Titleholder's Report on Public Comment – Eureka 3D MSS

Pilot Energy are planning to undertake a marine seismic survey (MSS) in offshore permits WA-418-P located in Commonwealth waters of the Perth Basin, ~6 km offshore of Western Australia adjacent to Dongara and north of Beagle Island. Pilot Energy proposes to survey approximately 1,575 km^2 over a maximum duration of 40 days in water depths ranging from 10 m to 60 m.

The Eureka 3D MSS will take a maximum of 40 days to acquire and will be undertaken within the acquisition window of February to March (inclusive) during either 2025 or 2026. The precise timing of the survey is subject to vessel availability, weather conditions and other operational considerations, and will consider the seasonality of environmental sensitivities, where practicable.

The Eureka 3D MSS was submitted to NOPSEMA for completeness check and accepted as complete on 21 February 2024. Following acceptance, the EP was published on the NOPSEMA website for a 30-day public comment period. The EP was available for public comment from 21 February 2024 to 22 March 2024.

Pilot Energy would like to thank the submitters for their responses pertaining to the Eureka 3D MSS Environment Plan. A total of 25 public submissions were received during the public comment period. The following report details comments on 11 themes from the received public comments.

There were several comments made which are out of scope of the public comment process. These included claims related to the following matters:

- Risk of triggering earthquakes from seismic surveys.
- Objections to Cliff Head being used for carbon capture and storage.
- General opposition to seismic activities.
- Concerns about carbon capture and storage activities beyond the scope of this EP.

One submission of the 25 received was in relation to a different petroleum activity and has not been included in this report.

Pilot Energy has identified the sections of the EP that correspond to the matters raised, where the matters have been accounted for in the EP. Where applicable, Pilot Energy has indicated where updates have been made to the EP in response to the submissions received. The titleholder and nominated liaison person contact details for the Eureka 3D MSS are provided below.

Details	**Titleholder**
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1. Theme: Inadequate description of survey operations

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
1.	**Matter: The site is too shallow for vessels to access.** **Claim**: Seismic vessels would not be able to access whole site, being too shallow.	In the detailed investigations and research undertaken by Pilot to inform the survey design, highly granular bathymetry maps have been compiled. A representative of one of these maps is found in Fig 3-2 of the EP which shows that the depth within the Operational Area is mostly safely navigable and some known reef areas which may be shallower have been excluded. In addition, whilst this is standard practice in the industry, a control measure has been adopted to ensure that all activity vessels will have sonar and depth sounders and follow Marine Order 27 (safety of navigation and radio equipment) to ensure that the areas that may be too shallow are not entered.
2.	**Matter: Insufficient operational description of the shallow water nodes was provided in the EP.** **Claim:** Provide mapping and detailed descriptions of the survey's shallow water area, survey vessel line turns, and the shot grid in the shallow water area. **Claim:** Clarify if shots will be fired in the shallow water area and if so, will the number of shots fired in the shallow water area be increased. **Claim:** Explain the separation distances between sail lines for the seismic source operation with streamers and between source lines for the ocean bottom nodes and clarify if the ocean bottom nodes will be placed in a rectangular grid.	Pilot has added information to Section 3 of the EP to explain with more clarity the activity within the nodal area. This information includes that the density of nodes is 200/sqkm. In comparison to a density of 266/sqkm in sections where the streamer is deployed, which identifies that there will be less shots fired in the nodal area. Additional information on sail lines was also added as sail lines in the nodal area will be 50m apart with a shot point every 100m. There have been no changes to the discussion on shot grid layout which is detailed in Section 3.3.3 of the EP, stating it will depend on the contractor but the most likely layout is 250 m x 250 m.
3.	**Matter: The proposed vessels and survey design does not meet maritime standards.** **Claim:** Shallow water seismic acquisition should be eliminated from the operational area due to the proposed vessels and survey design not meeting maritime standards.	The vessel is required to adhere to all relevant AMSA marine orders which are listed as performance standards throughout the EP in Section 7. SOLAS legislative requirements must be met. Additionally, In Section 10, the EP details the roles and responsibilities of Vessel Manager and Vessel Master which must be followed.
4.	**Matter: The EP wording is uncertain that nodes will be used for shallow water seismic acquisition.** **Claim:** The use of ocean bottom nodes in shallow water is identified as a possible method rather than a confirmed method in the EP. Therefore, the impacts resulting from the survey methodologies are unclear.	Pilot agrees that there was some ambiguity in the activity description on operational methodology. As a result section 3.3.3 of the EP has been reworded to commit to specific survey methodology in the ASA and nodal area. It makes it clear that the area called 'nodal area' will not be acquired using streamers, but only with Ocean Bottom nodes.

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
5.	**Matter: A different seismic source should be considered for the survey, in line with the Senate's "Environment and Communications References Committee Report Making waves: the impact of seismic testing on fisheries and the marine environment" recommendations.** **Claim:** Alternative seismic technologies which pose a lower impact on marine animals and the marine environment should be considered and adopted, in line with the Senate's recommendations in the "Environment and Communications References Committee Report Making waves: the impact of seismic testing on fisheries and the marine environment".	As the timing (Feb -Mar 2025 or 2026) and vessel contractor are yet to be determined Pilot have added a statement in the EP (section 3.3.1) that all source options will be considered based on what contractors have available at the time of survey to allow for technical advances, and the requirements of the survey.

2. Theme: Inadequate description of the existing environment

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
6.	**Matter**: **The west coast inshore lagoons Key Ecological Feature (KEF) is a sensitive area that should be addressed further in the EP, especially considering the dependency of juvenile fish on this area.** **Claim**: Inadequate reference sources and insufficient detail in the EP to describe the widespread presence of juvenile populations and interaction of larger species in feeding grounds of the nearshore environment. **Claim**: Insufficient detail in the EP to describe the west coast inshore lagoons KEF's sensitive environment.	The detail provided in section 4.3.5.1 of the EP is considered to meet the requirements in the OPGGS (Environment) Regulations 2023 section 21. It identifies the relevant KEF's and highlights the values of the Commonwealth marine environment within and adjacent to the West Coast Inshore Lagoons KEF. Section 7.1.2 identifies an acceptable level of impact (no impact to the values of the KEF) and Section 7.1.5.9 undertakes an assessment on the values of the KEF that may be impacted and finds that there is a Low risk ranking for potential impact on the KEF. Pilot has considered these claims and is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the EP in response to these claims.
7.	**Matter: Inappropriate use of reference source on the Western rock lobster life cycle to inform EP assumptions.** **Claim:** The Western rock lobster life cycle infographic is too simple and is not a suitable reference source to underpin assumptions in the EP and for the activity exclusion zone context.	The information provided in the EP regarding western rock lobster (WRL) (EP section 4.3.5.2) to support the impact assessment (EP section 7.1.5.2) includes peer reviewed data from the Western Australian Marine Stewardship Council and ecosystem processes descriptions from reports prepared for the Commonwealth Government, and the impact assessment is supported by a combination of bathymetrical analysis, acoustic modelling and stakeholder input. The infographic is included in the EP to support explanation of the complex life cycle of the WRL and is not intended to provide stand-alone information to support impact assessment. The impact assessment in Section 7.1.5.2 draws from additional peer reviewed literature on the WRL life cycle.
8.	**Matter: The role of ecosystem function could be better recognised and defined in this EP.** **Claim**: There is a detailed focus on only a singular species and a limited number of commercial fish species **Claim**: Not enough information on association between fish assemblages and the habitat value of the EP site.	The OPGGS E Regs (section 21) require a titleholder to include details of the relevant values and sensitivities in the environment that may be affected by the activity. The purpose of this description is to inform the evaluation of environmental impacts and risks and assist with defining acceptable levels of impact. Pilot identified the most relevant and sensitive species that may be impacted by the survey through following a series of processes including: • Conducting a search of the Commonwealth protected matters database

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		• Subject Matter Expert information • Discussion with key stakeholders • Research of relevant literature. As there are so many different species the intent is that the controls, outcomes and performance standards in the EP will be relevant to all species, including those considered less sensitive to environmental impacts. The commercial fish species described in the EP are indicative of fish stocks targeted by fisheries in the OA and EMBA. These species are known as key indicator species and are used in the management of commercial fish stocks. Indicator species are selected from a suite of commercially targeted fishes (based on their vulnerability, management importance and sustainability risk) to represent the status of the overall resource. Pilot has considered these claims and is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the EP in response to these claims.

3. Theme: Impacts from seismic noise to marine life

#	PUBLIC COMMENT CLAIMS	TITLEHOLDER RESPONSE
9	**Matter: The seismic survey will impact Western rock lobster** **Claim:** Key habitats for Western rock lobster are located within the operational area and the marine seismic survey could result in significant impacts to Western rock lobster populations, the wider ecosystem and on fishing activities. **Claim:** The impact assessment for WRL has not adequately considered relevant scientific literature, including the unpublished DPIRD study, or impacts to different life stages including juveniles and planktonic larvae.	During the assessment process Pilot engaged with numerous stakeholders including relevant government agencies such as DPIRD. Potential impacts of the survey on Western Rock Lobster (WRL) was a common concern raised and this resulted in substantial efforts in desktop review of available literature and a robust evaluation of potential impacts from seismic noise on this species. This thorough assessment is presented in section 7.1.5.2 and includes consideration of all literature identified during the public comment process. In addition, activity specific acoustic modelling was undertaken to determine sub-lethal effect ranges in accordance with the best available science. Sub-lethal effects were predicted out to approximately 200 m from the seismic source and Pilot have committed to a 300 m exclusion zone around the major shallow reef systems within the nodal area of the activity, which are likely to form habitat for juvenile WRL (refer to Table 7-20 and Performance standard 13). Some additional discussion has been added to Section 7.1.5.2 to more clearly evaluate the spatio-temporal overlap of the proposed MSS with different WRL life stages. While there remains potential for individual WRL to incur sub-lethal effects Pilot considers that impacts to WRL will be managed to ALARP (As Low as Reasonably Practicable) and acceptable levels based on the evaluation set out in Sections 7.1.5.2 and 7.1.6.1.
10	**Matter: The seismic survey will impact Australian sea lion foraging resources and has not been addressed in the EP.** **Claim:** Impacts to Australian sea lion prey species (fish, cephalopods, crustaceans and sea birds), and flow on impacts to Australia sea lion, including foraging capability, physical interaction or displacement, have not been addressed in the EP.	Pilot has expanded the evaluation of impacts to the Australian Sea Lion (ASL) in Section 7.1.5.7 to include potential impacts from prey displacement. This additional discussion draws the reader back to the impact assessment on fishes and elasmobranchs, cephalopods and invertebrates sections. It concludes that impact to ASL prey species will be short term and localised and that the area of temporary prey displacement for more mobile species will be small relative to the large Australian Sea Lion BIA for foraging.
11	**Matter: Impacts to fishes from seismic surveys are downplayed in the EP.** **Claim:** Concern that previous seismic activity in the area resulted in declined and changed catching patterns, and impacts to fish, fish spawning and food chain.	The potential for previous seismic surveys to have impacts to catch rates is assessed in Section 7.1.5.5. Numerous studies have been undertaken across different target species and fishing methods to determine if there are significant impacts to catch rates as a result of marine seismic surveys. The results of these studies have not shown a clear pattern of declining catch rates, with some studies revealing elevated catch rates and some showing decline. One issue is that it is not possible to isolate possible seismic survey effects from

#	PUBLIC COMMENT CLAIMS	TITLEHOLDER RESPONSE
	Claim: That the EP discredits studies on impacts from previous seismic surveys on the genuine short-, medium- and long-term impacts to fishes and catch rates from seismic sound.	confounding factors such as fishing pressure, climatic changes and variation in natural population dynamics. The impact assessment in the EP has considered the best available science, contemporary data on fishing catch and effort in the operational area and current stock status of relevant target species to evaluate potential impacts. Pilot has considered these claims and is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the EP in response to these claims.
12	**Matter**: **Impacts to plankton and krill from marine seismic surveys.** **Claim:** Marine seismic surveys pose significant impacts to zooplankton and low abundance and high mortality for krill, as detailed in existing literature (Vereide et al. 2023). Considering zooplankton's trophic value in the ecosystem, impacts to zooplankton can lead to significant ecosystem impacts. **Claim:** Marine seismic surveys pose significant impacts to zooplankton, which could reduce foraging resources for coral and resulting in significant ecological and commercial impacts.	Impacts to Zooplankton have been assessed in Section 7.1.5.1 of the EP and the conclusions have found the below: • Any potential mortality/ injury impacts to zooplankton communities have to be assessed in the context of natural mortality in these populations. Any mortality or mortal injury effects to zooplankton (including fish eggs and larvae) resulting from seismic noise emissions are likely to be inconsequential compared to natural mortality rates, which are very high. • The magnitude of localised impacts is negligible and is not expected to be discernible at the regional scale when considering the large natural spatial and temporal variability and scale of plankton and spawning biomass in the Southwest Marine Region. In particular, phytoplankton and zooplankton biomass in the oceans can vary significantly at spatial scales ranging from hundreds of metres to hundreds of kilometres and temporal scales of hours, days, seasons and inter-annually, due to tidal and large-scale currents, bathymetry, temperature, salinity, water chemistry parameters and other environmental factors (Gibbons & Hutchings 1996; Holliday et al. 2011; McKinnon et al. 2008; Pearce et al. 2000; Sutton & Beckley 2017). Therefore, changes in zooplankton abundance are likely to be replenished and indistinguishable from natural levels and distributions within hours of a seismic survey vessel passing. Pilot has considered these claims and is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the EP in response to these claims.
13	**Matter: The marine seismic survey will impact on invertebrates, including scallops.**	Section 7.1.5.2 of the EP includes a comprehensive review of published literature on the effects of underwater noise on scallops and other molluscs. However, impacts of scallops are not a major focus of the impact assessment as the operational area does not overlap the fished area of the Abrolhos Islands and Mid West Trawl Managed Fishery, indicating

#	PUBLIC COMMENT CLAIMS	TITLEHOLDER RESPONSE
	Claim: Existing research (Day et al. 2017) shows potential harm from marine seismic surveys on scallops, which is a commercially valued species. The resulting behavioural changes and high mortality will have a cumulative impact on scallops, which are already under pressure from the fishing industry.	that the operational area is not a suitable habitat for scallops, at least at commercial densities (Table 4-15 and Section 4.4.2.3.2 of EP). Pilot has considered these claims and is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the EP in response to these claims.
14	**Matter: Demonstration of acceptability for commercial and recreational fisheries not met.** **Claim:** The EP's assessment that commercial or recreational fishery catch rates will be impacted for <12 months following completion of the survey is inconsistent with the EP's demonstration of acceptability criteria of no impacts to commercial or recreational fishery catch rates.	Pilot found on review of this comment that there was an inconsistency in the acceptability criteria and conclusions. Pilot have undertaken further analysis of this discussion and it is now consistent.
15	**Matter: The underwater noise modelling does not consider shallow, nearshore environments within the operational area.** **Claim:** The underwater noise modelling is limited in value as the modelling sites bordered or located outside the complex shallow, nearshore marine environment.	Section 7.1.4 describes how the acoustic modelling was undertaken and clearly shows that it included representative sites extending from the shallowest to the deepest water depths across the survey area. It should also be noted that there will be a number of reef exclusion zones around the complex shallow reef areas where the seismic source will not be discharged. The underwater noise modelling undertaken for shallow sites outside of the exclusion zones is considered appropriately representative of sound exposure levels across the shallow waters and no change has been made to the EP.
16	**Matter: Seismic surveys impact upon sensitive marine life.** **Claim:** Impacts to Australian sea lion from noise disturbance. **Claim:** The seismic survey will have significant impacts to fish. Existing literature (McCauley et al. 2003 and Sierra-Flores et al. 2015) has identified damage to hearing organs, behavioural changes, and signs of stress. Fish displaced from regular foraging and breeding habitat would affect the local food chain, and fish remaining can be subject to ongoing damage. **Claim:** Further research is required to understand the impacts to local marine fauna, as the EP states there may be limited localised effects resulting from ensonification.	The EP presents a comprehensive assessment of impacts to sensitive marine life from underwater noise produced by seismic surveys in Section 7.1 of the EP. Pilot applies the Oil and Gas UK (OGUK) (2014) Guidance on Risk Related Decision Making to determine the assessment technique applied for each impact or risk. Pilot has considered previous impact and risk assessments for similar activities, review of relevant published studies (peer reviewed and grey literature) and relevant person consultation concerns/feedback. Wherever possible, site-specific and activity-specific data has been used in the impact/risk assessment; however, in order to address areas of uncertainty, a precautionary approach has been taken and a conservative or "worst case" approach has been applied where there is uncertainty in the level of harm. With regards to marine mammals Pilot is aware that there is potential for Seismic activities to have an impact on marine mammals. Because of this they have restricted themselves to

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	Claim: The seismic survey will have significant impacts to dolphins and whales. **Claim:** Existing literature (Dunlop et al. 2018, Kavanagh et al. 2019 and Nowacek et al. 2015) shows reduction in sightings of cetacean species and temporary and permanent hearing impacts due to marine seismic surveys. Concern that noise pollution from marine seismic surveys will mask cetacean communication and therefore affect social structures and interactions. Concern that whales will sing louder or cease singing due to the marine seismic survey noise (Blackwell et al. 2013 and Thode et all. 2020). **Claim:** The marine seismic survey will reduce the extent and presence of marine mammal prey species.	a small window of time between February and March to avoid migration season for known migratory whales in that area. This temporal exclusion is supported with controls for Marine Fauna Observers (MFO's) on seismic and support vessels to increase the possibility of identifying any cetaceans that may be passing out of season. The MFO will then trigger commencement of shutdown protocols. This is detailed in section 7.1.6. This shut-down protocol has been extended to include the Australian Sea Lion (ASL). The ASL hearing range is likely to be largely below the frequency produced by the seismic airgun and hence is only a threat if it takes place close to them. The EP identified the following fish types for assessment: • Site-attached fish assemblages • Demersal fish species, including key commercial indicator species such as dhufish, snapper, baldchin groper and redthroat emperor • Pelagic fish species, including species targeted by commercial and recreational fishers, such as mackerels, samson fish, tuna species and trevally • Shark species, including EPBC Act-listed sharks. As these all represent different morphologies and impact pathways they have been discussed separately in the EP. However, the impact assessment conclusion across all these species found that the potential impacts of noise emissions are considered to be 'localised' and 'short-term' and restricted to temporary behavioural changes (avoidance) in any isolated individuals that may transit the area in close proximity to the operating seismic source. Based on the timing and duration of the seismic acquisition and overlap with suitable habitat, noise levels from the seismic acquisition is not considered likely to cause mortality, recoverable injury or significant TTS effects at a population level. Furthermore, recovery is expected within 12 to 24 hours for any low level impacts.
17	**Matter: Seismic acquisition in shallow waters is not assessed in the EP.** **Claim:** Marine seismic survey in shallow waters present vessel navigation and reef integrity hazards and increased noise impacts to marine life. The marine seismic survey activity in shallow water has been inadequately assessed. **Claim:** Risks to benthic habitats and aquatic species from underwater noise in shallow water environments has not been addressed.	To address claims relating to shallow water impacts the Eureka EP has been updated further detail to describe the activity being undertaken in shallow water environments, including: • More detail in section 3.1.1 – Active source area • More detail added in section 3.3.1 – seismic source operations • More detail added in section 3.3.3 – ocean bottom nodes • New images added to section 3. In addition to updates in the activity description Pilot have added a control that vessels will be fitted with sonar and depth sounders when working in waters <12 m. This is standard practice in vessels of this class and necessary for the management of safe operation of ships

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		(SOLAS). Along with this a performance standard to reference compliance with Marine Order 27 (safety of navigation and radio equipment) has been added to demonstrate that any vessel contracted by Pilot will be adhering to standard maritime laws. In section 7.1.4 the EP describes how sea floor sound levels were assessed at eight different representative water depths within the ASA (between 10 and 50 m). More information on sound attenuation in these areas and the potential impacts on marine receptors is found in section 7.1.5 of the EP.
18	**Matter: The EP presents unacceptable impacts to Australian Marine Parks.** **Claim:** Concerned about the proximity to or overlap with protected Australian Marine Parks (i.e. Abrolhos Australian Marine Park) and Beagle Island, which contains critical breeding habitat. **Claim:** The proposal poses unacceptable impacts to Matters of National Environmental Significance and Environmentally Significant Areas, as supported by existing literature.	An impact assessment on impacts to protected areas has been undertaken in EP section 7.1.5.9. This includes discussion of the key features and objectives of the protected areas within the environment that may be affected by the survey and an assessment of the activities Pilot intend to take on the values of that protected area. The marine protected areas that may be impacted by the survey are described in section 4.3.6 of the EP and the impact to those from underwater noise produced by the seismic survey is assessed throughout section 7.1.5. The assessment demonstrates that potential impacts to marine protected areas as a result of the survey are as low as reasonably practicable and are acceptable. In addition to the impact assessment section 7 there is an assessment in in Section 9 about whether activities and potential impacts are inconsistent with relevant recovery and threat abatement plans. Pilot has considered these claims and is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the EP in response to these claims.
19	**Matter: There are significant impacts to coral reefs from seismic surveys that are not addressed by the reef exclusion zones presented in the EP**. **Claim:** Concern on long term impacts to coral reefs and marine life from the marine seismic survey. **Claim:** The EP's reef structure exclusion zones are inadequate and do not address the complex reef structures in shallow waters or interaction of marine species between reef or other structures in the operational area. **Claim:** The reef exclusion zones and the relevance of the 12 meter contour and the 300 meter horizontal distance exclusion is unclear	In Section 7.1.5.2 of the EP a paper by Heyward et al (2018) is referred to which relates to the findings of no impact to corals from 3D MSS activities. Despite this Pilot Energy are also putting forward a conservative control to exclude certain known reef areas below the 12 m contour to further protect the reefs and sensitive biota living in those areas. To detail this, Pilot Energy have committed to no operation of the seismic source within 300 m of the 12 m contour of Leander reef and Big Horseshoe reef or within 300 m of the 12 m contour of other unnamed reef area within the eastern part of the ASA. These areas are marked on a map (Figure 3-2) and described in 3.1.1. Potential impact to coral reefs, spawning and krill is described in section 7.1.5 and found that there is low residual risk to these receptors.

#	PUBLIC COMMENT CLAIMS	TITLEHOLDER RESPONSE
	and how this will be applied on the inside of these major reef structures is not communicated.	
20	**Matter: Seismic surveys are too risky in the marine environment and have negative impacts on marine life.** **Claim:** The marine seismic survey will have significant impact on marine wildlife, vegetation, and ecosystems. **Claim:** Pilot Energy has not demonstrated that environmental values of the operational area can be maintained with certainty during the consultation process. **Claim:** The location of the marine seismic survey is already under existing anthropogenic stressors and the survey would place additional pressure on the environment. **Claim:** Concern for the reef systems recovering from marine heat waves.	The shipping, fishing and energy industries, and regulators, recognise that there are necessarily impacts from those activities. However best endeavours are made to avoid, minimise and mitigate potential impacts so that impacts are ALARP (as low as reasonably practicable). The Eureka EP thoroughly discusses what receptors are potentially impacted by Pilots activities, what the impacts and risks are and what can be done to ensure that they are ALARP After assessment, controls and performance standard are considered it was found that all risks, except for three are considered low. The remaining three: • underwater sound lobster and octopus, • interaction with fisheries and • vessel collision physical impact) have a moderate risk. These risks have mitigations in place (detailed in Tabel 7-20) to ensure that the impact or risk is ALARP.
21	**Matter: Cumulative impacts to marine receptors are not addressed in the EP.** **Claim:** Cumulative impacts to marine receptors (i.e. reef systems) have not been addressed. **Claim:** The Australian sea lion has critical breeding and foraging habitat in the proposal area its Abrolhos population is sensitive to external stressors. The proposed marine seismic survey will add to the cumulative impacts upon this species, which could have a significant impact. **Claim:** Cumulative impacts to Australian sea lion populations, and pups, from the proposed activity are poorly known. There are limited sources to understand the population in the proposal area and the current stressors on this population. **Claim:** Concern that cumulative impacts to West Coast Demersal Scalefish resource stock have not been considered in the EP, as the	The OPGGS Act provides the regulatory framework for all offshore petroleum exploration, production and greenhouse gas (GHG) activities in Commonwealth waters. The related OPGGS (E) Regulations require titleholders to undertake their petroleum activity in accordance with an EP accepted by NOPSEMA. This EP has been prepared to meet the requirements of the OPGGS (E) Regulations. Under the OPGGS (E) Regulations titleholders are not required to assess impacts to species resulting from the survey in addition to external stressors. The EP includes a cumulative/additive impact assessment of historic seismic surveys acquired in the vicinity of the proposed survey, and surveys that may be acquired concurrently with it in Section 7.1. No changes to the EP have been made in response to these comments.

#	PUBLIC COMMENT CLAIMS	TITLEHOLDER RESPONSE
	species has sustainability concerns and further impacts will affect its recovery. **Claim:** Cumulative impacts have not been addressed.	
22	**Matter: The data and impact assessment for southern rock lobster is not reflective of impacts to the western rock lobster.** **Claim:** The impact assessment for Western Rock Lobster does not adequately address areas of uncertainty. In particular, limitations of published literature on the effects of underwater noise (e.g. studies on different species in different environments or in laboratory settings), knowledge gaps and insufficient understanding of impacts in shallow, near shore environment within operational area. **Claim:** There is a requirement for specific, relevant, and robust research based on field data on species impacted by marine seismic surveys (i.e. western rock lobster at all life stages). The proposal cannot proceed without this information.	The Southern Rock lobster (*Jasus edwardsii*) and the Western rock lobster (*Panulirus cygnus*) are species of spiny rock lobster that belong to the Palinuridae family, though different genus within that family. There are known differences between the species in settlement time, duration of larval stages and growth patterns amongst other variations. However, both species have a mechanosensory organ called a statocyst that is potentially impacted by the particle motion component of underwater noise. As scientific research in all fields is limited, it is a common scientific and environmental impact assessment practice to draw on similar case studies for assessment of likely impacts. Importantly, the EP acknowledges the uncertainty in predictions of impact and has adopted a control measure that precludes operation of the seismic source within the shallow reef features of the survey area. A 300 m buffer has been applied to the 12 m depth contour of these reef features to prevent noise levels in these areas exceeding the sub-lethal effect thresholds for crustaceans. Pilot Energy is interested in working with the fishing stakeholders and regulators to get a more comprehensive understanding of priority items of research significance. These studies may be undertaken in the future but are not considered necessary to demonstrate that impacts from the activity will be managed to ALARP and acceptable levels. The EP has been updated in response to this matter to include more information on the spatio-temporal overlap of the survey with important life history stages of the WRL.

4. Theme: Impacts from the survey to other marine users

#	PUBLIC COMMENT	TOURISM, RECREATION AND COMMUNITIES (T)
23	**Matter: Displacement from fishing grounds, diving areas and tourism locations.** **Claim:** The marine seismic survey will displace people from regular fishing grounds. **Claim:** Concern about the proximity of the marine seismic survey to a busy port harbour and that it would impact access to the proposed area for recreational diving, fishing and whale and seal watching.	During the survey there will be temporary displacement of recreational and commercial fishers, charter and dive vessels, tourism vessels and commercial shipping, however, ddisruption to these activities is limited to that required for safe passage of the seismic vessel whilst it is restricted in its ability to manoeuvre . Performance standards 32, 33 and 34 is about notification and communication with relevant persons and fishers actively operating in the OA at the time of the survey. Fishing activities will be possible whilst the seismic vessel is located in other areas of the zone in which survey data is being acquired. Diving activities will need to be managed when within 30 km of the dive site and active source by undertaking a joint risk assessment.
24	**Matter**: **Impacts to tourism and fishing industry from the marine seismic survey.** **Claim:** Environmental impacts and damage from the marine seismic survey will adversely impact the local tourism, recreational and commercial and recreational fishing industries.	Sections 7 and 8 of the EP detail the assessment of environmental impacts that may occur from the survey to a range of receptors, including to the local tourism and commercial fishing and recreational fishing industries. The treatment of the inherent impacts and risks identified in the assessment process requires application of control measures to reduce them to ALARP and acceptable levels. Pilot applies the Oil and Gas UK (OGUK) (2014) Guidance on Risk Related Decision Making to determine the assessment technique applied for each impact or risk. Pilot has considered previous impact and risk assessments for similar activities, review of relevant published studies (peer reviewed and grey literature) and relevant person consultation concerns/feedback. Wherever possible, site-specific and activity-specific data has been used in the impact/risk assessment; however, in order to address areas of uncertainty, a precautionary approach has been taken and a conservative or "worst case" approach has been applied where there is uncertainty in the level of harm. Following demonstration that all reasonable and practicable control measures have been adopted to reduce the impacts and risks to ALARP, the pre-defined acceptable levels of impact have been compared with the residual levels of impact and risk. If the residual impact levels lie within the boundaries of the pre-defined acceptable levels, the impact or risk is considered acceptable. All of the environmental impacts assessed in the EP have been demonstrated to be managed to ALARP and acceptable levels. No change to the EP has been made in response to this comment.

#	PUBLIC COMMENT	TOURISM, RECREATION AND COMMUNITIES (T)
25	**Matter: That there may be future impacts to commercial fishing in the short, medium and long term.** **Claim:** Concern that the commercial fishing industry will take on the potential short, medium, and long-term impacts to aquatic resources from the marine seismic surveys. That future remediation of the environment will become the financial responsibility of the commercial fishing industry. **Claim:** Failure to acknowledge any ongoing or future impacts to commercial fishing in the EP. **Claim:** That the EP disregards studies on the legitimate medium-long-term effects of seismic exposure on wild Western rock lobster where adverse impacts are recorded on aquatic resources.	The impact assessment in section 7.1.5.5 concluded that impacts to fish, fish populations, fisheries and fishers will be localised and short term, with no evidence of medium – long term impacts to population levels, recruitment, behaviour or habitat for any species important to commercial fisheries. Australia has a dual access policy whereby through marine spatial planning ocean space is allocated for different uses. This area has been allocated as a petroleum title and with this is the expectation that Pilot will undertake certain activities as expectations of the right to hold that title. Pilot is obliged to have regard to the OPGGS Act and ensure that any impacts are ALARP (As Low as Reasonably Practicable). This process acknowledges that complete risk elimination is not always achievable due to resource limitations, technical constraints or scientific uncertainties but Pilot must demonstrate that all practicable preventative measures have been taken to minimise risks. As such mitigations detailed in Table 7-20 should prevent most short term impacts and if there are any formal claims of loss these will be followed up via the Commercial Fishing Industry Adjustment Protocol.

5. Theme: Mitigation measures

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
26	**Matter**: **Exclusion zone mitigation for WRL should be 500 m.** **Claim:** The Proponent should implement a 500 m distance between the marine seismic survey and the reefs that are western rock lobster habitat to enable their recovery during the surveys, as recommended in existing literature (Day et al. 2021). Concerned that the proposed approach of a 300 m distance from the 12 m bathymetric contour of the reefs could result in slowed development and growth, and physiological stress to the western rock lobster.	The proposed 300 m distance from the 12 m depth contour for reef features has considered the results of the Day et al. (2021) study. However, it is important to note that the airgun array used in this study was of a larger volume than proposed for the Eureka MSS and the environment will have unique geo-acoustic properties. This control measure was informed by noise modelling undertaken for this particular location and the specific airgun array proposed. This noise modelling determined that the appropriate sound effect level (202dB PK-PK) was only exceed out to a distance of 292 m. Hence it was considered appropriate to implement a control to avoid some of the most likely habitat for crustaceans, the larger reef systems, at a distance of 300 m which is unlikely to result in the harm outlined in this claim. Pilot has considered these claims and is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the EP in response to these claims.
27	**Matter: The mitigations applied to protect Australian Sea Lions are inadequate.** **Claim:** Marine seismic surveys proximate to the Australian sea lion breeding sites (e.g., Fishermen Island, the Houtman Abrolhos islands) should be restricted to night-time operations to avoid disturbance. An acceptable separation buffer distance from Australian sea lion breeding and foraging sites should be developed for day-time operations. **Claim:** Australian sea lion foraging areas, which represents critical habitat for the species, overlaps the operational area and they actively foraging in the waters surrounding and between islands. The proposed mitigation of an exclusion zone of 9.2 km horizontal distance around the Beagle Islands is inadequate as it does not account for Australian sea lions foraging or migrating away from Beagle Islands.	Pilot acknowledges that Australian Sea Lion foraging BIA overlaps the OA and ASA of the MSS. During the Impact assessment in section 7.1.5.7 it is noted that numerous factors such as the hearing range of pinnipeds, previous studies and observations, and the modelled sounds pressures for pinnipeds indicate that no TTS or PTS impacts will occur. It is noted that there may be some behavioural impacts but given the large survey area and short time frames in which the seismic vessel will be in certain areas, plus the reduced sensitivity of seismic sound it is considered that risk of impact is low. Additionally risks to pinnipeds of prey disturbance was also considered to be a low risk. Not withstanding this assessment Pilot have extended mitigations normally applied only to cetaceans to also apply to the ASL. This is detailed in Table 7-20. Pilot has considered these claims and found that more information pertaining to Asl would be of assistance so has updated the text in section 7.1.5.7 and in section 4.3.7. Nonetheless Pilot is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the mitigations within Table 7-20 in response to these claims
28	**Matter: Implement shutdowns of seismic activity in response to observing Australian Sea Lions.**	As detailed in Performance Standard 1 (Table 7-20) If foraging sea lions are identified by the onboard MFO to be within 500 m of the seismic vessel the seismic source will be shutdown.

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
	Claim: A suggested mitigation measure is to shut down the seismic activity upon sighting of an Australian sea lion for a period of 20 minutes to enable the Australian sea lion to move away. Two observations will result in ceasing the seismic activity, as it is a feeding site.	This will occur regardless of numbers of animals observed. Start-up procedures will then need to be undertaken once the animal moves out of the shutdown zone.
29	**Matter: Employ and utilise marine fauna observers during the marine seismic survey.** **Claim:** A marine fauna observer should be present to monitor for marine mammals who migrate northwards in autumn and winter and migrate southwards spring. The marine seismic survey is located within an important marine area and activities should be closely controlled.	As detailed in section 7.1.6 of the EP, EPBC Policy Statement 2.1 Part B.1 Additional Management Procedures in relation to marine fauna observers (MFOs), including that two MOFs will be used on the seismic survey vessel. No change has been made to the EP in response to this comment.
30	**Matter: The control measures to protect or mitigation impacts to commercial fisheries are inadequate.** **Claim:** Despite feedback from the commercial industry on potential impacts, there is concern that the control measures for aquatic resources (e.g., notification of survey activities prior) are inadequate and offer no protection of fish and commercial fisheries.	Mitigation measures are put in place to decrease an identified concern for a receptor. The impact assessment identified that access to fishing areas may be impacted during the survey and that acoustic impacts may impact on site attached fish and crustaceans. As such there are numerous mitigations in place to manage these two concerns including performance standards: • PS 25 • PS 32 • PS 33 • PS 34 • PS 36 • PS 39 • PS 13 If these mitigations don't prove to be adequate then PS 37 outlines a compensation protocol that can be utilised by the impacted fisher.

6. Theme: Operational period overlap with sensitive window for receptors

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
31	**Matter: Potential conflict of planned third party operations on water with proposed timing of survey.** **Claim:** Potential conflict with third party operations within the operational area. Require further discussion with the Proponent to manage these activities.	Section 7.3 assesses Interactions with other marine users. As this is a known and well recognised impact of undertaking petroleum activities in the marine environment there are well established Industry practices in place to manage any occurrence. Communication and notifications ahead of time is the primary way of managing this impact. The exact processes are outlined in Table 7-26.
32	**Matter: Survey timing conflicts with numerous biological sensitivities.** **Claim:** The marine seismic survey timing conflicts with numerous biological sensitivities for the following species: • coral (spawning) • western rock lobster (juvenile) • bridled tern (foraging) • soft-plumaged petrel (foraging) • fairy tern (foraging) • flesh-footed shearwater (foraging) • Australian sea lion • Scalloped hammerhead (migration) • white shark (foraging) • WA dhufish (spawning) • red-throat emperor (spawning) • eightbar grouper (spawning) • bass groper (spawning) • blue-eye trevalla (spawning) • several key demersal and recreational species (spawning).	As there are numerous sensitive receptors within the OA and EMBA an assessment was made, after consultation with key stakeholders, on the most appropriate timing for the survey. It is necessary to triage the receptors based on the potential impacts and the legislated requirements for certain receptors. Further some of these sensitivities are all year round so unable to avoided. Marine species vary in their sensitivity to sound pressure with different biological attributes resulting in different outcomes. Additionally, some of the sensitive species identified in table 4-11 are found in the wider EMBA and will not be impacted due to distance from the seismic source. For instance, spawning of eightbar grouper, bass groper and blue eye trevalla occurs at depths outside of the ASA. The impact assessment undertaken in section 7.1 assists in understanding what impacts are of concern for the different receptors. As mentioned in the response to xx matter Pilot have restricted themselves to a small window of time between February and March. A key driver for this was to avoid migration season for known migratory whales in that area. There are also operational reasons why certain times of the year are more appropriate to conduct the survey, such as weather conditions that may increase the likelihood of certain risks and the duration of the survey. Pilot has considered the species listed here and is comfortable that the timing selected minimises overlap and allows for operational and stakeholder considerations.

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
		When the information on scallops is taken in holistically and with specific reference to the context in which scallops will be encountered in the Eureka survey there is no concern that impacts will be anything greater than localised and short term.

7. Theme: Insufficient data to support impact assessment

		TITLEHOLDER RESPONSE
33	**Matter: Requirement for Pilot Energy to advance scientific knowledge and reduce uncertainty through research.** **Claim:** Clarify what Pilot Energy has done to collaborate with research bodies to advance scientific knowledge and reduce uncertainty on the impacts from the proposed activities.	There is no direct requirement for Pilot to undertake scientific research to advance scientific knowledge. Pilot applies the Oil and Gas UK (OGUK) (2014) Guidance on Risk Related Decision Making to determine the assessment technique applied for each impact or risk. Pilot has considered previous impact and risk assessments for similar activities, review of relevant published studies (peer reviewed and grey literature) and relevant person consultation concerns/feedback. Wherever possible, site-specific and activity-specific data has been used in the impact/risk assessment; however, in order to address areas of uncertainty, a precautionary approach has been taken and a conservative or "worst case" approach has been applied where there is uncertainty in the level of harm. No change has been made to the EP in response to this comment.
34	**Matter: Pilot Energy has a responsibility for mitigating potential environmental impacts and adhering to the precautionary principle.** **Claim:** The precautionary principle should be applied to potential impacts to western rock lobster recapture rates, which DPIRD found to be likely driven by mortality caused through increased predation and loss of rock lobster physiological functionality.	The precautionary principle is defined in Section 391 (2) of the EPBC Act, and states that "lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage. As none of the activities that will be undertaken during Pilot's MSS has been assessed as having the potential for serious and irrevocable environmental damage the condition to use the precautionary principle is not met. Instead Pilot is obliged to have regard to the OPGGS Act and ensure that any impacts are ALARP (As Low as Reasonably Practicable). This process acknowledges that complete risk elimination is not always achievable due to resource limitations, technical constraints or scientific uncertainties but Pilot must demonstrate that all practicable preventative measures have been taken to minimise risks.
35	**Matter: Limitations to risk and impact assessment due to insufficient information provided on fishing industries in the EP.** **Claim:** The use of averages to understanding vessel numbers and fishing effort in the West Coast Rock Lobster Managed Fishery is inaccurate as the fishery has changed dramatically since 2013. Changes include quota management being introduced, total allowable commercial catch, and number of operational boats.	*Already responded to this comment in relevant person communications – see event ID 4343 and Feedback ID 499*

		TITLEHOLDER RESPONSE
	Claim: The DPIRD 10nmx10nm CAES block catch reporting system provides broad understanding of fishing ground importance in an aggregate context however it does not provide a detailed spatial catch record for finer scale marine planning. As such, likely impacts to future catches or projected catches from catch history due to marine seismic surveys is poorly understood by industry. **Claim:** There is insufficient data on impacts to important marine species from seismic surveys.	
36	**Matter: Limitations to risk assessment and management due to scientific studies not sufficient to determine risk.** **Claim:** The scientific data used in the EP is insufficient to inform the risk assessment and management measures proposed. This includes data on: • Shallow water impacts of marine seismic survey • Impacts to zooplankton from marine seismic survey • Impacts to corals from marine seismic survey • Impacts to western rock lobster from marine seismic survey, including the significance of the seismic exposures and sub-lethal effects. • Impacts to Australian sea lion populations from marine seismic survey and existing pressures. • Impacts to invertebrates, fish, cetaceans, birds from marine seismic survey • Impacts to marine life from marine seismic survey, as existing research focuses on specific species and lacks from marine seismic survey. • Impacts along food chain and during juvenile stages of species from marine seismic survey	Pilot applies the Oil and Gas UK (OGUK) (2014) Guidance on Risk Related Decision Making to determine the assessment technique applied for each impact or risk. Pilot has considered previous impact and risk assessments for similar activities, review of relevant published studies (peer reviewed and grey literature) and relevant person consultation concerns/feedback. Wherever possible, site-specific and activity-specific data has been used in the impact/risk assessment; however, in order to address areas of uncertainty, a precautionary approach has been taken and a conservative or "worst case" approach has been applied where there is uncertainty in the level of harm. As described in Section 10.2 of the EP, if new information that differs to that included in this EP, such as potential changes in scientific knowledge regarding impacts and risks from seismic activities or new environmental sensitivities within or adjacent to the survey area is found, a management of change process will be implemented. The process includes a risk and impact assessment is performed using the same procedures as outlined in Section 6 of the EP. This will determine if there is an increase in risk as a result of the new information, and if the increase in risk is significant and would therefore trigger a requirement to revise and resubmit the EP under Section 39. No changes have been made to the EP in response to these comments.

		TITLEHOLDER RESPONSE
	• Data on diverse fauna taxa and ecologically important species, long-term data on fish and multi-disciplinary studies **Claim:** New findings by DPIRD not addressed in the EP. There is existing science to demonstrate clear impacts and the short, medium, and long-term risks to western rock lobster resulting from marine seismic surveys. **Claim:** New findings by DPIRD identified issues for the western rock lobster industry that further investigation, including: • Understanding impacts of seismic arrays on all lifecycle stages of western rock lobster (and zoo plankton and phyllosoma) in the marine environment context. • Understanding the implications of lobster locations on their experience with seismic arrays (e.g., sheltering under reef shelf reducing or amplifying impacts). • Understanding impacts to western rock lobsters within 200 m of seismic array, if any. • Understanding damage levels and mortality for different life stages of the western rock lobsters. • Understanding if western rock lobster behaviour confined to a pot or unconfined in the field influences the impacts from seismic arrays. **Claim:** The proposed activity is contrary to existing research on impacts to cetaceans from marine seismic surveys. **Claim:** Cumulative impacts to Australian sea lion populations, and pups, from the proposed activity are poorly known. There are limited sources to understand the population in the proposal area and the current stressors on this population.	
37	**Matter: Further data is required to compare streamer and ocean bottom nodes seismic survey methods.**	There is no difference in the sound exposure regime if seismic data is acquired through streamers or ocean bottom nodes. Streamers and ocean bottom nodes are passive sound receivers and do not generate additional underwater noise emissions. The underwater noise

		TITLEHOLDER RESPONSE
	Claim: Require 24-hour SELcom (cumulative sound exposure level for 24 hours) data to compare between streamer and ocean bottom nodes seismic survey methods.	modelling for this survey considered representative sites and survey scenarios for both the shallow water areas where nodes will be utilised and deeper waters where streamers will be used. Pilot has considered this claim and is satisfied that the concerns raised have been adequately addressed in the EP. As a result, no changes have been made to the EP in response to this claim.

8. Theme: Consultation (and Public Comment)

#	PUBLIC COMMENT	CONSULTATION (C)
38	**Matter: Consultation with First Nations Peoples is inadequate or has not occurred.** **Claim:** Concern about the lack of consultation with the Yamatji Southern Regional Corporation.	Pilot consultation with First Nation groups has been broad reaching and considered. As described in Section 5.3.3.1 of the EP, consultation with First Nations people was tailored to suit individual requirements. Provision of information to First Nations people was primarily verbal in one-on-one or group meetings. Visual aids were used in discussions to aid understanding of what a seismic vessel looks like and how it functions. Verbal discussions were followed up with fact sheets, often tailored with maps to show overlap of Native Title areas with the activity and information on totem species e.g. sea lions. During consultation one First Nations group requested that a YouTube® explanation video of the fact sheets be created and distributed so that the information could be accessed by those community members who preferred this medium of communication. The YouTube video was made available directly to these groups and to the general public by being uploaded to the project website. As described in EP Section 5.3.2.3, Pilot was referred to consult with the heritage team at Yamatji Southern Regional Corporation (YSRC) by the Yamatji Marlpa Aboriginal Corporation in March of 2023 regarding the Yamatji Nation Native Title Determination. Through meetings with the YSRC, Pilot was advised that consultation with the different coastal Yamatji nation groups would be best achieved via Cultural Committee Meetings, which were delayed due to the impact of the WA state heritage legislation changes. It was also advised that Pilot could work with YSRC to develop flyers to reach their community at local events. The YSRC team also advised Pilot to consult with their Sea Country Indigenous Protected Area (SCIPA) program. Pilot offered to host newly certified sea rangers on-board project to provide more opportunities in understanding marine activities in oil and gas in relation to marine species. The objective of consultation is to provide an opportunity for YSRC to input into the environmental management of the activity and the protection of environmental values and sensitivities important to YSRC. Pilot has provided information about the activity so that YSRC can understand any risks and impacts, and how they will be mitigated and YSRC have had, and continue to have, the opportunity to engage with Pilot and provide feedback regarding the proposed activity.
39	**Matter**: **Shallow water acquisition not consulted on.**	Pilot has reviewed the consultation process undertaken specifically regarding the shallow water data acquisition. Pilot have been consulting on acquisition in the

#	PUBLIC COMMENT	CONSULTATION (C)
	Claim: The acquisition method for shallow waters has not been adequately consulted on.	shallow waters of the Operational Area since May 2023. The use of ocean bottom nodes as an acquisition method were presented at multiple stages across the consultation period: • The May (9-12th) 2023 information community consultation sessions discussed this acquisition methodology in their slides and verbally as well as pdf copies of this presentation being made available on the Eureka website shortly after. • Webinars 4 (June) & 5 (December) 2023 both discussed the ocean bottom node use. • Detailed in "Environmental assessments – Impact 7 – Seabed disturbance – placement of ocean bottom nodes" document listed in the Eureka document library on the website, uploaded in October 2023. • A document purpose-written for commercial fishers and fisheries containing all necessary information titled "Eureka 3D MSS Commercial Fishers Information Sheet", discussing the use of ocean bottom nodal technology in shallow water areas – sent out in December. • A document was also purposely written for Western Rock Lobster fishers and state commercial fisheries containing information detailing the use of the technology. Pilot considers that sufficient information and time was provided during the consultation process to determine if there were any impacts to functions, interest or activities that reelevate persons may undertake within the environmental planning area for the survey. No changes have been made to the EP in response to this comment.
40	**Matter: Pilot should not have presented research data themselves.** **Claim:** The unpublished DPIRD paper regarding impacts to western rock lobster that was used in the EP should not have been presented during relevant persons consultation by Pilot, it should have been presented by the research authors.	Pilot released information regarding the unpublished DPIRD paper to stakeholders via a newsletter on 17th November and in a webinar held on 14th December 2023. Pilot's objective was to deliver the new data with transparency and openness to relevant persons in a timely manner was prioritised to enable sufficient time for relevant persons to determine if the assessment results would have any impact to their functions, interests or activities within the environmental planning area. The information available to Pilot to present at the time was limited due to the study not being released in full.

#	PUBLIC COMMENT	CONSULTATION (C)
		Summarised findings on the unpublished study by DPIRD has been included in the Environment Plan and reviewed by DPIRD. No changes has been made to the EP in response to this comment.
41	**Matter: The protocol for compensation of commercial fishers was not adequately consulted on.** **Claim:** Consultation was not conducted on changes the Western Rock Lobster Council made to the NERA commercial fishery compensation framework that is proposed to be used for the EP.	As the NERA Protocol was developed in consultation with commercial fishers, is considered fit-for-purpose with the exception of its application to pot fishing methods and hence the consultation undertaken with the Western Rock Lobster Council. Pilot signed a service agreement with Western Rock Lobster Council to review the current NERA protocol and provide revisions to the document to make it fit for purpose for use in the Midwest for rock lobster fishers. The Western Rock Lobster Council are still making edits to this document, with a completion target before the end of June 2024. Pilot Energy are currently not in a position to advise on any changes made. Pilot will publish an updated version of the NERA Compensation Protocol specific for use in relation to this survey for relevant persons to have certainty about the compensation methodologies being proposed for the Eureka survey once the document becomes available. No changes have been made to the EP in response to this comment.
42	**Matter: Commitments made during consultation were not met by Pilot.** **Claim**: Pilot Energy made a commitment to run additional consultation sessions, prior to submission, to update stakeholders on the activity and full environmental assessments. This has not happened.	Pilot updated relevant persons on the status of the activity and environmental impact assessment and provided the opportunity to attend face-to-face sessions to discuss these with Pilot in January of 2024. Pilot also provided additional consultation meetings in person with commercial fishers in January of 2024. As such, Pilot considers that it met its commitment to provide updates and opportunities to consult regarding the environmental assessment for the activity. No changes have been made in the EP in response to this comment.
43	**Matter: Responses provided in consultation were not considered in developing the impact assessment section of the EP.** **Claim**: On-water knowledge held by commercial fishers regarding impacts from seismic surveys has been disregarded by Pilot. **Claim:** Pilot has not accepted evidence from commercial fishers regarding the negative impacts of seismic surveys.	Pilot applies the Oil and Gas UK (OGUK) (2014) Guidance on Risk Related Decision Making to determine the assessment technique applied for each impact or risk. Pilot has considered previous impact and risk assessments for similar activities, review of relevant published studies (peer reviewed and grey literature) and stakeholder consultation concerns/feedback. Wherever possible, site-specific and activity-specific data has been used in the impact/risk assessment. The values, views, attitudes, perceptions and concerns of relevant persons consulted for the Eureka 3D MSS have

#	PUBLIC COMMENT	CONSULTATION (C)
		been used in the determination of the decision context and detailed in the impact assessment sections of the EP. No changes have been made in response to this comment.
44	**Matter: Consultation process was not conducted professionally.** **Claim:** Pilot did not listen or engage relevant persons professionally during consultation.	Pilot Energy proactively engaged with relevant individuals and organisations, initiating a consultation process. Initially, communication occurred via email, allowing flexibility in codesigning a meaningful consultation method to suit each person's preferences, and has made considerable efforts to meet with relevant persons as requested (with extensive evidence of consultation provided in EP Appendix E). Conversely, if a relevant person deemed meetings unnecessary and cancelled, Pilot Energy adapted the consultation process accordingly. Throughout consultation, Pilot Energy consistently extended an invitation to address any questions raised during the consultation period. Recognizing that additional queries might arise after reviewing the presented information, they remained responsive. Pilot Energy conducted several group meetings throughout the consultation period, during which robust discussions arose due to differing opinions. However, Pilot Energy maintains that their actions were not unprofessional; rather they were focussed on addressing inaccuracies presented to them.
45	**Matter: The consultation process was not two-way and not specifically targeted towards commercial fishers.** **Claim:** The consultation approach has been onerous and transactional with a one-way delivery of information, rather than a genuine and productive two-way engagement adapted to the commercial fishing sector.	As described in Section 5.3.3 of the EP, multiple modes of communication were employed by Pilot with commercial fisheries, dependent on the nature of the organisation or individual. For example, relevant individuals were consulted through, including but not limited to, emails, campaign emails, newsletters, in-person meetings and phone calls. Information provided to commercial fishers, fisheries and industry associations considered the guidance provided in WAFIC's Commercial Fishing Consultation Framework for The Offshore Oil and Gas Sector (July 2023). Early engagement of the commercial fishing industry was sought to determine ideal operational windows for the seismic survey and the location of sensitive fishing areas. Consultation with commercial fishers has been genuine and proportional to the potential impact that the Eureka MSS may have on commercial fishers and fishing stocks, with information provided written in plain language and clarified key issues of concern for commercial fishers.

#	PUBLIC COMMENT	CONSULTATION (C)
		In particular, documents were produced on seismic impacts to the western rock lobster (considering that a significant proportion of studies conducted have been on the southern rock lobster) for the Western Rock Lobster Council and its members (see the Sensitive Information Report). Western rock lobster presentation slides were made available to the general public and relevant persons via social media and the project website in June 2023. No changes have been made to the EP in response to this comment.
46	**Matter: Records of stakeholder consultation in the EP are not accurate.** **Claim**: Stakeholder misrepresented during consultation.	Pilot acknowledges that the feedback record inappropriately conflated two issues and considers this an oversight. This has been reviewed and edited for the next version of the EP.
47	**Matter: Merited objections or claims made by relevant persons consultation were not responded to by Pilot Energy.** **Claim:** Pilot has not addressed merits of objections and claims made by commercial fishers. **Claim:** No response has been received to previously submitted objections and claims.	Pilot disagrees that there are merited objections or claims made during relevant persons consultation that has not been addressed. All objections and claims from relevant persons were assessed for merit based on the criteria. A record of all objections and claims received, an assessment of their merit, any changes made in the EP in response to merited objections or claims, and the response provided to the relevant person is provided in Appendix E of the EP. No changes have been made to the EP in response to this comment.
48	**Matter: Confidential catch and effort data was requested from commercial fishers during consultation.** **Claim:** Confidential catch and effort data was requested from commercial fishers during consultation. **Claim:** Confidential information was requested during consultation without disclosing how that data will be used.	Pilot disagrees that commercially confidential catch and effort data were requested from commercial fishers during the consultation process. No change has been made to the EP in response to this comment.
49	**Matter: The website cookie tracking was not disclosed.** **Claim:** There was undisclosed data collection from visitors to the Eureka website.	Pilot do not use any cookie tracking on the Eureka activity website at present. The statistics presented in the EP represent statistics sourced from website traffic, for example the number of website functions accessed or interacted with as an indicator of how people accessed consultation material provided. Pilot did not collect any personal information from website visits alone. No changes were made to the EP in response to this comment.

#	PUBLIC COMMENT	CONSULTATION (C)
50	**Matter: Sufficient information was not provided during the relevant persons consultation process.** **Claim**: The website did not have very much information on it during the consultation process. **Claim:** The titleholder has not provided relevant persons sufficient information to allow relevant persons to make an informed assessment of the possible consequences of the activity on the functions, interests or activities of the relevant person. **Claim:** Critical information was not available or transparent to provide relevant persons sufficient information and time to make informed decisions. **Claim:** The maps provided had poor detail. **Claim:** Pilot Energy has not provided sufficient information to allow an informed assessment of the possible consequences of the activity on the functions, interests and or activities for the fishing industry. **Claim:** Pilot only sent a link to the information. **Claim:** The capacity for relevant persons to provide feedback was limited due to the wording the materials presented.	Under section 25(2) of the OPGGS (E) Regulations, titleholders must give each relevant person sufficient information to allow them to make an informed assessment of the possible consequences of the activity on their functions, activities, and interests. Every relevant person was engaged through information mediums offering two-way dialogue, was encouraged to disclose their preferred mode of communication, whether it be email or an in-person, face-to-face meeting, and this was catered for. Pilot provided sufficient information to relevant persons by providing: • Tailored information, responses, and communication mediums to relevant persons. This included further information when requested to ensure relevant persons' understanding and comprehension. • Published all relevant information regarding the activity on the Eureka 3D MSS website. Rather than using a one size fits all approach, Pilot understands that different people digest and respond to information differently. Once relevant persons were identified, they were consulted regarding which communication channel they prefer and the detail of information they require for effective consultation with Pilot as described in Section 5.3.3 of the EP. Information was tailored to requirements through techniques including: •Changing the format of information flow depending on the relevant person's needs. For example, some Indigenous groups required in-person, face-to-face meetings, whereas some individuals and groups preferred phone calls and emails. •Changing the content and complexity of the information based on personal needs. –Rather than overwhelming people with information, Pilot provided concise, to-the-point information and evidence surrounding the function, interest or activity that was being affected by the Eureka 3D MSS. For example, commercial fishers received purpose-specific scientific explanations about the immediate effects of seismic exploration on marine wildlife as per WAFIC 2023 consultation guidelines. •Subject-specific flyers were produced to provide relevant persons with tailored different levels of information. These flyers were unique to the subject-centred groups previously discussed, to facilitate the understanding of risks and response from interested persons. - The Eureka website contains all necessary information related to the Eureka 3D MSS for relevant persons to make an informed decision on the potential impacts of the Eureka 3D MSS on their functions, interests an activities. Through the design and nature of this publicly available information, relevant persons were able to access the

#	PUBLIC COMMENT	CONSULTATION (C)
		exact information they required to make informed decisions, without needing to ask for it. Where requested, Pilot provided additional information to relevant persons to enable them to review the proposed activity and determine if there may be an impact to their functions, interests, or activities. Pilot believes that it has provided relevant persons sufficient information and a reasonable period of time to make an informed assessment if their functions, interests or activities may be impacted because of the activity and to provide feedback to Pilot regarding any objections or claims of the activity. No changes to the EP have been made in response to this comment.
51	**Matter: Sufficient time not provided for relevant persons consultation.** **Claim:** The consultation requirement as defined under regulation 11A was not satisfied. **Claim:** Whilst the consultation period was long, sufficient time to process the information was not provided as not all information was available at all times during the consultation process, Instead were provided to community forums from October 2023.	Pilot Energy considers that each relevant person and potentially relevant persons has been provided with a reasonable period for the consultation, with ample opportunity to provide information and feedback on the Eureka 3D Marine Seismic Survey. Pilot Energy made draft EP chapters and technical supporting reports available to relevant persons via the Eureka website and communicated this availability on 9 October 2023 and instructions on how to provide feedback via email to relevant persons. Pilot Energy notes that the provision of draft EP chapters is not a regulatory requirement but aligns with Pilot Energy's objective to ensure the provision of all possible information available to support consultation. When the public comment period concluded on 22 March 2024, the draft EP had been available to anyone that wished to access them for a total of 168 days. No changes to the EP have been made in response to this comment.

9. Theme: Oil Spills

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
52	**Matter**: Species could be at risk from Oil Spills **Claim**: The proposal could present residual impacts through unplanned oil spills to coral species and sea lions.	The EP addresses the potential impact from Oil Spill in Section 8.6. The residual and inherent risk assessment is Low based on the unlikely nature of an event occurring. Nonetheless Pilot is required to be prepared in the event of an Oil Spill. The most major event considered credible is a spill as a result of a vessel collision or grounding resulting in the loss of 320 m^3 of Marine Gas Oil (MGO) Pilot have prepared an OPEP and OSMP which details how an Oil Spill and responses to it would be managed. These are presented in Appendix G and H. In the assessment it was found that there were no residual impacts above Low for any MNES, KEF or marine protected areas should an Oil Spill occur. The performance standards in Table 8-21 outline the mitigations in place to prevent the occurrence and impact of an Oil Spill.

10. Theme: Editorial

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
53	**Matter**: Lack of detail in the EP **Claim**: There is no key in Table 4-11.	A key has been added to Table 4-11 to enable interpretation.
54	**Matter**: Inconsistent information presented in EP on Australian Sea Lion population **Claim**: Slides at end of EP discuss the largest population of sea lions in WA which contradicts the early info in the EP that states it's a small population size	Information in section 4.3.7 has been updated for clarity and consistency within the EP and attachments.

11. Theme: Other

#	PUBLIC COMMENT	TITLEHOLDER RESPONSE
55	**Matter**: EP not consistent with Australian Sea Lion Recovery Project's overarching objective **Claim**: Not consistent with the ASL RP overarching objective Page 341 & 342 "To halt the decline and assist the recovery of the Australian sea lion throughout its range in Australian waters by increasing the total population ensuring that anthropogenic activities do not hinder recovery in the near future, or impact on the conservation status of the species in the future"	NOPSEMA will not accept an EP that is inconsistent with a recovery plan or threat abatement plan for a listed threatened species or ecological community. Section 9 and Table 9-5 describes the assessment that Pilot has undertaken to demonstrate that the MSS is not inconsistent with the ASL recovery plan.
56	**Matter**: Risk of vessel collision with Australian Sea Lions **Claim**: Sea lions are at residual risk from vessel collision	Risk of vessel collision with the seismic vessel would be the same as those of any other vessel. The ASL spends large amounts of time engaged in foraging on the seafloor and pops up for breaths intermittently. MFO's on the vessel will be watching for Sea Lions to evaluate if shutdown protocols ned to be adhered to. Additionally, the Seismic and other survey vessels will be moving at a slow and steady pace which is unlikely to present a collision risk to the ASL.