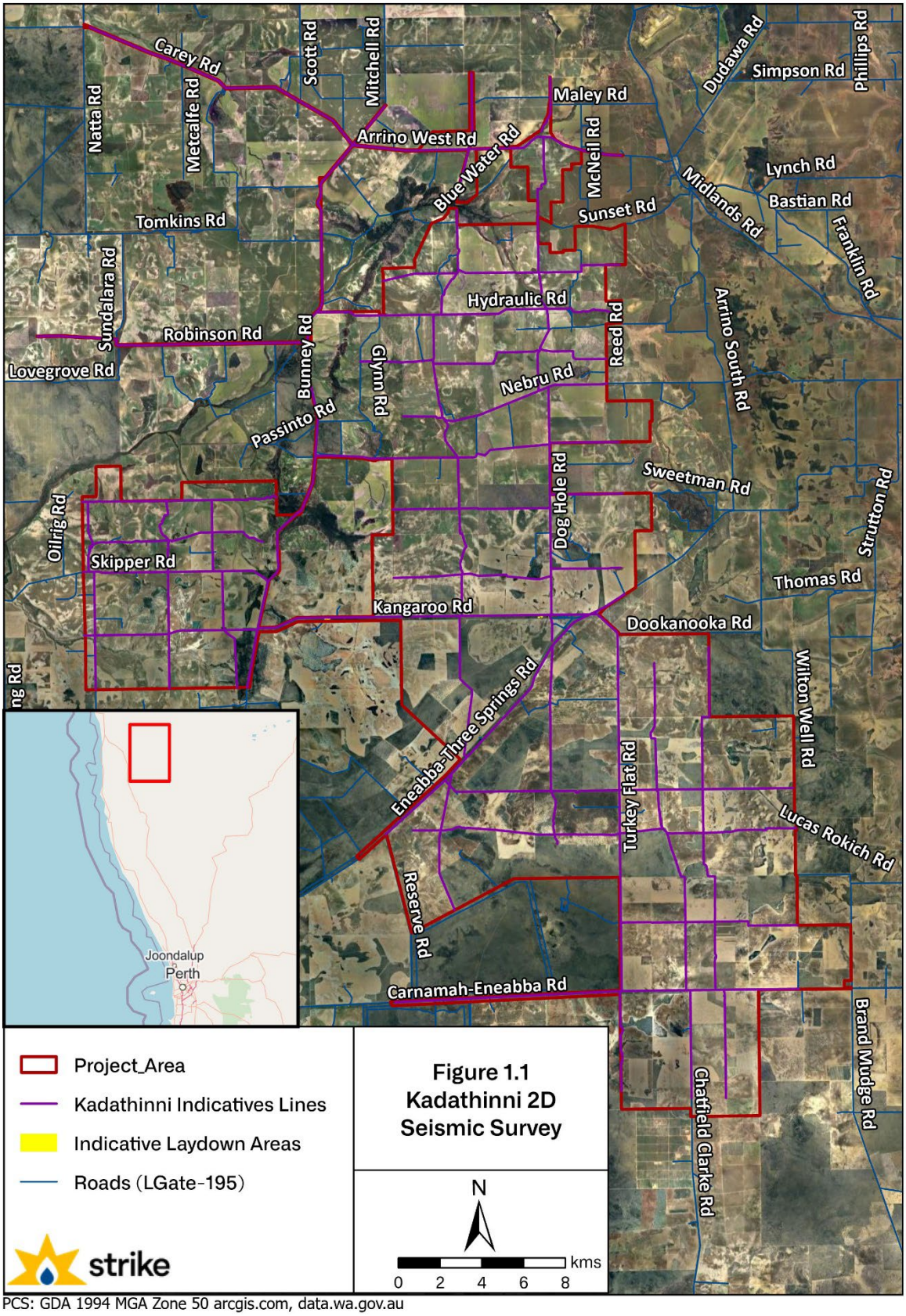

Figure 1.1: Kadathinni 2D Seismic Survey

1.2 Purpose and Scope

The purpose of this environment plan (EP) is to provide an outline of the activities associated with the Project along with a description of environmental management controls to ensure the activities are carried out in a manner consistent with the principles of ecologically sustainable development (ESD) and mitigate any potential environmental impacts from those activities.

This EP has been prepared to meet the requirements of the following:

- *Petroleum and Geothermal Energy Resources Act 1967* (PGER Act); and
- *Petroleum and Geothermal Energy Resources (Environment) Regulations 2012* (PGER(E)R).

This EP has been prepared in accordance with the DMIRS (2022) Guideline for the Development of Petroleum, Geothermal and Pipeline Environment Plans in Western Australia.

The scope of this EP is the Kadathinni 2D Seismic Survey.

1.3 Ecological Sustainable Development (ESD)

It is an objective of the Regulations that petroleum activities be undertaken in a manner consistent with the principles of ESD. Australia's National Strategy for Ecologically Sustainable Development (1992) defines ESD as:

> *"using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased."*

The National Strategy applies to governments, business, community organisations and individuals in Australia.

Under section 3A of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), the principles of ecologically sustainable development are:

- decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making; and
- improved valuation, pricing and incentive mechanisms should be promoted.

Strike has considered the principles of ESD, in the development of the environmental performance objectives, standards and management criteria within this EP, to ensure environmental risks and impacts are reduced to an acceptable level that is as low as is reasonably practicable (ALARP).

1.4 Operator Details

As required by Regulation 37 of PGER(E)R, the nominated operator for the Project will be responsible for the overall management and operation of the Project at all times. Table 1.1 summarises the details relevant to the notification of Strike as the operator of Kadathinni 2D Seismic Survey.

Table 1.1: Operator Details

Petroleum Instruments	EP 503, EP 504, EP 505, AA 31, AA 32, AA 33, AA 34, AA 35, AA 36
Operator	Strike North West Pty Ltd (ABN 92 153 352 160)
Contact Person	Amanda Emery
Position	HSEC – Manager Operations
Email Address	amanda.emery@strikeenergy.com.au
Telephone No.	(+61) 8 7099 7400
Postal Address	PO Box 569, West Perth, WA 6005

1.5 Environment Plan Revision

Strike will ensure the information included in this EP is current and relevant to the petroleum activity, and practical for implementation onsite. Under the regulations, a proposed revision of this EP must be submitted to DEMIRS where:

- A new petroleum activity is proposed which is not provided for in the EP.
- Any significant modification of, change in, or new stage of a petroleum activity is proposed to commence which is not provided for in the EP.
- There is a change in the instrument holder or operator of the petroleum activity.
- New or increased environmental impacts or risks associated with the petroleum activity have been identified.
- DEMIRS formally requests a revised EP from the operator.
- An EP has been in place for five years.
- An Oil Spill Contingency Plan (OSCP) has been in place for two and a half years[1]

Strike acknowledges, a petroleum activity must not continue if any significant, new or increased environmental impacts or risks are identified. In these circumstances a revised EP must be submitted to DEMIRS and approved prior to continuing the activity.

[1] A proposed OSCP revision must be submitted at least 14 days prior to the end of the 2.5-year period after approval.

2 Description of Activity

The seismic lines have been aligned to utilise previously cleared areas to undertake the Project. No disturbance via clearing of native vegetation is required to create access tracks for vibroseis trucks and light vehicles; no access to native vegetation is required for the Project.

Location and operational details specific to the Project are provided in Table 2.1.

Table 2.1: Project Details

Aspect	Description
Location	The Project is located within the Shires of Three Springs and Carnamah in the Mid West region of WA, within EP 503, EP 504, EP 505 and AA 31-36, and is approximately 237 km north of Perth at its closest point. Project Area coordinates are provided in Table 2.2. The primary land uses in the broader area are conservation, agriculture, mining and petroleum.
Total Survey Source Lines	484 line km
Petroleum Permits	EP 503, EP 504, EP 505, AA 31, AA 32, AA 33, AA 34, AA 35 and AA 36
Site Access	Existing roads and tracks will be used to access the Project Area. The Project Area will be accessed via multiple roads including Carnamah-Eneabba Rd, Eneabba-Three Springs Rd, Kangaroo Rd and Carey Rd. Access by vehicles within the Project Area will utilise cleared tracks and firebreaks or areas devoid of native vegetation.
Accommodation	Installation or construction of accommodation facilities will not be conducted to facilitate the project. A local accommodation provider will be utilised to support the Project.
Seismic Acquisition	The estimated number of data acquisition days will be 49 days.
Clearing	No native vegetation will be cleared
Survey Duration	The total duration of the Project will be approximately eleven (11) weeks. This duration accounts for some downtime to account for potential delays due to unforeseeable weather or operational circumstances.
Preferred Survey Timing	The preferred survey timing is April to June 2024 (subject to necessary approvals)
Aboriginal Heritage	The Project is located within the Yamatji Nation ILUA. There is one registered Aboriginal cultural heritage site listed on the ACHIS within the Project Area, the Arrowsmith River (ID 30068). Potential impacts to this site have been eliminated by the use of pre-existing access tracks.
Waste	The only planned wastes generated during the Project will be general waste, including food waste, plastics and rubber products and wastes from minor in-field servicing and repairs of vehicles. General wastes will be collected and retained in dedicated waste receptacles (containers and/or bags) within each vehicle used for the Project for disposal in dedicated facilities (i.e., bins) at the decided waste disposal facility or at dedicated locations approved by landowners. All wastes generated by any service and/or mechanical work conducted is to be placed in the appropriate rubbish bins or containers for disposal at the local council refuse station in accordance with the local council requirements.
Storage of chemicals and/or hazardous substances	Diesel will be the only chemical that requires storage. It will be stored in accordance with AS1940: 2017 and Dangerous Goods Safety Regulations 2007. Stationery fuel storage will be self-bunded and located such that native vegetation is outside of the range of any trajectory spill model.
Supporting Infrastructure	Strike will utilise a laydown area on previously cleared land.

Table 2.2: Project Area Coordinates (GDA94Z50)

Point	Easting	Northing	Point	Easting	Northing	Point	Easting	Northing
1	338808.0769	6748990.6007	64	360516.7217	6739753.5967	127	356821.2605	6713783.4697
2	345263.6195	6746307.8795	65	360535.7152	6739751.0642	128	353998.0305	6716383.3287

Point	Easting	Northing	Point	Easting	Northing	Point	Easting	Northing
3	345601.7675	6745958.0713	66	360556.3731	6738471.1577	129	353945.9221	6720430.41
4	347986.2935	6745998.8823	67	361119.0058	6738475.7948	130	349041.7983	6720374.7567
5	350741.0331	6744408.6541	68	361123.6429	6738053.8202	131	348048.9267	6719906.779
6	351665.8174	6743252.9621	69	361758.7377	6738060.6831	132	347195.1836	6719881.483
7	353205.9069	6745100.9817	70	361760.7162	6738157.6291	133	346746.178	6717231.7173
8	353264.6763	6745103.2603	71	362321.1514	6738170.3752	134	338888.5794	6717110.3752
9	351717.2238	6743219.4339	72	362313.6041	6739298.7019	135	338681.0724	6726376.551
10	354815.6284	6742975.0089	73	364005.6223	6739174.8784	136	339344.9713	6726407.43
11	355513.9078	6743845.8204	74	364713.185	6739428.4217	137	339391.2899	6727812.4253
12	357274.9323	6743886.0666	75	364730.874	6737470.8316	138	340549.2531	6727812.4253
13	357255.0321	6746678.7281	76	363789.1081	6737445.831	139	340578.4849	6726149.8545
14	357440.7673	6746668.778	77	363796.32	6735723.4285	140	343460.2156	6726190.3282
15	357483.2625	6743846.2662	78	364556.2864	6735749.1901	141	343476.4051	6727048.3717
16	357232.1644	6743019.4597	79	364551.9928	6734688.6721	142	347959.5999	6727120.1177
17	359552.7888	6743151.6165	80	363830.6688	6734637.1489	143	348009.0063	6725509.4681
18	360687.7571	6743922.0485	81	363848.6482	6730941.7052	144	348886.6507	6725494.7173
19	361122.4836	6745472.5731	82	365988.7371	6730961.8314	145	349458.5933	6733715.7706
20	361111.772	6746460.3567	83	366006.6628	6729972.0719	146	340463.8632	6733580.3487
21	361133.6303	6746439.8374	84	365910.4863	6729972.0719	147	340318.8053	6733629.5648
22	361145.4063	6743803.009	85	365917.356	6728999.6584	148	340329.1666	6733880.8258
23	361370.7957	6743455.4281	86	361115.8017	6728928.9078	149	336568.0222	6734018.1128
24	361810.1784	6743192.8827	87	361147.4425	6726462.8752	150	336549.89	6734049.1966
25	364609.7399	6742706.1745	88	365958.9796	6726528.4757	151	340377.1393	6733904.7604
26	364596.8797	6742687.3788	89	365989.4209	6724731.7556	152	340366.6688	6733678.6266
27	362620.9209	6742948.5359	90	365190.3173	6724715.8191	153	340463.4592	6733643.5818
28	362626.0577	6742306.0252	91	365220.6252	6722010.3072	154	349456.3829	6733784.4774
29	362153.0753	6742298.2967	92	363480.012	6720731.2488	155	350147.2085	6736233.6075
30	362156.1667	6742029.3459	93	364406.012	6719854.6059	156	350186.819	6736239.2662
31	361718.7352	6742023.1631	94	364402.4548	6719758.5598	157	350122.452	6740132.7641
32	361732.4593	6740479.8598	95	368704.7419	6719797.4673	158	349980.986	6740271.2829
33	361162.6354	6740472.3125	96	368742.3155	6715817.1125	159	349975.0915	6740524.7428
34	361169.4752	6739440.2144	97	372757.0341	6715853.5605	160	350128.3464	6740866.619
35	360536.9814	6739762.4603	98	372805.3429	6711052.5366	161	350110.6631	6741187.8647
36	360523.9135	6740542.388	99	372913.9019	6711025.3968	162	350078.2438	6741641.7348
37	360078.7536	6740537.7509	100	372900.7558	6710363.8284	163	350314.0205	6741644.682
38	360060.9603	6742146.6417	101	372847.3969	6710417.1874	164	351620.3706	6743198.7818
39	359247.2633	6742140.7453	102	372840.2824	6710424.3019	165	350697.1576	6744353.1664
40	359217.7815	6743031.095	103	372852.566	6708237.0577	166	347962.9735	6745928.744
41	357588.9722	6742996.8961	104	372939.4133	6708228.3729	167	345587.8036	6745888.1093
42	357623.1858	6740833.5969	105	372974.1522	6705840.0739	168	345214.7975	6746251.9054
43	357190.1722	6740455.8617	106	375492.7221	6705848.7586	169	338816.9609	6748821.1342
44	356646.6019	6740465.0747	107	375544.8305	6703199.9178	170	349930.6186	6728240.5484
45	356637.3888	6740787.5317	108	375197.4415	6703182.5484	171	352708.0171	6728082.2511
46	357206.8536	6742955.2167	109	375197.4415	6702869.8983	172	353534.0093	6728140.901
47	351665.5397	6743154.6113	110	375536.1457	6702861.2136	173	353591.3161	6724530.5708
48	350148.0543	6741316.1046	111	375544.8305	6702783.0511	174	352608.9134	6724514.1975
49	349982.2786	6735200.4686	112	371098.2518	6702748.3122	175	352646.0757	6720627.6359
50	352940.7374	6735228.2911	113	371149.8174	6696695.6024	176	348985.8545	6720576.3586
51	352952.0403	6735068.1185	114	367838.7664	6696668.4626	177	347880.707	6720100.1148
52	353208.0459	6735075.364	115	367811.6266	6697048.4193	178	347158.7229	6720087.6129
53	353152.4976	6735128.4972	116	364523.9158	6697025.0791	179	347677.0629	6722356.4128

Point	Easting	Northing	Point	Easting	Northing	Point	Easting	Northing
54	353081.3956	6737288.7016	117	364441.5847	6702516.9511	180	347977.4013	6722659.193
55	354635.398	6737331.1115	118	353563.7943	6701958.0023	181	348060.4217	6722646.9841
56	354630.5677	6737724.7806	119	353468.2623	6702175.1204	182	348170.3015	6722837.4426
57	355434.208	6739453.4222	120	364489.1769	6702722.258	183	348153.2091	6723755.5501
58	355992.7108	6739687.3896	121	364432.7262	6708094.3025	184	348077.5141	6723760.4336
59	356253.0938	6739981.7357	122	359357.5907	6708053.5929	185	348075.0114	6724662.5094
60	356256.8675	6740170.4191	123	354486.0034	6705488.8853	186	348976.0874	6725498.9777
61	356658.1321	6740168.33	124	353280.6723	6710148.3917	187	349093.2926	6725494.0941
62	356673.7053	6739369.9282	125	351991.1645	6708981.1648	188	349181.1965	6725552.6967
63	360518.6211	6739443.3697	126	351857.7671	6709142.3533	189	349788.1303	6727018.525

2.1 Project Overview

2.1.1 Equipment and Infrastructure

Existing roads and tracks will be used to access the Project Area.

The Project requires a fleet of supporting vehicles. The type and quantity of vehicles may change depending on the availability at the time of the survey. All vehicles will use diesel. Vibroseis trucks will use balloon tyres to reduce imprint depth, therefore pressure, reducing soil compaction.

Bulk hydrocarbon and chemical (i.e., drums and bulky containers) will be stored in accordance with AS1940 (The Storage and Handling of Flammable and Combustible Liquids).

2.1.2 Mobilisation

Mobilisation to the Project Area will require the use of commercial carriers to transport the vibroseis trucks to site. All travel on public roads will be in accordance with the State Road legislation. In privately-owned areas, set driving speeds will be restricted (maximum of 40 km per hour). Information on speed limits will be included in the site induction which all personnel, including contractors, will undertake prior to attending site.

Daily mobilisation to and from the Project Area will be required. This will comprise of light vehicle movements via public roads.

2.1.3 Seismic Line Preparation

No clearing of native vegetation is required to facilitate the Project. All Project activities will be undertaken within existing cleared areas, roads, access tracks and firebreaks. No access to native vegetation will be required for the Project.

The proposed seismic lines have been developed through a detailed process of review to ensure that impacts to the environment are mitigated to ALARP. Since no native vegetation will be cleared, or existing infrastructure will be destroyed/removed, acquisition lines may deviate from the surveyed route and the nominal plan that is shown in the seismic application. This allows for changes due to operational reasons, (e.g., unanticipated access difficulties, discovery of Aboriginal artifacts, etc.).

2.1.4 Data Acquisition

The main elements of the Project involve laying out lanes of 'cable-free' receiver nodes and a seismic survey using vibroseis technologies. Receiver nodes are placed at regular intervals along seismic lines. The nodes are planted into the ground to approximately 100 mm deep (no deeper than 200 mm). Vibroseis vehicles subsequently traverse the proposed seismic lines, creating acoustic waves at regular intervals. The reflected acoustic waves are received by the nodes. The data is systematically processed and interpreted to create subsurface imaging. The vibroseis vehicles will not create acoustic waves close to sensitive receptors and will maintain a safe offset distance.

2.1.5 Demobilisation and Rehabilitation

Upon completion of the Project, all equipment will be removed from the Project Area. Furthermore, any infrastructure altered or removed as a result of the Project will be reinstated.

The clearing of native vegetation is not necessary for the completion of the Project. Areas that are disturbed by the Project may only require minor civil works in order to restore them to their condition prior to undertaking the Project. Rehabilitation works will be undertaken to establish a safe and stable, non-polluting, landform similar to that of surrounding areas.

2.1.5.1 Waste

The only planned wastes generated during the Project will be general waste, including food waste, plastics and rubber products and wastes from minor in-field servicing and repairs of vehicles.

General wastes will be collected and retained in dedicated waste receptacles (containers or bags) within each vehicle used for the Project for disposal in dedicated facilities (i.e., bins) at the decided waste disposal facility or at dedicated locations approved by landowners.

3 Existing Environment

3.1 Regional Context

The Project is located within the Lesueur Sandplain subregion of the Geraldton Sandplains bioregion, as defined by the Interim Biogeographic Regionalisation for Australia. The Lesueur Sandplain subregion comprises coastal Aeolian and limestones, Jurassic siltstones, and sandstones (often heavily lateritised) of central Perth Basin.

The Mid West region experiences a Mediterranean climate (i.e., dry and warm summers, and relatively wet and cool winters).

3.2 Soils and Landform

The landform is described as undulating with well-defined ridge lines (lateritic) and breakaways towards the west and southwest. Ground levels vary between 140 m above Australian Height Datum (AHD) to 300 mAHD.

The Geraldton Sandplains (including the Lesueur Sandplain subregion) are characterised by a series of old dunes which run parallel to the coast. The younger Quindalup dunes occur near the contemporary coastline, with the Spearwood dunes occurring further inland. The soils are typically sandy with some areas of exposed limestone, and a series of wetlands occurs along the plains; toward the east lateritic rises occur.

3.3 Hydrology

The Project Area primarily exists upon two hydrographic catchment basins:

- Hill River Catchment; and
- Arrowsmith River Catchment.

Two lines on the northwestern side of the survey extend into the Irwin River Catchment and 2 lines on the far eastern side of the survey extend into the Yarra Monger Catchment.

Watercourses in the primary catchments flow predominantly in an east-west direction from the upland areas in the east into large swamps or lakes in interdunal depressions on the Swan Coastal Plain to the west. The poorly defined drainage lines of the Arrowsmith River flow in a westerly direction prior to turning north-west to enter the terminal swamps and lakes of the Arrowsmith Lake area.

Surface water flows are generally considered to be low in the region due to the sandy nature of the surface soils and their corresponding high infiltration rates. Although these soils have high saturated infiltration rates and hydraulic conductivities, their permeability decreases significantly when in an unsaturated condition, therefore surface runoff is common following rapid and intense rainfall events following extended dry periods.

No geomorphic, Nationally Important (Directory) or Ramsar-listed wetlands are present within or in proximity to the Project.

3.3.1 Groundwater

The largest fresh groundwater resources within the northern Perth Basin are in the Surficial/Superficial, Leederville, Leederville-Parmelia and Yarragadee aquifers. There are also three secondary aquifers: the Mirrabooka, Cattamarra and Eneabba-Lesueur aquifers. In addition to these groundwater resources, there are minor shallow and fractured-rock aquifers that are locally significant sources of water. Hydraulic connection between aquifers is often impeded across faults and low permeability units, both within and between aquifers.

Groundwater is contained within superficial aquifers including the Leederville aquifer west of the Project Area, the Leederville-Parmelia aquifer east of the Project Area and the Yarragadee aquifer on the coastal plain and the Dandaragan Land System. Groundwater

is understood to be relatively deep ranging from approximately 245 to 370 m below ground level (mbgl) with salinity ranging from 500 to 1,500 mg/L across the Project Area (Perth Groundwater Map).

3.3.2 Public Drinking Water Source Areas

A buffer of 50 m for refuelling, seismic acquisition and stationary equipment has been applied to all PDWSAs; these buffers are best on worst case spill scenarios of 20 m for the refuelling truck and 50 m for the stationary bulk fuel storage equipment. Given that no impacts to groundwater are anticipated as a result of Project activities and the applied buffers, the Project will not adversely affect any PDWSAs.

3.4 Air and Noise Emissions

Ambient air quality in the vicinity of the Project is expected to be representative of surrounding dust-generating activities, being primarily pastoral and tourism activities, as well as the use of agricultural machinery and vehicular movements.

Project activities will likely give rise to atmospheric emissions as a result of vehicle movements; however, emissions are not expected to cause a reduction in local air quality and are considered comparable to emissions from existing activities in the area.

Ambient noise levels in the vicinity of the Project are expected to be similar to agricultural and tourism activities. These sources of emissions are anticipated to have a relatively low or insignificant impact on the overall noise levels in the local area.

The primary noise source associated with the Project is the movement of vehicles. The vibroseis trucks are designed to minimise noise to reduce interference with the seismic acquisition. The Project will be conducted in accordance with the Environmental Protection (Noise) Regulations 1997.

3.5 Flora and Vegetation

The Project vehicle activities are located entirely within pre-existing cleared areas used for agricultural activities. No clearing of native vegetation is required.

A database search was undertaken to generate a list of vascular flora and ecological communities previously recorded within and/or in proximity to the Project Area, with an emphasis on species and ecological communities of conservation significance and introduced species.

Beard et al. have mapped the extent of pre-European vegetation across Western Australia, which is represented in spatial dataset (DPIRD-006) maintained by DPIRD. Inspection of the spatial dataset identified five vegetation associations within the Project Area. All vegetation associations are well represented on the Lesueur Sandplain subregion (DBCA 2019) (Table 3.1). Seismic acquisition will be completed using pre-existing cleared areas and no access to native vegetation is required; therefore, the Project will not impact native vegetation.

Table 3.1: Beard (DPIRD-006) Vegetation System Associations within the Project Area

Vegetation System	Vegetation Association	Description
Tathra	49	Low shrubs of mixed composition.
	379	Mixed heath with scattered tall shrubs *Acacia* spp. *Proteaceae* and *Myrtaceae*.
	391	Wattle, casuarina and teatree acacia-allocasuarina-melaleuca alliance.
Mullingarra	691	Wattle, casuarina and teatree acacia-allocasuarina-melaleuca alliance.
Eridoon	378	Mixed heath with scattered tall shrubs *Acacia* spp. *Proteaceae* and *Myrtaceae*.

3.5.1.1 Threatened and Priority Flora

Strike will utilise previously cleared areas (i.e., cropland, access tracks and firebreaks) and thus will not enter into areas covered by continuous vegetation within 50 m of rare flora. No access to areas of native vegetation will be granted for the Project and the Project does not involve any clearing. No refuelling will occur within 50 m of declared rare (threatened) flora.

3.5.1.2 Threatened and Priority Ecological Communities

Six Threatened Ecological Communities and several Priority Ecological Communities are known from the Geraldton Sandplains; given that communities occur on restricted landforms and are known to be locally restricted in their occurrence, it is not anticipated that any conservation significant ecological community occurs within the Project Area. No impacts to Threated or Priority Ecological Communities are anticipated.

3.5.1.3 Weeds

The Western Australian Organism List (WAOL) database identifies 49 Declared Pests under Section 22(2) of the *Biosecurity and Agricultural Management Act 2007* within the Shire of Three Springs with 28 of those being listed as Weeds of National Significance (WoNS). The potential introduction and/or spread of weeds will be managed via hygiene measures and in consultation with landowners.

3.5.2 Potential Impacts to Flora and Vegetation

No clearing of native vegetation is required to facilitate the Project. All Project vehicle activities will be undertaken within existing cleared areas, roads, access tracks and firebreaks. No access to areas of native vegetation will be required for the Project. The overall risk of Project activities to vegetation and flora, including conservation significant flora and ecological communities, is considered to be very low.

3.6 Fauna

Database searches were undertaken to generate a list of conservation significant fauna.

The *Environmental Protection and Biodiversity Conservation Act 1999* (Commonwealth) protects a range of shorebirds listed under the JAMBA and CAMBA Migratory Bird

Agreements. Species may also be listed migratory or subject to international agreements including, the Convention on the Bonn, CAMBA, JAMBA, ROKAMBA and the IUCN.

The Protected Matters Search Tool identified 14 conservation significant species as having previously been recorded or have the potential to occur based on distribution and habitat.

Given that Project activities involving vehicles will be restricted to existing cleared areas, roads, access tracks and firebreaks, it is considered unlikely conservation significant species and/or their preferred habitat will be impacted as a result of Project activities.

3.6.1 Potential Impacts to Fauna

No clearing of native vegetation is required to facilitate the Project activities and vehicle movements other than on public roads will be limited (e.g., 40 km/h) to minimise potential for livestock or native fauna vehicle collision.

The overall risk of Project activities to conservation significant fauna and livestock is considered very low.

4 Socio-economic Environment

4.1 Local Area

The Project Area is approximately 15 km west of Three Springs and 20 km east of Eneabba at its closest point within the Shires of Three Springs and Carnamah. The Shire of Three Springs has a population of 575 (ABS, 2021).

The dominant industries within the Shire of Three Springs are farming (grain production and livestock grazing), mining, and government-based operations.

4.2 Aboriginal Cultural Heritage

Aboriginal Cultural Heritage in Western Australia in relation to petroleum activities is managed by:

- the *Aboriginal Heritage Act 1972*; and
- Indigenous Land Use Agreements (ILUAs).

For the Project:

- On 26 October 2020, the Yamatji Nation ILUA was conclusively registered.

One (1) Registered Aboriginal heritage site was identified as occurring within the Project Area on the Aboriginal Cultural Heritage Inquiry System (ACHIS):

- Arrowsmith River (ID 30068) – intersects the northern part of the Project Area.

The Project will utilise pre-existing crossing. No refuelling or seismic acquisition will be conducted within 50 m of the Arrowsmith River. It is considered that the Project will not impact on the Arrowsmith River.

In the event of a discovery or the identification of an object reasonably suspected of being an Aboriginal artefact a Site Discovery Procedure will apply.

4.3 European Heritage

A place search for European heritage sites was conducted in February 2024 on the State Heritage Council database. There are no European heritage sites within the Project Area. The nearest heritage site is approximately 1.6 km east of the Project Area and will not be impacted; Arrino Townsite (Place number 5292)

4.4 Geo-Heritage

A place search for Geo-heritage sites was conducted in February 2024 on the DMIRS GeoVIEW database. There are no Geo-heritage sites within or in proximity to the Project. The nearest Geo-heritage site is located approximately 8 km northeast of the Project area, Enokurra Hill (Site No 41)

5 Stakeholder consultation

Strike maintains a stakeholder consultation program with key stakeholders in relation to its Perth Basin petroleum activities.

The key objectives of the consultation program are to:

- Identify relevant stakeholders;
- Initiate and maintain communication;
- Develop tools for ongoing communication;
- Provide for two-way communication on management/mitigation strategies to minimise impacts of the Project on the environment and potentially affected stakeholders; and
- Record consultation activity, key issues, and outcomes.

Strike continues to consult with landholders, traditional owners, local government, state and federal government agencies and other stakeholders with regards to the Project.

- Relevant person(s) for the purpose of identifying stakeholders that should be consulted were identified based on the following:
- Departments or agencies that administer the required approval(s) to implement the proposed Project;
- Landholders within the Project Area;
- Any person or organisation whose functions, interests or activities may be affected by the Project; and
- Any other person or organisation with a potential interest in the proposed Project.

Stakeholders engaged to date include:

- Department of Energy, Mines, Industry Regulation and Safety;
- Yamatji Southern Regional Corporation;
- Shire of Carnamah;
- Shire of Coorow; and
- Landowners (direct and adjacent).

Strike will continue to communicate with existing and any new identified stakeholders and consult during all phases of the Project, on a formal and informal basis, and by email, letter, face-to-face and telephone. Records of consultations activities will be presented in Strike's annual environment report to DEMIRS.

6 Environmental Management

A summary of the potential environmental impacts that may result from the Project is provided in Table 6.1. It outlines the management and mitigation measures that form part of the implementation strategy to minimise environmental risk.

Table 6.1: Summary of Performance Objectives, Standards and Measurement Criteria

Aspect	Potential Impacts	Management Measures	
Soil and Landform	Compaction of dryland agricultural soils Damage to beds or landforms as a result of vehicle movements near crossings and/or sloped banks	Hierarchy of Controls	Measure
		Elimination	Surface water bodies and areas of riparian vegetation will be avoided to minimise the risk to existing features.
		Substitution	Balloon tyres utilised on agricultural land.
		Engineering	Controls will be put in place to ensure activities are restricted to designated areas/planned survey lines.
		Administration	All personnel involved in the Project will undertake training and induction to ensure awareness of potential risk associated with damage to beds and banks and measures to be undertaken to minimise the risk.
Regional Hydrology	Localised water impacts	See Unplanned Event (Loss of Containment)	
Flora and vegetation	Loss of conservation significant flora and/or ecological communities	Hierarchy of Controls	Measure
		Elimination	No clearing of native vegetation is required for the Project.
			No access to areas of native vegetation
		Isolation	50 m buffer for refuelling around known declared rare (threatened) flora
		Engineering	Vehicles and equipment movement will be restricted to pre-existing cleared areas.
		Administration	Site Induction covers Project Area, access restrictions, speed limits and flora/vegetation conservation significant values of the surrounding area.
Terrestrial Fauna	Injury and/or loss of native/ conservation-significant fauna Modification of fauna behaviour	Hierarchy of Controls	Measure
		Elimination	Activities limited to daylight hours.
			No clearing of native vegetation is required for the Project.
			No access to areas of native vegetation.
		Engineering	Vehicles and equipment movement will be restricted to pre-existing cleared areas.
		Administration	Site induction includes vehicle speed limits, staying on pre-existing cleared areas and the requirement for personnel to be alert for wildlife.
Greenhouse Gas Emissions	Greenhouse Gas emissions resulting in significantly reduced air quality	Hierarchy of Controls	Measure
		Engineering	Vehicles and equipment regularly maintained.
		Administration	Fuel usage records are maintained.

Aspect	Potential Impacts	Management Measures	
Dust Emissions	Dust impacts reduce air quality	Hierarchy of Controls	Measure
		Engineering	Speed limits for vehicle traffic imposed across Project Area.
		Administration	Induction of site personnel on vehicle speed limits.
			Activities to stop where excess dust generation is noticed.
Noise Emissions	Noise impacts native fauna Noise impacts on rural residences	Hierarchy of Controls	Measures
		Elimination	Activities limited to daylight hours.
		Engineering	Maintenance of equipment and vehicles per manufacturer recommendations.
		Administration	Consultation with near-by neighbours.
Light Emissions	No Potential Impacts		
Weeds and Dieback	Introduction and/or spread of weeds and/or Dieback	Hierarchy of Controls	Measure
		Elimination	Project location not in Dieback area.
		Engineering	Vehicles and equipment (including geophones) are to arrive on site in a clean state and conduct inspection on site including sign off on the hygiene inspection checklist.
			Land access will be in in accordance with landholder access agreement.
			Vehicles restricted to existing cleared areas.
			Vehicles and equipment to clean down prior to seismic activities adjacent to DBCA managed land
		Administration	Personnel are required to complete the induction which outlines weed management.
			Mobile clean down equipment will be available at all times during Project activities.

Aspect	Potential Impacts	Management Measures	
Socio-economic	Negative stakeholder feedback Additional traffic impacting local road users Damage to infrastructure Disruption to socioeconomic value of landholder's activities	Hierarchy of Controls	Measure
		Elimination	Adhere to vibroseis vehicle's safe offset distances.
		Substitution	Activities limited to daylight hours.
			Diversion of lines to avoid damage occurring during the Project.
		Engineering	Personnel to drive to conditions and strictly adhere to speed limits.
			Vehicle movements and placement of nodes to be restricted to existing cleared areas, roads, access tracks and firebreaks.
			All avoidance areas (including known critical infrastructure) identified and demarcated via flagging and/or and uploaded to GPS navigation system of Project vehicles.
		Administration	All personnel (i.e., employees, contractors and subcontractors) will be instructed (via inductions) on landowner/stakeholder sensitivities of the surrounding area.
			All Project activities undertaken in accordance with the landowner access agreement.
			Where possible, local accommodation facilities will be utilised to reduce transport on public roads.
			Ongoing consultation, including notification of activity details to relevant stakeholders, throughout the life of the Project.
			Rehabilitation will be undertaken in consultation with relevant landholders and in accordance with terms and conditions of a Land Access Agreement for the relevant property.
			Reinstate infrastructure to pre-disturbance condition, or as otherwise agreed with relevant landholders.
			Restore disturbance on private land as soon as practical, but no later than six months.
			Land Access Agreements are executed prior to entry to freehold land
Aboriginal Heritage	Loss of heritage value due to disturbance of heritage site	Hierarchy of Controls	Measure
		Elimination	Project to occur on pre-existing cleared areas such as agriculture land, existing roads, tracks and firebreaks.
		Isolation	No vehicle movements within 50 m of surface water, except on existing tracks and roads.
		Engineering	Identified sites or avoidance areas to be loaded on GPS navigation instruments.
		Administration	Induction of site personnel to identify potential risk of encountering artefacts of heritage value and required actions and reporting if items identified.
			Induction of site personnel on Site Discovery Procedure.
			Consultation with Yamatji Southern Regional Corporation

Aspect	Potential Impacts	Management Measures	
Waste	Injury or death of native fauna and livestock due to inappropriate waste management practices (e.g., from ingestion) Contamination of soil, surface water or groundwater Nuisance/amenity impacts to local landowners	Hierarchy of Controls	Measure
		Elimination	No scheduled or major vehicle servicing will occur within the Project Area.
		Engineering	Wastes to be segregated and stored in dedicated waste bins.
			Cigarette butts placed in vehicle ash trays or in issued personal ash tray.
			Domestic wastes (food/lunch waste, paper) and rubbish will be contained in vehicles and disposed of at the accommodation facility in dedicated waste bins or in consultation with relevant landowner.
		Administration	Inductions and awareness training to cover waste management.
			Site inspections to ensure all equipment and wastes removed from Project Area.
Unplanned Event (Fire)	Degradation of the broader area Injury or loss of native fauna and/or livestock Loss of conservation significant flora, ecological communities and fauna habitat	Hierarchy of Controls	Measure
		Elimination	No access to areas of native vegetation.
			No scheduled or major vehicle servicing will occur within the Project Area.
			No hot works are permitted to be undertaken in the Project Area
		Isolation	Prior to machinery maintenance, the immediate area will be cleared of flammable materials
			Ignition sources will never be left unattended
			All vehicles will be parked within the cleared area, with no parking on areas of native vegetation
			Smoking is permitted in designated areas only
		Engineering	Maintain vehicles and equipment in accordance with service schedules to minimise risk of fire
			Firefighting equipment will be made available for use.
		Administration	ERP and emergency exercises (fire drills) in place
			OSCP in place
			Project activity workers will be trained in fire prevention and firefighting techniques.
			Fire restrictions are observed and adhered to when required
			Refuelling in accordance with the Primary Contractor's Standard Operating Procedure
			Immediate notification of stakeholders in the event of an incidence of fire associated with Project activities.
			No open fires permitted in the Project Area
			Inductions and awareness training to cover fire prevention and management.

Aspect	Potential Impacts	Management Measures	
Unplanned Event (Loss of Containment)	Contamination of soil, surface waters and/or groundwater.	Hierarchy of Controls	Measure
		Isolation	Stationary fuel tank to be located in laydown area at least 50 m from surface water areas
		Engineering	Project to occur on pre-existing cleared areas such as agriculture land, existing roads, tracks and firebreaks.
			No vehicle movements within 50 m of surface water, except on existing tracks and roads.
			Use of a self-bunded stationary fuel tank and mobile refuelling truck.
			Refuelling to use appropriate equipment.
			Stationary bunded fuel tank to be located 50 m from native vegetation
		Administration	Vehicle refuelling conducted on site will not be conducted within 50 m of surface water, national parks, or nature reserves.
			All operational machinery, vehicles and equipment to be inspected prior to commencement.
			Daily check for all vehicles and equipment for evidence of oil/fuel leaks.
			Spill kits to be available in Project vehicles at all times.
			All spills to be recorded and immediately cleaned up in accordance with the OSCP and ERP.
			Inductions and awareness training, including OSCP.

7 Implementation Strategy

Strike has an overarching environmental responsibility for the management of the Project. Strike will undertake the Project with a commitment to reduce its impact on the environment. This commitment is fundamental to its Environmental Policy.

Strike has a number of systems, practices and procedures that relate to the implementation of the Environment Plan and enables activities to be managed to ALARP. Strike's Implementation strategy includes:

- Systems, practices and procedures for implementing this Environment Plan;
- Roles and responsibilities of personnel to ensure that the Environment Plan is implemented;
- Training and competencies required of personnel;
- Oil spill response plan;
- Monitoring, auditing and management of non-conformances;
- Record keeping;
- Reporting and notification arrangements; and
- Review of the Environment Plan.

Relevant systems and procedures include:

- HSE Management System;
- Emergency Response Plan;
- Oil Spill Contingency Plan (OSCP); and
- Incident Investigation and Reporting.

The implementation strategy detailed in the Environment Plan identifies the responsibilities/roles and competency/training requirements for all personnel (Strike and its contractor(s)) in relation to implementing management controls, monitoring, auditing, and reporting requirements during the Project. The Environment Plan details the types of monitoring and auditing that will be undertaken, the reporting requirements for environmental incidents and reporting on overall compliance of the Project.